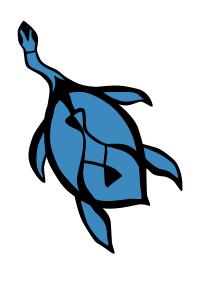
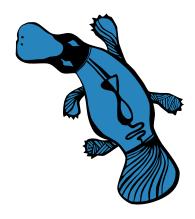


Our Water Our Country

An information manual for Aboriginal people and communities about the water reform process





warning users of this manual should be aware that it contains images of people who are now deceased

Published by:

NSW Department of Primary Industries, NSW Office of Water

Level 18, 227 Elizabeth Street

GPO Box 3889 Sydney NSW 2001

T 02 8281 7777 F 02 8281 7799

information@water.nsw.gov.au www.water.nsw.gov.au

The NSW Office of Water manages the policy and regulatory frameworks for the state's surface water and groundwater resources, to provide a secure and sustainable water supply for all users. It also supports water utilities in the provision of water and sewerage services throughout New South Wales.

The Office of Water is a division of the NSW Department of Primary Industries.

Preferred way to cite this publication:

NSW Office of Water 2012. Our Water Our Country: An information manual for Aboriginal people and communities about the water reform process. Edition 2.0. NSW Department of Primary Industries, Office of Water, Sydney, NSW.

Copyright information

© State of New South Wales through the Department of Trade and Investment, Regional Infrastructure and Services, 2012

This material may be reproduced in whole or in part for educational and non-commercial use, providing the meaning is unchanged and its source, publisher and authorship are clearly and correctly acknowledged.

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of publication, the State of New South Wales, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.

NOW 11_264

ISBN 978 0 7313 3990 7

Second edition February 2012

Disclaimer

While every reasonable effort has been made to ensure that this publication was correct at the time of printing, the State of New South Wales, its agents and employees, do not assume any responsibility and shall have no liability, consequential or otherwise, of any kind, arising from the use of or reliance on any of the data and information contained in this publication.

Some of the information and commentary contained in this publication are presented as an outcome primarily derived from the Aboriginal communities and individuals involved in the project workshops and consultations. They are presented to inform government agencies, water management authorities, and Aboriginal communities and individuals about the current water management regime operating in this state, and to foster greater communication and discourse with Aboriginal interests at the earliest possible stage of the water planning, management, and decision making processes.

The views expressed by contributors to this publication do not necessarily represent those of the NSW Office of Water, or the NSW government.

Acknowledgements

The project was jointly funded by the Australian and New South Wales Governments through the intergovernmental natural resource management Joint Steering Committee (JSC) responsible for the National Action Plan for Salinity and Water (NAP) and the Natural Heritage Trust (NHT).

The production of this information manual and the accompanying DVD was co-ordinated by the Country Culture and Heritage Division of the Office of Environment and Heritage, Department of Premier and Cabinet, assisted by an inter-agency steering committee and consultants.

The steering committee consisted of Lillian Moseley, Senior Project Officer (Aboriginal Water) Country Culture and Heritage Division, Office of Environment and Heritage (OEH) Gavin Callaghan Aboriginal Liaison and Policy Officer, Fisheries Division Department of Primary Industries (DPI), Lynn Webber, Manager Conservation Programs Delivery, Office of Environment and Heritage (OEH), Dave Miller of the NSW Office of Water (NOW), Bradley Moggridge of the Commonwealth Science & Industry Research Organisation (CSIRO), Rob Learmonth, Consultant; Brett Peterkin of Peterkin Consulting, Geoffrey Ferguson of The Hub, Virginia Bear of Little Gecko Publications.

The paintings on the cover and chapter headings are the work of Worimi artist Krystal Hurst, who was commissioned to interpret the major themes of the Information manual in a culturally appropriate artistic manner. The steering committee and others involved in the project have greatly appreciated having such inspiring artwork to compliment this publication.

Members of the Brewarrina, Kempsey, Newcastle and Walhallow Aboriginal communities had given up their time to attend meetings and provide valuable feedback on the project and share their knowledge and ideas. They welcomed us to their country, and availed themselves and allowed their culturally significant places to be filmed, photographed and recorded as an integral part of the project.

Further to this, the project team are most appreciative of the assistance provided by the community people who participated and assisted in delivering the project. The project team set out to make this package as culturally appropriate and useful as possible, and the community participants assistance was invaluable in this process.

The information manual and accompanying DVD of the initial project is being used to support work by the Office of Water with Aboriginal communities into the future.

We acknowledge the contribution of the National Water Commission towards the printing of this document.

Welcome

We wish to pay our respects to the traditional Aboriginal people of this country, and to acknowledge Aboriginal peoples past and present as the original natural resource managers of this land. For tens of thousands of years Aboriginal people utilised all aspects of our land and water to sustain their lifestyles, working cohesively with the environment, and keeping themselves and the ecosystem fit and healthy.

Aboriginal communities have a spiritual and customary living relationship with water in all its forms, through creation stories, use of water as a resource, and knowledge about sharing and conserving water. Aboriginal people have a holistic view to land, water and culture and see them as one, not in isolation of each other. The title of this manual *Our Water Our Country* reflects our deep spiritual appreciation of waters role in sustaining life.

A complex variety of water management practices were, and often still are, carried out across the state, changing and adapting with the different landscapes and cultures.

Today Aboriginal people maintaining cultural practice is difficult, to say the least. We may want to strengthen and reignite our traditional affiliation with country, but there are many barriers to achieving this, and we often fear our attempts will be buried in mountains of government legislation and regulation.

The water reform processes offer new opportunities, for Aboriginal communities and individuals through access to water to protect cultural values and to participate in economic development opportunities. Through this process Aboriginal communities and individuals have the potential for renewed efforts to strengthen culture, and to participate in the water market. It's time to understand and exercise our rights in the state's water sharing framework.

This resource package is designed to help communities make the most of these opportunities, including access to water for social, cultural and economic purposes, and a greater say in how water is used in general. It is important that Aboriginal people are engaged appropriately in all aspects of the water planning and reform processes. This will help our people to meet their cultural responsibilities and protect Country, and it will benefit Australians as a whole through fairer distribution of resources, a healthier natural environment and a stronger, richer culture.

However the onus in this regard is squarely on Government and regulators to appropriately recognise the Cultural connection and relationship to water and other natural resources that Aboriginal have had for thousands of years, and that this needs to be reflected in any subsequent plans, policies and legislation, so as to address Aboriginal issues within the natural resource management frameworks over the long term.

We would like to acknowledge our elders past and present, as the inspiration for our work to keep the land, water, ecology and culture alive and healthy for generations to come. We have represented some of our inspiring Elders in the case studies, some of whom unfortunately are no longer with us today. Further we would like to acknowledge their life's work in keeping our culture alive and strong.

We wish you all the best in utilising this information manual and accompanying DVD, *Our Water Our Country*. We hope it assists you and your community to actively participate in water management and reform processes in an attempt to sustain our cultural and natural resources for future generations.

Contents

1-1	Chapter 1	Introduction
-----	-----------	--------------

- 2-1 Chapter 2 What is water reform?
- 3-1 Chapter 3 Aboriginal culture and water
- 4-1 Chapter 4 Water for the environment
- 5-1 Chapter 5 Water for basic rights
- 6-1 Chapter 6 Water licensing
- 7-1 Chapter 7 Water sharing plans
- 8-1 Chapter 8 Appendices
 - A Acronyms, terms and definitions
 - B Commenced water sharing plans
 - C Useful contacts
 - D Sample Aboriginal cultural water access licence application
 - E Sample water supply works application
 - F Factsheet on Native Title and land claims
 - G Factsheet on access rights to rivers, streams and billabongs
 - H Guide to water access licence and certificates
 - I Flowchart: Water for my rural property—do I require a licence?
 - J Flowchart on the approval process for licences and approvals associated with Aboriginal access licences
 - K Information Agreement and Water Dependent Cultural Asset Report Card





School of Fish

A school of fish swimming up a river system. The lines represent the waves being created by their movements in the water. The star-like features represent small organisms for the fish to eat. This painting highlights that our river systems must be healthy not only for people but for our aquatic animals.

This Chapter...

summarises the water reform process and the new opportunities it represents for Aboriginal people. There is an outline of the content of the manual, and some background about its development.



Introduction

The way water is managed in NSW has changed over time. Each region has, or will soon have, its own water sharing plan. Now, for the first time, water sharing plans specifically include the protection of Aboriginal spiritual, social, customary and economic values.

There are opportunities for Aboriginal communities not only to improve the local environment but also to use water for cultural activities and business purposes.

Active involvement by Aboriginal communities in the water sharing planning process will confirm identity, respect and acknowledgement of Aboriginal rights to water.

This information manual, along with the DVD, aims to build knowledge, skills and confidence, and encourage Aboriginal people to make the most of these new opportunities.

Many people, including many non-Aboriginal people, believe that it is now time for the non-Aboriginal people to learn from Aboriginal people. The non-Aboriginal ways have all but destroyed the environment, and it is wise to listen to those who were the original caretakers of this land ¹.



What is this information manual hoping to achieve?

Our Water Our Country aims to provide information that will increase Aboriginal peoples' understanding and encourage involvement in the water sharing process. It is intended to help build Aboriginal peoples' capacity to participate as water users, protect their rights to water, maintain a healthy environment, and take full advantage of economic opportunities.

More specifically, this manual aims to:

- encourage Aboriginal people to not only know the law of how water is managed; by government, but to exercise their rights within this law
- assist Aboriginal people to gain fair and equitable access to water along with other interests including the environment, domestic and commercial
- provide practical ways for Aboriginal individuals and communities to achieve cultural, social and enterprise goals
- encourage and assist government agencies and Aboriginal people to work together.

The water sharing process is an intricate and complex subject. Aboriginal cultural values are often not well understood by governments. In turn, government processes, legislation and application forms can seem daunting for water users.

In the past, knowledge gaps, rights to water and how water is managed have limited Aboriginal people's capacity, especially at the community level, to influence the water planning process or even to exercise basic rights to water.

Water dependent cultural values have not been well recognised in the past, so it is extremely important to redress the balance, ensuring the process is equitable and inclusive and people are aware of opportunities and how to make the most of them.

It is in the interests of all Australians that Aboriginal people are effectively involved in the water sharing process because cultural traditions provide a unique and valuable understanding of the significance of water.

What sort of water is this information manual talking about?

The water referred to in this manual is fresh water that comes from rivers, streams, lakes, billabongs, floodwater, wetlands, springs, and groundwater. Water from a brackish estuary or a salty lake is also included, but not the ocean.

Who is this information manual for?

The primary target groups for this manual are Aboriginal communities, and individuals who are associated with Aboriginal reference groups, local Aboriginal land councils, native title claimant groups, Traditional Owner

groups, knowledge holder groups, Aboriginal landcare and environmental groups, and other Aboriginal corporations. Government agencies who seek to build partnerships and work with Aboriginal communities and individuals may also find this manual useful.

What this information manual contains

Chapter 1 gives an overview and background to the water reform process. It includes a summary of opportunities available, along with some suggested actions.

Chapters 2 to 7 describe a particular aspect of the water sharing process, and are divided into:

- 'This chapter'—a brief summary of the contents and introduction to the topic
- 'Knowing the lingo' (in Chapters 2, 4, 5, 6 and 7)—this explains terms and concepts that those new to water management may not be familiar with—there is also a list (glossary) in Appendix A
- main body of the chapter—explores the themes of the chapter in more detail
- 'Summary'—a review of the main points in the chapter.

Chapters 5 and 6 include case studies from three Aboriginal communities who are making use of opportunities offered in water management: building skills, creating jobs, developing economically, reinvigorating culture and connection to Country, and repairing environmental damage.

Chapter 8 (the Appendices) contains additional information, contact details and samples:

- **A** is a glossary explaining many of the terms, expressions and acronyms (words formed from the first letters of other words such as WAL for water access licence) used in water management
- **B** is a list of the water sharing plans for the state and when they commenced
- C is a list of people or organisations, Aboriginal and non-Aboriginal, government and non-government bodies, involved in water management
- **D** provides a sample of a completed Aboriginal cultural water access licence application
- **E** provides a sample of a completed water supply works application
- F provides a factsheet on Native Title and land claims
- **G** provides a factsheet on access rights to rivers, streams and billabongs
- **H** provides a factsheet on water access licences and certificates
- I provides a flow chart: 'Water for my rural property do I require a licence?'
- J provides a factsheet on the water licensing approval process relevant to licences for Aboriginal purposes
- **K** provides blank copies of the Information Agreement and Water Dependent Cultural Asset Report Card.

The DVD explains the water sharing process, and the history of water management in NSW. It explores the role of water in Aboriginal culture, and presents the six case studies of Aboriginal communities making use of water licences.

New opportunities for Aboriginal people

Aboriginal interests have been recognised on a number of different levels as a result of water reforms in NSW. The objectives of the Water Management Act 2000 and each of the water sharing plans specifically include the protection of spiritual, social and customary values of Aboriginal communities.

Native Title

Native title rights have been provided for under the Basic Landholder Rights provisions of the Water Management Act 2000, allowing a native title holder to take and use water without the need for a water access licence or approval, in the exercise of native title rights. All water sharing plans recognise that extractions, as part of a native title right, may increase over the term of the plan, in the event that native title is granted.

In addition, applicants for consents under the *Water* Management Act 2000 (in relation to a new grant of water, or an approval), are notified of native title claimants etc, in accordance with the Native Title Act 1993.

Aboriginal representation in water sharing planning processes

During the development of the initial water sharing plans the former Department of Land and Water Conservation included two representatives from the local Aboriginal community on the water management committees. These representatives were drawn from local Aboriginal land councils, Elders Groups, etc. It was the responsibility of the representatives to ensure that information provided for, and decisions arising from, the water management committee meetings were referred back to their local community for comment.

Aboriginal representation on Water Management Committees achieved positive outcomes in many areas. These achievements included access to water for cultural and commercial purposes and identification of values of importance.

As part of a recent change, water sharing plans are now developed through interagency regional panels, rather than water management committees. Aboriginal input into planning is being provided through the stakeholder consultation processes undertaken by the Office of Water with assistance from the catchment management authorities.

The Office of Water, through ongoing community consultation processes, will work with communities to identify water dependant cultural values and assist Aboriginal communities to secure water access licence for social, cultural and economic development purposes.

In addition, to facilitate consultation on natural resource management issues, most catchment management authorities have established an Aboriginal reference group (ARG), or Aboriginal advisory committee (AAC), to provide them with Aboriginal community and cultural advice about natural resource management issues within their respective catchment areas. These groups have the potential to be referenced for consultation on future water sharing plans.

Protection of cultural heritage

All applications, for new/amended water supply works and use approvals and certain other dealings, will need to be assessed regarding the potential to impact on Aboriginal cultural heritage. OEH's cultural heritage impact assessment processes require direct and newspaper notifications of proposals, and consultation with Aboriginal communities to ensure that Aboriginal people are made aware of, and can raise their concerns in, the assessment processes associated with the decision making regarding such proposals.

Water is available to Aboriginal communities for cultural needs

Water use for cultural purposes by Aboriginal communities and persons is provided for in the Water Management (General) Regulation 2004, by way of Aboriginal cultural water access licences. Water sharing plans reflect this.

Water is also available to Aboriginal communities in parts of the state for economic development purposes

Certain water sharing plans provide for Aboriginal Community Development Access Licences. A number of coastal plans provide for these licences in specific water sources and the licences will also be considered in groundwater systems where there is unassigned water (see 'Knowing the lingo'—Chapter 2). Provision for these licences will also be considered in future water sharing plans developed for the coast.

The Aboriginal Water Trust

The Aboriginal Water Trust (AWT) operated between 2000 and 2009. It provided specific purpose grant funding for water infrastructure (such as irrigation, pumps, etc), and offered opportunities to establish water based commercially viable enterprises for Aboriginal communities. The Aboriginal Water Trust provided funding to 16 Aboriginal communities across the state for a variety of water based projects. Each of the communities featured as case studies in Our Water Our Country benefited from the Trust's water infrastructure grants program.



Water reform—opportunities and actions

It is good to understand how things may work in the water world, but the next step is for Aboriginal people to get involved. This section summarises opportunities and suggests some actions.

Why get involved?

All communities in Australia, Aboriginal and non-Aboriginal, face serious social, environmental and economic challenges. Aboriginal and non-Aboriginal people can plan culturally and ecologically sustainable futures by working on these issues together.

This work may have many different aspects to it, including environmental restoration and re-creating Aboriginal cultural landscapes, and dreaming and songlines. It may involve water sharing but also broader issues including restoring stressed sites, such as middens, fish traps, stone workshops, Bora grounds, burial grounds and carved trees. It could also involve the regrowth of native vegetation so bush medicines and foods can be collected. It could also create new employment opportunities and businesses for Aboriginal people.

On the surface, water reform may seem irrelevant to the many urgent issues of Aboriginal people, but Aboriginal values, knowledge and issues are integral to achieving long term sustainability of waterways for all stakeholders.

The water reform process offers potential for Aboriginal people to live in healthy environments, and create new opportunities for employment and economic development.

Clean, healthy and adequate water for our cultural, social and economic well-being is a fundamental right of every person and every culture—so get involved, speak up and exercise your rights.

Take part in the development of your water sharing plan

When a new water sharing plan is being developed, or comes up for its 10 year review there are opportunities for Aboriginal communities to comment on all aspects of the water sharing process, particularly on how well the plans protect Aboriginal values and interests in water. The government is looking for assistance from Aboriginal people and communities, to identify areas which would benefit from water for cultural purposes, and the type of activities that may be eligible for these Aboriginal community development licences.

Find out when your water sharing plan is being developed or is up for review. If the plan is already in place, ask when the ask when the 10 year review or any interim reviews allowed for within the water sharing plan are occurring (see Appendix B for a list of plans, or Appendix C for contact details for the Office of Water, and other relevant agencies).

Start planning early for the next review—get a list together. Some of your aims might be:

- · restore and strengthen Aboriginal culture
- restore water for cultural purposes
- improve water quality
- apply for an Aboriginal community development water access licence to further a business or commercial opportunity in the community
- apply for an Aboriginal cultural water access licence either as an individual or group.

Get a copy of your water sharing plan. Check to see if Aboriginal cultural, economic and social values are being addressed. Could this be improved?

Check your water source report card

Water source report cards are used to assist in the consultation process for macro water sharing plans. These are used to summarise the draft rules which may apply to a particular river or aquifer area.

Ask the Office of Water about the report card for your water source.

Have your say about how water supply works affect cultural sites and activities

Before new water allocations, or works such as levees, irrigation channels, or bores are approved, the Office of Water must consider their possible effect on cultural and natural heritage. Most applications are advertised and public comments are invited.

Ask the Office of Water how applications in the local area are advertised (for example in the local newspaper). A process is in place for assessing licences and approvals associated with Aboriginal access licences. See Appendix J for a flow chart on the approval process.

Contact the Office of Water and let them know who to consult with about assessments.

Reach out across cultural boundaries

Look for every opportunity to introduce non-Aboriginal people to Aboriginal culture, and Aboriginal ways of thinking so our needs and theirs will be acknowledged, understood and valued.

Run a cross-cultural awareness workshop with the relevant consent authorities so that they better appreciate the importance and significance of a water licence application to the Aboriginal community or the individual.

Play as a team and have a stronger voice

Making the most of the opportunities water reform offers means working constructively together.

Work together as a community and determine your goals and strategies.

Work with other Aboriginal cultural groups in your

Establish a regional Aboriginal committee to speak for and to promote caring for our waterways.

Network with other Aboriginal groups and organisations who have been successful in achieving their goals.

Exercise water rights as landholders

Water rights can exist in two forms in NSW, either as basic landholder rights or as licensed water entitlements.

Given Aboriginal people are significant landholders in the state they will have the same basic landholder rights as everyone else and in addition may have Native Title Rights.

Aboriginal people also have a right to participate in the commercial water market like everyone else. Properties may have water licences attached to them but sometimes the landholder is unaware of them.

If you own property, it is important that you understand what your basic landholder rights are and have a look at the deeds and check what water entitlements there might be.

Make the most of native title rights

A native title holder does not need an access licence, water supply work approval or water use approval, to take and use water in the exercise of native title rights.

Is there anyone in your community who has been granted native title or has a native title application submitted but is unaware of their rights to water? It could benefit the individual or the wider community if they were made aware of their rights. Refer to Appendix F for a fact sheet.

Care for Country

Restoring the environment is a major way of restoring cultural connections to Country and to nature. It gives the wider community a sense of what Aboriginal people are about.

Find out about caring for country or billabong restoration projects in your area and how you could become involved, or how you might start one and obtain funding. Talk to your local Catchment Management Authority (CMA).

Are there opportunities for water for cultural purposes to help protect and restore part of the local environment as well?

Apply for an Aboriginal cultural water access licence

These licences provide for water to help maintain water dependant cultural values, such as a fishing ground or ceremonial site.

Identify areas which may be of cultural significance to individuals or your community, which would benefit from access to water, additional water, protection from pumping for other purposes and trading, or may require a buffer zone (even if the precise locations or details of activities are confidential, it is enough to identify zones where there are significant sites or places of high cultural sensitivity).

Describe what water is required and when.

Make these areas known to your local Office of Water and request that they receive a share of water for cultural purposes or a protection measure(s) be put in place within the water sharing plan. Ask for a site visit and workshop with the Aboriginal staff. Your community may wish to enter into an Information Agreement with the Office of Water. Site information on these areas is recorded on the Water Dependent **Cultural Asset Report Card by the staff working with** the local community. See Appendix K for a copy of the Information Agreement and Water Dependent Cultural Asset Report Card. This information will be stored and protected on a data base to inform future water planning and licensing purposes

Apply for an Aboriginal community development water access licence

These licences can help communities negotiate new economic and community development opportunities: jobs, income and education.

Are you in a coastal catchment where these licences are offered? Consider how these opportunities could work for your community.

For contact details for the Office of Water, catchment management authorities and other agencies, see Appendix C 'Useful contacts'.



Developing the information manual: the consultation process

Consultation with Aboriginal communities was an important part of the development of this printed information manual and the DVD.

It was already clear that gaps in knowledge and experience were causing Aboriginal people to miss out on valuable opportunities. To find what information people required, and how to best present it, a series of consultation workshops were held in NSW during 2009, where the project team met with different Aboriginal communities to seek their advice. The first round of workshops looked at information requirements. The second round sought feedback on information products under development.

Many workshop participants were sceptical at first about the relevance of the project to them (a typical comment was 'the irrigators always get it all anyway'). However, once people understood how water reforms could make a difference to them and their community, they became very interested, and wanted to know how to get involved. This confirmed that a resource such as Our Water Our Country was needed.

Participants in the workshops put a lot of time and energy into helping develop the manual and their contributions were of great assistance.

How is your voice being heard today?

Following on from the round of consultation workshops in 2009 the Office of Water employed Aboriginal water planners in 2010 to specifically represent and explain the needs of Aboriginal people in the water sharing planning process. This initiative was supported by the National Water Commission who provided funds for the further development of resources such as refining this Information Manual and accompanying DVD, a training strategy and for 30 information/issues workshops to be delivered across NSW involving Aboriginal communities.

The round of workshops concluded at the end of 2011. Future workshops are planned and will, in many instances, target those areas where water sharing plans are under development or are being reviewed.

Many issues were raised in addition to those captured in the 2009 workshops especially with regard to the consultation process on water sharing plans and Aboriginal interests in water at the local level.

The Office of Water will continue to work with Aboriginal communities to better understand how they can secure water access rights and provide input to Aboriginal considerations in water planning and licensing through Office of Water Aboriginal staff; liaison with Aboriginal organisations at the federal, state and regional level; from Elders and Traditional Owners and the wider Aboriginal community.

For further information on what water planning activities are to be conducted in your area contact Office of Water Aboriginal staff. Names and contact details are provided in Appendix C 'Useful contacts' at the back of this information manual.

References in this chapter

Callaghan, G and Moseley, L (2000) Healthy Waters, Healthy People—A Support Package for Aboriginal and Torres Strait Islander Representatives on Water Management Committees Department of Land and Water Conservation

Summary of outcomes from 2009 consultation workshops

Workshops to assess information needs about water rights were held in various Aboriginal communities during 2009, The workshops confirmed that knowledge and understanding of the water sharing process was limited.

Whilst each individual community identified its own unique issues, key themes emerged across all three communities.

There is concern about the previous lack of consultation with the Aboriginal community regarding the water sharing process. Participants were unaware of any previous community consultation (Aboriginal culturally specific or not) regarding water sharing.

Many people were unaware of the status of their water sharing plan, unsure what government agency was responsible, or who to contact within the agency.

Terminology and jargon used in association with the water sharing process caused confusion and misunderstanding amongst the participants.

The Aboriginal cultural water access licence is a **new concept** and therefore little was known about it. Participants showed much interest in the allocation of cultural water licences and were very keen to learn more about them. Discussion related to the significance of use of water at Aboriginal specific cultural activities and ceremonies, which highlighted the important connection between Aboriginal cultural activities and water to these communities.

The idea for Aboriginal communities to purchase **their own property** to potentially generate income and provide employment within their community was welcomed and explored at all workshops with enthusiasm.

The issue of resourcing and funding for the water **sharing process is of particular interest**. Participants saw a great need for the resourcing of Aboriginal involvement in the water sharing process. They felt Aboriginal communities need to be resourced, funded and organised to better access and use water via the water sharing process.

There is a need to have regionally specific Aboriginal bodies formed to be involved with the local water sharing plan process. Aboriginal community Elders and other local Aboriginal people need to be involved in any consultation design and implementation about the water sharing process.

There was also discussion about state level representation relating to water sharing processes. The Aboriginal Water Trust was identified as an important body for representing the interests of Aboriginal communities in terms of economic policy and commercial developments which progress the achievement of Aboriginal community objectives. (The Aboriginal Water Trust ceased operating in 2009)

Information resources about the water sharing process need to be user-friendly, clear, concise and **non-complicated**, without too much technical jargon, and easily understood by people new to the water sharing process. Definitions and acronyms should also be addressed in the resource product.

The importance of consistency in approach to the process of developing water sharing plans and administration of the water licensing system. This process should be mapped out to ensure transparency and to identify key points for engagement and consultation with Aboriginal communities to encourage timely, active and equitable participation.

There is significant enthusiasm for the use of case studies to exemplify key messages regarding Aboriginal water use and participation in the water sharing process.

The Aboriginal cultural significance of water was highlighted. There is a need to explore how Aboriginal cultural activities and the water sharing process are linked and to ensure these cultural activities are catered for in the water sharing plans.

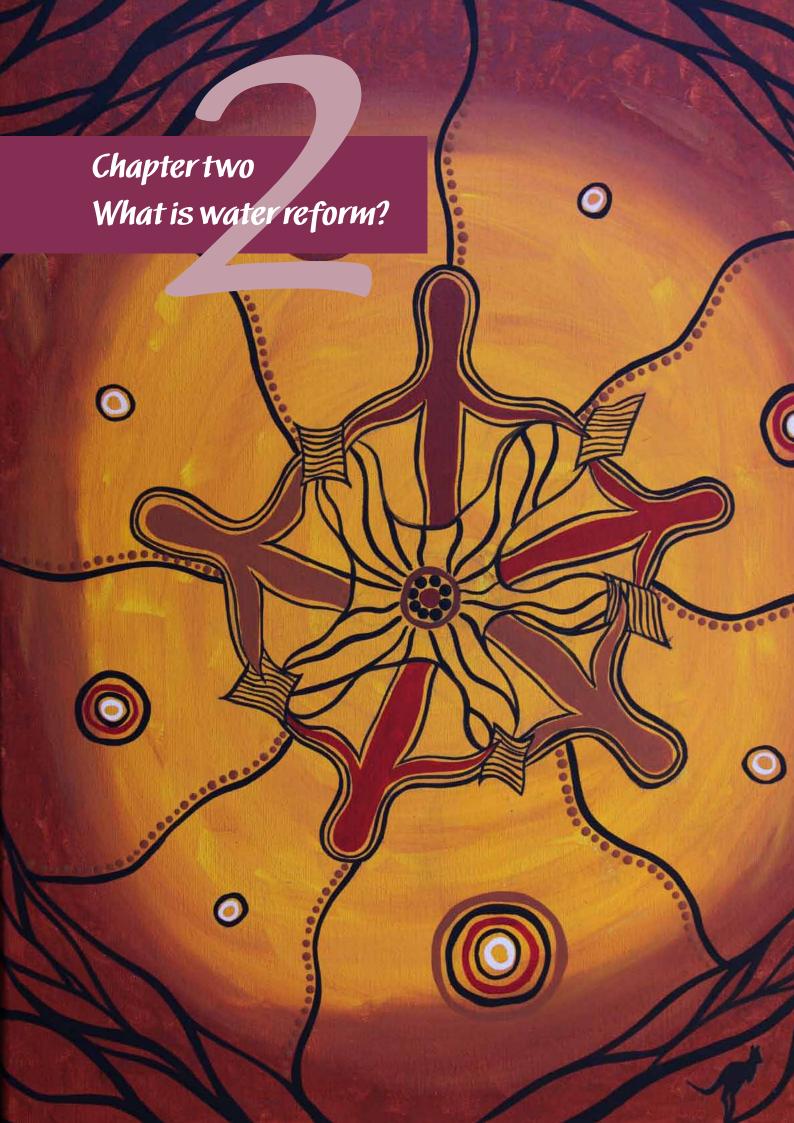
The importance of economic development and opportunity within Aboriginal communities was raised at all workshops.

Aboriginal communities are unaware of the resources and funding available to encourage their participation in the water sharing process and enhance their communities. The resource package should set out how and for what Aboriginal communities can seek funding for water use activities. The appropriate government agencies and contacts that can assist these communities need to be highlighted.

Aboriginal cultural values associated with rivers and aquifers are poorly understood by water resource managers, and some values may be difficult to relate to particular flow regimes, to quantify or to describe in allocation decisions. However, Aboriginal people are critical of water agencies for the exclusive focus given to the satisfaction of ecological criteria in environmental flow assessments.

Environmental flows tends to be highly technical and strongly focused on meeting purely ecological objectives, resulting in alienation of traditional **Aboriginal knowledge and values.** There is a need for research to specify the water required to sustain cultural values.

Adapted from Peterkin Consulting Pty Ltd (2009) Aboriginal Water Use Capacity Project—Information Needs Analysis Consultation Workshops Report Unpublished report for DECCW



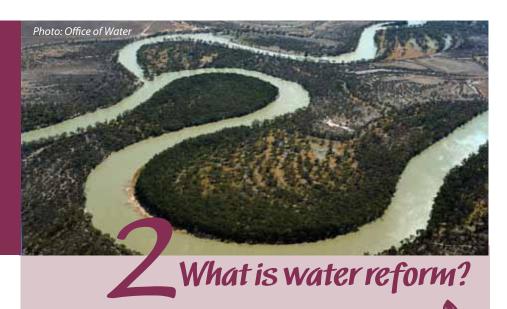




This painting represents connectedness. The unbroken circle depicts men and women in an office talking, negotiating and planning. They are holding new policy plans, the lines emerging from the meeting circle represent how these policies affect Aboriginal and non-Aboriginal people and the environment.

This Chapter...

gives an overview of water reform, the special water sharing provisions for Aboriginal people, and the historical issues leading up to the latest water reforms.



In recent times the health of rivers, creeks, wetlands, groundwater and surrounding vegetation has declined in NSW.

It is generally accepted that current land and water management practices are a contributing cause of the degradation, and that it is necessary to reform the way water is used.

Governments now realise what has been clear to Aboriginal people for a long time: the need to develop sustainable practices about how water is shared, and give more consideration to Aboriginal people, culture and the natural environment.

The way water is shared among users, including the natural environment, will be set out in water sharing plans developed for each surface water catchment or aquifer area.



Knowing the lingo

Aquifer Underground water sources where water is contained in the rocks and soil, sometimes reaching the surface as springs.

CMAs Catchment Management Authorities.

Dealings Changes to a licence, in particular for trading or selling all or part of the licence or account water. Also a change in extraction location, licence category or the consolidation or subdivision of licences.

Degradation This expression can be used for where the environment has lost some or all of its values, through pollution, low flows, soil erosion and overstocking as examples.

Embargo / embargoed In water management terms this means that no new water licences will be issued in those areas still under the old Water Act 1912. In some instances, there are exemptions to the embargo and certain licences can still be applied for.

Entitlement A water entitlement is a licensed right to access a share of water in a catchment.

Extraction / extractive The removal of water from a river, aquifer etc.

MDBA Murray-Darling Basin Authority (formerly known as the Murray-Darling Basin Commission or MDBC).

Murray-Darling Basin cap The limit set for commercial water extraction in the Murray-Darling Basin. No new licences or volumes of water can be allocated (given out) that would exceed 'the cap'.

National Water Initiative A shared commitment by governments, endorsed in June 2004, to increase the efficiency of Australia's water use, leading to greater certainty for investment and productivity for rural and urban communities, and for the environment.

Regulated rivers Are declared by the Minister to be a regulated river and typically require the flow to be controlled by the gates and valves on a large instream dam and these flows are released to meet downstream water orders. However, not all rivers below dams are declared to be regulated rivers.

Riparian The banks and surrounding area of a stream or river. Riparian vegetation can be trees and plants along the banks as well as those growing near the bed of the stream itself.

Salinity Where salt has risen to the surface through poor land management practices such as over watering of crops combined with the removal of trees.

Sustainable Is where the impact of changes or activities on a natural resource such as altering the flow of a river is minimised to an acceptable level based on available scientific knowledge and current values associated with respect to the trade-off between environmental, cultural, social and economic factors.

The Crown This refers to the NSW State government as in Crown Land i.e., land which is owned and managed by the State government. The Crown owns the rights to the water and it manages the water through water sharing plans and issues rights to use this water through the legal and licensing framework.

Unassigned water There are some groundwater sources in NSW where the long-term average annual extraction limit (LTAAEL) is higher than the total volume of licensed entitlement plus water required to meet basic landholder rights (BLR). The difference between the LTAAEL and licensed entitlement plus BLR is called 'unassigned' water and is potentially available to be allocated as new entitlement.

Unregulated rivers Any river that has not been declared by the Minister to be a regulated river. It typically has no large instream dam to control the flow of water. Most coastal rivers, and inland rivers upstream of major dams are unregulated rivers.

Water sharing plans (WSPs) These plans are a major part of the NSW water reforms under the Water Management Act 2000. They regulate how water will be shared between water users including the environment.

What is water reform?

Water reform is an Australia wide process, changing the way surface and underground water (groundwater) is managed, to protect our environment, communities and economy.

Problems that led to the need for water reform include:

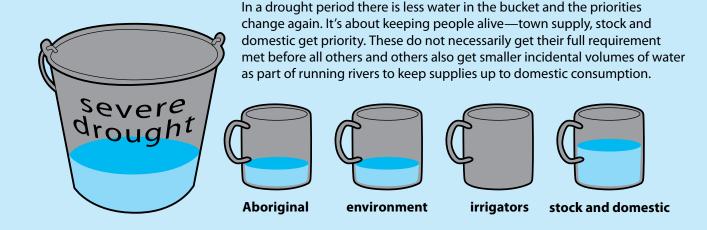
overuse of water for irrigation, domestic use, industry, town and other uses

- pollution of rivers from sewerage contamination, storm water and chemicals
- destruction of river banks and riparian (riverside) vegetation
- lack of access to, or destruction of, Aboriginal fishing, swimming, hunting, burial sites and Aboriginal heritage.

Water reform has changed licensed water sharing priorities









Water sharing plans are a key part of water reform

Every part of the state has, or will soon have, its own water sharing plan, and it will be reviewed every 10 years. Water sharing plans:

- place sustainable limits on extraction (how much water can be taken out without impacting on a healthy environment)
- establish a system to manage water extraction from rivers and groundwater systems
- define rights to water without a licence, including native title rights, basic landholder rights and harvestable rights
- · streamline administration on how water is managed
- · facilitate trading.

Licence holders are bound by the water sharing plan. This includes cease to pump limits, rules for water trading (dealings), and rules for placement of new and replacement works.

Water sharing plans have clearly defined access rules such as:

- when people must stop taking any water for commercial purposes (cease to pump)
- when people should reduce the amount they take (flow sharing)
- where pumping is prohibited to allow special flows to go past (the first flush rule)—this may be the first flow of water down a river after a drought or rainfall event
- where new bores can be located.

For further details refer to Chapter 7 'Water sharing plans'.

Special water sharing provisions for Aboriginal people

In contrast to the *Water Act 1912* which did not recognise Aboriginal cultural values, the *Water Management Act 2000* includes special provisions to protect them.

Aboriginal cultural water access licences

These licences are only available to Aboriginal persons or Aboriginal communities and provide water for personal, domestic and communal use including drinking, food preparation, washing, manufacture of traditional artefacts, watering of domestic gardens, hunting, fishing and gathering, recreational, cultural and ceremonial purposes.

Aboriginal community development water access licences

These licences provide for water-related businesses, and are available in some water sources in coastal water sharing plans, but not inland areas because of the Murray-Darling Basin cap which limits growth in entitlements.

Native title rights to water

The Water Management Act 2000 includes native title rights to water (see Chapter 5 'Water for basic rights').

Increased protection for places of Aboriginal cultural value

Within a water sharing plan area, Aboriginal community groups or individuals may identify special places of Aboriginal cultural value which may need protection, or would benefit from a certain flow, or might be damaged by increasing the amount of water being removed.

Detailed locality information is not necessarily required for licensing purposes—it may only need to be described as being somewhere in a water source.

A water sharing plan may include specific rules to protect places of cultural value such as:

- restricting where pumps can be placed
- specifying times of the year or flow levels when pumping should be reduced or excluded
- limiting the amount of water allocated.

These areas or special zones will need to be identified to the Office of Water when the water sharing plan is being developed or reviewed during community consultation. This will then mean they can be considered in the Plan both for protection or for potentially being suitable for an Aboriginal cultural licence. See Appendix K 'Information Agreement and Water Dependent Cultural Asset Report Card' for additional information on the identification and protection of Aboriginal water dependent cultural assets (areas, sites) for inclusion in local water sharing plans.

The National Water Initiative

The National Water Initiative (NWI) requires jurisdictions to provide for Aboriginal access to water resources through planning processes, and to include Aboriginal customary, social and spiritual objectives in water plans. Native title interests in water are to be taken into account and Aboriginal water use assessed and addressed in plans. Under the National Water Initiative section titled Integrated Water Management, there is an expectation that environmental and other public benefits will be identified as specifically as possible within water resource planning frameworks.

According to the National Water Initiative, Aboriginal access is to be achieved through water planning processes that:

- 'include Indigenous representation in water planning, wherever possible;
- incorporate Indigenous social, spiritual and customary objectives and strategies for achieving these objectives, wherever they can be developed;
- take account of the possible existence of native title rights to water in the catchment or aquifer area;
- potentially allocate water to native title holders; and
- account for any water allocated to native title holders for traditional cultural purposes (clauses 52-54)'.1

The National Water Commission (NWC) has developed the National Water Initiative Implementation Plan. Paragraphs 52 to 54 state:

'National Water Initiative Element No.1: Water Access Entitlements and Planning Framework

Action 7: Water plans to address Indigenous water issues **Actions**

- The Parties will provide for Indigenous access to water resources, in accordance with relevant Commonwealth, State and Territory Legislation, through planning processes that ensure:
 - Inclusion of Indigenous representation in water planning wherever possible; and
 - Water plans will incorporate Indigenous social, spiritual and customary objectives and strategies for achieving these objectives wherever they can be developed.
- II. Water planning will take into account the possible existence of native title rights to water in the catchment or aquifer area. The Parties note that the plans may need to allocate water to native title holders following the recognition of native title rights in water under the Commonwealth Native Title Act 1993.
- III. Water allocated to native title holders for traditional cultural purposes will be accounted for.'



A brief history of water management in NSW

Aboriginal traditional land and water management

Before white settlement, the rivers and other water resources were part of traditional lands and managed by the Aboriginal people of those lands. The land supported a rich variety of vegetation, and could soak up the surface water and release it slowly. Rivers ran naturally, varying with the seasons. During floods, the excess water drained into underground basins, seeped into aquifers or collected in pools and other wetlands such as billabongs. Wildlife flourished and Aboriginal people could move freely from place to place for food and traditional cultural activities.

Floods replenished the land with top soil and kick started new life, which in the deserts may have lain dormant for years. Wetlands absorbed water like sponges, cleaning it of silt and debris, slowing the flow and providing habitat for plants and animals.

Riverbank vegetation held the banks together and provided homes and food to a wide variety of animal life. Aboriginal hunting, gathering, agriculture, cultural and spiritual values were all linked to this cycle. Movement across the land was in tune with the seasons.

Art and storytelling throughout Aboriginal people long history with this land illustrate this close link to water. People and water were one with Country.

Development gets priority but culture and Country suffer

After white settlement, the focus of water management changed: now it was about development. Water was taken for domestic and farming purposes as a given right with limited government control. Rivers were dammed, wetlands drained and the groundwater sources exploited.

Movement across and throughout the countryside was restricted by fences, farms and new laws. Natural water holes became filled with silt and animal waste. Changed land management practices led to rivers becoming affected by chemical pollution.

The government sponsored the removal of large tracts of vegetation and the building of farm dams, water supply and irrigation schemes.

Government manages and owns the water With Federation in 1901, Australia became a nation in the eyes of the new settlers. The state governments now owned the water, at times in partnership with the Commonwealth. The water was said to be vested in 'the Crown'. Water was owned by the government, including water flowing across the land and in rivers, wetlands and lakes, or underground in aquifers.

The early 1900s—drought The worst drought in the history of white settlement severely impacted on inland communities and encouraged a new round of dam building and subsequent expansion of agricultural development.



The Narran River. Photo: OEH

1912—NSW Water Act This act licensed water for farming, commercial use and domestic supply such as Town Water Supply. New water licences permitted water to be taken from rivers and from underground (bores, wells) for watering stock, growing crops, and for industry.

The amount of water to be taken was based on the area to be irrigated. Water licences were closely linked to the land.

Water licences were easily obtained for commercial activities. In some river valleys, more water was licensed to be taken out than was actually available.

The environment was not considered a key stakeholder.

To stimulate the economy and provide employment for the ever-increasing population, new irrigation areas were opened up and dams were constructed, especially on inland rivers. Water supply pipelines and government subsidies encouraged the growth of rural communities. With development also came the clearing of the land and the introduction of non-native animals and plants, sometimes very poorly adapted to the climate and ill-suited to the highly erodible soils.

Mid 1900s—Salinity Salting of the land and waterways was a major issue in the Murrumbidgee Irrigation Area. River gums died along the Murray.

Since the 1950s, much agriculture has relied on chemicals such as fertilisers and pesticides leading to toxic run-off from farms and towns entering the waterways.

1991—Blue-green algae A major environmental disaster occurred. The Darling River along most of its length turned blue-green, and villages and towns along the river either had water transported in, or sunk new groundwater bores in an attempt to access clean water for people and stock. The crisis was brought about by very low flows, hot temperatures and the chemical soup present in the water ways.



Blue-green algae. Photo: OEH

Finding a better way—the water reform process

The environmental catastrophes of the 1990s became a real wake up call, not only for the river systems but across the State with wetlands diminishing; lack of seasonal flows in the rivers; red gums dying along the Murray and the increased salting of irrigation areas and the resultant poor water quality in the rivers and streams. Even coastal rivers were impacted with the Macleay River ceasing to flow in 1993. There were huge fish kills in our coastal rivers following flooding from acid water run-off from poorly managed agricultural lands.

All these events resulted in the community demanding water to be much better managed, the environment improved, and water better shared amongst all the users. This brought about a change in laws at the State and Federal government levels.

Mid 1990s—All States agree that water must be better managed The Commonwealth Government supports the States to improve ways of managing water—the 'water reforms'.

1993/4—The Murray-Darling Basin cap was introduced This meant no new surface water licences would be granted in the Murray-Darling Basin as the limit to available water had been reached.

1996/7—Most coastal rivers are embargoed This meant that no new surface water access licences were to be issued.

2000—New laws change how NSW water is managed The Water Management Act 2000 (WMA) passed in State Parliament. It introduced new ways of sharing the water with the establishment of water sharing plans developed by government in partnership with local communities.

The Water Management Act 2000 recognised the cultural and spiritual importance of water to Aboriginal people in NSW.

It also recognised the environment as a shareholder and it was given a priority in the water sharing plans.

Limits were placed on how much water could be taken from the environment leaving enough for the environment's needs i.e. sustainable limits on extraction. The way water was to be managed and administered, including licensing, was streamlined and information on how water was being used and by whom was more freely available.

New ways of trading water were introduced, as was the concept of a hierarchy (who is first priority, second priority etc), for water use recognising the needs of the environment, town water supply, stock and domestic water, commercial and the irrigation community. Licence holders were given shares in a water source as was the environment.

Rules for setting aside water for the environment and to entitlement holders (those who had a water licence) are contained in water sharing plans which have been, and continue to be, developed after consultations with regional communities.

2004—The National Water Initiative was developed through the Council of Australian Governments (COAG). It requires that Aboriginal interests, such as cultural practices and access to water, be allowed for in water sharing plans.

2009 to 2011—The Murray-Darling Basin Plan is being developed

References in this chapter

Jackson S, Tan PL, Altman J (2009) Indigenous Fresh Water Planning Forum: proceedings, outcomes and recommendations National Water Commission, Canberra



SUMMANATY What is water reform?

Water reform is a change in the way Australia's water is managed, to give better protection to the environment, communities and economy.

For millennia, water sources were part of traditional lands managed by Aboriginal people in accordance with cultural practices. Rivers ran naturally, varying with the seasons. When non-Aboriginal people took over water management, they were more interested in controlling rivers, and changing the landscape.

The previous Water Act was introduced in 1912. It provided for water licences, irrigation districts, and encouraged extensive dam building on inland rivers.

But water was often over-extracted, polluted, and riparian vegetation was damaged. Problems such as salinity and algal blooms, and dying red gums made it clear that water had to be managed more carefully.

New water management laws were introduced in NSW in 2000 (the *Water Management Act 2000*):

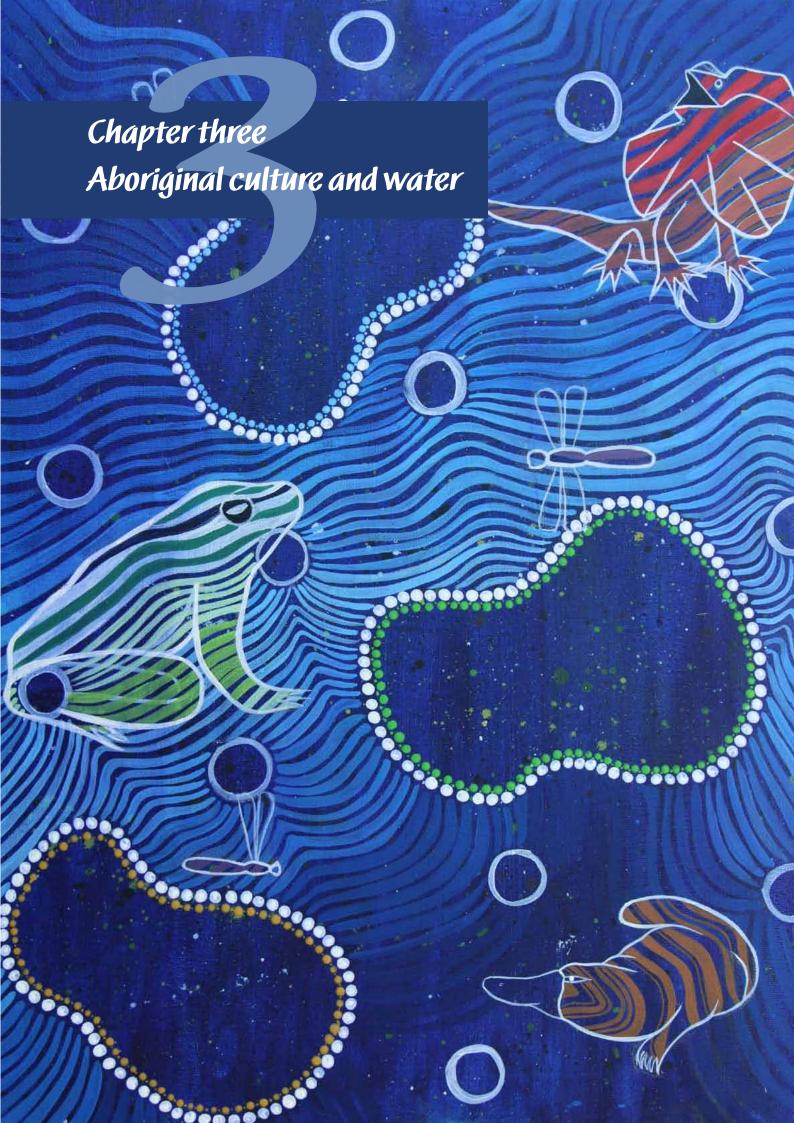
- requiring formal plans to manage water (every part of the state has or will soon have its own water sharing plan which will be reviewed every 10 years, and licence holders are bound by the water sharing plan)
- providing greater certainty for water users
- · providing water for the environment
- recognising basic rights
- · increasing protection of Aboriginal cultural heritage
- placing sustainable limits on extraction
- facilitating trading of water—a 'water market'
- streamlining administration.

At a federal level the National Water Initiative (NWI) was introduced in 2004. It required that states provide for Aboriginal interests in water sharing plans.

Water reform provides new opportunities for Aboriginal people:

- Aboriginal cultural water access licences—only available to Aboriginal persons or Aboriginal communities
- Aboriginal community development water access licences available in some water sources in coastal water sharing plans, but not inland areas
- · native title rights to water
- identification and protection of cultural values and sites, such as restrictions on where pumps can be placed, and how much water can be extracted.







Tiddalik dreaming

This painting is about Tiddalik the frog, who just let all the water out after laughing. The frill-neck lizard and the platypus are happy that water is restored back to the land and billabongs for all to share. The waves represent animals' ability to blend in with the environment.

This Chapter...

discusses Aboriginal culture and cultural practice, in the past and present, and their relationship to water management in NSW.



Aboriginal culture and water

Traditionally Aboriginal peoples cared for the land, living as one with it. This custodial relationship, expressed through cultural practice, sustained the natural environment and secured the viability of resources necessary to sustain their continuing existence.

Aboriginal environmental knowledge and associated cultural practice is becoming increasingly recognised as essential elements of today's land and water management practices.

Aboriginal people are well placed to contribute to and have meaningful involvement in water management. Engaging with Aboriginal people and respecting their cultural knowledge and practices is important for all people because the rewards are great: a healthier environment, healthier communities, and a deeper understanding of the land.

Water management has a long history for Aboriginal people

From the earliest days of modern Australia, Aboriginal people have been involved in water sharing, helping the first European settlers as they stepped ashore.

'The first involvement of white settlers with Aboriginal peoples occurred around Botany Bay and Port Jackson when the first fleet arrived in January 1788. The primal contact related to water. A boat load of Arthur Phillip's party approached a cluster of natives on the shore of Botany Bay. The Europeans mimed the need for water by making bailing motions with their caps, bringing them to their lips in gestures of universal implication. The natives motioned the group around the point where fresh water could be found' ¹.



Joseph Lycett, Fishing by torchlight, c. 1819. National Library of Australia

As the colony developed and expanded, Aboriginal knowledge of water availability continued to be important for early European settlement. Today. Aboriginal people still have a lot to offer, through their cultural heritage and traditions of respecting natural systems and working sustainably with them.

The traditional Aboriginal lifestyle of sustainable farming of natural and cultural resources was developed and maintained over many generations. Cultural practice prescribed how to share water equitably and manage it for the future.

Aboriginal people have an inner custodian relationship with their country which connects them to their living environment and natural resources. In Aboriginal culture it is understood that managing the land and water meant being at one with their culture and country. This is how the lands and waters have been managed for tens of thousands of years. For Aboriginal people, culture and Country are not separate things.

Nature's resources could be relied upon to provide whatever was needed. Cultural practices allowed for seasonal climatic changes as well as more extreme natural events such as droughts, floods and fires.

'Aboriginal people were exploiters, conservators, managers and manipulators of water resources. They were able to prevent the pollution of water, filter it before drinking, to reticulate it and to store it so as to reduce evaporation. They brought remarkable insights to resolve intransigent problems of how to find water, how to conserve it and how to use it to produce basic food stocks of fish, shellfish and eels. Indeed, very little of the fundamental elements of hydrology and hydraulics eluded them.'2

Many accounts of the early settlers make reference to the extensive and intricate knowledge of Aboriginal people in finding and managing water and natural resources.

There are vivid portraits of the Sydney tribes spearing and netting fish from canoes fashioned out of a single sheet of bark lashed at each end with vines and caulked with resin. For instance, Governor John Hunter noted that around the estuaries of Port Jackson, Broken Bay and Botany Bay the 'Blacks' spent much of their time fishing: the men with spears: the women with hooks and line and also gathering shellfish.

Where people spent time was based on resource availability and water was particularly important because it sustained people, and also because it attracted and sustained other resources such as plants and animals.

'Proximity to drinking water governed the location of camping sites and hunting grounds. Studies of shell middens sites on the NSW south coast showed that most were situated within 50 to 100 metres of fresh or brackish water.' ³



An Aboriginal group on the River Darling at Avoca Station in 1904. Photo: Cudmore Collection, South Australian Museum Archives

Creation stories and culture

Traditional knowledge, cultural beliefs and practices rely heavily on the foundation laid by creation or dreaming stories, with their explanations of land formation, animal behaviour, plant uses and remedies, and how the land and its ecology must be managed.

Cultural belief and practice governed every aspect of traditional Aboriginal life. It showed people how to sustain the environment, and find food, water, medicines and other resources. It also set out how water was used and shared.

Cultural belief and practice regulated:

- the protection of the environment and the sustainable use of natural resources, e.g. water, soil, plants and animals
- social behaviour
- kinships, marriages
- cultural teachings and ceremonies including men's and women's business
- funeral practices, sorry business
- tribal boundaries
- justice and the punishment for breaking the law
- spirituality, linking back to creation and their living culture.

Different Aboriginal groups have distinctive sets of beliefs and practices, and these need to be respected and understood by governments during consultation with Aboriginal people, such as when developing water sharing plans.

'Aboriginal 'lore' and land management are not just things of the past. They are very much a part of the present and the future. Aboriginal land management had been part of this land for tens of thousands of years, and involves people being at one with the land, water and environment'. 4

Traditional culture is not recorded through the written word. The library of knowledge was embedded in the people, their living environment, and expressed through stories, songs, dances and artworks which were, and still are, passed down through the generations today.

Creation stories often have many levels of meaning, and take many years to learn and understand. Children may first hear a simple version, but will be given more details as they grow older.

There are many variations of creation stories in different Aboriginal groups throughout Australia. The stories and beliefs may differ from group to group, but they share core principles and protocols.

'Dreamtime stories are still being told and the knowledge these stories contain is still being passed on from generation to generation of Aboriginal people'4

A well known example of a creation story relating to sustainable water management is Tiddalik the frog who drank all the water (see page 3-5). There are many different versions of this story, but its messages about greed and selfishness are consistent. It is relevant to today's society when talking about water management and sharing the resource appropriately among all users. Tiddalik broke the law and he had to live with the consequences.

Another example is the story of the creator spirit Baiame and how he built the stone fish traps or Ngunnhu at Brewarrina, to help the people survive after a long drought (see page 3-4). He also taught the old men how to call the rain. Baiame instructed that, although the Ngemba people of Brewarrina are to be custodians, they were to share the maintenance and use of the fish traps with neighbouring tribes. The site became an important regional meeting and trading centre, and is now recognised as a heritage site of national significance.

Aboriginal communities and water management

Water reforms can help protect culture, reinvigorate caring for Country and can contribute to building the capacity of communities to access their rights to water and to become involved in the water sharing decision making process.

Within the current NSW laws on water, there are opportunities for Aboriginal people not only to improve their local environment but also to use water for cultural activities and business purposes. Some Aboriginal communities are already taking up these opportunities as the case studies in chapters 5 and 6 show.

Water access licences provide a key opportunity for Aboriginal people. They have been put in place specifically to provide the opportunity for Aboriginal people to maintain the places, resources, and practices that are significant for each local group. Communities are now able to get involved in the water sharing process and to speak up about what is important for their cultural, social and economic development.

Aboriginal communities can access many benefits from involvement in cultural and natural resource management. Where the natural environment is being repaired and protected, this will also assist in replenishing and sustaining cultural resources, such as bush tucker.

Aboriginal communities can also benefit through programs and projects that build capacity in natural and cultural resource management, thus leading to further employment options for community members.



How Baiame's Ngunnhu came to be

This story tells how the lore was created, how rivers were made, and how to use the rivers' resources sustainably. The Ngunnhu (fish traps) are still there, and still of great spiritual significance to the Ngemba people (Brewarrina community), but low water flows, and sediment build up are compromising their use. Water reforms offer a chance for specific water allocations to restore and maintain the Ngunnhu.

Everything was different then. There were no fisheries. There was no river. This was the Dreamtime.

Many things happened in the Dreamtime. This was the time that Baiame, the Spiritual Leader or Great Wirrinun, came to the Aborigines through a tremendous upheaval in the centre of the land. The earth opened, gigantic rocks were thrust out and scattered on the flat red ground, as Baiame entered the land of the sun and the moon. Those giant rocks, rounded and smoothed by time, are visible today in the Centre of Australia.

Baiame's exploits have been preserved in legend by the people who benefited from this patronage through the ages. It is told that on one of his walkabouts, Baiame stepped from Cobar to Gundabooka—which is a sacred place of the river people—then to Byrock, where the mark of his foot was left on a stone, and then to Brewarrina.

Baiame stopped at the waterhole known as Gurrungga, where he spied, beyond the rock wall that held back the water, a large black fish. Being hungry, he raised his short wooden spear and struck the fish which, wounded by the thrust, broke through the rock wall and burrowed desperately into the hard ground to escape. Baiame dug after it, cutting a channel that filled behind him with the escaping water from Gurrungga. The fish, grunting with pain, dodged and twisted away from the pursuing spear thrusts to form the tortuous bends of a now mighty river.

Where the fish doubled back, are the still billabongs. Where Baiame rested in his pursuit, are the hard rock barriers that cross the river.

The chase continued until the black fish broke into a broad river and made its escape. So the Callewatta* was formed and can still be traced from Brewarrina to the sea.

The once plentiful waters of the Ngemba, Murowari, Paakantji, Weilwan, Barabinja, Ualarai and Kamilaroi tribes who lived on the fertile country around Brewarrina began to disappear. Fish drained away to the west, the country slowly browned, as a Big Dry shrunk the waters further, leaving strings of fading green waterholes. The rich grasses yellowed, the trees withered, the once abundant animal life was reduced. The survivors crowded to the dry lakes and waterholes where they were trapped by the clinging mud or became easy prey for the hungry hunters.

As the Big Dry continued the Ngemba of Brewarrina faced a famine as the depleted waters of Gurrungga were swallowed by the Sun. Their plight became known to Baiame who returned to Brewarrina with his two sons, Booma-ooma-nowi** and Ghinda-inda-mui**. Using scattered stones and boulders dug up by Baiame they laboured to set them out in the pattern of a great fish net. First the boulders, then higher to a man's thigh with smaller stones, until the stone mesh stretched down the slope of the wall of the Gurrungga and across the dry water course. Baiame showed how to open the stone traps at either end and to set the stones securely so that they would always be kept in good repair.

That evening, as the fires twinkled, the folk gathered on the bare banks and held a corroboree for Baiame, who took a coolamon and showed some of the old men how to call the rain. For hours the hard ground rumbled under the stamping feet, while the fine dust rose up through the clapping boomerangs, clouding the camps, before the dancers flung themselves down to sleep around the dimming campfires. Slowly the dust clouds drifted higher and higher into the night sky where they ringed Giwa the moon, who filled them with rain.

The exhausted dancers were woken by big heavy drops of rain, which thudded onto their stiff dusty bodies and thumped into the soft powdered earth. For several days the rain poured down, clouding the green water of Gurrungga which rose slowly before the excited people, who were then startled by a growing roar as a foaming wall of brown water rushed into the Gurrungga, over the rock wall, covering Baiame's net or Ngunnhu, and on down the dry Callewatta.

Slowly the creaming flood fell, exposing the sharp black pattern of Baiame's net, to show the fins and mouths of thousands of fish breaking the surface of the water. The watchers, overjoyed at the return of the fish, rushed into the river and herded the teeming fish through the stone mesh, killing them with their sticks, their short spears or just grabbing them in with their hands. One grunted like a wounded animal caught, this was one of Baiame's black fish, the black bream or grunter, which all grunt as the great fish Baiame first speared. The older and wiser men followed behind the excited hunters and blocked the entry to the stone traps, preventing the escape of any fish back down the river to warn others of the trap.

Long thin black lines scribbled themselves across the blue sky as the waterfowl answered their ancient call and the thanks of all were given to Baiame. This is the story of how the Rock Fisheries came to Brewarrina.

Published with the permission of the Ngemba people

- * Calle means water in Ngemba language. Watta was a translation of the English water
- ** Ualarai language

Tiddalik the frog

Tiddalik the frog broke the lore—today you could say he ignored the water sharing plan—but he suffered the consequences. This is an ancient story that is still popular today, it has been published in book form and taught in schools. It is told in many parts of Australia.

Long ago there was a frog called Tiddalik.

It was the dry season and there was not much water in the land. Tiddalik didn't want to go thirsty, and he decided to drink all the water he could find, so he could keep it all for himself. Down to the billabong he went and began to drink, growing bigger and bigger as he slurped up the water. Soon the billabong was dry. But Tiddalik was not finished. He hauled himself up the bank and hopped off to the next billabong, again he drank it dry.

When the other animals saw what Tiddalik was doing they were shocked and angry. Without water they would surely die. Didn't Tiddalik care about anyone else?

All the animals came together to talk about what they could do. They decided someone should find Baiame and tell him that Tiddalik was drinking all the water. The kangaroo said 'I will go' and off he went, jumping up the Stairway Mountains into the sky where Baiame lived.

Meanwhile the wombat had an idea, 'we can make Tiddalik laugh', he said 'and then he will spew out all the water and the billabongs will fill again'

'Good idea' said the others, and they gathered around, working out all the funny things they could do to make the giant frog laugh.

Then they set off to find Tiddalik. He was at the billabong where the grumpy old platypus lived. By now he was enormous, and he was still drinking.

The platypus was enjoying a swim, but as the last of the water drained out of the billabong, he found himself sinking in mud, and he was angry.

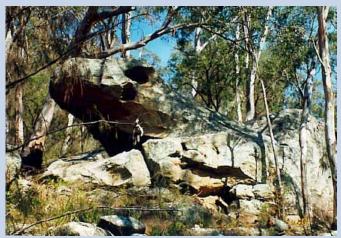
The kookaburra was the first to try to make Tiddalik laugh, she let out a big loud laugh and made all the funniest sounds she could possibly make, but none of them amused the frog.

Then the wallaby and the emu did a funny dance, but Tiddalik just sat there.

As all animals were taking it in turns to try and make Tiddalik laugh, the grumpy old platypus tried to climb up the billabongs steep, muddy bank but he was stuck and this made him even angrier.

Then the koala and the lizard tickled Tiddalik's belly that made him giggle, but he tightened his lips and refused to put the water back.

Then the snake did somersaults and twisted himself into knots. He almost choked himself and Tiddalik thought that was funny. Tiddalik giggled, spilling a bit of the water, but he didn't laugh.



Tiddalik the frog in rock form in the Hunter region. Photo: John Thorpe

All this effort was making the animals tired and thirsty. They tried their best and did their funniest tricks, and still Tiddalik held onto the water.

But something was amusing Tiddalik. Each time the grumpy old platypus tries to climb out of the empty billabong, he kept tumbling back down,—yelling at Tiddalik as he went. Such a serious, angry platypus— Tiddalik started chuckling.

The platypus would not give up. Up the bank he struggled then back he slid. Tiddalik was more and more amused until he could not hold back he let out a big laugh and all the water came gushing out of his mouth. The animals rushed to get out of its path, but some were caught in the wave of water and washed away.

The billabong quickly filled, the flood poured down the dry creek bed, filling the next, billabong and the next until once again there was enough water for everyone.

But Baiame was watching, and had seen what Tiddalik had done. Baiame was not pleased with Tiddalik's greed and selfishness. He said to Tiddalik 'you have been a greedy frog and did not consider all the other animals. If you had not put back the water they would have died, and for this you must be punished.' Baiame turned Tiddalik into stone, and said 'let this be a lesson to all, the water is there for all to share'.

Written by Lillian Moseley (OEH), with permission, from a story told by Graham Ward (deceased)



Different ways of thinking about water

For thousands of years Aboriginal people have had a spiritual connection with natural features such as rivers and lakes. Cultural beliefs and practices explained how they were created, how they have special cultural values, and methods or techniques for the long-term sustainable .management of water dependant cultural values.

Lack of flows in the river systems, drained wetlands, polluted estuaries and lakes, drying up of natural springs, all greatly impact on Aboriginal people's capacity to undertake cultural activities. These include hunting and fishing; access to medicinal plants and herbs; ceremonies especially associated with water. Dreaming tracks, songlines and spiritual connections with Country at the heart of Aboriginal culture are fractured and sometimes broken.

When Country is in decline, people's cultural and spiritual health, general and economic well-being declines along with it.

For Aboriginal people, water has a spiritual significance and is not looked upon as an element to be managed in its own right, but as a part of the natural, spiritual and environmental order of things. Aboriginal people see things holistically; the land, water, flora and fauna are as one. Life does not travel in a straight line, but in an integrated pattern of interconnected cycles. When a cycle is broken, the pattern becomes unbalanced.

The water reform process is grounded in western management and scientific perspectives which divide natural resources (land, water, vegetation, soil) among different departments and specialists. Governments and many non-Aboriginal people, look upon water as something which can be controlled or managed on its own. It may not have any spiritual significance and may not be part of a belief system.

It is essential that non-indigenous stakeholders and the wider community see our relationships to land and culture. Through understanding comes support, recognition and respect. Many non-Aboriginal people have a simplistic view of contemporary Aboriginal interests, and do not understand where Aboriginal people are coming from. Often, for example, they may think we are only interested in cultural sites, and not the wider human rights, land management and economic development issues. This makes it hard for them to see Aboriginal concerns as core water management issues.'.4

To Aboriginal people managing Country holistically and feeling spiritually connected to the land makes obvious sense. The understanding that culture and Country are one and the same, could help all Australians to a sustainable future.

Instream cultural values and water for cultural purposes

For thousands of years, natural flows assisted Aboriginal people to maintain a sustainable food and resource base and undertake cultural activities such as ceremonies, teaching and recreation. In water management talk, such places, activities, or things that depend on water are known as instream and/or off stream cultural values.

The water flow that helps protect and maintain instream and/or off stream cultural values is known as water for cultural purposes. Water for cultural purposes can be described as sufficient flow in a suitable volume and seasonal pattern to ensure the maintenance of water dependant Aboriginal culturally and spiritually significant places, practices and resources.

Water sharing plans can help to protect instream and off stream cultural values. Where an Aboriginal community identifies some natural features as having spiritual, social and customary cultural values, the water sharing rules for that catchment can be set up to protect these values by providing an appropriate water allocation.

Instream and off stream cultural values could include (but are not limited to):

- maintenance of sites of significance
- resource collection points, e.g. harvest sites for traditional bush foods, fish and other aquatic species
- traditional song lines and travelling routes
- ceremonial, creation and meeting sites
- men's and women's cultural activities
- · totemic and creation species
- · burial grounds.

The Brewarrina fish traps are a good example of water dependent cultural values. Not only were they linked to the Dreaming stories and a source of fish and other aquatic species, they also served to slow the flow of water and retain a sustainable fresh water supply to ensure the people's ongoing survival. They operate best in a natural, unregulated flow.

A key issue—Aboriginal cultural water

Brewarrina fish traps—Baiame's Ngunnhu

The Brewarrina Aboriginal fish traps were placed on the National Heritage Register in June 2005, as one of the 106 places considered to be of outstanding national heritage value to the Australian nation. Their listing notes that:

'Long before Europeans came to Australia, Aboriginal communities were applying advanced knowledge of engineering, physics, water ecology and animal migration to catch large numbers of fish in traps. The Ngunnhu was, and continues to be, a significant meeting place to Aboriginal people with connections to the area. The Brewarrina fish traps continue to be visible in the Darling River today'.

The condition of the fish traps and the health of the river ecosystem are closely connected, and both have been damaged in recent decades by inappropriate land and water management actions, including:

- alteration of natural flows by years of overextraction of water and the building of a weir just above the fish traps
- blockage of natural fish passages
- accumulating sediment deposition around the fish trap structures, filling sections, allowing weeds to grow and increasing turbidity.

This has made it almost impossible to keep the fish traps in good order. Traditional practices of regular maintenance and use have been interrupted, and this unique cultural icon has degraded. Understandably, this has also affected community morale because cultural practices can no longer be carried out properly.



Biaiame's ngunnhu in the 1930s. Photo: State library of Victoria

The Ngemba people, who are traditional custodians of the fish traps, have identified that along with repair of the fish traps, a consistent cultural flow of water is required to help sustain the integrity of the fish traps. This means that environmental flows may need additional water for cultural purposes for the fish traps to function as they were traditionally intended and constructed. Nobody is sure exactly how much flow the fish traps need, but the community knows how a functioning fish trap works and what it looks like. Culturally-related water research may help clarify how much water is needed to maintain a viable flow volume and rate through the fish traps. This then may help identify how much water should be allocated in the water sharing plan for this purpose.

With the task of restoring the damaged structures still to be undertaken, the Landcare group is expected to take a key role, and it is an important opportunity for them and other community members to reconnect with the traditional ways and strengthen cultural ties.

This is a significant project which includes a national heritage item, an Aboriginal cultural icon, and a tourist draw card for the town of Brewarrina. It is going to need community and government to work in close partnership to be successful.

Research into flow requirements to sustain cultural values

Aboriginal cultural values associated with rivers and aguifers are poorly understood by water resource managers. Some cultural values may be difficult to relate explicitly to particular flow regimes, and to quantify or articulate in water allocation decisions. However there is often an exclusive focus given to ecological criteria in environmental flow assessments and water allocation decision-making.

'Discussion around environmental flows tends to be highly technical and strongly focused on meeting purely ecological objectives, resulting in alienation of traditional Aboriginal knowledge and values. In many jurisdictions environmental flows serve as a surrogate to meet Aboriginal cultural, social and economic needs'.5

There is a need to assess the relationship between environmental flows and water for cultural purposes and to quantify the amount of water required to sustain Aboriginal cultural values, and present this information scientifically in terms of water volumes and flow rates for inclusion in water sharing plans. In undertaking this work, it is important to recognise that Aboriginal communities are best positioned to describe and recognise flows that deliver on the protection of their cultural values.

The following priority actions are suggested for research bodies to undertake as collaborative proposals to underpin water for cultural purposes:

- devise protocols to identify cultural values of water with the relevant Aboriginal catchment community
- identify, record and map Aboriginal cultural values in a culturally agreed manner across all catchments

3 Aboriginal culture and water

- quantify the flow or groundwater required to sustain those cultural values identified by community
- allocate the flow volume required to sustain the identified cultural values within the relevant water sharing plan.

Implementation of these suggested priority actions to establish what is culturally important and how best to manage those cultural values requires close collaboration with relevant Aboriginal people in each local area.

Within the Water Management Act 2000, and through the water sharing plan process, there has been recognition of this problem. Through the introduction of a new specific purpose water access licence, the Aboriginal cultural water access licence, there is potential for Aboriginal people to identify cultural needs for water at either the local or regional level. Within the area's water sharing plan water may be allocated to these needs, such as providing additional flow for a specific cultural purpose. Cultural needs may mirror environmental needs such as filling wetlands, increasing seasonal flows or improving instream habitat, but are like an additional water source, as well as environmental flows. Water for cultural purposes is linked intimately with identity, recognition, belief and respect for Aboriginal cultural values, the knowledge holders and the importance of place to specific Aboriginal communities.

There is more information on Aboriginal cultural water licences and how to apply for one either as an individual or as a community in Chapter 6 'Water licences'. Appendix J provides information on the process used to consider applications for licences and approvals associated with cultural purposes.

The Office of Water can also assist. Contact details are listed in Appendix C 'Useful contacts'.

Who defines cultural values?

Each Aboriginal community has its own unique set of cultural values, therefore only the local community can define what is of value and of cultural significance to them. Aboriginal culture and cultural practices belong to the Aboriginal peoples of a particular area and therefore

the expression of that culture is the intellectual property of each particular group or community.

Time to work together and bridge the gaps

With the introduction of non-Aboriginal infrastructure, widespread native vegetation clearing, and pastoral industry development in general, the cycles of traditional Aboriginal caring for Country were damaged and the cultural and spiritual connections became very difficult, or in some cases impossible, to maintain.

'The lores and customs have been proven successful and have sustained this country prior to settlement. Before invasion, Aboriginal culture relied on, and forged a harmonious relationship with the ecology. With invasion the cycle was broken. The breakdown of the traditional links between our culture and the ecology of the land began. The health of both our people and land has been harmed'.⁴

In spite of this, current day Aboriginal peoples' connections to caring for Country still remain strong. Today, governments are much more conscious of sustainability and Australians as a whole are increasingly aware and respectful of Aboriginal culture. However government processes are rarely conducive to maintaining and reinvigorating traditional practices.

If there is to be meaningful engagement between government and Aboriginal people in water sharing, governments of all jurisdictions need to recognise the importance of cultural, economic, social beliefs and practice, and Aboriginal communities need to speak up about the cultural values that are important to them.

Over the years Aboriginal people in NSW had only scant involvement in the water management and planning processes, so there is a lot of catching up to do. The culturally appropriate engagement of Aboriginal people in this process is vital, so that governments and Aboriginal communities can work together towards achieving sustainable natural and cultural resource management outcomes that are of benefit to all.

Is it Lore or Law?

Across Aboriginal communities there are differing views on the use of the terms 'law' or 'lore' when referring to Aboriginal culture, cultural beliefs, values and practices. Different Aboriginal peoples use terms like Aboriginal law, Aboriginal lore, cultural law, law and custom, etc as a means to distinguish the 'law' of the general society from the Aboriginal community cultural beliefs and cultural practices.

References in this chapter

- 1 Frost 1987, 184-85 Cited in Lloyd C.J. (1988) Either Drought or Plenty, Water Development and Management in NSW, Department of Water resources
- 2 Lloyd C.J. (1988) Either Drought or Plenty, Water Development and Management in NSW, Department of Water resources
- 3 Sullivan and Gibbney cited in Lloyd C.J. (1988) Either Drought or Plenty, Water Development and Management in NSW, Department of Water resources
- 4 Callaghan, G and Moseley, L (2000) Healthy Waters, Healthy People—A Support Package for Aboriginal and Torres Strait Islander Representatives on Water Management Committees Department of Land and Water Conservation
- 5 Jackson, S (2008) Recognition of Indigenous Interests in Australian Water Resource Management, with particular reference to environmental flow assessment. Geography Compass 3.

SUMMUATY Aboriginal culture and water

Cultural practices, developed over many generations, prescribed how to share water equitably and manage it for the future.

Aboriginal traditions see land, water, flora and fauna as one rather than separate elements to be managed independently.

Aboriginal natural resource management has a strong spiritual dimension, fostering a deep connection and respect for Country—managing the land and water means being at one with it, because culture and Country are not separate things.

Many culturally significant places, resources or activities (such as ceremonies, teaching and recreation) are dependent on water. These are known as instream cultural values.

The water flows that maintain these values are known as water for cultural purposes.

The Aboriginal approach is a holistic, long term view of managing Country, recognising that we depend on ecological processes. It has a lot to offer Australians as a whole.

It is important that Aboriginal communities speak up about the cultural values that matter to them, so that water sharing plans can help to protect cultural values.

Water reforms can help protect culture, reinvigorate caring for Country, and encourage Aboriginal communities to become involved in the water sharing decision making process:

- new specific purpose water access licences provide opportunities for Aboriginal people to access water for cultural activities and business purposes
- water sharing plans must allocate water to maintain and repair the health of the environment
- when new pumps, bores, etc are being assessed, there are rules that restrict where they can be placed the impact on Aboriginal cultural values must be considered, and Aboriginal input is an important part of this process.







Mother Earth

This painting depicts earth, sky and people. The birth process begins in the soil and then in the sky/water. The painting symbolises birth — birth of plants, birth of people and birth of policies that are made by people. It is a reminder that our choices affect something in some way.

This Chapter ...

explores the relationship between environmental water, why it is needed, and how rules for environmental water work to support environmental outcomes and may assist supporting cultural needs.



Water for the environment

Under natural conditions, river flows in NSW vary greatly from year to year and season to season. Aquatic plants and animals are uniquely adapted to the extremes of drought and flood. Similarly, aquifers rely on rainfall and often on river flows to recharge groundwater supplies.

If river flows are regulated and water is removed from the system for commercial uses, these natural patterns are altered, sometimes with disastrous consequences, such as the slow death of river red gums.

The water reform process tries to redress the balance by setting water aside to keep environmental systems healthy and operating.



Knowing the Lingo

Aquatic ecosystem An interacting community of plants and animals living in or depending on a river, lake, spring.

Aquifer Underground water sources where water is contained in the rocks and soil. Some can also reach the surface as springs, especially following heavy rain.

Cease to pump (CtP) These are the triggers at which pumping is stopped until conditions which permit pumping are restored. Can be expressed as particular flows in megalitres (ML)/day at a reference point, a depth on a staff gauge or simply visible flow at either the reference point or pump site.

Regulated rivers Are declared by the Minister to be a regulated river and typically require the flow to be controlled by the gates and valves on a large instream dam and these flows are released to meet downstream water orders. However, not all rivers below dams are declared to be regulated rivers.

Unregulated rivers Any river that has not been declared by the Minister to be a regulated river. It typically has no large instream dam to control the flow of water. Most coastal rivers, and inland rivers upstream of major dams are unregulated rivers.

How regulation impacts the environment

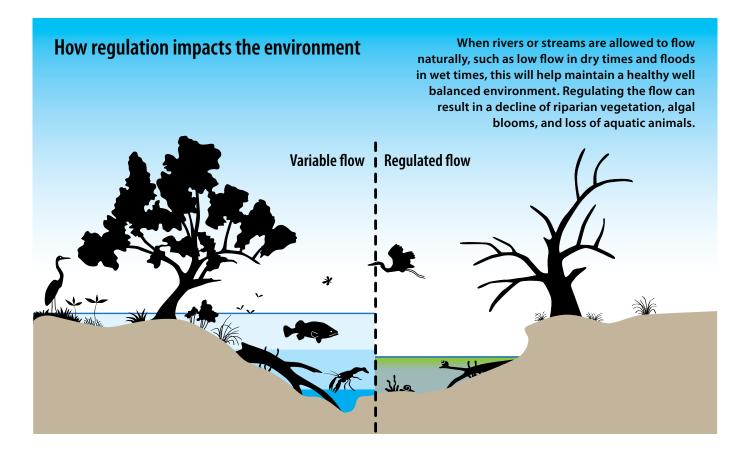
Regulation of river flow in a regulated system and the extraction (removal) of water can alter flows and the natural wetting and drying patterns of aquatic areas by:

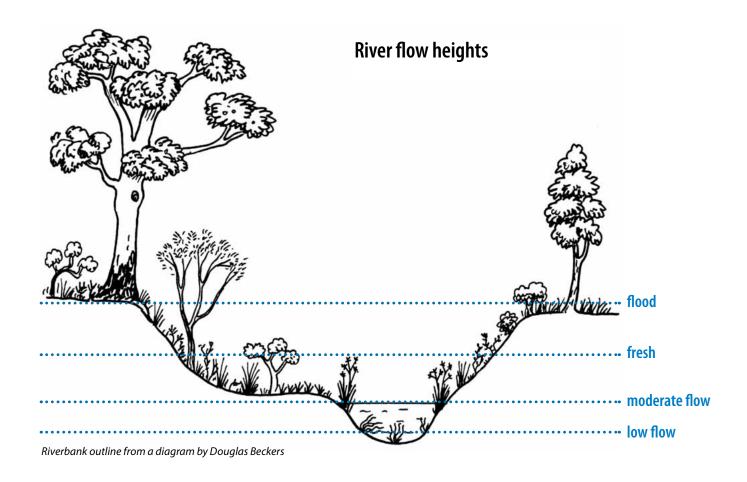
- changing the seasonal pattern of flow, with higher flows than natural in late summer (when water is being released for downstream users) and lower flooding in late winter and spring (when water is being trapped in the dam for later release)
- reducing the amount and altering the timing of flood flows
- reducing the frequency of small rises in the river, called 'freshes'

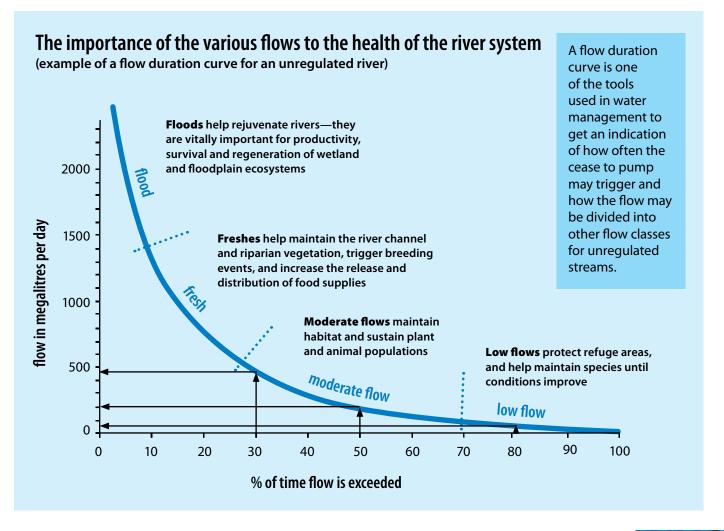
 prolonging low flows, thus preventing drying out of riverine habitats.

Natural periods of high flows are important for flushing nutrients and sediments, triggering waterbird breeding and fish spawning, for promoting vegetation growth, such as for red gums along the river, and for preventing algal blooms.

In addition, the water that is released from large storages can be much colder than that in the river below the dam and can cause cold water pollution—i.e., the water is too cold for native species to survive.









Water sharing plans and environmental water

The Water Management Act 2000 requires that the sharing of water must protect the water source and its dependent ecosystems, and that water sharing plans establish specific environmental water rules.

Environmental flows

Environmental flows are natural flows or water deliberately released in a regulated system to supply the needs of the environment. For example, to:

- mimic or copy natural water flows
- encourage fish breeding
- connect floodplains and wetlands to rivers
- water stressed floodplain plant communities.

Environmental flows are critical for maintaining the health of the waters and rivers upon which ecosystems, and industries depend. The timing, quantity and duration of flows and the quality of water is crucial to the effectiveness of environmental flows.

Interactions between the catchment, floodplains, wetlands, groundwater and streams are required for the effective management of environmental flows. Without this understanding and appropriate action, catchment health will continue to decline, with environmental and economic costs to our nation.

There is growing support for the inclusion of Aboriginal cultural values in the planning process concerning when and where environmental water should be delivered. Further research is required to establish the differences between environmental water and water for cultural purposes while considering the long term benefits of each (see page 3-7 Research into flow requirements to sustain cultural values).

Types of environmental water

A water sharing plan provides water for the environment by protecting a proportion of the water available, such as in rivers, streams and groundwater, for the health of the environment. There may be specific environmental rules on how this water is protected. This is called 'planned environmental water'.

A water sharing plan allows licensed water to be committed for environmental purposes. This is called 'adaptive environmental water' and can be obtained from water recovery projects or by buying back water licences. As an example this water may be used to fill wetlands or put more flow back into a stream to assist plant and animal species dependent on healthy instream flows.

Environmental flow rules for unregulated rivers

The management rules in regulated river systems have a lot more flexibility because of the ability of the major storages (dams and weirs) to provide for environmental flow management. In contrast, the flows in unregulated rivers can only be protected through controls on extraction.

In most unregulated rivers, it is during drier periods when flows are naturally low, that there is generally greatest concern for the health of the river. This is when pools become shallow, there is poor water quality, algal blooms occur, the oxygen level in the water declines and fish and other water life compete for less and less food. The water sharing plans for the unregulated rivers therefore require licence holders to stop pumping when the river flow falls below a certain level. In addition many of the plans set limits on how much water can be taken from the different types of flow.

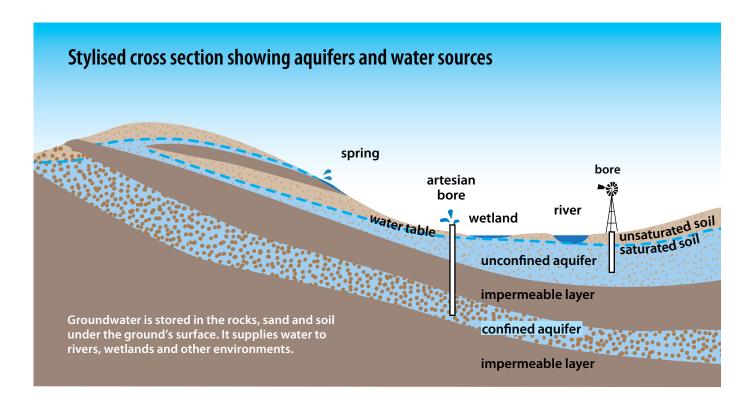
River flow objectives

Environmental flows are designed to meet 12 river flow objectives. These objectives describe aspects of flow considered to be critical for the protection or restoration of river health, ecology and biodiversity. The objectives were subject to extensive public consultation and endorsed by the NSW Government in 1999.

The river flow objectives are to:

- protect natural water levels in pools of creeks and rivers and wetlands during periods of no flow
- protect natural low flows
- protect or restore a proportion of moderate flows, freshes and high flows
- maintain or restore the natural flood events and distribution of floodwaters supporting natural wetland and floodplain environments
- mimic (copy) the natural frequency, duration and seasonal nature of drying periods in natural temporary waterways (creeks or which may be dry for most of the year)
- maintain or mimic natural flows in all rivers
- maintain rates of rise and fall of river heights within natural bounds
- maintain groundwater within natural levels, and variability, critical to surface flows or ecosystems
- minimise the impact of dams, weirs and crossings
- minimise the impact of water releases from dams, on downstream water quality
- maintain and keep estuaries healthy.

For Aboriginal people it is important to realise that the river flow objectives do not include any mention of the need to protect and enhance recognition of Aboriginal cultural values, or provide cultural outcomes or considerations.



Environmental rules for aquifers

As with rivers, high levels of extraction can also affect groundwater systems, sometimes permanently lowering water tables. This can cause salty water to soak into the aquifer, reduce base flows to nearby rivers, and decrease the water available to natural springs, soaks, hanging swamps, limestone caves and groundwater dependant vegetation. In an extreme case, over-extraction could cause the aquifer to collapse and the water source to dry up. There is further research required to examine the effects of over-extraction on the environment and Aboriginal cultural values relating to groundwater. In a dry landscape, surface water is not always available, so groundwater sources would have supplied Aboriginal people for thousands of years.

The environmental rules in the groundwater sharing plans are based on:

- 1 protecting the long-term storage component of the aquifer
- 2 reserving a proportion of the average annual recharge for the environment.
- 3 protecting groundwater dependent ecosystems (GDEs) from groundwater extraction through requiring buffer zones to keep extraction points away from the GDE.

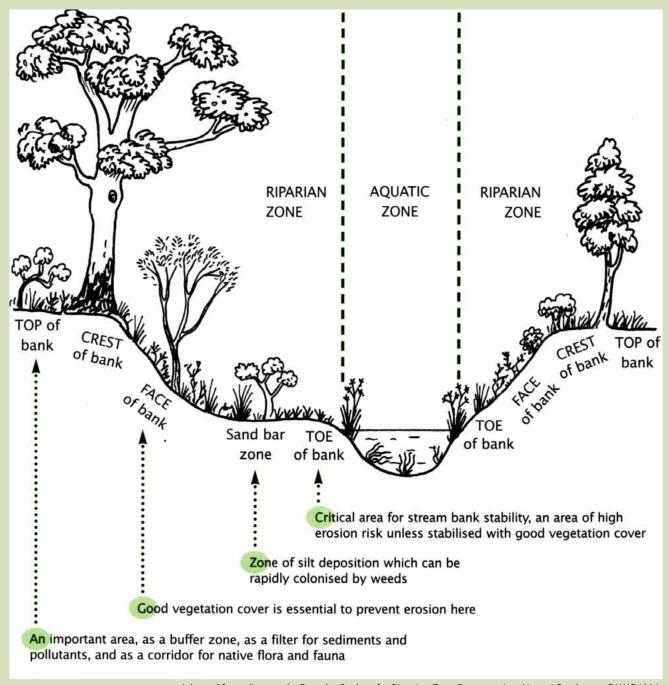
In addition the *Water Management Act 2000* allows for local restrictions on pumping to be established at certain times, if water level drawdown is below a specified level or if water quality is declining. The plans may also specify that distance limits (buffer zones) be set between bores or from groundwater dependent ecosystems such as in caves, wetlands and lakes.

In some NSW groundwater systems more water was licensed for extraction than the groundwater system has the ability to refill. The water sharing plans for these areas have included reductions in the amount of water licensed users can take either by reducing entitlements (such as the case in the major inland alluvial aquifers—the Upper and Lower Namoi, Lower Gwydir, Lower Macquarie, Lower Lachlan, Lower Murrumbidgee and Lower Murray groundwater systems) or by restricting the amount of water taken to current levels of extractions (such as the case for most other inland alluvial aquifers).



Understanding the riparian zone

The riparian zone is that area of land extending from the waters edge, up and over the bank to an undefined and subjective point behind the bank. The riparian zone can vary from 5 metres wide to over 100 metres, depending on the width of the vegetation that has been retained. The zone can extend further back than just the width of the bank. It can incorporate a portion of the adjoining vegetation of the floodplain, which makes it difficult to decide where the riparian zone ends. It is a subjective decision and there are no hard and fast rules.



 $Adapted\ from\ diagram\ by\ Douglas\ Beckers\ for\ Riparian\ Zone\ Revegetation, Namoi\ Catchment\ DLWC\ 1996$

SUMMAIL

Water for the environment

Many of the states river and groundwater systems have been damaged by river regulation and water extraction.

The natural cycles of the river and its floodplain are disrupted because:

- the seasonal patterns of flow are changed
- there are fewer floods
- there are fewer small rises in the river (freshes)
- low flow periods last longer.

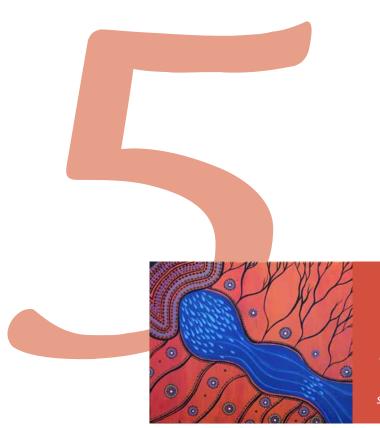
In aquifers the water table may drop, reducing the flow to rivers and springs, and allowing salty water to soak in. In extreme cases the aquifer itself can collapse and be permanently damaged.

The Water Management Act 2000 sets out to restore the balance:

- water sharing plans must provide for environmental flows
 - a portion of the available water may be allowed to remain in the river, aguifer or lake rather than being allocated to licence holders—this is called planned environmental water
 - licensed water may be redirected to the environment through water recovery projects or licence buy backs—this is called adaptive environmental water
- Aboriginal cultural water access licences are issued to provide water for cultural purposes—these are likely to mirror environmental needs such as filling wetlands, increasing seasonal flows or improving instream habitat
- water sharing plans include restrictions on pumping water users may be required to limit pumping or cease altogether if water falls below a certain level
- water supply works, such as pumps, dams, tanks, pipes or bores also need approval—they are assessed to ensure harm to the environment (as well as to cultural heritage and other people) is minimised.







Dam

This painting is about dams regulating rivers and their role in providing water for farms, river systems and communities.

This Chapter...

explores options for accessing water under a basic landholder right, which does not require a licence.



In NSW the *Water Management Act 2000* allows water to be taken for the following basic landholder rights:

Domestic and stock rights Landholders or occupiers of land that overlies an aquifer or has river, estuary or lake frontage can take water without a licence for domestic (household) purposes or to water stock.

Harvestable rights—dams Landholders in most rural areas can capture a proportion of the rainwater runoff on their property and store it in one or more farm dams up to a certain size. In the Western Division 100% of rainfall runoff may be captured and in the Eastern and Central Division only 10% of runoff can be captured.

Native title rights Anyone who holds native title with respect to water, as determined under the *Commonwealth Native Title Act 1993*, can take and use water for a range of personal, domestic and noncommercial purposes. See Appendix F for more details.

Each water sharing plan, allocates a share in the water source for these uses.



Knowing the lingo

Aquifer An underground water source where water is contained in the rocks and soil. Some can also reach the surface as springs, especially following heavy rain.

Aquatic ecosystem An interacting community of plants and animals living in or depending on a river, lake, spring.

water body or source.

While a water access licence is not required to take water under a domestic and stock right, a water supply work approval is required to construct a dam or a

Water taken under a domestic and stock right can be used for normal household purposes around the house and garden and/or for drinking water for stock. It cannot be used for irrigating fodder crops for stock, washing down in a dairy or machinery shed, intensive livestock operations (such as feedlots, piggeries or battery chickens), aquaculture or for commercial purposes (including caravan parks or large-scale bed and breakfast accommodation) other than for the personal

activities such as irrigation, mining, aquaculture, feedlots, piggeries, poultry farms, golf/sporting areas and snow making.

Domestic and stock rights

A landholder or occupier of land is entitled to take water from a river, estuary or lake which fronts their land or from an aquifer which is underlying their land for domestic consumption and stock watering without the need for an access licence. This is a domestic and stock

Access right Authorises a person to take water from a

Riparian The banks and surrounding area of a stream

or river is referred to as the riparian zone, e.g. riparian

vegetation can be trees and plants along the banks as

well as those growing near the bed of the stream itself.

groundwater bore.

use of the proprietors. A licence is required for water taken for commercial

Canberra Deniliquin • **Native title rights**

The Water Management Act 2000 recognises the cultural and spiritual importance of water to Aboriginal people in NSW. Anyone who holds native title with respect to water, as determined (or granted) under the Commonwealth's Native Title Act 1993, can take and use water for a range of needs. These include personal, domestic and non-commercial communal purposes such as manufacturing traditional artefacts, hunting, fishing and gathering, and recreation, cultural and ceremonial purposes.

Under Section 55 of the Water Management Act 2000 a native title holder is entitled, without the need for an access licence, a water supply work approval or a water use approval, to take and use water for the exercise of native title rights. However, native title holders cannot construct dams or bores without approval.

For assistance contact Native Title Services Corp (see Appendix C 'Useful contacts'), and for more information on this topic refer to the fact sheet in Appendix F.

Harvestable right—dams

Harvestable right enables landholders to capture and store rainwater runoff in a dam or dams located on minor streams that are not permanently flowing and that do not capture overland flow that comes from a river.

The harvestable right is intended to satisfy essential farm needs such as stock and household water but can be used for any purpose including commercial irrigation. However, the amount of water available is typically unlikely to support a significant crop in the Murray-Darling Basin, but on the coast, the harvestable right is a higher volume of water given the higher rainfall rates and increased runoff characteristics of the catchments. In the Western Division 100% of rainfall runoff may be captured and in the Eastern and Central Division only 10% of runoff can be captured.



Some important points:

- harvestable rights dams can only be constructed on minor streams that are not permanently flowing and that don't receive overland flow that comes from a river
- harvestable rights dams cannot be constructed on rivers or major streams
- one or more farm dams can be used to access harvestable rights
- it is up to landholders how much of the water in dams they use—they decide whether to keep some water in the dams for next year or use it all now
- the water available under the harvestable right is in addition to, and separate from, any water extracted under a licence from a river or a bore
- there is no restriction on the size of rainwater tanks that collect water from roofs because these are not considered harvestable rights dams.

Do I need a licence for domestic and stock use of water?

If your land fronts a river or lake or overlies an aquifer ...

...and you want to take water from the river, lake or estuary for domestic or stock use

Domestic and stock rights apply. You do not require a licence to take water in this situation but you must obtain a water supply work approval to construct a dam

...and you want to take water from the aquifer for domestic or stock use

Domestic and stock rights apply. You do not require a licence to take water in this situation but you must obtain a water supply work approval to construct a bore or well

If your land does not front a river or lake and does not overlie an aquifer ...

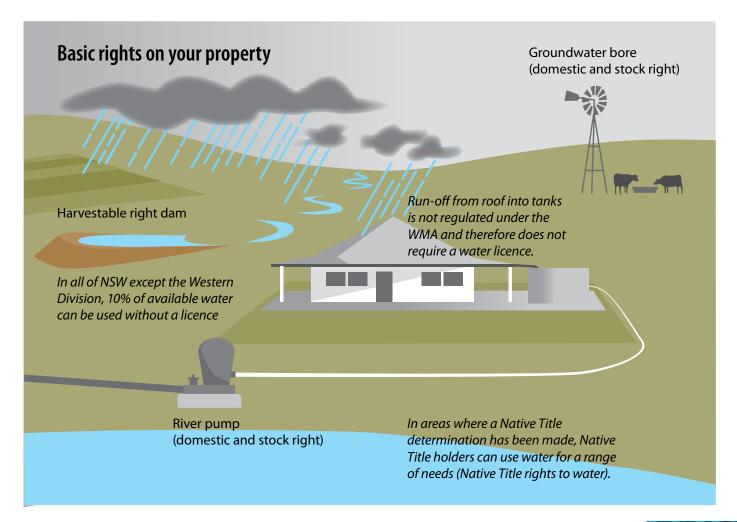
...and you want to **build a dam** for domestic or stock use

Domestic and stock rights do not apply. Harvestable rights may apply in this situation. You do not need a licence or an approval for a harvestable right dam

...and you want to take water from a river, lake or aquifer for domestic or stock use

Domestic and stock rights do not apply. You must obtain a licence before taking water or installing a pump

Note that rainwater tanks do not require a licence from Office of Water, although some local government authorities may require development consent.



Case study: Walhallow Community Farm

Basic landholder water rights: harvestable rights in farm dams

Landholders in the Eastern and Central Division of NSW can collect up to 10% of the average regional rainwater runoff on their property in a dam or dams located on first or second order streams that are not permanently flowing and that don't receive overland flows that comes from a river. In the Western Division landholders may capture 100% of runoff (see map on page 5.2 for details). The water can be used for any purpose including commercial irrigation. The dam water cannot be transferred or given to another landholder.



The Quirindi/Walhallow Community own land near Walhallow where they graze approximately 100 head of Murray grey cattle (*photo above*).

The NSW Aboriginal Water Trust provided funding to desilt an existing dam (photo below) to improve collection of surface runoff from the property. They considered using the dam water to water the cattle and to irrigate pasture but, being rainfall dependant, the supply from the dam is not consistent. It is used instead to supplement the supply from the bores and rainwater tanks on the property.



Case study: Walhallow Community town supply

Basic landholder rights: domestic and stock

Water is available without a licence for household, stock and garden use, but not commercial uses (such as vegetables for sale). A works approval is required for new works associated with extraction from groundwater supplies for basic landholder rights.



The Quirindi/Walhallow Community is in the Namoi catchment near Caroona, north west of Quirindi. The Walhallow village could benefit from basic landholder rights to water.

Walhallow village used to rely on bore water, but most properties switched to reticulated water (the town or piped water network) when it became available. The community now plan to purchase a submersible pump and use it to bring the bore back into service. The water could also be used for watering stock.

Further reading

The following publications are available on the Office of Water website www.water.nsw.gov.au

Dams in NSW— where can they be built without a licence? Water Licensing > Basic water rights > Harvesting runoff

Dams in NSW— **do you need a licence?** *Water Licensing > Basic water rights > Harvesting runoff*

Domestic and stock rights *Water Licensing > Basic water rights > Domestic and stock*

For more advice about basic rights contact the Office of Water (see Appendix C 'Useful contacts').

SUMMAIY

Water for basic rights

The water reforms gave legal recognition to certain uses of rivers, and groundwater by landholders.

In NSW the *Water Management Act 2000* allows water to be taken without a licence for the following three types of basic landholder rights:

- Basic rights for domestic and stock—using water for normal domestic household purposes and for raising stock on the land
- Harvestable rights—constructing and using a dam to capture a proportion of rainfall runoff
- Native Title rights—taking and using water in the exercise of native title rights for domestic and traditional purposes.

Landholders can keep as much rainwater from their roof as they like since this is not regulated under the *Water Management Act 2000*. In the Eastern and Central Division landholders can only keep 10% of the runoff from their land—it needs to be shared with the environment and other landholders. In the Western division they may capture 100% of runoff.

There are restrictions on where dams can be constructed without an approval, and approvals are needed for bores and wells.





Cultural flows

This painting is about cultural flows and their importance to Aboriginal communities and animals.

This Chapter...

looks more closely at water licences, water access licences and approvals, how they work, who needs them, and how to make an application for a licence and/or approval.



Water licensing

Water licences operate in areas where there is no water sharing plan and the Water Act 1912 still applies. A water licence is tied to the land. It authorises the volume of water that can be extracted from a water source, the means by which the water is taken (e.g. pumps, diversion channels, etc), the purpose for which the water may be used, the land on which the water may be used and the conditions which apply to the taking and use of water.

Water access licences operate in areas with water sharing plans and are issued under the Water Management Act 2000 and are separate from land ownership. Water access licences can sometimes be referred to in the shortened form as WALs.

A water access licence is an entitlement to a share of the available water in a particular water source and is issued with conditions. It permits the holder to take water from a water source such as a stream river or aquifer for commercial purposes (such as irrigating a crop) or for specific purposes including spiritual and cultural activities undertaken by Aboriginal people.

A water access licence allows the licence holder to take water but limits how much they can take and when they are allowed to take it.

Water supply work approvals authorise the construction and use of the work that will take water from the water source (e.g. pumps, channels, pipelines, etc).

Water use approvals authorise the purpose for which water is used and the location at which it is used e.g. for the irrigation of a cotton crop at Willow bend on the Namoi River.

By 2014 it is intended that water sharing plans will extend to all water sources in NSW. When this occurs all water licences will have been converted to water access licences, water supply work approvals and use approvals.

Note: information in this chapter may be out of date. Please refer to the internet or contact a licensing office (Appendix C: 'Useful contacts') for current information.



Knowing the lingo

Aquifer Underground water sources where water is contained in the rocks and soil. Some can also reach the surface as springs, especially following heavy rain.

Available water determination (AWD) Sets out how much water a licence holder can extract in a year. An AWD adds volumes of water (i.e. water allocations) to the accounts of all licences in that category (e.g. irrigation licences). The AWD also ensures that long-term extraction does not exceed the LTAAEL. AWDs are initially undertaken on 1 July at the commencement of each water year. If the initial AWD is less than 100% further AWDs may be done during the water year if more water becomes available for water access licences during the year. When an AWD is done a volume of water is credited to each water account in the water source.

Dealings Changes to a licence, in particular for trading or selling all or part of the licence or account water. Also a change in extraction location, licence category or the consolidation or subdivision of licences.

Embargo / embargoed In water management terms this means that no new water licences will be issued in those areas still under the old Water Act 1912. In some instances, there are exemptions to the embargo and certain licences can still be applied for.

Entitlement A water entitlement is a licensed right to access a share of water in a water source.

Extraction component Sets out specified times, rates of extraction and the sections of the water source (river, lake, steam, underground water) water may be extracted from.

Independent Pricing and Regulatory Tribunal (IPART) An independent body that oversees regulation of the pricing for water, gas, electricity and public transport industries in New South Wales. Established by the NSW Government in 1992, IPART's primary purpose was to regulate the maximum prices charged for these services by government utilities and other monopoly businesses.

Megalitre (Written as ML) A unit of volume equal to 1,000,000 litres (one million litres) about one Olympic-size swimming pool.

Recharge The inflow of water to the groundwater system from the surface. Its movement to the water table is one form of natural recharge.

Regulated rivers Are declared by the Minister to be a regulated river and typically require the flow to be controlled by the gates and valves on a large instream dam and these flows are released to meet downstream water orders. However, not all rivers below dams are declared to be regulated rivers.

Share component Each water access licence has a share component, which represents the share of the water source that is allocated to that licence. The share component is the maximum volume of water that the licence holder can extract from the water source during a water year. However, the actual volume of water that may be taken depends upon the available water determination and any water carried over from previous years.

The Minister The member of the NSW Parliament, responsible for the management of rural water (Water Management Act 2000 and Water Act 1912) in NSW.

Unregulated rivers Any river that has not been declared by the Minister to be a regulated river. It typically has no large instream dam to control the flow of water. Most coastal rivers, and inland rivers upstream of major dams are unregulated rivers.

Water access licence (WAL) Allows the licence holder a share of the available water in the water source. These licences exist under the Water Management Act 2000 where a water sharing plan has commenced. (Approvals to use the water or to construct and operate pumps, dams are also needed).

Water access licence certificates The record for each water access licences issued in NSW with details such as: share component (volume), extraction component, water source, expiry date, current ownership, mortgages and charges. This is issued to the water access licence holder.

Water Access Licence Register The WAL Register provides a record of all water access licences in New South Wales.

Water allocation account / water account Like a bank balance except it is water not money. A licensed user is given an allocation of water into their account as specified on their licence and in combination with an available water determination.

Water licence Covers both the right to take a specific volume of water as well as the works to be constructed. These licences exist under the Water Act 1912 which governs where water sharing plans have not commenced.

Water sharing plans (WSPs) These plans are a major part of the NSW water reforms under the Water Management Act 2000. They regulate how water will be shared between water users including the environment.

Water use approval Authorises the use to which water is put, e.g. to irrigate a crop or water for town water supply. Can also specify how the water is to be applied such as in drip irrigation.

Water supply works approval Authorises the construction and operation of water supply works at specified locations (e.g. bores, pumps, channels).

What is a water access licence?

A water access licences entitles the licence holder to a share of the available water within a particular water management area or water source and to take water at specified times, rates or circumstances from specified areas or locations.

A water access licence is separate from the approvals required to use the water or to construct and operate the work to extract the water (e.g. a pump or dam). Water access licences do not have to be renewed.

Types of water access licences

Categories help define the priorities of different water access licences, the conditions that apply to them and, in the case of specific purpose licences, how water may be used. These categories include:

- Regulated river (high security) and regulated river (general security) These licences exist on a regulated river (below the major infrastructure) and allow the licensee to order water from the large dam and have it delivered to their extraction point (pumps, channels). The river's flow is controlled, and water can be released according to operational rules for town water supply and commercial use. Examples include Pindari, Burrendong and Burrinjuck dams. These licences have account management rules specified in the relevant water sharing plan.
- 2 Unregulated river These licences exist on regulated rivers above the major infrastructure or in unregulated rivers and the licensee does not order water but gets access to water based on flow events and the relevant access rules defined by the water sharing plan. A river where the water is not controlled by a large dam is typically said to be unregulated.
- **Aquifer** These licences exist in underground sources of water which can be recharged. The available water is based on the storage, recharge and is sometimes constrained by local access rules specified in the relevant water sharing plan. Many aquifers are closely linked with waterways adding to their flow. Wells or bores are used to access this water. Aguifers can be deep or shallow and may have a flow.
- **Supplementary** (under the *Water Act 1912*, this was called 'off-allocation access'). These licences typically exist in regulated rivers and allow the licensee to access a share of high uncontrolled flow events. In other instances, supplementary licences have been used as an entitlement reduction tool, for example in some of the inland groundwater areas.
- Specific purpose access licences Include:
 - a local water utility
 - b domestic and stock
 - c Aboriginal cultural
 - Aboriginal community development.

Regulated and unregulated river water access licences

These types of licence form the basis of the water market, although trade in aquifer access licences is expanding in several inland groundwater sources. They address the access and use of water for commercial purposes beyond the basic rights for stock and domestic use. Examples would include horticultural crop irrigation or commercial livestock production activities.

In the case of water access licences which are 'continuing' (in-perpetuity), the licence and water allocation available under that licence can be bought, sold, mortgaged or leased fully or in parts, and the licences can be subdivided, consolidated and changed.

At times water can be traded or leased—these are called 'dealings'.

Specific purpose water access licences

Specific purpose category licences provide higher priority access to water than licences for most commercial purposes. Generally these licences do not have a tradeable value for purchase or sale, and the share component is expressed in megalitres per year. There are exceptions, however, which are discussed below. The term of the licence is limited to the term of the activity.

Local water utility (town water supply)

These address the access and use of water for town resident's domestic needs. Under section 63 of the Water Management Act 2000, a local water utility licence may only be granted to a local water utility. Temporary trading of entitlement is allowed in certain restricted circumstances.

Domestic and stock

Domestic and stock water use is allowed without a licence as a basic right. However If basic rights are limited by lack of access to rivers or groundwater, landholders may apply for a licence to satisfy this need. Trading is not permissible.

Aboriginal cultural water access licences

The water sharing plans recognise Aboriginal cultural values within water sources and therefore make special provision for Aboriginal people and communities to access water for cultural purposes.

These licences provide water for the benefit of an Aboriginal community, for personal, domestic, cultural and spiritual purposes. This may include water for drinking, food preparation, washing, manufacture of traditional artefacts, watering for domestic gardens,

6 Water licensing



hunting, fishing and gathering, recreational, cultural and ceremonial purposes. It can also be restricted to cultural purposes such as men's business or women's business.

Aboriginal cultural licences are to be made available in all water sources including river, streams, lakes and underground water.

As with all water access licences, certain conditions need to be met in order to be eligible to apply for this type of licence. The main conditions are:

- the applicant needs to be of Aboriginal descent
- the cultural purpose needs to be clearly defined (seasonal water for a wetland, water to fill a billabong, etc) and endorsed by the relevant Traditional Owners, or a relevant nominee, and, where necessary, supported by the local Aboriginal land council
- this licence is available for all water sources
- there is a time limit—once the purpose no longer exists the licence can be cancelled by the Minister
- this licence cannot be traded, sold to someone else or put in someone else's name
- the water cannot be used for financial gain such as growing crops or vegetables to sell at the local markets
- the maximum volume of water available is currently capped at 10 megalitres per application.

See Appendix D—'Sample Aboriginal cultural water access licence application'.

Aboriginal community development water access licence

The NSW Government is committed to providing Aboriginal people with opportunities to become involved in water-related businesses and will consider granting water extraction licences specifically for Aboriginal commercial activities in certain situations. The situations where the licences can be granted must recognise the need to protect our rivers and aquifers from more and more extraction.

This is a general category of unregulated river and groundwater water access licence. In unregulated systems it allows water to be taken during periods of high flows by Aboriginal persons or communities for commercial purposes up to specified limits.

This is a general category of unregulated river water access licence that allows water to be taken during periods of high flows by Aboriginal persons or communities for commercial purposes up to specified limits

These licences are available in some areas of NSW to support Aboriginal enterprises. These licences and the water they access must benefit the community in a way that fosters economic and social development.

Aboriginal community development licences can be used for commercial enterprises owned by Aboriginal people and could include:

- irrigated cropping, such as maize
- horticulture, such as fruit, vegetables, flowers or ornamental plants
- irrigated pasture, such as lucerne for a dairy farm
- aquaculture, such as oyster growing or prawn farms
- non-agricultural activities, such as manufacturing or craft.

Unlike most other categories of specific purpose licences, Aboriginal community development licences can be traded, but only in limited circumstances.

They have similar conditions to the Aboriginal cultural water access licence, with the following exceptions:

- they are only available to those in water sharing plan areas on the coast and in some aquifer systems
- they are not available to Aboriginal people living in the Murray-Darling Basin where the cap applies the cap limits the amount of water to be taken out, but the limit has already been reached, so no new licences can be given
- they are for commercial purposes such as irrigating a crop or running a nursery
- · they are subject to an assessment process
- the amount of water available (volume) is limited for each water source
- in unregulated systems they are only available in high flows, and where the use of water does not impact on the environment (estuaries downstream) or the availability of current high flows to other users
- there is a maximum limit of 500 megalitres in any given water source
- there is no individual limit of 10 megalitres per licence.
- they may be traded in certain limited circumstances.

Native title holders

Under Section 55 of the *Water Management Act 2000* a Native Title holder is entitled, without the need for an access licence, water supply work approval or water use approval, to take and use water for the exercise of native title rights. However, native title holders cannot construct dams or bores without approval.

The maximum amount of water that can be taken or used by a native title holder in any one year for domestic and traditional purposes is prescribed in the regulations of the Act.

Water use approval

A water use approval authorises its holder to use water for a particular purpose at a particular location. This includes uses such as town water supply, Aboriginal cultural practice, Aboriginal community development, commercial irrigation.

Water supply works approval

A water supply works approval authorises its holder to construct and operate a work including pumps, dams, tanks, pipes or bores at specified locations. The aim of giving an approval for these works is to minimise harm to the environment and minimise impacts on other water users.

When will I need a licence?

At times you may not require a licence to take water and this is explained in Chapter 5 'Water for basic rights'. Basic landholder rights include rights to use water for domestic (household) or stock watering purposes; and native title rights to water; and property owners in NSW may be entitled to harvestable rights for farms dams.

Water Licensing Access licence Approvals Share component **Use approval** (the licence holder's entitlement to a (irrigate, crops etc) share in the available water) **Works approval Extraction component** (pumps, channels, bores) (the time rates and circumstances and where the licence applies)



Water licensing and water sharing plans

Water sharing plans contain rules that the Minister follows when determining how much water can be taken each year, the types of water access licences available, and some of the conditions under which water can be taken (see Chapter 7 'Water sharing plans' for more detail about how they work and where they operate).

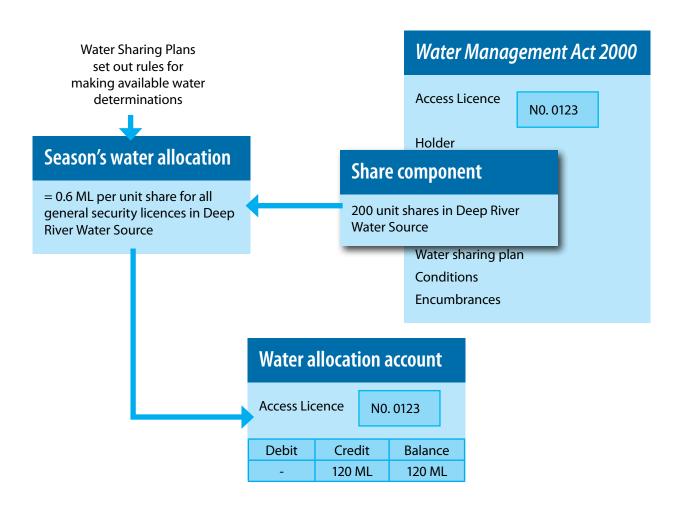
A licence holder is given shares in the water source, but the water can only be taken under certain conditions.

Each year the amount of water which is available in the water source for licensed use is announced. This is called

the available water determination (AWD). Each day the access to river flows is constrained by the access rules (cease-to-pump rules) in the plan. Furthermore, the amount of water a licence holder can take once access is granted can be restricted by the total daily extraction limit which allows for changes in flow and the amount of water available, such as during drought times or floods.

A licence holder is only permitted to take water which is in their water allocation account.

This is best explained in the diagram below.



Based on a diagram published by NSW Department of Infrastructure, Planning and Natural Resources, June 2004

Water Access Licence Register

A water access licence specifies the name of the licence holder or holders and the licence number, the type of access licence (e.g. regulated river (general security), the share component and extraction component and any nominated works. Each water licence is recorded on a Water Access Licence Register. A person or an organisation will own this licence or licence certificate. It is just like owning the title to a block of land.

For information about how to access the Register contact the Office of Water (contact details are given in Appendix C). All searches of the Register have a small administrative fee.

Fees for water licences

The Office of Water charges fees to cover the assessment and processing costs of applications for water access licences, water supply works approvals, water use approvals and water dealings lodged under the Water Management Act 2000. These fees are determined by the Independent Pricing and Regulatory Tribunal.

Fees increase annually according to the consumer price index.

In areas of the state governed by the Water Act 1912, the fees differ. By 2014 it is planned that water sharing plans will cover all water sources in NSW. When this occurs the Water Act 1912 fees will no longer apply and there will be a single fee schedule for the whole of the state.

For details go to Water Licensing > Applications and Fees at www.water.nsw.gov.au

Water charges

Charges for water management services also apply to all water access licences (but not approvals). These charges include those for extracting bulk water and services in managing the water and are separate to the fees charged to cover the assessment and processing costs of applications for water access licences and approvals.

The State Water Corporation also charges for water delivery services for water taken from regulated rivers. See www.statewater.com.au for details, or contact the nearest Office of Water (contact details are given in Appendix C).

What is included in the transaction fees?

A minimum administration fee to cover the basic handling of the application is required for:

- all transactions for new water access licences
- new, amended or renewed approvals for water supply works and use
- water trades or dealings (other than assignments of annual water allocation previously known as temporary transfers)
- work approval for a domestic and stock bore issued under basic landholder rights.

Depending on the type of transaction, additional charges may apply to cover the costs of assessment and advertising.

Advertising is required for certain classes of applications for new work or use approvals and for applications for amended work or use approvals where the approval relates to additional uses, works, activities or land. Advertising is not required for applications for work approvals for bores used solely for basic landholder rights. Requirements for advertising are described in the Water Management (General) Regulation 2011.



Applying for an Aboriginal cultural water access licence

Aboriginal cultural water access licences are available to applicants of Aboriginal descent. The licence owner could be a local Aboriginal land council, an Aboriginal co-operative, Elders council or a qualified individual.

They are available in all water sources where there is a water sharing plan.

These licences cannot be traded, sold or used for financial gain.

The first step in applying for an Aboriginal cultural water access licence is to define the cultural purpose, and decide how much water might be needed. The purpose must be approved by the relevant people (Elders, Traditional Owners, local Aboriginal land council, Elders council) in writing.

The next step is to visit the Office of Water office or their website for an Aboriginal cultural water access licence application, and a form for a water supply work approval.

The approval process for a water supply work assists the Office of Water to determine whether the work will have an adverse impact on the environment or social or economic values. This is especially relevant if it is proposed to install a pump or to pipe or channel the water. The form for a water supply work approval is also available from the Office of Water office or website.

The final step is to complete both the work approval and licence application forms and forward them to the Office of Water for assessment.

The application for a water supply work approval will be advertised in the newspaper so people can comment on it, or object to it, if they wish. This is an important part of the assessment process.

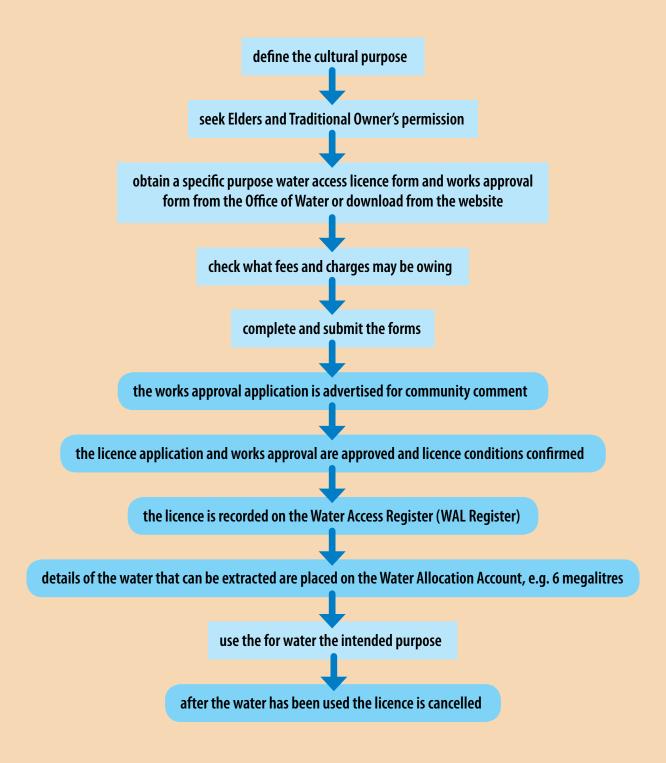
When the licence and works approval application has been granted, the new water access licence will be placed on the Water Access Licence Register.

The amount of water the licence holder is permitted to extract (use) will be recorded in a water account held in the licence holder's name. The water account is similar to a bank account in that it can be credited (water added) or debited (water taken out).

The water licence will have certain conditions. Aboriginal cultural water access licences have a mandatory limit of 10 megalitres of water that can be extracted per year per application. The volume allocated may be less than this depending on things like location, and impact on flows or seasonal conditions.

For help or advice, contact other Aboriginal groups who have applied and been successful. The Office of Water will also be able to help including the Aboriginal staff.

For contact details for the Office of Water and other agencies see Appendix C 'Useful contacts'.





Case study: Brewarrina billabong restoration project

Aboriginal cultural water access licence

Aboriginal groups may apply for a specific purpose water access licence which will authorise water extraction for Aboriginal cultural purposes. This water is not tradeable. There is currently a 10 megalitre limit per application for this type of licence and they are not available in all areas.



The Old Mission Billabong (photo above) has cultural and environmental significance for the Ngemba people. The billabong is situated on land that has long been associated with the former Brewarrina Mission.

The billabong is part of the Barwon River system but has remained isolated from the river for many years, due to drought, water extraction, and regulation of the river system higher in the catchment.

The local people had noticed the water quality declining and are concerned about the ongoing state of low flow. Native vegetation around the billabong has been grazed and trampled by cattle. Although there are no cattle on the property now, cattle from the adjacent properties have been accessing the billabong through broken

The Traditional Owners are keen to improve the health of the billabong, and hope to build community pride and connection to Country at the same time. They have formed a Landcare Group to restore and protect the billabong and other natural and cultural features in the area. They have also formed partnerships with Department of Primary Industries NSW and TAFE NSW to provide training and advice about restoration techniques. They expect to get the best results by integrating contemporary and traditional knowledge about water and landscape management. They have repaired the fences to protect the area from cattle and allow the native plants to regenerate. They are also replanting particularly degraded areas with local native plants.

Water sharing rules allow for them to have a percentage of river flow as part of an Aboriginal cultural water access licence. They applied for a water access licence for Aboriginal cultural purposes to restore a flow to this culturally and environmentally significant area. Their application was successful and they used this water to fill the billabong again, hoping to improve water quality for aquatic and terrestrial flora and fauna. They also received a small grant from the Aboriginal Water Trust to acquire water infrastructure (pump and piping) to get the water from the river to the billabong.

It hasn't been an easy process though, and community members have had to be resourceful. An ongoing problem has been the lack of transport, with Landcare group members relying on private vehicles to get them in and out to the site, which at times required 4-wheel drive vehicles due to wet weather. The project's organisers were disappointed to find that none of the funding sources were able to help with this transport issue.

Young people in the community are expected to benefit particularly, as the restoration work gives them a practical way to contribute to their community and earn respect.

Case study: Stuarts Point Farm

Aboriginal community development water access licence

Aboriginal groups may apply for a specific purpose water access licence which will authorise water extraction for community development purposes. There are volume limits per water source for this type of licence and they are not available in all areas.



The Stuarts Point Aguifer north east of Kempsey is an area of major significance to the Dunghutti and Gumbaynggirr peoples. The area provided a sustainable diet of fish, oysters and other aquatic species as well as a diverse array of bush medicines and other essential natural resources.

The shell midden complex at Stuarts Point is possibly Australia's largest at approximately 14 kilometres long.

The Kempsey Local Aboriginal Land Council (KLALC) owns land in this important area. They operate a small native cut flower farm specialising in Kangaroo Paw (photo above) for export, and are trialling orchard plantings of avocado and citrus as well as flannel flower, Christmas bush and proteas. The farm has provided a small income for the community, and there are plans for expansion.

They already have an Aquifer Access Licence with a share component of approximately 60 unit shares. They access the aquifer directly and pump water straight onto the crops. A grant from the Aboriginal Water Trust has enabled the farm watering systems to be upgraded to a modern and efficient crop-specific watering system.

The Stuarts Point Groundwater Sharing Plan commenced in 2004, during the initial round of water sharing plans in NSW. In the event that the KLALC need additional water, they will be able to apply for a share of any unassigned water for Aboriginal Community Development purposes.

The KLALC are considering starting an aquaculture venture, as well as expanding the horticultural side of the business, so may soon wish to access this extra water. The farm is much more than an income earner. Community members have previously been employed there as part of the CDEP program. The KLALC is about to employ and train 15 local people on the farm, with funding from the Department of Employment and Workplace Relations (DEWR).

Case study: Walhallow Community Farm

Water access licence

A fully tradeable water allocation available for commercial use.



The Walhallow community has purchased farm land with assistance from the Indigenous Land Corporation (ILC). Indigenous Business Australia (IBA) helped to develop their land with a grant for infrastructure and equipment such as cattle handling systems (photo above) and sheds.

Their cattle grazing enterprise already provides the community with a small income, and they have plans to expand the farm.

The community were interested in 'drought proofing' the property, and applied for assistance from the NSW Aboriginal Water Trust. They received funding to upgrade irrigation bores and pumps, install water tanks (two to collect water off the shed roof and a third for storage), and to desilt an existing dam.

The bores, tanks and dam increased the farms water use capacity and efficiency. They currently provide drinking water for the cattle and irrigation for the pasture.

The property already has a commercial water access licence. The community are now applying to the Office of Water to increase the allocation. They plan to diversify their land use by starting an aquaculture venture.

Case study: Brewarrina Old Mission landholding

Water licence

A water licence available for commercial use.



The Brewarrina Community owns a 487 hectare property on the Barwon River (photo above), which was purchased through the Aboriginal and Torres Straight Islander Commission (ATSIC) in 1993. The property is adjacent to the old mission site owned by the Brewarrina Local Aboriginal Land Council. The property originally had a 3000 megalitre water licence attached to it, but when the Murray-Darling cap was introduced in 1995 it was reduced to 650 megalitres.

Although it has not yet been activated, the water licence authorises two pumps on the Barwon River and irrigation of 162 hectares. The Land Council is considering using the licence as a basis to develop agricultural and aquaculture industries.

The community can also choose to sell part or all of their licence.

This water licence will be replaced with a water access licence on commencement of the water sharing plan for the Barwon River. Information on licence conversion is available under Water Licensing > About licences > Licence Conversion at www.water.nsw.gov.au.



SUMMAN

Water licensing

A water access licence (WAL) is a formal year-to-year and day-to-day, with entitlement to extract a share of water:

- The share component is the share of the water source that is allocated to a particular access licence. It is also the maximum volume that may be extracted in a water year as the actual volume that may be taken is governed by the available water determination.
- At the commencement of each year the Minister makes an available water determination which prescribes the share of water that may be taken by each access licence during the water year. If the initial determination is less than 100%, further determinations may be made during the water year if more water becomes available for distribution

The extraction component gives the conditions for taking water—where, when, how much.

Approval is also needed:

- for any water supply works (constructing and operating pumps, dams, bores etc)
- to use water for a particular purpose at a specific location—this 'activates' the WAL.

There are different types of water access licenses:

- regulated river WAL—the flow of the river is controlled and water can be held and released to meet downstream orders
- unregulated river WAL—water is not controlled by dams
- aguifer WAL—for underground water sources which can be recharged
- specific purpose WAL includes:
 - town water supply (TWS)
 - Aboriginal cultural
 - Aboriginal community development.

A licence holder may not always get to use their full share. The amount they are allowed to take will change from

climate conditions and river flows.

A water access licence is not attached to land, i.e. there is no need to own land to get one.

Commercial WALs (regulated river, unregulated River and aquifer) are tradeable on the water market.

Aboriginal community development WAL:

- for commercial use such as for irrigating a crop or running a nursery
- Aboriginal groups may apply for a specific purpose water access licence which will authorise water extraction for community development purposes. There are volume limits per water source for this type of licence and they are not available in all areas
- the amount of water available (volume) for this licence is limited for each water source
- for surface waters (rivers, streams, lakes) it is available in high flows only—provided it does not impact on the environment (estuaries downstream) or the availability of current high flows to other users
- the maximum volume that may be allocated to Aboriginal community development WALs in any given water source will be prescribed in the relevant water sharing plan and is typically up to a maximum limit of 500 megalitres
- can be traded in certain circumstances.

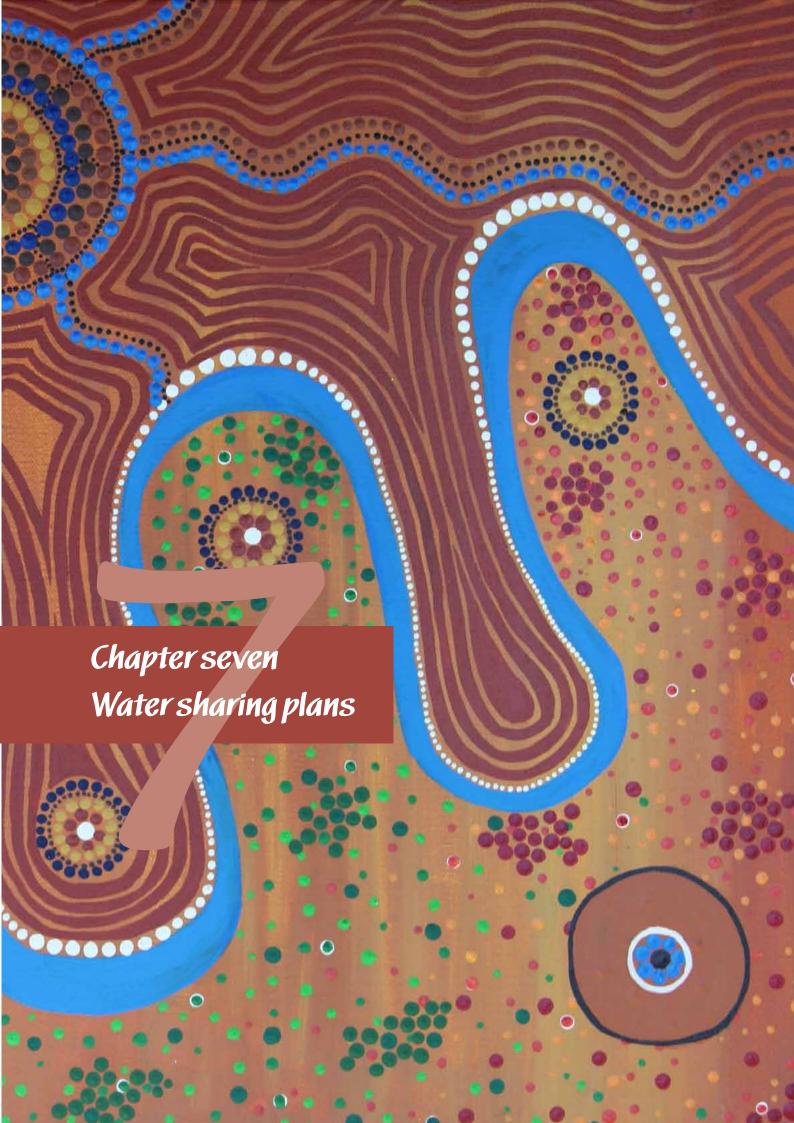
Aboriginal cultural WAL:

- for the benefit of the Aboriginal community e.g:
 - domestic use such as drinking, food preparation, washing, gardens
 - manufacture of traditional artefacts
 - hunting, fishing and gathering
 - recreational, cultural and ceremonial purposes

- men's business and women's business
- seasonal water for a wetland, water to fill a billabong
- available for all water sources
- the maximum volume of water available is currently capped at 10 megalitres per application
- has a time limit—once the purpose is achieved the licence ends
- the applicant needs to be of Aboriginal descent
- can not be traded, sold to someone else or put in someone else's name
- the cultural purpose needs to be clearly defined and endorsed by the relevant Traditional Owners and where necessary supported by the local Aboriginal land council
- water accessed cannot be used for financial gain (to make money) such as growing vegetables to sell at the local markets.

For water sources where there is no water sharing plan, the Water Act 1912 applies. Entitlements issued under this Act are called water licences. A water licence is tied to a particular parcel or parcels of land. It authorises the volume of water that may be extracted from a water source, the means by which the water is taken (e.g. pumps, diversion channels, etc), the purpose for which the water may be used, the land on which the water may be used and the conditions which apply to the taking and use of water.

By 2014 it is intended that water sharing plans will cover all water sources in NSW. When this occurs all water licences will have been converted to access licences, water supply work approvals and use approvals.





River Snake

This painting is about connecting communities by river systems and Aboriginal nations. This painting highlights different clan boundaries and how communities are connected by a particular river system and that water should be shared between everyone.

This Chapter...

looks in more detail at water sharing plans, what they are, where they are, and why they are needed.



Water sharing plans

Water sharing plans are a new way of managing water in NSW, and are a key part of the NSW water reform process.

For the first time since white settlement Aboriginal people can get a legally recognised share in the State's water.

Water sharing plans allow for Aboriginal cultural and economic rights to water through the creation of new water licences, and provision of Aboriginal native title rights to water.





Knowing the lingo

Adaptive environmental water A water sharing plan may permit licensed water to be committed for environmental purposes—from water recovery projects or by buying back water licences.

Allocation A water allocation refers to the specific volume of water that is allocated to water access entitlements in a given season.

Aquifer Underground water sources where water is contained in the rocks and soil. Some can also reach the surface as springs, especially following heavy rain.

Available water determination (AWD) Available water determinations (AWDs) Set out how much water a licence holder can extract in a year. An AWD adds volumes of water (i.e. water allocations) to the accounts of all licences in that category (e.g. irrigation licences). The AWD also ensures that long-term extraction does not exceed the LTAAEL. AWDs are initially undertaken on 1 July at the commencement of each water year. If the initial AWD is less than 100% further AWDs may be done during the water year if more water becomes available for water access licences during the year. When an AWD is done a volume of water is credited to each water account in the water source.

Dealings / water access licence dealings Changes to a licence, in particular for trading or selling all or part of the licence or account water. Also a change in extraction location, licence category or the consolidation or subdivision of licences.

Entitlement A water entitlement is a licensed right to access a share of water in a water source.

Extraction/extractive The removal of water from a river, aguifer etc.

Groundwater dependent ecosystems (GDEs) This is where plants and animals rely on underground water for a drink and to sustain life cycles. This water may be available as springs or soaks. The groundwater may be closely linked to rivers and streams where it may supply the river and hence the riverine environment with water.

Interagency Regional Panel (IRP) comprises membership from key water management agencies (such as the Office of Water, Department of Primary Industries, Office of Environment and Heritage and local CMAs) and is responsible for informing the development of water sharing plans in a particular area.

Long Term Annual Average Extraction Limit (LTAAEL) The target for total extractions (under all water access licences plus an estimate of basic landholder rights within an EMU) which is used to assess whether growth in use has occurred. The actual annual extractions (metered plus estimated) are averaged over a fixed period of time defined by the water sharing plan when comparing with the LTAAEL. If the fixed period of time is greater than one water year, then in any one water year, extractions can exceed the LTAAEL without triggering a growth in use response.

Macro water sharing plan Water sharing plans which apply to a number of water sources across catchments or different types of aquifers. Macro plans are being prepared for areas that generally have low water usage.

Mandatory conditions Rules set out in a water sharing plan to protect the rights of all users and the environment. They apply to water access licences and water supply work approvals, and specify things like the licence share in the water source, how and when water can be extracted and how the water account will operate.

Megalitre (ML) A unit of volume equal to 1,000,000 litres (one million litres) which is about one Olympic-size swimming pool.

The Natural Resource Commission is an independent body providing advice to the NSW Government. It is responsible for recommending whether to extend or remake a water sharing plan, based on a consideration as to whether the plan has contributed to the achievement or otherwise of the relevant State-wide natural resource management standards and targets in the relevant catchment management area.

Planned environmental water A water sharing plan protects a proportion of the water available for the health of the environment such as in rivers, streams and groundwater.

Recharge The inflow of water to the groundwater system from the surface. Its movement to the watertable is one form of natural recharge..

State Groundwater Panel (SGP) provides a senior level forum for discussing and resolving a wide range of water planning and policy issues specific to groundwater. The SGP plays a specific role in reviewing and, where appropriate, modifying the outcomes of the regional groundwater assessments and the proposed groundwater sharing rules to ensure consistency across the state for aquifer types. The Panel comprises membership from key water management agencies (such as the Office of Water, Department of Primary Industries, Office of Environment and Heritage and CMAs representing coastal and inland areas).

State Inter-Agency Panel (SIP) has overall responsibility for the statewide strategic direction of water sharing planning, to ensure that adequate resources are available from each agency and that the varying policy and statutory requirements of the relevant NSW Government agencies are met. The SIP also has the role of making water sharing decisions in cases where the IRP, cannot reach agreement or where the issue has statewide significance. The Panel comprises membership from key water management agencies (such as the Office of Water, Department of Primary Industries, Office of Environment and Heritage and CMAs representing coastal and inland areas).

Sustainable Is where the impact of changes or activities on a natural resource such as altering the flow of a river is minimised to an acceptable level based on available

scientific knowledge and current values associated with respect to the trade-off between environmental, cultural, social and economic factors.

Sustainable yield The annual average volume that can be extracted from a groundwater source by all water users, without causing unacceptable impacts.

Water allocation account / water account Like a bank balance except it is water not money. A licensed user is given an allocation of water into their account as specified on their licence and in accordance with the available water determination.

Water sharing plans (WSPs) These plans are a major part of the NSW water reforms under the Water Management Act 2000. They regulate how water will be shared between water users including the environment.

Water Executive Consists of Water Senior Officers' Group and the Natural Resources and Environment Chief Executive Officers group.

An overview of water sharing plans

Water sharing plans are legal documents prepared under the Water Management Act 2000. They establish rules for sharing water between the environmental needs of the river or aquifer and water users, and also between different types of water users such as town supply, rural domestic supply, stock watering, industry and irrigation.

Each water sharing plan operates for 10 years, and is then up for review.

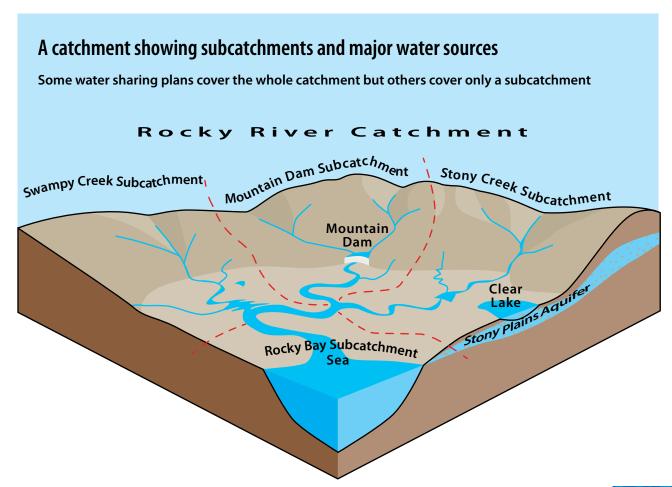
Plans can be prepared as either an individual plan covering a specific river or groundwater system or covering a number of rivers or groundwater systems.

Water sharing plans that cover an entire catchment including a number of different water sources are called macro water sharing plans.

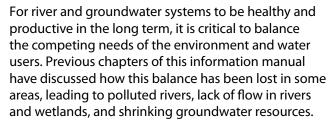
Most water sharing plans already developed include those for regulated rivers (mainly inland), some unregulated rivers (mainly coastal) and some groundwater sources (inland and coastal). See Appendix B for a list of commenced water sharing plans.

The purpose of a water sharing plan is to:

- protect the environmental health (nature) of the water source
- ensure that the water source is sustainable in the long-term
- provide water users with a clear picture of when and how water will be available for extraction.



7 Water sharing plans



Water sharing plans recognise the environment as a priority. There are new rules to keep it healthy by giving it a share of the available water. This is culturally and spiritually significant to Aboriginal people in that it commences, in many instances, the healing process where a healthy environment means a healthy people.

Water sharing plans are developed through a public consultation process. The consultation process is facilitated by regional catchment management authorities (CMAs) and includes public exhibition involving meetings and distribution of information on the draft plans for comment.

By setting the rules for how water is allocated for a 10 year period, a water sharing plan provides a decade of certainty for the environment and water users. This not only ensures that, for the first time, water is specifically provided for the environment through a legally binding plan, but also allows licence holders, including irrigators, to better plan their business activities. Irrigation accounts for about 80% of all water used in NSW.

In addition, water sharing plans set rules for water trading, that is, the buying and selling of water licences and annual water allocations. An allocation is the amount of water which a water licence is given to use on a yearly basis.

For most new commercial purposes, water trading remains the only way that water can now be obtained, as in most areas of the state the available water for licensed activities is fully allocated (given out to licensed users). This means that all of the available surface water, and in many instances the groundwater, has been licensed and no further licences are available for commercial purposes.

What does a water sharing plan do?

- Provides water for the environment by reserving a proportion of the water for rivers, streams and groundwater sources for ecosystem health. There may be specific environmental rules on how this water is protected. This is called planned environmental water.
- Allows licensed water to be committed for environmental purposes. This is called adaptive environmental water. It can come from water recovery projects or from buying back water licences. As an example, this water may be used to sustain wetlands or increase stream flow.
- Protects the water required to meet basic landholder rights. Basic landholder rights are discussed in Chapter 5 'Water for basic rights'. An important basic right is native title rights to water. Basic rights holders do not require a water access licence.
- Sets annual limits on water extractions to ensure that the taking of water does not increase thus taking away the water set aside for the environment and also the security of supply to water users.
- Specifies the categories of additional access licences that can be granted, e.g. local water utility access licences (for town water supplies), Aboriginal cultural licences and Aboriginal community development licences.
- Determines how water is to be shared among the different types of licensed users by setting the priorities of supply, e.g. in very dry periods, water for domestic purposes has priority over the environment
- Provides flexibility for licence holders, who can manage their water accounts by carrying over unused water or by group rostering as through a water user group.
- Specifies rules in groundwater plans to minimise impacts on other groundwater users, dependent ecosystems, water quality and the stability of the aquifer. A groundwater dependent ecosystem can be a wetland fed by a spring or a river or stream where there is a close relationship between the surface water and the water underground. Both may replenish the other, keeping plants and animals in the system alive and healthy.
- Specifies the rules for water trading (or water dealings).
- Sets out the mandatory conditions that apply to licence holders.
- Specifies which parts of the plan can be changed without triggering the compensation provisions of the Act.
- Sets out the monitoring and reporting requirements, including indicators against which the performance of the plans is to be monitored. The Natural Resources Commission reviews the water sharing plans.

Who is responsible for developing and monitoring water sharing plans?

Government agencies are working together to make sure that all interests are covered in the water sharing process.

The of Office of Water, Department of Primary **Industries** has the overall responsibility for developing the plans and putting them into operation. This includes consulting with stakeholders on their needs, granting licences, providing flow information, collecting data and overall management of how and when water will be extracted from waterways and groundwater sources in accordance with the water sharing plans.

The Office of Environment and Heritage, Department of Premier and Cabinet (DEH), researches and provides information and input on issues relevant to the environment and Aboriginal people. This can include advice on measures to protect endangered and threatened species relating to waterways, groundwater and the riverine environment.

Department of Primary Industries NSW (DPI NSW) researches and provides information on the needs of rural and commercial interests with regard to water sharing. This includes providing economic data and information relating to the water needs of the irrigation community, farmers, fish and fish habitat requirements and other rural activities such as nurseries and poultry enterprises. Information is also provided in the planning process with regard to water efficiencies and the social and cultural needs of communities.

The catchment management authorities (CMAs)

across the state assist with the facilitation of community input into the water sharing plans during their development. This is especially relevant to Aboriginal people who should contact their local Aboriginal Reference Group/Committee representative who can seek advice from the Office of Water on where the water sharing plans are up to, and what input Aboriginal interests can have in the plan or at the review stage.

The Natural Resource Commission is an independent body providing advice to the NSW Government. It is responsible for recommending whether to extend or remake a water sharing plan, based on a consideration as to whether the plan has contributed to the achievement or otherwise of the relevant State-wide natural resource management standards and targets in the relevant catchment management area.

A list of Office of Water, OEH, DPI and CMA contact details is given in Appendix C.

Priorities in sharing the water

One of the main features of a water sharing plan is that it provides shares in the available water to a number of interests. These interests are ranked in order of their importance. The environment is regarded as the equal first priority with basic landholder rights users, followed by town water supply, stock and domestic supply, specific purpose licences and then irrigation. This can sometimes change if there are conditions such as a severe drought.

Priority in severe drought:

- domestic purposes under basic landholder rights and essential licensed town water supplies
- the needs of the environment
- stock purposes under basic landholder rights, irrigation and industry.

Basis for water sharing

The water available to meet all competing environmental and extractive needs for water varies year-to-year and day-to-day with climate conditions and river flows.

A licence holder's access to water is managed in the water sharing plan through:

- 1 the long-term average annual extraction limit (LTAAEL) which sets how much all water licence holders in total can extract annually
- 2 daily access rules.

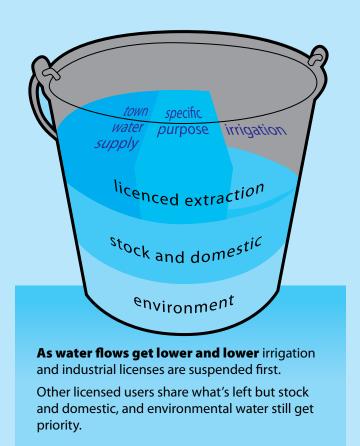
The long-term average annual extraction limit will apply across an entire catchment area (referred to in the plan as the extraction management unit or EMU). The extraction limit is a longer term management tool against which total extractions will be monitored and managed over the 10 year life of the plan.

More specific are the rules in the unregulated rivers plan that determines when licence holders can and cannot pump on a daily basis. As a minimum, licence holders cannot pump when there is no visible flow at their pump site.

Water sharing priorities









Adapted from a presentation: Water Sharing Plans Aboriginal Interests, Feb 2009 by Dave Miller, NSW Office of Water



Recognising the needs of Aboriginal communities

Before the *Water Management Act 2000* Aboriginal people were not considered as having any special interest or rights with regard to water. The *Water Management Act 2000* recognised native title rights to water as well as introducing two new water access licences:

- Aboriginal cultural water access licences
- Aboriginal community development water access licences.

Aboriginal people in NSW were involved in the development of the first round of water sharing plans, along with landholders, conservationists, and industry and government representatives. This was largely achieved through Aboriginal representation on regional water management committees.

The NSW Government intends to work closely with Aboriginal communities in reviewing existing plans and in the development of new macro water sharing plans.

There will be opportunities for Aboriginal communities to comment on all aspects of the macro water sharing plans, in particular focusing on how well the plans protect Aboriginal values and interests.

Aboriginal cultural water access licences

These allow communities to access water for important cultural purposes, such as manufacturing traditional artefacts, hunting, fishing, gathering, recreation, cultural and ceremonial purposes. An Aboriginal cultural water access licence can also be used for drinking, food preparation, washing, and watering domestic gardens.

These licences will be considered in both inland and coastal surface water and groundwater systems but can not be used for commercial activities.

Aboriginal community development water access licences

These will provide opportunities for people in coastal catchments, where appropriate.

Many of our rivers and aquifers already have a high number of irrigation licences, and are generally judged to be 'stressed', particularly during dry times when, for example, river flows are low. Recognising this, inland rivers are subject to the Murray-Darling Basin 'cap', which means total extraction cannot increase beyond the 'capped' limit. This effectively prevents the issuing of any new water licences on inland rivers and anyone who requires more water will have to source it from the water market.

However, in our coastal rivers, higher and more reliable flows are common and provide an opportunity for licences to be granted for Aboriginal commercial activities, provided this additional extraction would not negatively impact on ecological values that are dependent on high flows.

In some coastal catchments, Aboriginal community development water access licences may be issued which allow water to be pumped from rivers during the higher flows, and stored in farm dams or tanks, to be used as needed. It is important to note that higher flows are not just peak or flood flows but also include flows that occur for 50 percent of the time.

Similarly, there may be opportunities in both inland and coastal groundwater systems to grant Aboriginal Community Development Access Licences. This will occur in areas where licensed entitlement is less than the sustainable yield of the aquifer.

Flow chart of the macro water sharing planning process

Government

Endorsement of macro approach.

Interagency working group

Development of macro method.

Office of Environment and Heritage, and Office of Water

Information input for classification of water sources and rule development.

Interagency Regional Panels

Develop draft water sharing rules.

Office of Water (facilitated by CMAs and assisted by other agencies)

Targeted consultation on draft water sharing rules.

Inter-Agency Regional Panels

Revised draft water sharing rules with consideration of feedback from targeted consultation.

Office of Water (facilitated by CMAs and assisted by other agencies)

Public exhibition of draft water sharing plans.

Inter-Agency Regional Panels

Finalise water sharing plans with consideration of submissions from the public exhibition period.

Minister for Primary Industries

Minister for the Environment

The Minister for Primary Industries approves the water sharing plan, with concurrence from the Minister for the Environment.

Water Executive:

- monitor progress on water reforms including macro water sharing plans
- consider water reform policies and high level strategic issues.

State-wide Inter-Agency Panel:

- drives the macro water sharing planning process and endorses policy development
- resolves issues raised by regional panels.

State-wide Groundwater Panel:

- develops policy for the groundwater macro water sharing process
- reviews the groundwater rules developed by regional panels to ensure consistency of approach across the state.

This flow chart is to give a basic outline of the process involved. At times steps may either change or be modified to meet special circumstances.



How is water shared in the groundwater sources?

This chart shows how the rules of the plan are put into effect and relates these 9 key steps to the relevant section in the statutory Water Sharing Plan.

STEP 1 Define the recharge for groundwater which is not considered highly connected to surface water

In groundwater sources which are not identified as highly connected to surface water—based on historical records of rainfall, surface water/groundwater linkages and hydrogeology—assess the amount of recharge to each of the groundwater sources on a long-term average basis.

STEP 2 Provide water for the environment

Reserve the storage component of the groundwater sources that receive recharge for the environment. For highly connected groundwater, the environment is assigned all of the groundwater storage plus that proportion of the recharge that is in addition to the extraction limit based on history-of-use. For less connected groundwater, the environment is assigned all of the groundwater storage plus a proportion of the recharge based on a sustainability index.

For non-connected groundwater, that receives little or no recharge, a small proportion of the storage may be extracted up to a cumulative maximum that has minimal environmental impact.

Section of WSP Part 4 'Environmental water provisions'.

STEP 3 Provide water for basic landholder rights

Estimate total requirements for domestic and stock rights and native title rights.

Section of WSP Part 5 'Requirements for water'.

STEP 4 Determine requirements for water extraction

Assess the total requirements of all access licences in each groundwater source

Section of WSP Part 7 'Requirements for water'.

STEP 5 Set limits on water for extraction

For modelled groundwater sources, set the annual extraction limit equal to the sustainable yield of the model. For less highly connected groundwater sources set the sustainable yield as the annual extraction limit as a proportion of recharge based on a risk assessment. Provide for other local limits if necessary to protect water supplies and dependent ecosystems.

For highly connected and inland alluvial groundwater sources, set the annual extraction limit equal to current usage, plus the requirements for basic landholder rights.

Section of WSP Part 6 Division 1 'Long-term average annual extraction limit'

STEP 6 Determine rules for access licences and works approvals

Assess the relationship between total water requirements and the annual extraction limit and determine rules for granting access licences.

Assess the aquifer characteristics and determine rules to manage the location of water supply works approvals **Section of WSP** Part 7 'Rules for granting access licences' and Part 9 'Rules for water supply works approvals'.

Provide flexibility for access licence holders STEP 7

Set rules to provide flexibility in how water accounts are managed, and define the trading rules.

Section of WSP Part 8 Division 1 'Water allocation account management', and Part 10 'Access licence dealing rules'.

Provide clear licensed rights STEP 8

Translate Steps 5 and 6 into mandatory conditions on individual access licences and approvals, and specify if and how a plan rule can be amended.

Section of WSP Part 11 Mandatory conditions and Part 12 'Amendment of this plan'

Monitor plan STEP 9

Review the implementation of the plan and audit performance of the plan mid-term



How is water shared in unregulated rivers?

This chart shows how the rules of a water sharing plan are put into effect and relates these 7 key steps to the relevant section in the statutory water sharing plan.

STEP 1 Provide water for the environment

Divide river flow into ranges, based on historical flow records, as a basis for sharing water. Reserve a portion of water within each flow class for the environment.

Section of WSP Part 4 'Environmental water provisions'.

STEP 2 Provide water for basic landholder rights

Estimate total requirements for domestic and stock rights and native title rights.

Section of WSP Part 5 'Requirements for water'

STEP 3 Determine requirements for water extraction

Assess the total requirements of all access licences and rules for granting additional access licences.

Section of WSP Part 5 'Requirements for water'

STEP 4 Set limits on water for extraction and share that between water users

Set daily access thresholds (limits) based on an assessment of the risk to the environment and the value of the water for socio-economic purposes. Also set both annual and daily limits on the water available for extraction above the access thresholds, and share the water available within these limits between all access licences. Set rules for managing within these limits.

Section of WSP Part 9 Division 1 'Long-term average extraction limit,' and Part 10 Division 3 'Sharing flows on a daily basis'.

STEP 5 Provide flexibility for access licence holders

Set rules to provide flexibility in how water accounts are managed, and define the trading rules (Dealings).

Section of WSP Part 8 Division 1 'Water allocation account management' and Part 10 'Access licence dealing rules'.

STEP 6 Provide clear licensed rights

Translate Steps 4 and 5 into mandatory conditions on individual access licences and approvals, and specify if and how a plan rule can be amended.

Section of WSP Part 11 'Mandatory conditions' and Part 12 'Amendment of this plan'.

STEP 7 Monitor plan

Review the implementation of the plan and audit performance of the plan mid-term. A plan goes for a ten year period and some contain a number of reviews within their term.

Section of WSP Part 14 'Monitoring and reporting'.

How is water shared in a regulated river?

This chart shows how the rules of the plan are put into effect and relates these 7 key steps to the relevant sections in the statutory water sharing plan.

Provide water for the environment STEP 1

Establish the volumes of water under NSW control that are to be used for environmental purposes and the management rules that are to be applied to their management.

Section of WSP Part 4 'Environmental water'.

STEP 2 Provide water for basic landholder rights

Estimate total requirements for domestic and stock rights and native title rights.

Section of WSP Part 5 'Requirements for water'.

Determine access licence requirements STEP 3

Assess the total volume of all access licences and rules for granting of any additional access licences.

Section of WSP Part 5 'Requirements for water under' and part 8 'Rules for granting access licences'.

STEP 4 Set limits on water for extraction and share that between water users

Set a limit on the water for extraction on an average yearly basis and the rules for management within these limits. Specify how the water that is available will be shared between all access licences.

Section of WSP Part 7 Division 1 'Long-term extraction limit' and Part 7 Division 2 'Available water determinations'.

STEP 5 Provide flexibility for access licence holders

Set rules on how water accounts are to be managed and define the trading arrangements.

Section of WSP Part 9 division 1 'Water allocation account management' and Part 10 'Dealing with access licences'.

STEP 6 Provide clear licensed rights

Translate steps 4 and 5 into mandatory conditions on individual access licences and approvals, and specify any system operation rules, and if and how a plan rule can be amended.

Section of WSP Part 11 'Mandatory conditions', Part 6 'System operation rules' and Part 12 'Amendment of this plan'.

STEP 7 Monitor plan

Review the implementation of the plan each year and audit performance of the plan mid-term Section of WSP Part 13 'Monitoring and reporting'.



SUMMANU Water sharing plans

Water sharing plans establish rules to manage water extraction from rivers and groundwater systems.

Access rules:

- when commercial water use must stop (cease to pump)
- when to reduce the amount of water taken (flow sharing)
- when special flows must be allowed to go past for example to provide the environment with a drink before extraction can take place (first flush rule).

Trading rules:

- where licence holders can try to buy extra shares of water
- how much extra water can be purchased
- anything else that might be a problem if shares were increased.

Water sharing plans must be prepared for all parts of the state, and be reviewed every 10 years.

Water sharing plans recognise the cultural and economic importance of rivers and groundwater to Aboriginal culture.

The Water Management (General) Regulation 2004 allows Aboriginal communities to apply for water access licences for cultural purposes.

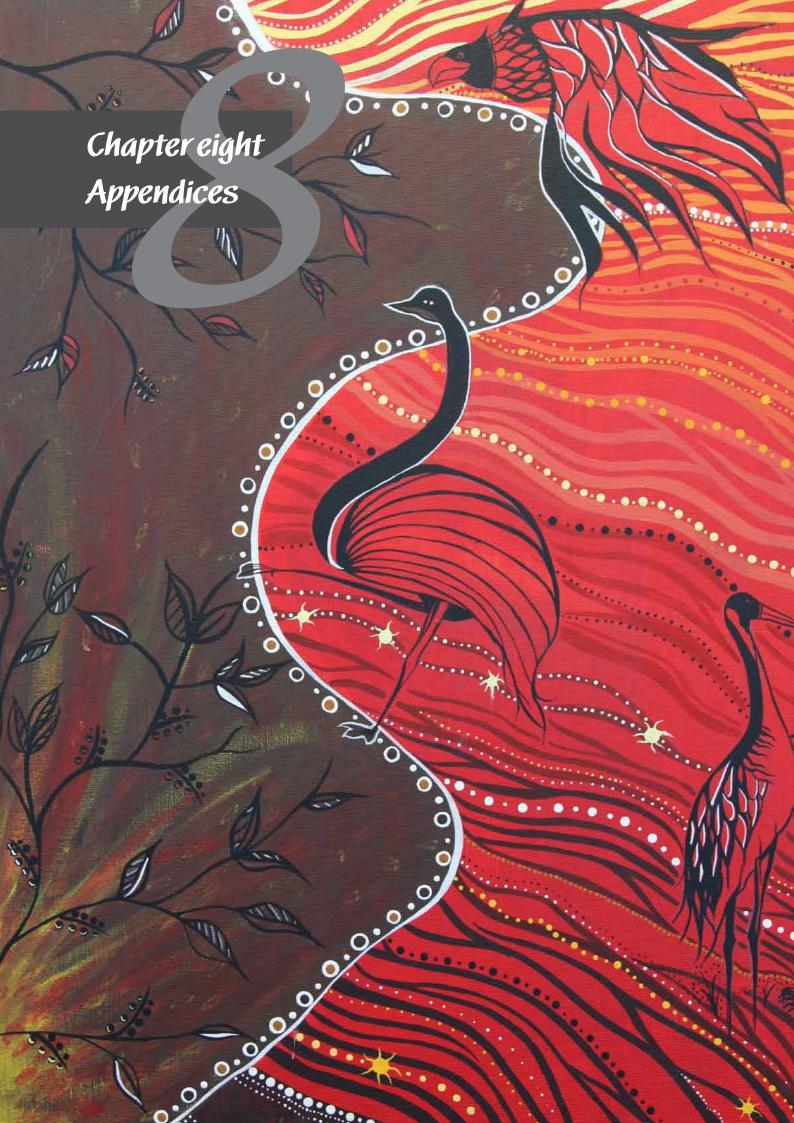
Some plans also allow Aboriginal communities to apply for water access licences for community development purposes.

Various agencies are responsibility for developing WSPs:

- catchment management authorities are responsible for facilitating the consultation processes in partnership with the Office of Water
- the Office of Water is responsible for development of rules, and presenting drafts to communities.

Before each WSP is finalised, there is an opportunity—open to everyone—to comment on the draft plans.







Sunset

This painting depicts the wetlands at sunset, with the eagle flying over the land, and the emu and brolga. The leaves and branches symbolise nature reaching out to us and fauna. The waved lines represent the ever changing landscape. Nature is precious.

This Chapter...

provides additional information, contact details and samples.



- A Acronyms, terms and definitions
- **B** Commenced water sharing plans
- C Useful contacts
- D Sample Aboriginal cultural water access licence application
- E Sample water supply works application
- F Factsheet on Native Title and land claims
- G Factsheet on access rights to rivers, streams and billabongs
- H Guide to water access licence and certificates
- I Flowchart: Water for my rural property—do I require a licence?
- J Flowchart on the approval process for licences and approvals associated with Aboriginal access licences
- K Information Agreement and Water Dependent Cultural Asset Report Card



Appendix

Acronyms, terms and definitions



Acronyms, terms and definitions

Aboriginal cultural water access licence These licences are for Aboriginal personal, domestic and communal purposes including drinking, food preparation, washing, manufacture of traditional artefacts, the watering of domestic gardens, hunting, fishing and gathering, recreational, cultural and ceremonial purposes (see Chapter 6 'Water licences' for more information about the special terms and conditions for these licences).

Aboriginal community development water access licence These are also known as Aboriginal commercial access licence in some water sharing plans on the coast. This is a general category of unregulated river access licence that allows water to be taken from B Class flows (high flows) by Aboriginal persons or communities for commercial purposes up to specified limits. It gives Aboriginal people the opportunity to become involved in water-related business (see Chapter 6 'Water licences' for more information about the special terms and conditions for these licences). These may also be available as aquifer access licences in some groundwater sources.

Aboriginal Water Trust (AWT) This was a statutory trust established under the *Water Management Act 2000* and operated until 2009. It provided grant funding to Aboriginal people and communities conducting a legitimate business for the good of the Aboriginal community where water was an essential part of the business, such as growing medicinal herbs, cropping etc.

Access right Authorises a person to take water from a water body or source.

Access rules A set of rules to control the extraction of water from the water source. The range of rules includes:

- (i) Cease to pump (CtP) The triggers at which pumping is stopped until conditions which permit pumping are restored.
- (ii) **Special environmental rules** Special conditions to protect particular instream values and may be of a seasonal nature or have particular flow requirements.
- (iii) **Daily flow sharing** A range of conditions intended to gradually reduce extractions above the CtP (cease to pump). This could be implemented through hourly restrictions or daily volume limits.

The reference point relates to the point at which the access rules are triggered. There may be a depth gauge at this point to measure flow.

Allocation A water allocation refers to the specific volume of water that is allocated to water access entitlements in a given season.

Aquatic ecosystem An interacting community of plants and animals living in or depending on a river, lake, spring.

Aquifers Underground water sources where water is contained in the rocks and soil. Some can also reach the surface as springs, especially following heavy rain.

Average annual recharge The volume of water added to the groundwater source naturally, usually by infiltration (soaking through the surface) from rainfall and river flows, and assessed on a long-term average basis. This recognises that the amount of recharge to a groundwater source can vary from year to year depending on climatic conditions.

Available water determination (AWD) Available water determinations (AWDs) Set out how much water a licence holder can extract in a year. An AWD adds volumes of water (i.e. water allocations) to the accounts of all licences in that category (e.g. irrigation licences). The AWD also ensures that long-term extraction does not exceed the LTAAEL. AWDs are initially undertaken on 1 July at the commencement of each water year. If the initial AWD is less than 100% further AWDs may be done during the water year if more water becomes available for water access licences during the year. When an AWD is done a volume of water is credited to each water account in the water source.

Basic landholder rights These cover three types of rights that do not require a licence. It includes domestic and stock rights; Aboriginal native title rights and harvestable rights.

CMA Catchment management authority.

COAG Council of Australian Governments. The peak intergovernmental forum in Australia comprising the Prime Minister, State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association. The role of COAG is to develop and monitor the implementation of policy reforms that are of national significance, including water policy.

Cease to pumps (CtPs) These are the triggers at which pumping is stopped until conditions which permit pumping are restored. Can be expressed as particular flows in megalitres (ML)/day at a reference point, a depth on a staff gauge or simply visible flow at either the reference point or pump site.

Degradation This expression can be used for where the environment has lost some or all of its values, through pollution, low flows, soil erosion and overstocking as examples.



Dealings Changes to a licence, in particular for trading or selling all or part of the licence or account water. Also a change in extraction location, licence category or the consolidation or subdivision of licences.

DEUS The previous New South Wales Department of Energy, Utilities and Sustainability. Was responsible (among other things) for town water supply. Became the New South Wales Department of Water and Energy in 2007 and is now part of the NSW Office of Water.

DPI New South Wales Department of Primary Industries.

DWE The previous New South Wales Department of Water and Energy, is now part of the NSW Office of Water.

Ecosystem Communities of living things such as plants and animals all interacting with their environment. Ecosystems can be things such as rivers, billabongs and lakes.

Embargo / embargoed In water management terms this means that no new water licences will be issued in those areas still under the old *Water Act 1912*. In some instances, there are exemptions to the embargo and certain licences can still be applied for.

Environmental flow A water regime provided within a river, wetland or estuary to improve or maintain ecosystems and their benefits where there are competing water uses and where flows are regulated.

Environmental water A water sharing plan provides water for the environment by protecting a proportion of the water available for the health of the environment such as in our rivers, streams and groundwater sources. There may be specific environmental rules on how this water is protected. This is called planned environmental water.

The plan may permit licensed water to be committed for environmental purposes—this is called **adaptive environmental water** which can arise from water recovery projects or by buying back water licences. As an example, this water may be used to refill wetlands or put more flow back into a stream to assist plant and animal species dependent on healthy instream flows.

Entitlement A water entitlement is a licensed right to access a share of water in a catchment.

Extraction The removal of water from a river, aquifer etc.

Extraction component Sets out specified times, rates of extraction and the sections of the water source (river, lake, steam, underground water) water may be extracted from.

Extraction limit The average yearly volume of water that can be extracted (taken) from the water source by all water access licences.

Groundwater dependent ecosystem (GDE) This is where plants and animals rely on underground water for moisture and to sustain life cycles. This water may be available as springs or soaks. The groundwater may be closely linked to rivers and streams where it may supply the river and hence the riverine environment with water.

Groundwater Water which is stored in rocks and soil beneath the surface in what is called aquifers. Groundwater can be accessed by a bore, a well or excavation. At times the groundwater may break the surface as springs. There is usually a close link between groundwater and surface water such as in our rivers, streams and at times lakes.

Individual daily extraction limit (IDEL) The daily volume limit for a particular licence holder for each flow class. The IDEL will be specified as part of the extraction component on the access licence. It is a share of the total daily extraction limit.

Instream cultural values Water-dependant culturally and spiritually significant places, practices and resources.

Independent Pricing and Regulatory Tribunal (IPART) An independent body that oversees regulation of the water, gas, electricity and public transport industries in New South Wales. Established by the NSW Government in 1992, IPART's primary purpose was to regulate the maximum prices charged for monopoly services by government utilities and other monopoly businesses.

Interagency Regional Panel (IRP) Comprises membership from key water management agencies (such as the Office of Water, Department of Primary Industries, Office of Environment and Heritage and local CMAs) and is responsible for informing the development of water sharing plans in a particular area.

Long Term Annual Average Extraction Limit (LTAAEL) The target for total extractions (under all water access licences plus an estimate of basic landholder rights within an EMU) which is used to assess whether growth in use has occurred. The actual annual extractions (metered plus estimated) are averaged over a fixed period of time defined by the water sharing plan when comparing with the LTAAEL. If the fixed period of time is greater than one water year, then in any one water year, extractions can exceed the LTAAEL without triggering a growth in use response.

Mandatory conditions Rules set out in a water sharing plan to protect the rights of all users and the environment. They apply to water access ILicences and water supply work approvals, and specify things like the licence share in the water source, how and when water can be extracted and how the water account will operate.

Macro water sharing plans Water sharing plans which apply to a number of water sources across catchments or different types of aguifers. Macro plans are being prepared for areas that generally have low water usage.

Megalitre (ML) A unit of volume equal to 1,000,000 litres (one million litres) which is about as much water contained in an Olympic size swimming pool.

Murray-Darling Basin Authority (MDBA) Once known as the MDBC (Murray-Darling Basin Commission). One of its responsibilities is overseeing water sharing for the Murray-Darling Basin in liaison with the eastern states.

Murray-Darling Basin cap (MDB cap) This is where the extraction of water for commercial uses is set at a certain limit for the Murray-Darling Basin. No new licences or volumes of water can be allocated (given out) that would exceed 'the cap'.

National Water Initiative (NWI) The NWI represents a shared commitment by governments to increase the efficiency of Australia's water use, leading to greater certainty for investment and productivity, for rural and urban communities, and for the environment. It was endorsed by the Council of Australian Governments in June 2004. The NSW Government prepared its NSW NWI Implementation Plan containing specific actions for implementing the eight key elements of the NWI.

Natural Resource Commission An independent body providing advice to the NSW Government. It is responsible for recommending whether to extend or remake a water sharing plan, based on a consideration as to whether the plan has contributed to the achievement or otherwise of the relevant State-wide natural resource management standards and targets in the relevant catchment management area.

NoW NSW Office of Water, Department of Primary Industries.

OEH New South Wales Department of Environment and Heritage, Office of Premier ad Cabinet Water. Includes NSW National Parks and Wildlife Service.

Recharge The inflow of water to the groundwater system from the surface. Its movement to the watertable is one form of natural recharge.

Regime A system. A water regime, under water licensing, may be all of the different types of water access licences which make up the system (stock and domestic, irrigation, special purpose, town water supply etc).

Regulated rivers Are declared by the Minister to be a regulated river and typically require the flow to be controlled by the gates and valves on a large instream dam and these flows are released to meet downstream water orders. However, not all rivers below dams are declared to be regulated rivers.

Replenishment flows Flows provided to refill pools or water holes in systems downstream of a water source and can provide water for household, town use and stock.

Riparian The banks and surrounding area of a stream or river is referred to as the riparian zone. Riparian vegetation can be trees and plants along the banks as well as those growing near the bed of the stream itself. The area within the stream itself is called the aquatic zone.

Salinity Where salt has risen to the surface through poor land management practices such as over irrigation combined with the removal of trees. The salt is washed into the waterways causing a saline environment. It can, however, occur naturally in nature such as in Lake Eyre.

Share component Each water access licence has a share component, which represents the share of the water source that is allocated to that licence. The share component is the maximum volume of water that the licence holder can extract from the water source during a water year. However, the actual volume of water that may be taken depends upon the available water determination and any water carried over from previous years.

State Groundwater Panel (SGP) Provides a senior level forum for discussing and resolving a wide range of water planning and policy issues specific to groundwater. The SGP plays a specific role in reviewing and, where appropriate, modifying the outcomes of the regional groundwater assessments and the proposed groundwater sharing rules to ensure consistency across the state for aquifer types. The Panel comprises membership from key water management agencies (such as the Office of Water, Department of Primary Industries, Office of Environment and Heritage and CMAs representing coastal and inland areas).

State Inter-Agency Panel (SIP) Has overall responsibility for the statewide strategic direction of water sharing planning, to ensure that adequate resources are available from each agency and that the varying policy and statutory requirements of the relevant NSW Government agencies are met. The SIP also has the role of making water sharing decisions in cases where the IRP, cannot reach agreement or where the issue has statewide significance. The Panel comprises membership from key water management agencies (such as the Office of Water, Department of Primary Industries, Office of Environment and Heritage and CMAs representing coastal and inland areas).



Supplementary water Holders of supplementary water access licences are able to extract water when flows exceed those required for other license obligations and environmental needs. This is typically when the dam is spilling, or as a result of high tributary inflows downstream of a dam. (This is a new licensed right replacing access to 'off-allocation' water and special additional licences and high flow authorities).

Sustainable Is where the impact of changes or activities on a natural resource such as altering the flow of a river is minimised to an acceptable level based on available scientific knowledge and current values associated with respect to the trade-off between environmental, cultural, social and economic factors.

Sustainable yield The annual average volume that can be extracted by all water users in a groundwater source without causing unacceptable impacts. The average annual recharge (water to fill the aquifer) minus the portion reserved for the environment determines the sustainable yield.

The Minister The member of the NSW Parliament, responsible for the management of rural water (*Water Management Act 2000* and *Water Act 1912*) in NSW.

Unregulated rivers Any river that has not been declared by the Minister to be a regulated river. It typically has no large instream dam to control the flow of water. Most coastal rivers, and inland rivers upstream of major dams are unregulated rivers.

Water access licence (WAL) Allows the licence holder a share of the available water in the water source. These licences exist under the *Water Management Act 2000* where a water sharing plan has commenced. (Approvals to use the water or to construct and operate pumps, dams are also needed).

Water access licence certificates The record for each water access licences issued in NSW with details such as: share component (volume), extraction component, water source, expiry date, current ownership, mortgages and charges. This is issued to the water access licence holder.

Water Access Licence Register The WAL Register provides a record of all Water Access Licences in New South Wales

Water allocation account / water account Like a bank balance except it is water not money. A licensed user is given an allocation of water into their account as specified on their licence and in combination with an available water determination.

Water for cultural purposes The surface and groundwater that help protect and maintain water-dependant cultural values.

Water Executive Consists of Water Senior Officers' Group and the Natural Resources and Environment Chief Executive Officers group.

Water licence Covers both the right to take a specific volume of water as well as the works to be constructed. These licences exist under the *Water Act 1912*, which governs where water sharing plans have not commenced.

Water sharing plans (WSPs) These plans are a major part of the NSW water reforms under the *Water Management Act 2000*. They regulate how water will be shared between water users including the environment.

Water supply works approval Authorises the construction and operation of water supply works (e.g. bores, pumps, channels).

Water use approval Authorises the use to which water is put, e.g. to irrigate a crop or water for town water supply. Can also specify how the water is to be applied such as in drip irrigation. .

Water year The 12 months running from 1 July to 30 June.

Appendix Commenced water sharing plans



Commenced water sharing plans

This table lists all the water sharing plans that have commenced in NSW as of January 2012. A water sharing plan is in place for ten years.

New water sharing plans are commencing all the time, so please refer to NOW's web-site for information on any new plans. A total of 82 plans are proposed to cover the

state by 2014.

Copies of the gazetted plan, summaries and any further information about the plan are available from the Office of Water, www.water.nsw.gov.au > Water management > Water sharing

Water management area	Water sharing plan information	Plan status
Murrumbidgee	Adelong Creek Water Sharing Plan for the Adelong Creek Water Source	2004-07-01 – commenced
Northern Rivers	Alstonville Plateau Groundwater Water Sharing Plan for the Alstonville Plateau Groundwater Sources	2004-07-01 – commenced
Mid North Coast	Apsley River Water Sharing Plan for the Apsley River Water Source	2004-07-01 – commenced
South Coast	Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sharing Plan for the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources	2011-04-01 – commenced
Upper North Coast	Bellinger River Area Unregulated and Alluvial Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources	2008-07-01 – commenced
Central West	Castlereagh River (above Binnaway) Water Sharing Plan for the Castlereagh River above Binnaway Water Source	2004-07-01 – commenced
Central West	Castlereagh River (below Binnaway) Unregulated and Alluvial Water Sharing Plan for the Castlereagh River (below Binnaway) Unregulated and Alluvial Water Source	2011-10-01 – commenced
Central Coast	Central Coast Unregulated Water Sharing Plan for the Central Coast Unregulated Water Sources	2009-08-01 – commenced
Upper North Coast	Coffs Harbour Area Unregulated and Alluvial Water Sharing Plan for the Coffs Harbour Area Unregulated and Alluvial Water Sources	2009-08-01 – commenced
Mid North Coast	Commissioners Waters Water Sharing Plan for the Commissioners Waters Water Source	2004-07-01 – commenced
Northern Rivers	Coopers Creek Water Sharing Plan for the Coopers Creek Water Source	2004-07-01 – commenced
Mid North Coast Upper North Coast	Dorrigo Plateau Surface Water Source and Dorrigo Basalt Groundwater Water Sharing Plan for the Dorrigo Plateau Surface Water Source and Dorrigo Basalt Groundwater Source	2004-07-01 – commenced
Hawkesbury- Nepean Southern Southern Sydney Sydney Harbour	Greater Metropolitan Region Groundwater Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources	2011-07-01 – commenced

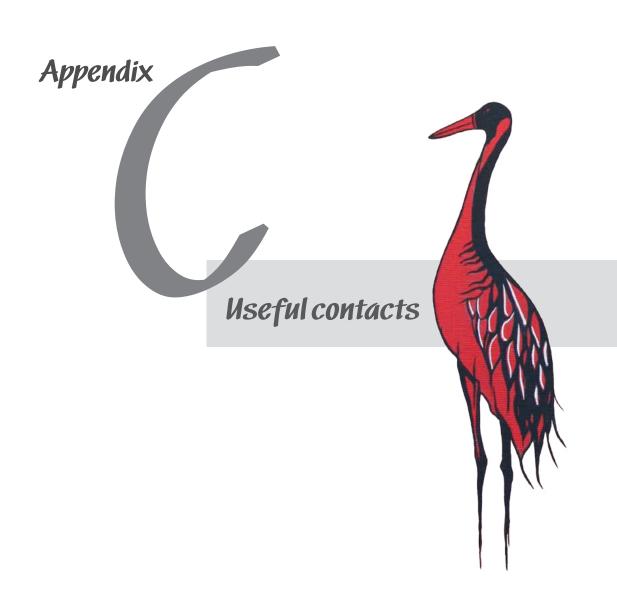


Water management area	Water sharing plan information	Plan status
Hawkesbury- Nepean Southern Southern Sydney Sydney Harbour	Greater Metropolitan Region Unregulated River Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources	2011-07-01 – commenced
Gwydir	Gwydir Regulated River Water Sharing Plan for the Gwydir Regulated River Water Source	2004-07-01 – commenced
Hunter	Hunter Regulated River Water Sharing Plan for the Hunter Regulated River Water Source	2004-07-01 – commenced 2006-12-29 – suspended 2009-02-20 – recommenced
Hunter	Hunter Unregulated and Alluvial Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources	2009-08-01 – commenced
Western	Intersecting Streams Unregulated and Alluvial Water Sharing Plan for the Intersecting Streams Unregulated and Alluvial Water Sources	2011-11-14 – commenced
Central Coast	Jilliby Jilliby Creek Water Sharing Plan for the Jilliby Jilliby Creek Water Source	2004-07-01 – commenced
Southern	Kangaroo River Water Sharing Plan for the Kangaroo River Water Source	2004-07-01 – commenced
Lower North Coast	Karuah River Water Sharing Plan for the Karuah River Water Source	2004-07-01 – commenced
Central Coast	Kulnura Mangrove Mountain Groundwater Water Sharing Plan for the Kulnura Mangrove Mountain Groundwater Sources	2004-07-01 – commenced
Lachlan	Lachlan Regulated River Water Sharing Plan for the Lachlan Regulated River Water Source	2004-07-01 – commenced 2004-07-01 – suspended 2011-09-16 – recommenced
Gwydir	Lower Gwydir Groundwater Water Sharing Plan for the Lower Gwydir Groundwater Source	2006-10-01 – commenced
Lachlan	Lower Lachlan Groundwater Water Sharing Plan for the Lower Lachlan Groundwater Source	2008-02-01 – commenced
Central West	Lower Macquarie Groundwater Water Sharing Plan for the Lower Macquarie Groundwater Sources	2006-10-01 – commenced
Murray	Lower Murray Groundwater Water Sharing Plan for the Lower Murray Groundwater Source	2006-11-01 – commenced
Murrumbidgee	Lower Murrumbidgee Groundwater Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources	2006-10-01 – commenced
Lower North Coast	Lower North Coast Unregulated and Alluvial Water Sharing Plan for the Lower North Coast Unregulated and Alluvial Water Sources	2009-08-01 – commenced

Water sharing plan information	Plan status
Macquarie and Cudgegong Regulated Rivers Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source	2004-07-01 – commenced 2007-07-27 – suspended 2011-09-16 – recommenced
Mandagery Creek Water Sharing Plan for the Mandagery Creek Water Source	2004-07-01 – commenced
Murrah-Wallaga Area Unregulated and Alluvial Water Sharing Plan for the Murrah-Wallaga Area Unregulated and Alluvial Water Sources	2010-12-17 – commenced
Murrumbidgee Regulated River Water Sharing Plan for the Murrumbidgee Regulated River Water Source	2004-07-01 – commenced 2006-11-10 – suspended 2011-09-16 – recommenced
NSW Border Rivers Regulated River Water Sharing Plan for the NSW Border Rivers Regulated River Water Source	2009-07-01 – commenced
NSW Great Artesian Basin Groundwater Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources	2008-07-01 – commenced
NSW Great Artesian Basin Shallow Groundwater Water Sharing Plan for the NSW Great Artesian Basin Shallow Groundwater Sources	2011-11-14 – commenced
NSW Murray-Darling Basin Fractured Rock Groundwater Water Sharing Plan for the NSW Murray-Darling Basin Fractured Rock Groundwater Sources	2012-01-16 – commenced
NSW Murray-Darling Basin Porous Rock Groundwater Water Sharing Plan for the NSW Murray-Darling Basin Porous Rock Groundwater Sources	2012-01-16 – commenced
Murray Unregulated and Alluvial Water Sharing Plan for the Murray Unregulated and Alluvial Water Sources	2012-01-30 – commenced
NSW Murray and Lower Darling Regulated Rivers Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources	2004-07-01 – commenced 2006-11-10 – suspended 2011-09-16 – recommenced
Lower Murray-Darling Unregulated and Alluvial Water Sharing Plan for the Lower Murray-Darling Unregulated and Alluvial Water Sources	2012-01-30 – commenced
North Western Unregulated and Fractured Rock Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Source	2011-10-01 – commenced
Ourimbah Creek Water Sharing Plan for the Ourimbah Creek Water Source	2004-07-01 – commenced 2006-12-22 – suspended 2010-04-09 – recommenced
Paterson Regulated River Water Sharing Plan for the Paterson Regulated River Water Source	2007-07-01 – commenced
	Macquarie and Cudgegong Regulated Rivers Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source Mandagery Creek Water Sharing Plan for the Mandagery Creek Water Source Murrah-Wallaga Area Unregulated and Alluvial Water Sharing Plan for the Murrah-Wallaga Area Unregulated and Alluvial Water Sharing Plan for the Murrumbidgee Regulated River Water Sharing Plan for the Murrumbidgee Regulated River Water Sharing Plan for the NSW Border Rivers Regulated River Water Sharing Plan for the NSW Border Rivers Regulated River Water Sharing Plan for the NSW Great Artesian Basin Groundwater Source NSW Great Artesian Basin Groundwater Water Sharing Plan for the NSW Great Artesian Basin Shallow Groundwater Sources NSW Murray-Darling Basin Fractured Rock Groundwater Water Sharing Plan for the NSW Murray-Darling Basin Fractured Rock Groundwater Sources NSW Murray-Darling Basin Porous Rock Groundwater Water Sharing Plan for the NSW Murray-Darling Basin Porous Rock Groundwater Sources Murray Unregulated and Alluvial Water Sharing Plan for the Murray Unregulated and Alluvial Water Sources NSW Murray-Darling Regulated Rivers Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources Lower Murray-Darling Unregulated and Alluvial Water Sharing Plan for the Lower Murray-Darling Unregulated and Alluvial Water Sources North Western Unregulated and Fractured Rock Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Source Ourimbah Creek Water Sharing Plan for the Ourimbah Creek Water Source



Water management area	Water sharing plan information	Plan status
Namoi	Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sharing Plan for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources	2010-07-01 – commenced
Namoi	Phillips Creek, Mooki River, Quirindi Creek and Warrah Creek Water Sharing Plan for the Phillips Creek, Mooki River, Quirindi Creek and Warrah Creek Water Sources	2004-07-01 – commenced
Northern Rivers	Richmond River Area Unregulated, Regulated and Alluvial Water Sharing Plan for the Richmond River Area Unregulated, Regulated and Alluvial Water Sources	2010-12-17 – commenced
Gwydir	Rocky Creek, Cobbadah, Upper Horton and Lower Horton Water Sharing Plan for the Rocky Creek, Cobbadah, Upper Horton and Lower Horton Water Source	2004-07-01 – commenced
Mid North Coast	Stuarts Point Groundwater Water Sharing Plan for the Stuarts Point Groundwater Source	2004-07-01 – commenced
Murrumbidgee	Tarcutta Creek Water Sharing Plan for the Tarcutta Creek Water Source	2004-07-01 – commenced
Border Rivers	Tenterfield Creek Water Sharing Plan for the Tenterfield Creek Water Source	2004-07-01 – commenced
Hunter Lower North Coast	Tomago Tomaree Stockton Groundwater Water Sharing Plan for the Tomago Tomaree Stockton Groundwater Sources	2004-07-01 – commenced
Mid North Coast	Toorumbee Creek Water Sharing Plan for the Toorumbee Creek Water Source	2004-07-01 – commenced
South East	Towamba River Unregulated and Alluvial Water Sharing Plan for the Towamba River Unregulated and Alluvial Water Sources	2010-12-17 – commenced
Northern Rivers	Tweed River Area Unregulated and Alluvial Water Sharing Plan for the Tweed River Area Unregulated and Alluvial Water Sources	2010-12-17 – commenced
Namoi	Upper and Lower Namoi Groundwater Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources	2006-11-01 – commenced
Murray	Upper Billabong Water Sharing Plan for the Upper Billabong Water Source	2004-07-01 – commenced
Northern Rivers	Upper Brunswick River Water Sharing Plan for the Upper Brunswick River Water Source	2004-07-01 – commenced
Namoi	Upper Namoi and Lower Namoi Regulated River Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources	2004-07-01 – commenced
South East	Wandella Creek Water Sharing Plan for the Wandella Creek Water Source	2004-07-01 – commenced
Hunter	Wybong Creek Water Sharing Plan for the Wybong Creek Water Source	2004-07-01 – commenced 2006-08-18 – suspended



Useful contacts

Office of Water, Department of Primary Industries

The Office of Water is responsible for the strategic management of the State's surface water and groundwater resources. This includes the development of water sharing plans.

The Office of Water's website also includes copies of water sharing plans, information on water access and trade, additional information sheets and downloadable application forms for water dealings.

On-line public registers at www.water.nsw.gov.au/ Water-licensing/Registers/default.aspx provide up to date information on approvals and other consents and activities under the Water Management Act 2000, including:

- · water access licences
- licence conditions
- available water determinations
- water allocation assignments (formerly known as temporary trades)
- assignment of shares (formerly known as permanent trades)
- water access licence and use statistics
- summaries by water source of number of licences, available water determinations and water usage
- summaries by water source of water allocation assignments.

For Water Act 1912 licences and authorities, it is possible to check if a Water Act 1912 licence or authority has been converted to a Water Management Act 2000 water access licence and approval.

All general water management enquiries, please contact the Office of Water hotline:

t: 1800 353 104

e: information@water.nsw.gov.au

Catchment management authorities

Catchment management authorities (CMAs) have been established across New South Wales to ensure that regional communities have a say in how natural resources are managed in their catchments.

Thirteen CMAs are working with farmers, Landcare and other local groups, Aboriginal communities, local government, industry and state agencies to respond to the key natural resource management (NRM) issues facing their catchments.

With direction from a Board of local community members, CMAs have prepared, and are now implementing, their Catchment Action Plans (CAPs) and investment programs. State and Federal funding are supporting projects and activities which help communities restore and improve the natural resources in their catchments.

The CMAs are assisting the Office of Water by facilitating wider community (including Aboriginal community) consultation on the water sharing process in NSW.

Most CMAs have established Aboriginal Reference Groups (ARG) to provide culturally appropriate advice on Aboriginal issues in natural resources management and also have dedicated Aboriginal staff positions to assist in engaging Aboriginal communities in natural resource management.

The CMAs have multiple programs designed to actively involve their communities in NRM activities. These may include restoration of water ways, billabongs, riparian and other vegetation projects, Water Watch and other natural resource and environmental education and improvement projects. Water is vital to the management of natural resources; therefore water management is one of the major components for the CMAs to work with, as they are required to take a whole of catchment approach to their Catchment Action Plans (CAPs) and the priority programs contained in the CAPs.

The Office of Environment and Heritage, Department of Premier and Cabinet (OEH), Department of primary Industries, and other NSW natural resource agencies provide CMAs with advice, information, scientific expertise and technical assistance in delivering their CAPs. The web links listed below provide information relevant to CMAs and links to CMA activities in natural resource management in each region.

Border Rivers/Gwydir

15 Vivian Street Inverell NSW 2360 PO Box 411 Inverell NSW 2360 t: 02 6728 8020 f: 02 6728 8098

e: brg@cma.nsw.gov.au w: www.brg.cma.nsw.gov.au

Central West

141 Percy Street Wellington NSW 2820 PO Box 227 Wellington NSW 2820 t: 02 6840 7800 f: 02 6840 7801

e: cw@cma.nsw.gov.au w: www.cw.cma.nsw.gov.au

Hawkesbury-Nepean

159 Auburn Street Goulburn NSW 2580 Locked Bag 2048 Goulburn NSW 2580 t: 02 4828 6747 f: 02 4828 6750

e: hn@cma.nsw.gov.au w: www.hn.cma.nsw.gov.au



Hunter/Central Rivers

816 Tocal Road Paterson NSW 2421 Private Bag 2010 Paterson NSW 2421 t: 02 4930 1030 f: 02 4930 1013

e: hcr@cma.nsw.gov.au w: www.hcr.cma.nsw.gov.au

Lachlan

2 Sherriff Street Forbes NSW 2871

t: 02 6851 9500

f: 02 6851 6991

e: lachlan@cma.nsw.gov.au w: www.lachlan.cma.nsw.gov.au

Lower Murray-Darling

32 Enterprise Way Buronga NSW 2739 PO Box 363 Buronga NSW 2739 t: 03 5021 9460 f: 03 5021 1308

e: Imd@cma.nsw.gov.au w: www.lmd.cma.nsw.gov.au

Murray

315 Victoria Street Deniliquin NSW 2710 PO Box 835 Deniliquin NSW 2710 t: 03 5880 1400

f: 03 5880 1444

e: murray@cma.nsw.gov.au w: www.murray.cma.nsw.gov.au

Murrumbidgee

Level 1, 43-45 Johnston Street Wagga Wagga NSW 2650 PO Box 5224 Wagga Wagga NSW 2650 t: 02 6932 3232

f: 02 6932 3269

e: murrumbidgee@cma.nsw.gov.au w: www.murrumbidgee.cma.nsw.gov.au

Namo

35-37 Abbott Street Gunnedah NSW 2380 PO Box 546 Gunnedah NSW 2380 t: 02 6742 9220

f: 02 6742 4022

e: namoi@cma.nsw.gov.au w: www.namoi.cma.nsw.gov.au

Northern Rivers

State Government Offices, Level 3 / 49 Victoria St Grafton NSW 2460

PO Box 618 Grafton NSW 2460

t: 02 6642 0622

f: 02 6642 0640

e: northern@cma.nsw.gov.au w: www.northern.cma.nsw.gov.au

Southern Rivers

Level 1 / 84 Crown St Wollongong NSW 2500 PO Box 3095 Wollongong East NSW 2500

t: 02 4224 9700 f: 02 4224 9669

e: southern@cma.nsw.gov.au w: www.southern.cma.nsw.gov.au

Sydney Metropolitan

Ground Floor / 10 Valentine Ave Macquarie Tower Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124

t: 02 9895 7898

f: 02 9895 7330

e: sydney@cma.nsw.gov.au w: www.sydney.cma.nsw.gov.au

Western

62 Marshall Street Cobar NSW 2835 PO Box 307 Cobar NSW 2835

t: 02 6836 1575 f: 02 6836 2988

e: western@cma.nsw.gov.au

w: www.western.cma.nsw.gov.au

Country, Culture and Heritage Division of the Office of Environment and Heritage, Department of Premier and Cabinet

The Country, Culture and Heritage Division (CCHD) helps agencies and communities understand, strengthen and conserve cultural connections with the environment. The division has five regional based teams covering all of NSW to work with Aboriginal communities, private and public landowners, local councils and catchment management authorities to protect, conserve and promote Aboriginal cultural values associated with the lands, waters and natural resources of NSW.

Head Office

Level 7, 43 Bridge Street Hurstville NSW 2220 PO Box 1967 Hurstville NSW 1481 t: 02 9585 6453 f: 02 9585 6366

Central Region

Level 7 / 43 Bridge Street Hurstville NSW 2220 PO Box 1967 Hurstville NSW 1481 t: 02 9585 6546 f: 02 9585 6534

Far West Region

200 Yambil Street Griffith NSW 2680 PO Box 1049 Griffith NSW 2680 t: 02 6966 8111 f: 02 6962 5480

North West Region

48-52 Wingewarra Street Dubbo NSW 2830 PO Box 2111 Dubbo NSW 2830 t: 02 6883 5346 f: 02 6884 8675

Northern Region

Federation House 24 Moonee Street Coffs Harbour NSW 2450 Locked Bag 914 Coffs Harbour NSW 2450 t: 02 6659 8259 f: 02 6651 6187

Southern Region

11 Farrer Street Queanbeyan NSW 2620 PO Box 733 Queanbeyan NSW 2620 t: 02 6298 9736 f: 02 6299 4281

National Native Title Tribunal

A Federal Government agency set up under the *Native Title Act 1993* to assist people to facilitate timely and effective native title outcomes.

- applies the registration test to native title claimant applications
- mediates native title claims under the direction of the Federal Court of Australia
- provides notification of native title applications and indigenous land use agreements
- maintains the Register of Native Title Claims, the National Native Title Register and the Register of Indigenous Land Use Agreements
- makes arbitral decisions about some future act matters
- negotiates other sorts of agreements, such as indigenous land use agreements.

On request, the Tribunal can provide assistance and information to all people involved in the native title process.

w: www.nntt.gov.au

Principal Registry

Level 4, Commonwealth Law Courts Building 1 Victoria Avenue Perth WA 6000 GPO Box 9973 Perth WA 6848 t: 08 9268 7272 free call: 1800 640 501 f: 08 9268 7299 e: enquiries@nntt.gov.au

New South Wales and Australian Capital Territory Registry

Level 25, 25 Bligh Street Sydney NSW 2000 GPO Box 9973 Sydney NSW 2001 t: 02 9235 6300 free call: 1800 640 501 f: 02 9233 5613 e: enquiries@nntt.gov.au

Native Title Services Corp (NTSCORP)

Promotes social justice; economic, cultural and social independence, by assisting Traditional Owners with:

- facilitation of native title claims
- dispute resolution
- notification of future acts and activities
- · agreement making.

w: www.ntscorp.com.au

Head Office Redfern

Suite 15/245 Chalmers Street, Redfern NSW 2016 PO Box 2105, Strawberry Hills 2012 DX 22525, Surry Hills t: 02 9310 3188 free call: 1800 111 844 f: 02 9310 4177

Regional Office Coffs Harbour

Suite 2, 133 West High Street, Coffs Harbour NSW 2450 PO BOX 156, Coffs Harbour NSW 2450 t: 02 6651 4588 f: 02 6651 7954 free call: 1800 111 844

NSW Aboriginal Land Council

The State's peak representative body in aboriginal affairs, aims to protect the interests and further the aspirations of its members and the broader Aboriginal community.

w: www.alc.org.au

Head Office

Ground Floor, 33 Argyle St Parramatta NSW 2150 PO Box 1125 Parramatta NSW 2124 t: 02 9689 4444 F: 02 9687 1234

Northern Zone - Coffs Harbour

2/26 Park Ave Coffs Harbour NSW 2450 PO Box 1912 Coffs Harbour NSW 2450 t: 02 6659 1200

Western Zone - Dubbo

2/36 Darling St Dubbo NSW 2830 PO Box 1196 Dubbo NSW 2830 t: 02 6885 7000

Southern Zone - Queanbeyan

Suite 110 Riverside Plaza Monaro St Queanbeyan NSW 2620 PO Box 619 Queanbeyan NSW 2620 t: 02 6124 3555

Eastern Zone - Parramatta

Level 5 - 33 Argyle St Parramatta NSW 2150 PO Box 987, Parramatta NSW 2124 t: 02 9689 4444

State Water Corporation

State Water is NSW's rural bulk water distributor. In areas where there is no other water authority (such as Sydney Water) it manages dams, weirs, and distributes water to town water supplies, water access licence holders and the environment.

Customer Information centre t: 1300 662 077 e: Customer.Helpdesk@statewater.com.au

w: www.statewater.com.au



Department of Primary Industries NSW (DPI)

Among its responsibilities are agriculture and fisheries. Its main water sharing role is to assess and advise on the needs of farmers, and the habitat requirements for fish and other aquatic life.

w: www.dpi.nsw.gov.au

Port Stephens - Fisheries

Port Stephens Fisheries Institute Port Stephens Fisheries Institute Taylors Beach Road Taylors Beach NSW 2316 Locked Bag 1 Nelson Bay NSW 2315 t: 02 4982 1232 F: 02 4982 1107

Port Macquarie - Fisheries

Hastings Fisheries Office Unit 3 22-24 Acacia Ave Port Macquarie NSW 2444 PO Box 5584 Port Macquarie NSW 2444 t: 02 5524 0600 F: 02 6581 4083

Paterson - Agriculture

Tocal Agricultural Centre Tocal Road Paterson NSW 2421 t: 02 4939 8888 F: 02 4938 5549

Orange - Primary Industries HO

NSW Industry & Investment 161 Kite Street Orange NSW 2800 Locked Bag 21 Orange NSW 2800 t: 02 6391 3100 F: 02 6391 3336

Ourimbah - Primary Industries

Central Coast Primary Industries Centre University of Newcastle, Ourimbah Campus North Loop Road Ourimbah NSW 2258 Locked Bag 26 Gosford NSW 2250 t: 02 4348 1900 F: 02 4348 1910

Grafton - Agriculture

Grafton Primary Industries Institute Trenayr Road Junction Hill NSW 2460 Private Mail Bag 2 Grafton NSW 2460 t: 02 6640 1600 F: 02 6644 7251

Grafton - Forests Nursery

Forests NSW Grafton Nursery Cnr Trenayr Road Grafton NSW 2460 Private Bag 9004 Grafton NSW 2460 t: 02 6644 7001 F: 02 6644 7041

Ballina - Fisheries

Richmond Fisheries Office 15 Regatta Avenue Ballina NSW 2478 PO Box 154 BALLINA NSW 2478 t: 02 6618 1800 F: 02 6686 8907

Cronulla - Fisheries

Cronulla Fisheries Centre 202 Nicholson Parade Cronulla NSW 2230 PO Box 21 Cronulla NSW 2230 t: 02 9527 8411 F: 02 9527 8576

West Pennant Hills (Bus. Unit)

Forests NSW Nursery Business Unit 95 Castle Hill Road West Pennant Hills NSW 2125 PO Box 100 Beecroft NSW 2119 t: 02 9871 3399 F: 02 9872 3456

West Pennant Hills (FNSW)

Forests NSW Head Office 121-131 Oratava Ave West Pennant Hills NSW 2125 PO Box 100 Beecroft NSW 2119 t: 02 9872 0111 F: 02 9871 6941

West Pennant Hills (I&I NSW)

NSW Industry and Investment 121 - 131 Oratava Ave West Pennant Hills NSW 2125 PO Box 100 Beecroft NSW 2119 t: 02 9872 0111 F: 02 9871 6941

West Pennant Hills (Tech Serv)

Forests NSW Land Management & Technical Services 121-131 Oratava Avenue West Pennant Hills NSW 2125 PO Box 100 Beecroft NSW 2119 t: 02 9872 0111 F: 02 9871 6941

West Pennant Hills (nursery)

Forests NSW Cumberland Nursery 95 Castle Hill Rd West Pennant Hills NSW 2125 PO Box 100 Beecroft NSW 2119 t: 02 9871 3222 F: 02 9872 7590

Wollstonecraft - Fisheries

Sydney North Fisheries Centre 12 Shirley Road Wollstonecraft NSW 2065 t: 02 8437 4903 F: 02 9966 0663

Yanco - Agriculture

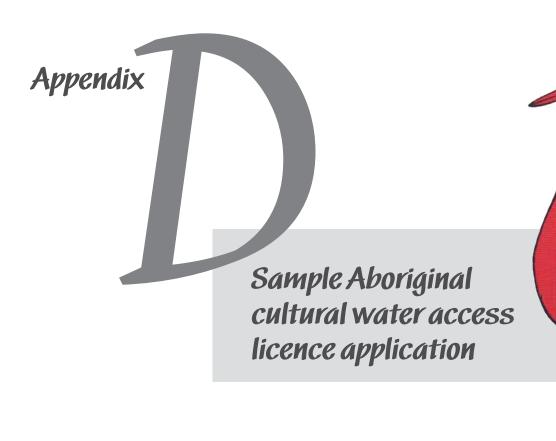
Yanco Agricultural Institute Trunk Road 80 Yanco NSW 2703 Private Mail Bag Yanco NSW 2703 t: 02 6951 2611 F: 02 6955 7580

Yanco - Forests Depot

Forests NSW Yanco Forest Centre Yanco Agricultural Institute Narrendera Road Yanco NSW 2703 Private Mail Bag Yanco NSW 2703 t: 02 6951 2509 F: 02 6951 2749

Sydney - Primary Industires

NSW Industry & Investment Level 6, 201 Elizabeth Street Sydney NSW 2000 PO Box K220 Haymarket NSW 1240 t: 02 8289 3999 f: 02 9286 3208







Application for a new specific purpose water access licence

This application is for a new specific purpose water access licence (WAL) under section 61 (1) (a) of the *Water Management Act 2000*. A WAL entitles its holder to specified shares in the available water within a specified water management area or from a specified water source (the share component), and to take water at specified times, at specified rates or in specified circumstances, or in any combination of these, and in specified areas or from specified locations (the extraction component). A WAL does not permit the use of water for a particular purpose nor does it permit the holder to construct or use a water supply work. Those rights are conferred by a water use approval and a water supply works approval, respectively.

A specific purpose WAL specifies the purpose the WAL can be used for and may limit the operation of the WAL to a particular location where it can be used. A specific purpose WAL cannot be 'mortgaged' and very limited dealing (trade) rules apply. A specific purpose WAL will be cancelled if the purpose for which it was granted no longer exists.

If you intend to apply for a new zero share component WAL, a new WAL pursuant to a controlled allocation order, or you wish to make changes to or transfer an existing WAL, you require a different form.

Applicants are advised to read the guide to this form. Step-by-step instructions on each section are included in the guide, which also lists options for submitting this application and application fees. Information on fees is also available from the NSW Office of Water website www.water.nsw.gov.au or from your nearest water licensing officer.

You can either complete this form by typing in the PDF or writing using a black/blue ink pen using BLOCK capitals.

SECTION A: Applicant details

List all applicants - photocopy and attach extra pages if more than two applicants.

First applicant

ROWN	V A3 Given name(s) TAMES				
A4 Corporation name (If applicable) BUNDANG LOCAL ABORIGINAL LAND COUNCIL					
AS ACN (if applicable) N/A A6 Position held (if applicable) LALC CO-ORDIN ATOR					
STRE	EET				
A9 State NSW	A10 Postcode 248	A11 Country AUSTRALIA			
112 Phone 02 66281490 A13 Alternate phone 0473 561029					
114 Fax 0266281500 A15 Email brown@lalc.org.au					
	ANG LOC A6 STRU A9 State NSW	ANG LOCAL ABORIGI A6 Position held (# applicable) L STREET A9 State NSW A10 Postcode 248 I A13 Alternate phone O			

OFFICE	Fee paid: \$	Customer receipt number:	Office Stamp
JSE	Officer signature:	Date:	
ONLT	Application number.	Acceptance date:	



Application for a new specif	ic purpose water ac	cess licence				
Second applicant (if a	applicable)					
A16 Title (Mr, Mrs, Ms)	A17 Surname				A18 G	iven name(s)
A19 Corporation name (if app	olicable)					
A20 ACN (if applicable)			A21 Positio	on held (if ap	plicable)	
A22 Address						
A23 Town		A24 State	A25	Postcode		A26 Country
A27 Phone			A28	Alternate pl	none	
A29 Fax		A30 Email				
A31 If more than two applica	ants, specify total nur	mber of applicar	nts			
SECTION B: Auth	orised contac	ct person	Contion	al)	100	
	elow is authorise	ed to amend	this appli	cation, cl		formation in this application, or provide behalf of all applicants.
	information in co	nnection with	n this app			person is authorised and the Office of may occur as all the applicants may
B1 Title (Mr, Mrs, Ms)	82 Surname	CLARI	4	В	3 Given r	name(s) JOSIE
84 Address BUND.	ANG LA	LC 5	5BU	NJU	P	ST
85 Town BUNT	UP	ве State	5W B7 P	ostcode 2	481	88 Country AUSTRALIA
89 Phone 02 66	281490	0	B10 /	Alternate ph	none	NA
B11 Fax 02 66	281500	B12 Email	clark	2@10	alc.	orq.au
						9
SECTION C: Wate	r access lice	nce tenan	CV	E-WILLS	4.11.5	A STATE OF THE SHALL BE STATE OF THE STATE O
Tick the appropriate bo				on A.		
c1 Licence to be held by:	Sole holder	Joint tena	ints [Tenant	s in Com	nmon*
* If the WAL is to be held b	y Tenants in Commo	on specify details	s:			
c2 Name				to hold		fraction of licence
Name				to hold		fraction of licence

For more than two applicants, include details on attached pages.



SECTION D: Water access licence details

Specify the water source where you wish to extract water

DI Water source BUNDJUP CREEK

D2 Zone (il applicable) A3 (UPPER ZONE)

Specify the proposed category (sub-category) of the WAL

D3 Category (Sub-category)* ABORIGINAL CULTURAL ACCESS LICENCE

D4 Provide details of the purpose for which the WAL is sought:

Provide	cultural flow into Bunjup lagoon for
months	September and October each year.
	jt.

D5 Volume of water applied for:	10	megalitres per year

06	Provide	details	of	how	the	volume	applied	for	has	been	calculate	C

D7 Provide details	of where the	water is to	be used:

Lot	DP	Parish	County
28	48361	GRIFFITH	WENTWORK

If necessary, photocopy and attach extra pages.

^{*} Note: You need to check the Water Management (General) Regulation 2004 and the relevant water sharing plan to see whether an application for the specific purpose WAL may be made. See the guide to this form for more information.



Application for a new specific purpose water access licence

SECTION E: Nominated works

Provide details of the water supply work approval number for all water supply works that are to be nominated on the new WAL, as work(s) by means of which water credited to the WAL may be taken. You are nominating all water supply works listed on an approval(s) entered below.

Photocopy and attach extra pages to include details for more than two water supply work approvals.

E1 Approval number: 1	Approval number: 2
or	
E2 Water supply work approval (application number)	

Note: The consent of each approval holder (E1) must be attached if those persons are not applicants for the new WAL, or, the consent of each applicant for an approval (E2) must be attached if those persons are not applicants for the new WAL. See the declaration of approval holder(s) below.

SECTION F: Declaration

Photocopy and attach extra pages if more than two applicants.

I/We, the undersigned applicants, acknowledge and agree:

- a) that I/We apply for a water access licence as described in this application
- that this application will be determined in accordance with the Water Management Act 2000 and any associated regulations or guidelines as in force from time to time, and that no right or entitlement shall arise pending determination of this application and that any such determination may be subject to conditions
- c) that the Crown in right of the State of New South Wales, including the NSW Office of Water and its officers, employees, agents and successors ('the State'), accepts no liability in relation to any action, proceeding, claim, demand, cost, loss, damage or expense (including reasonable legal costs or expenses) arising directly or indirectly as a result of or in connection with this application or any act or omission of the State in connection with this application and I/we hereby agree to release and indemnify the State from and against any such action, proceeding, claim, demand, cost, loss, damage or expense to the fullest extent permitted by law
- d) that all information contained in this application is accurate, true and complete and that the State will rely on such information
- e) that the State does not provide any legal, financial or technical advice in connection with this application and that any such advice, if required, is to be obtained independently
- f) that details about any water access licence arising out of this application will be recorded in the publicly available Water Access Licence Register pursuant to the Water Management Act 2000.

For applications made by individuals

F1 Name	Signature	Date
Name	Signature	Date

For applications made by a corporation: Executed for and on behalf of the applicant in accordance with section 127 of the *Corporations Act 2001* Cth (if a company) or by a duly authorised officer (for other types of corporation)

F2 Name of corporation BUNDANG Lo	OCAL ABORIGINAL L	AND COUNCIL		
F3 Position of signatory BUNDANG LALC Co-ordinator				
F4 Name of signatory JAMES BROWN	Signature	Date 27/11/09		
F5 Position of signatory BUNDANG LALC Chair				
F6 Name of signatory TOSIE CLARK	Signature	Date 27/11/09		



SECTION G: Declaration of approval holder(s)

Photocopy and attach extra pages if there is more than one approval and/or more than two approval holders.

Note: Section G should only be filled in if each holder of an approval listed in Section E, or if each person listed on an approval application listed in Section E, is not listed as an applicant in this application. If this does not apply insert 'N/A' (not applicable) at G1 below.

I/We, the undersigned, acknowledge and agree:

- a) that I/We are the holder(s) of the approval referred to at G1 below, or I/We are applicants for the approval application listed at G1 below
- b) that I/We consent to the water supply work(s) listed on the approval being nominated as work(s) by means of which water credited to the water access licence being applied for in this application may be taken
- that all information contained in this application relating to the approval(s) is accurate, true and complete and that the Crown in right of the State of New South Wales, including the NSW Office of Water and its officers, employees, agents and successors ('the State') will rely on such information
- d) that the State does not provide any legal, financial or technical advice in connection with this application and that any such advice, if required, is to be obtained independently
- e) that details about the approval may be recorded in the publicly available Water Access Licence Register, pursuant to the Water Management Act 2000.

or					
Approval application number					
For individuals:					
G2 Name	Signature	Date			

For corporations: Executed for and on behalf of the corporation in accordance with section 127 of the Corporations Act 2001 Cth (if a company) or by a duly authorised officer (for other types of corporation):

G3 Name of corporation BUNDANG LO	CAL ABORIGINAL LA	ND COUNCIL		
G4 Position of signatory BUNDANG LALC Co-ordinator				
G5 Name of signatory SAMES BROWN	Signature	Date 27/11/09		
G6 Position of signatory				
G7 Name of signatory JOSIE CLARK	Signature	Date 27/11/09		

Privacy note

The personal information you provide in this form will be treated in accordance with the *Privacy and Personal Information Protection Act 1998*, under which you have rights of access and correction. Your personal information will be used for assessing and processing your application or in connection with the operation of any water access licence granted and may be disclosed to State or Commonwealth public authorities and other parties: (i) for any of the above mentioned purposes; or (ii) for research related purposes; or (iii) as required by law. If a water access licence is granted, the *Water Management Act 2000* requires that various details relating to the water access licence are to be recorded in the Water Access Licence Register kept by the Minister. Information recorded in the Water Access Licence Register is publicly available.



Application for a new specific purpose water access licence

Offences and suspension or cancellation

It is an offence, under section 344 of the *Water Management Act 2000*, to make a statement that you know to be false or misleading in a material particular in, or in connection with, this application. A corporation found guilty of an offence against section 344 is liable to a penalty not exceeding \$1.1 million. An individual found guilty of an offence against section 344 is liable to a penalty not exceeding \$247,500.

An access licence may be suspended or cancelled, under section 78 of the *Water Management Act 2000*, if: (a) the holder of the licence has failed to comply with any term or condition to which the licence is subject, (b) the holder of the licence has been convicted of an offence against the Act or the regulations, (c) if any fees, charges or civil penalties in respect of the licence have not been paid, whether or not those fees, charges or civil penalties were incurred by the current holder of the licence, (d) the holder of the licence has failed to comply with any direction given to the holder under this Act in connection with the licence, or (e) the licence was granted as a result of false, misleading or materially inaccurate information supplied by or on behalf of the applicant.

Appendix

Sample water supply works application



Section A

Attach additional pages to back of form, if required.

Application for approval for water supply works, and/or water use

Application for Minister's consent under section 92 of the Water Management Act 2000

Applicants are advised to read the instructions carefully before filling in this form. Step-by-step instructions on each section are included in the Guide to the application for approval for water supply works and/or new water.

Please complete the form with a black/blue ink pen and use BLOCK letters.

	Part	1 Applicant Details	
	nt details		
First app	licant (or company applicant)	3 VV V	
(corresponder	ice in relation to this application will be directed to		
A1 Title	Ms) A2 Su	rnameBROWN	
A3 Given n			V (101)
A4 Compa	ries -	LALC AS	ACN
A6 Position	held CO-OKDINA	TOR	
(if applica Name (if applica	of company representative		
	S 5 BUNDJUP ST	REETA8 Town	BUNDJUP
	The state of the s	81 A11 Country AUSTRAL	IA
A12 Phone	no. 02 66 28 14 90 A13 Alt	ernative phone no. <u>0473 56</u>	1029
A14 Fax no.	0266281500		
A15 E-mail	brown@lalc.ord	1.00	
Second A	Applicant	J.	
(# applicable) A16 Title	MRS A17 Su	rname CLARK	
(Mr, Mrs,	Ms)		
A18 Given n	ame(s) <u>JOSIE</u>		
A19 Addres	BUNDANG LALC !	5 BUNDJUP ST A20 TOWN	BUNDJUP
A21 State _	NSW A22 Postcode 24	81 A23 Country AUSTRA	ALTA
Statistical Control	evi de de Ni de disipi ig		
A24 If more (attach e	than 2 applicants, specify total number tra page to list additional applicants)	of applicants	
Office	Fee paid: \$	Customer receipt number:	Office Stamp
use only	Officer signature:	Date:	
	Application number:	Acceptance date:	

į	2	S		V.
`		-		١
ē	()	۹	
2	=	ú	91	

Section B	Applicant's or agent's contact details (Only fill in this section if a different person from the first applicant in section A will be dealing with the application)
	B1 TitleB2 Position
	B3 Surname)B4 Given name
	B5 Postal address
	B6 StateB7 PostcodeB8 Country
	B9 Preferred phone noB10 Alternative phone no
	Btt E-mail
Section C	Land ownership of the works site (Tick appropriate boxes) - relates to applicants listed in Section A) Is your application made as the: C1 Owner of the land C2 Lawful occupier of the land
	(attach documentary evidence of lawful occupation such as a lease or court order) C3 Other (please specify)
Castian D	
Section D	Other approvals (Please tick appropriate boxes)
	Does your proposal (including water use and water supply works) require development consent from your local council?
	D2 If yes, has development consent been granted? Yes No
	D3 If yes, provide consent number
	If your proposal involves water use, does it also require consent to clear native vegetation (incl. grassland)? No
	D5 If yes, has consent been granted? Yes No
	D6 If yes, provide consent number
Section E	Maps
	Attach a topographic map, aerial photo and/or a farm plan of A3 or A4 size outlining the following information:
	 location of property (identifiable from a landmark and with North arrow included);
	property boundary;
	 location(s) of all existing works as well as works proposed in this application. Include pumps, diversion works, bores, storages, channels etc.; and
	 watercourses and wetlands (including dry river beds and temporary wetlands).
Section F	Pre-application discussion (Please tick appropriate boxes)
	Has a pre-application discussion taken place in respect of this application?
	F1 No F2 Yes, it took place on 15/11/09 with the assistance of
	Bronwyn Pipet from the Licensing Section-GRAFTONOW

Part 2 Water use approval

(You may be requested to provide further information to support your application)

NB. In order to begin irrigation, you must ensure that you have a valid water access licence and a valid water use approval. Contact your local NOW office for further details.

You do not require a water use approval for a development that has been granted development consent under Part 4 of the *Environmental Planning and Assessment Act 1979*.

Water Use only (Please tick appropriate boxes)
I wish to apply for: G1 a new water use approval
an amended water use approval specifying changed water use (ie to amend or change the details of an existing water use approval)
If you ticked the second box (G2) please complete the following questions G3 and G4:
G3 Existing approval number to be amended
G4 Briefly describe the changes you wish to make (e.g. increase the size of irrigated area etc.)
Purpose
Please nominate the purpose you are seeking approval for: (Please tick appropriate boxes)
H1 Irrigation Town water Other
H2 If 'other', please specify Aboriginal Cultural Flow
H3 Do you have a current and relevant water access licence? Yes No
H4 If yes, what is the number of the licence/s to be associated with this application?
H5 If no, when do you intend to secure a water access licence?
Location of land where water will be used 11 Property name BUNDJUP LAGOON - LALC land
Property address 43 BUDYDJUP LAGOON Rd
13 Town BUNDJUP 14 Postcode 2481
Area of property 40 (ha) 16 Area of property proposed for the use 15 Ha (ha)
Lot DP Parish/Portion County
28 48361 GRIFFITH WENTWORK
18 Local council BUNJUP Shire Council
Name of nearest river/s adjacent to or within the property boundaries BUNDTUP CREEK

Page 3 of 10

ı	
Ļ	\sim
٦	-
Ų	ده.
5	ALC: YES

~							w
C.	$^{\circ}$	\sim	п	\sim	n	W	
\sim		97	ш	w		100	ы

Water use proposal

For irrigation please specify:

Crop Type (please specify)	Area to be irrigated (ha)	Irrigation System / Method

For other purposes, please provide details of proposal. <u>Provision of cultural flow in</u>
(attach photocopy extra page if more space is required) September and October to topup BUNDJUP LAGOON, from the BUNDJUP CREEK. water used for ceremonial purposes.

Section K

Information maps

On the map described in Section E mark the following information relating to your proposed use of water:

- area(s) to be affected
- location(s) of all works supplying water to your proposed use area including any flood protection works
- drainage and/or recycling system proposals
- soil types such as sandy/light soils, clay, clay loam, loam areas within the proposed use area
- any native vegetation on the property (including native grasses)
- any known high watertable areas on the property
- any known Aboriginal or European cultural heritage features on the property
- any areas covered by an Irrigation Drainage Management Plan
- areas of wetlands

Sact	inni	
Sect	וווטו	

Soils

lde	Sandy Loamy	Clay Loam Clay Other (please specify)	
	Red/red brown	the proposed irrigation area (tick box) Yellowish browr Grey Black Other (please specify)	
L3	Describe the soil cat	egory in the proposed use area (tick one or more)	
	Туре	Description	Tick
	Alluvial soils	extremely variable, layered profile with sand, clay etc	
	Cracking clays	deep uniform clays with seasonal cracking when dry	
	Sandy soils	deep, uniform, coarse or fine textured sandy soil	
	Earthy soils	gradual texture change – increase in clay content	
	Duplex soils	texture contrast between surface soil and sub soil - loam (over clay)	
	Other (please specify)		
		on, what is the slope of the area to be irrigated? (tick box)	

www.water.nsw.gov.au September 2010 Document Number: WMAF030

Section M	Environmental issues (Please tick appropriate boxes)
	Does your property have any of the following features/characteristics? Salinity Acid Sulphate Soils Sodic Soils Waterlogging Erosion High Watertables Land Subsidence Contaminated Land Other
	Any other comments (include the occurrence any of the above features/characteristics on neighbouring properties, if known) some erosion around the edge of BUNDSUP lagoon caused by stock access. We have applied through CMA to fence off the lagoon.
Section N	Drainage management (For irrigation only – please tick appropriate boxes)
	Have you prepared an Irrigation and Drainage Management Plan? Yes No If yes, supply a copy with this application.
	N2 If you intend to recycle your irrigation drainage on-farm, provide details of your proposed recycling setup including collection, storage and re-use proposals.
	N3 If you are not recycling your drainage, how do you propose to dispose of any irrigation tailwater?
	N4 Does your proposal also require consent from the Department of Environment, Climate Change and Water No No
	No See No
	No If yes, please provide consent number Part 3 Water supply works approval
Section 0	Pump(s) – surface water only (If you are seeking approval for more than one of these works, please photocopy this page, complete it and attach it to this application. Mark each work on a copy of the topographical map, aerial photo and/or farm plan. Please tick appropriate boxes) I wish to apply for
	A new water supply work approval An amended water supply works approval specifying a changed or new water supply work (ie to amend or change the details of an existing water supply works approval)
	If you ticked the second box (O2) please complete the following questions O3 and O4.
	O3 Existing approval number to be amended.
	O4 Briefly describe the changes you wish to make (eg. change in the size of pump, location, etc).

Page 5 of 10



	Os Do you have a current and relevant water access licence? Yes No
	Of If yes, what is the number of the water access licence/s to be associated with this application?
	or If no when do you intend to secure a water access licence? Licence application supplied with
	LOCATION OF WORKS
	08 Lot number 28 DP number 48361 County Westwork Parish Griffith
	OB RIVER BUNDSUP CREEK
	010 Type Firefighter Size 25 (mm) Capacity 22.1 (litres/sec)
	Description Firefighter pump (o.g. contribugal)
	O11 Do you intend to excavate to install your pump? Yes No
	O12 Do you intend to clear any native vegetation to construct the works?
	O13 If yes, area of ground to be cleared(m²)
Section P	Channel(s) for diverting or conveying water, regulator(s) or pipes (If you are seeking approval for more than one of these works, photocopy this page and attach the completed extra page(s). Mark each work on a copy of the topographical map, aerial photo and/or farm plan of A3 or A4 size. Please tick appropriate boxes)
	I wish to apply for
	An amended water supply works approval specifying a changed or new water supply work (ie to amend or change
	the details of an <u>existing</u> water supply works approval) If you ticked the second box (P2), please complete the following questions P3 and P4.
	P3 Existing approval number to be amended
	P4 Briefly describe the change(s) you wish to make
	P5 Do you have a current and relevant water access licence? Yes No
	P6 If yes, what is the number of the licence/s that is/are to be associated with this application?
	P7 If no, when do you intend to secure a water access licence? Application Supplied with this
	P8 Type of Work Channel Regulator Pipe Other
	Location of the work
	P9 Lot number 28 DP number 48361 County Wentwork Parish Griffith
	P10 Name of nearest river Bundjup Distance from nearest river 20 (m or km)
	P11 Size and dimensions of the work Length
	Depth (average) (m)
	Width (average)(m)
	Height above surrounding ground level(m)
	If a pipe, diameter of pipe(m)
	P12 Do you intend to clear any native vegetation to construct the works? Yes No
	P13 If yes, area of ground to be cleared(m2)
	www.water.nsw.gov.au September 2010 Document Number: WMAF030

Section Q

Groundwater works

(If you are seeking approval for more than one of these works, please photocopy this page and attach the completed extra page(s). Mark each work on a copy of the topographical map, aerial photo and/or farm plan of A3 or A4 size. Please tick appropriate boxes) I wish to apply for A amended water supply works approval specifying a changed or A new water supply work approval new water supply work (ie to amend or change the details of an existing water supply works approval) If you ticked the second box (Q2), please complete the following questions Q3 and Q4. Q3 Existing approval number to be amended. ____ Q4 Briefly describe the change(s) you wish to make. ___ Q5 Is the work existing or proposed? ____ 06 Do you have a current and relevant water access licence? Yes 97 What is the number of the licence/s to be associated with this application? Q8 Type of Work Excavation Spearpoint Test Bore Artesian Well Bore Q9 Purpose of Work _ _____ DP number __ _____ County __ _ Parish_ Q11 Will the proposed works be within 40m of a creek, stream, river, lake, Nο wetland, swamp, marsh or the coast line? Q12 If Yes, what is the name Q13 Distance of proposed work of this water body from this water body _____ (m) _. Q14 Distance from property boundary ______ (m or Km) ^{C15} Proposed depth of bore ___ Q16 Are the proposed works within 100m of any septic, sewerage, stormwater or other waste water storage or conveyancing works, or any other waste repository (such as a landfill, dump, burial area), or known site of contamination (such as a sheep or cattle dip site, or petrol station) that has or may have the potential to contaminate the groundwater into which the bore will be constructed? (If yes, indicate type and distance in each case.) Q17 Do you intend to clear and native vegetation to construct the works? Yes Q18 If yes, area of ground to be cleared _____ Q19 Will your proposed work impact on an area of known Aboriginal cultural significance? Yes Q20 Are you in an underground mining area?

Page / of 10



(e _!	corage works — off-river and runoff harvesting storages only g. on-farm dams, turkey's nest dams) ou are soeking approval for more than one of those works, photocopy this page and attach the completed extra page(s). Mark each work a copy of the topographical map, aerial photo and/or farm plan of A3 or A4 size. Please tick appropriate boxes)
l wi	ish to apply for
R1	A new water supply work approval R2 A replacement water supply works approval specifying changed or new water supply work (ie to amend or changed or new water supply work approval the details of an existing water supply works approval.
If y	ou ticked the second box (R2) please complete the following questions R3 and R4.
R3	Existing approval number to be replaced.
R4	Briefly describe the change/s you wish to make.
R5	Is the work existing or proposed?
R6	Do you have a current and relevant water access licence? Yes No
87	If yes, what is the number of the licence/s to be associated with this application?
R8	If no, when do you intend to secure a water access licence?
R9	Type of workR10 Purpose
Loc	ration of the work
R11	Lot number DP number County Parish
	Is the work proposed to be on a floodplain? Yes No
	Size and dimensions of the work
	Length(m or km)
	Depth (average)(m)
	Width (average)(m)
	Height above surrounding ground level(m)
í	Proposed capacity(ml)
	Do you intend to clear and native vegetation to construct the works? Yes No No

WWW.Water.nsw.gov.au September 2010 - Ducument Number, WMAF030

Section S

Storage works - in-river storage only (eg. weirs)

Note that most water sharing plans prohibit in-river dams. Check the guide for your area.

(If you are seeking approval for more than one of these works, please photocopy this page and attach the completed extra page(s). Mark each work

on a copy of the topographical map, aerial photo and/or farm plan of A3 or A4 size. Please tick appropriate boxes)				
I wish to apply for				
A new water supply work approval A replacement water supply works approval specifying a changed or new water supply work (ie to amend or change the details of an existing water supply works approval)				
If you ticked the second box (S2), please complete the following questions S3 and S4.				
s3 Existing approval number to be replaced				
S4 Briefly describe the changes you wish to make.				
S5 Is the work existing or proposed?				
S6 Do you have a current and relevant water access licence? Yes No				
s7 If yes, what is the number of the licence/s to be associated with this application?				
S8 If no when do you intend to secure a water access licence?				
S9 Type of workS10 Purpose				
Location of the work				
S11 Lot number DP number County Parish				
County Parish				
S12 Is the work proposed to be on a floodplain? Yes No				
If Yes, you may be required to lodge a separate application under the Water Act 1912.				
S13 Size and dimensions of the work				
Length (m or km)				
Depth (average)(m)				
Width (average)(m)				
Height above surrounding ground level(m)				
Proposed capacity(ML)				
S14 Do you intend to clear and native vegetation to construct the works? Yes No				
S15 If yes, area of ground to be cleared(m²)				



Part 4 Declaration of approval holder(s)

(attach/ photocopy extra page if more than 2 holders)

Section T

I/We, the undersigned, apply for an approval described above for the nature and purpose specified in the application.

I/We state that the information provided for the purpose of this application is accurate and true.

ls:	
Signature	Date
Signature	Date
ANGLALC .	Position held Co-ordinator
Signature	
rk Signature	Date 27/11/09
	Signature

Please note that it is an offence to provide misleading or incorrect information. This approval (should it be granted) may be cancelled or suspended if you are convicted of an offence under the Water Management Act 2000.

Submit your completed form to your local NOW office. Enclose a cheque or money order for the application fee.

Privacy Note: The personal information you provide in this form will be treated in accordance with the *Privacy and Personal Information Protection Act 1998*, under which you have rights of access and correction. Your personal information will be used for assessing and processing your application and may be disclosed to public authorities and other parties as required.

NB The Water Management Act 2000 requires that some details of your application appear in a public application register. Should your application be approved, details of the approval will also appear in a public approval register.



Guide to the application for water supply works approval, and/or water use approval

Application for Minister's consent under section 92 of the Water Management Act 2000

Introduction

This guide is provided to assist you in completing the Application for approval for water supply works, and/or water use. This form must be completed in order to obtain a water use or water supply works approval under section 92 of the Water Management Act 2000 (WMA) or to apply to change or remove a condition of an existing water use or water supply works approval.

A water supply works approval allows you to install and operate a particular pump, bore or other water management work at a particular location. A water use approval allows you to use water for a particular purpose at a particular location (fill out this form only if you want approval to use water for irrigation or town water supply). It is important to note that water use or water supply works approvals do not allow you to take water without a water access licence (WAL).

If you want to apply for approval for water supply works and water use on different properties, you will need to make separate applications.

You should also refer to information on *Dealings in water and Applying for a new water access licence* on the **NOW** website which provides more information on water dealings.

About these guidelines

The Application for approval for water supply works, and/or water use has several parts (relating to the type of approval sought) and sections, which are divided into a series of questions. The questions are identified by a number on the left hand side of the page, for example, B4, which is question 4 in section B. This guide provides detailed explanations of each section and question to help you fill in the application form. We recommend you read this carefully before completing the application form. However, if you require further assistance, please contact your local **NOW** office.

General Instructions

To make sure that your application is processed efficiently, please note these general instructions:

- use BLOCK letters as they are easier to read;
- if there is not enough space on the form for all your information complete the answer on a separate sheet of paper and attach it to application form (remember to include this page when numbering your pages);
- ensure that you fully complete the form as all the information is necessary to verify and process your application – it may be rejected if all the information is not available for the assessment; and
- include the appropriate fee with your application – your local NOW office will be able to advise you on the current fee.

Section A: Applicant details

These are the details of either the applicant(s) that will appear on your approval.

- A1-4. The name can be a person's name or the name of a legal entity, such as a corporation, that is either the owner or legal occupier of the land to which the application relates. The application for an approval must be by an individual (or individuals), a company, body corporate or public authority, but not a partnership or joint venture. If the approval is to be registered under the names of more than one person, provide the names in the spaces provided, or if more than two owners, provide the additional names on a separate sheet of paper and attach it to application form.
- A5: Insert your Australian Company Number (ACN) if it is a company application. Note that an ABN (Australian Business Number) is not permitted.
- A6: Insert the position of the person who will represent the company as the holder the approval, should it be granted.
- A7-11: Insert the usual address of the applicant. If a corporation is applying, you should fill

www.water.nsw.gov.au



in the details of the contact person to whom all correspondence will be sent.

A16-23: More than one person can hold one approval.

This form makes provision for 2 applicants. If there are more than 2 applicants, please attach additional pages.

A24: This is the total number of applicants to be listed on the approval and includes applicants listed on any additional pages.

Section B: Applicant's (or agent's) contact details

These are the contact details of the applicant's representative. If a corporation is applying for an approval you should fill in the details of the contact person to whom all correspondence will be sent.

Section C: Land ownership

If you are applying for a water use or a water supply works approval where you are the owner of part of the land and the lawful occupier of the remainder then you will need to tick more than one of these boxes.

- C1 An **owner of land** is any person with freehold title to land.
- C2: To permit you to carry out the activities to be authorised by the approval, the term lawful occupation includes:
 - a) an easement;
 - b) a power arising under legislation; or,
 - an agreement or other legally binding permission with the owner (eg. a lease, a permissive occupancy or enclosure permit)

The agreement may be a specific authorisation or an appropriate clause in a general authority such as a lease. You must attach a copy of the relevant documentation, which includes:

- a) a letter from the owner authorising your occupation of the land to which the approval would apply;
- evidence of an easement, a power arising under legislation or an agreement or other legally binding permission with the owner (eg. lease, a permissive occupancy or enclosure permit).
- C3 Other This could be if you are applying as a major utility, irrigation corporation, private irrigation board, private drainage board or private water trust, or as permissive occupancy.

 Alt owners of the land or lawful occupiers, or their legal representative, must sign this application form.

Section D: Other approvals

D1-D3: If your proposal has been granted consent from your local council, please provide the consent number in D3.

D4-D6: You may require a separate approval or a property vegetation plan under the *Native Vegetation Act 2003* if your proposal is for water use and involves clearing. If native vegetation clearing consent has also been granted, please provide the consent number. You do not need to fill in D4-D6 if your proposal only involves works.

Section E: Maps

A photocopy of a topographic map with hand-drawn property boundaries and features is acceptable.

Section F: Pre-application discussion

For complex proposals, we recommend that you have a preapplication discussion with a NOW officer where you discuss the proposed activity, any likely impacts of the proposed activity, the application process, and what information you will be required to provide to NOW. A pre-application discussion could be carried out over the telephone.

Pre-application discussions can save you time by preventing delays in information gathering. To arrange for a pre-application discussion, ring your local NOW office.

Section H: Purpose

H1: You should only fill out Part 2 if you want approval to use water for irrigation or town water supply. If you have any other purpose, contact your local office for advice.

H3-H5: It is not necessary to hold a water access licence in order to apply for a water use approval. However, it is recommended that you check with NOW about water availability before making an application if you are in doubt.

Part 2: Water Use Approval

If you are applying for a *Water Use Approval only*, fill in Part 2, leave Part 3 blank and go on to Part 4.

Section I: Location of water use

I1-I7: Provide the location of the water use approval and the river location to allow references to relevant planning policies that apply to the area. If the proposal will be located on more than one property, please mark them all clearly on a map and provide property details such as lot number etc. for each.

Section K: Information maps

Attach maps to the application.

Section L: Soils

L1-L4: For complex or potentially high impact proposals, you may be required to provide a soil survey to NOW. If you are in doubt, contact your local office. www.water.nsw.gov.eu

Section N: Drainage management

N4-N6: Some activities such as applying pesticides also require consent from the Department of Environment and Conservation.

Part 3: Water Supply Works

Sections O to S: Water supply works approval

If you are applying for a *Water Supply Works Approval only*, fill in the relevant sections O to S then go to the end of the form (Part 4) and sign the declaration.

If you are applying for approval for multiple works, you only need to fill in the relevant section for each individual work.

If you are applying for more than one work of the same category (eg. Groundwater works), you will need additional copies of the relevant section of the application. These copies should be attached to the application before it is submitted to NOW.

An Aboriginal Heritage Information Management System report and a Threatened Species Assessment report will be completed internally by NOW and the Department of Environment, Climate Change and Water as a part of your application.

Depending on the size of your proposal and its potential impacts, you may also be required to provide:

- a Species Impact Statement (if your proposal has potential impacts on threatened species under the Threatened Species Conservation Act 1995);
- a surveyed plan showing the proposed layout, dimensions and construction details of the work/s; or
- any other additional information about your proposal as required by NOW.

If your proposed activity is a water supply work and it involves clearing of native vegetation, you do not have to get separate approval under the Native Vegetation Act 2003. You may, however, require a separate approval or a property vegetation plan under the Native Vegetation Act 2003 if your proposed activity is water use and it involves clearing at the proposed site of the water use.

In some of the sections below, there are questions relating to rivers. 'River' is defined in the *Water Management Act 2000* to include:

- a) any water source, whether perennial or intermittent and whether comprising a natural channel or a natural channel artificially improved, and
- any tributary, branch or other water course into or from which a water course referred to in paragraph (a) flows, and
- c) anything declared by the regulations to be a river.

For the practical purposes of this application, NOW defines 'river' as any blue line on the largest topographical map of that area (ie. at least 1:25,000).

Section O: Pumps(s) - surface water only

O5-O7: It is not necessary to hold a water access licence in order to apply for a works approval.

However, it is recommended that you check with NOW about water availability before making an application if you are in doubt.

O8: If the proposal will be located on more than one property, or there is more than one work, please mark them all clearly on a map and provide property details such as lot number etc. for each

O12 For type of work, see list of works at the end of this guide.

Section P: Channel(s)

P5-P7: It is not necessary to hold a water access licence in order to apply for a works approval. However, it is recommended that you check with NOW about water availability before making an application if you are in doubt.

P8: See list of works at the end of this guide.

P9: If the proposal will be located on more than one property, or there is more than one work, please mark them all clearly on a map and provide property details such as lot number etc. for each.

Section Q: Extraction works – groundwater only

Q8: See list of works at the end of this guide.

Q10: If the proposal involves more than one work and/or more than one property, please mark them all clearly on a map and provide property details such as lot number etc. for each.

Q11-13: NOW needs to check that your proposed work will not extract from a river, damage a wetland, interfere with a neighbour's bore or extract contaminated groundwater.

Q21: The proposed work must be carried out by a licensed bore driller. Contact NOW to check whether a driller is licensed if you are in doubt.

Section R: Storage works - off river

R6-R8: It is not necessary to hold a water access licence in order to apply for a works approval. However, it is recommended that you check with NOW about water availability before making an application if you are in doubt.

R7: See list of works at the end of this guide.

R11: If the proposal will be located on more than one property, or there are more than one work, please mark them all clearly on a map and

www.water.nsw.gov.au



provide property details such as lot number etc. for each.

R12: If the proposed work is to be on a floodplain, it may cause the redistribution of flood flows, which may have adverse environmental impacts and adversely affect surrounding landholders. NOW is required to assess these aspects and may require you to redesign your proposal to mitigate any potential impacts and a separate application may be required under the Water Act 1912.

R13: Refer to information on farm dams for a method of calculating storage capacity at www.water.nsw.gov.au/Water-licensing/ Basic-water-rights/Harvesting-runoff/ Harvesting-runoff/default.aspx

Section S: Storage works - in river

S6-S8: It is not necessary to hold a water access licence in order to apply for a works approval. However, it is recommended that you check with NOW about water availability before making an application if you are in doubt.

S7: See list of works at the end of this guide.

S12 If the proposed work is to be on a floodplain, it may cause the redistribution of flood flows, which may have adverse environmental impacts and adversely affect surrounding landholders.

NOW is required to assess these aspects and may require you to redesign your proposal to mitigate any potential impacts and a separate application may be required under the Water Act 1912.

S13: Refer to information on farm dams for a method of calculating storage capacity at www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/Harvesting-runoff/default.aspx
NOW may refer the application to NSW Fisheries, who may require a separate approval.

Section T: Declaration

Please ensure you understand your legal obligations before signing this document. If you require assistance, please ring your local NOW office.

T1: Each of the approval applicants must fill in their name, followed by a signature and the date of signing.

T2: If the applicant is a company, insert the name of the company and the title or position of the company's signatory/representative.

T3: Insert the name of the company signatory/representative.

T4: An independent witness is required to sign this section in order to verify that the position stated in T2, above, is the position held by the signatory in T3. Submitting your application

Submit your completed form to your local office of the Department Natural Resources enclosing your cheque or postal order.

If the application is complete and correct it will be registered on NOW's database and the fee processed. You will receive an acknowledgment letter providing an application reference number and a receipt for the fee. The application will be delayed if it is incomplete or incorrect. NOW will notify you of this. NOW may also notify you if further information is required. If this information is not received within the specified time, NOW will reject the application and return it with an explanation and the fee will be refunded.

For more information

Contact the water licensing officer at your local NSW Office of Water (contact details are available on the website) or

free call: 1800 353 104

email: information@water.nsw.gov.au

web: www.water.nsw.gov.au

List of works

In each of sections E to L, the application requires the 'Type of work' to be entered. Select from the 'type of work' listed under each of the work categories.

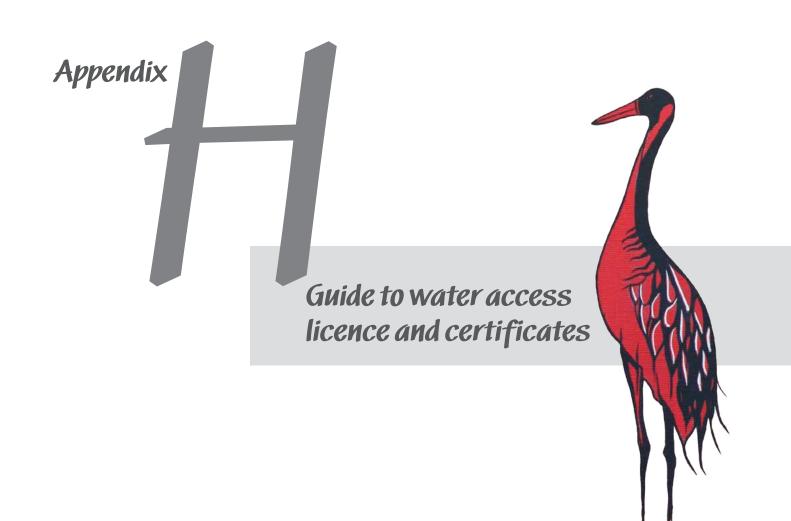
Type of work	Specific type		
Diversion work - pump	Axial flow	Centrifugal	
	Mixed Flow	Force	
	Piston	Mono	
	Submersible	Pumping Plant	
	Pumping Station	Stand by pump	
	Helical rotor	Windmill	
	Hydraulic ram	Spearpoints	
Diversion work – other	Cutting	Channel	
	Regulator	Water race	
Extraction works – groundwater	Bore	Spearpoints	
	Well	Excavation	
	Artesian bore	Collector system	
Conveying works	Channel – above ground	Channel – below ground	
	Pipeline		
Storage Works – off river	Bywash dam	Bywash dam and cutting	
	Earthen dam and pipe spillway	Recirculation storages	
	Groundwater storages (eg. tank, dam)		
Storage works – in river	Block dam	Block dam and diversion pipe	
	Block dam and regulator	Block dam with training walls	
	Earth fill dam/ spillway/ radial gate and emergency spillway	Earthen dam and pipe spillway	
	Overshot dam	Overshot dam and diversion pipe barrage	
	Bywash dam	Bywash dam and cutting	
	Block dam with bywash	Weir	
Storage – runoff harvesting	Bywash dam	Block dam with training walls	
	Excavated tank		

Factsheet on Native Title and land claims



Factsheet on access rights to rivers, streams and billabongs









Guide to water access licences and certificates

A guide to interpreting a water access licence certificate and the information provided by a search of the Water Access Licence Register

BACKGROUND

The Water Management Act 2000 (WMA) recognises that a water access licence is a valuable asset. The WMA offers a number of benefits for licence holders. In particular, water access licences:

- provide a clearly-defined share of the available water in a particular water source that can be sustainably extracted
- provide a clearly-defined entitlement that is separate from land ownership
- separates the entitlement to access water from the approvals associated with supply works and the use of water
- in the case of 'continuing' (licences granted in perpetuity) water access licences, allow for the licence and water allocation available under that licence to be bought and sold fully or in parts and for the licences to be subdivided, consolidated and changed (eg for category, zone, water source)
- are listed on a public Water Access Licence Register.

The Water Access Licence Register

The Water Access Licence Register is maintained by the Land and Property Information (LPI) Division of the NSW Land and Property Management Authority (LPMA).

This Register includes the names of the licence holder/s, type of tenancy if more than one holder (either tenants in common or joint tenants), category of licence, encumbrances, any water dealings (except water allocation assignments) and the licence details such as the share component, extraction component and nominated works.

Information on the Water Access Licence Register is not at this stage guaranteed, though every effort is being made to ensure the information is accurate.

Changes to information on the Water Access Licence Register about the licence holder (through a transfer of a licence) and security interests (such as mortgages or caveats over the licence and any term transfer arrangements) are managed directly by LPI. The lodgement forms can be obtained from the LPMA website or office.

Changes as a result of other water dealings (eg. subdivisions, change of location or licence category) must be approved by the NSW Office of Water before they can be registered on the Water Access Licence Register. An information sheet and application forms are available at www.water.nsw.gov.au or by contacting your local office.

To find the most up to date version of a licence, you can search the Water Access Licence Register. For information on the Water Access Licence Register go to 'Public Registers' under the 'Land Titles' section of the LPMA website www.lpma.nsw.gov.au. Type in the Water Access Licence (WAL) number of the licence in the 'Title Search' option. There is a nominal fee for each search.





Water Access Licence Certificates

Water access licence certificates are valuable legal documents which should be stored carefully. If you lose your certificate you will be charged to have it re-issued by LPMA.

The certificates are issued by LPMA and are issued to either the licence holder or, in most cases when a mortgage or charge is registered against the licence, the security interest holder.

In the case of a former joint water supply authority, where there are a number of separate holders and registered interests, certificates will only be issued where all parties agree on who should hold it.

Where a licence certificate has been issued it must be produced to register a dealing in the Water Access Licence Register.

Usually, a new licence certificate or edition of the certificate is generated each time a new dealing is registered.

What is not available from the Water Access Licence Register

The conditions that apply to a water access licence are not included on the Water Access Licence Register. They can be obtained from the Water Access Licence Condition Register found at http://registers.water.nsw.gov.au or contact a licensing officer. From the date of commencement of a new water sharing plan, the new extraction component will apply and must be complied with. Until copies of the replacement water access licence and approval are received, licence holders must continue to comply with the conditions of the former licence, except to the extent the new extraction component applies.

Taking water under a water access licence requires a current water supply works approval for the work. Use of water on land also generally requires a current water use approval. Only the approval numbers, but not the details of the approvals that are associated with a water access licence, are included on the Water Access Licence Register.

The details of the approval, including conditions, are available from the Register of Approvals on the website or contact your local office.

A register of available water determinations is at http://registers.water.nsw.gov.au or contact a licensing officer.

For details of any outstanding water fees and charges associated with a water access licence and the water held in a water allocation account, contact State Water.

For water allocation account information for unregulated rivers contact a licensing officer.

KEY COMPONENTS SHOWN ON A WATER ACCESS LICENCE CERTIFICATE OR WATER ACCESS LICENCE SEARCH

1. WAL number

This is the key identifier of a water access licence. This number should be quoted in any correspondence or enquiries about a licence and in all licence dealings and is required to search the Water Access Licence Register for information about that licence. When you are searching include the reference to 'WAL' with the number.

2. Edition and date

The date specifies when the current licence certificate was issued. A new edition of a water access licence certificate is generated when a new licence certificate is issued (usually when changes are made because of a dealing).

Some dealings (such as a subdivision) require a new licence to be created.





There are three tenure types – continuing, specific purpose and supplementary.

A water access licence with continuing tenure is typically used for a commercial purpose (such as irrigation or industrial use) and is issued in perpetuity, which means it does not need to be renewed.

A water access licence with specific purpose tenure (ie for town water or domestic and stock purposes) generally has higher priority access to water than continuing licences but must be cancelled when the purpose for which the licence was issued ceases. Further, as these licences are issued for a set purpose, security interests cannot be registered over them.

A water access licence with a supplementary tenure generally has a lower priority than all other licences. These licences only arise where a water sharing plan makes provision for them and they are cancelled when the relevant water sharing plan ceases to provide for the extraction of water under these licences.

Note: Irrespective of the tenure type, a water access licence can be suspended or cancelled if there is a breach of the licence conditions or other non-compliance.

4. Holders

A water access licence may be 'held' by one or more persons (person for the purpose of an access licence can be either an individual or a legal entity such as a corporation).

Where there are multiple holders of a water access licence, each holder has a co-holding in the licence and is known as a 'co-holder'.

There are three tenancy arrangements available for water access licences held by more than one holder:

- Tenants in Common in Equal Shares
- Tenants in Common in Unequal Shares (where the holders specify the various shares within the water access licence, e.g 1/3 and 2/3 holding)
- Joint Tenants (where each co-holder jointly holds an equal share of the entire licence or holding)

Water access licence holders may also select to undertake multiple variations of these tenancy types on the one water access licence.

A key difference between the two arrangements is that if a joint tenant dies, the entire licence passes into the name of the surviving joint tenant/s. If a tenant in common dies, that holding remains intact and passes to the beneficiary of the deceased's estate.

A co-holding does not equate to, or represent direct rights to any particular component of a water access licence. For example, a co-holder is not entitled to deal separately with any of the unit shares in the share component or water in the water allocation account. This is the same as for land ownership, where land specified as being owned by multiple parties does not entitle any one of those parties to a particular part of the block.

A holder(s) of a holding may sell their holding to another party without the consent of the other co-holders in the licence. The water access licence certificate is required for registration of the transfer of a holding on the Water Access Licence Register.

However, any dealing which subdivides the licence; changes the share component; alters the location where water is taken under the licence; or assigns allocations requires the consent of all holders.

The volume of water that may be taken under a water access licence by a particular co-holder from time to time is governed by private agreement between the licence holders.

All licence holders are required to comply with the conditions of their water access licence.





Security interests

Like land, a water access licence can be used as security for a loan. Security interests, such as mortgages and charges can be registered against the licence, and the security interest holder/s have certain rights under the *Water Management Act 2000* to ensure their interests are protected.

Any security interest that existed in relation to a licence under the *Water Act 1912* (WA) as security (by virtue of it being registered in relation to the land to which the land attached or otherwise) continues as an equivalent interest in any water access licence that replaces this entitlement if it registered within three years after the date of the creation of the replacement licence. If registered within this time frame the security interest ranks:

- a. with respect to any other such interest, in the same priority as it previously ranked under section 184G of the *Conveyancing Act 1919*, section 36 of the *Real Property Act 1900*, or Part 2K.3 of the *Corporations Act 2001* of the Commonwealth, as the case may be, and
- b. before any interest in the licence that arises after the commencement date, regardless of when that other interest is registered.

These interests will be registered on request, subject to:

- 1. The security interest holder notifying the licence holder of their intention to register the interest against the water access licence, and a period of 90 days lapses.
- 2. The security interest holder certifying that they have undertaken step 1.

In the event that the licence holder disputes the registration, the security interest holder can still request its registration, but a notation will be added to the Water Access Licence Register indicating the interest is disputed.

Where there are security interests in relation to the former WA licence, the water access licence certificate will not be issued until the security interest is registered against the licence on the Water Access Licence Register, or the security interest holder indicates they are not going to proceed with registration.

Any interests that are not registered within the time frame are extinguished. Within that period it is recommended that, in relation to any dealings in the licence, a search is undertaken of the:

- General Register of Deeds and/or the Torrens Land Title Register at LPMA with respect to the land that the former WA licence was attached
- ASIC Company Register where the licence holder is a company.

In the case of a water access licence which replaces a surface water authority, dealings may be allowed without the certificate being issued. In such cases, searches of the LPMA and Company Charge Registers (where relevant) are also recommended before dealings with the licence occur.

If security interests are not resolved, the land to which the former WA licence applied is identified on the replacement water access licence.

More information on security interests, as well as an on-line security interest conversion tool, is available at www.water.nsw.gov.au.

Pending Water Act 1912 applications

In some cases applications for permanent transfers or replacement licences under the WA may have been lodged before the commencement of the water sharing plan. These applications will continue to be dealt with under the WA. If approved the licences are then automatically converted to WALs and approvals under the WMA from the date of the completion.

A note is added to the security interest section of the licence if the licence is subject to a pending WA application. For information on the status of a pending application, contact your local office.





Term transfers

Similar to a rental agreement, a licence or a co-holding in a licence may be transferred to another person for a period of time. The holder of the licence does not change and a term transfer is registered against a water access licence or a co-holding in a licence.

During the period for which a term transfer has effect, the term transferee is taken to be the holder (to the exclusion of the actual holder) for the following purposes:

- taking of water
- payment of fees and charges
- compliance with the terms and conditions the term transferee is responsible for any breaches of the Act or the licence
- applying to change the nominated water supply works or assign water allocations.

Apart from the changing of the nominated water supply works and the assignment of water allocations, the licence holder remains the only one who can apply for other dealings. However the term transferee must consent to the dealing where this affects the entitlements in the licence or where the licence can be used.

Term transfers apply for a fixed period. The minimum period is six months, with no maximum period.

Any person in lawful occupation of the land to which the WA attached before conversion is taken to hold a term transfer of the replacement water access licence. The right continues until the occupation ceases. The person is required to notify the NSW Office of Water of that occupation so that it may be recorded on the Water Access Licence Register.

6. Notations

The following notations may appear on a replacement water access licence.

Dealings may not be registered

This notation will apply if the holder of the water access licence has not been verified and/or registered security interests in the prior licence have not been registered on the water access licence register or otherwise resolved.

Contact a licensing officer for more information on holder verification. For information on security interests go to www.water.nsw.gov.au.

Licence certificate not issued. Dealings may be registered

In the case of a water access licence for a joint water supply scheme, where holder and prior licence security interests have been resolved, the parties may elect to undertake dealings with their water access licence without a certificate.

Unregistered dealings

Any dealings which have been lodged at LPMA but not registered at the time of the search will be listed in the notations.





7. Access licence details

Category

Water access licence categories help define the priorities between different access licences, the conditions that apply to them and, in the case of specific purpose category licences, define how water may be used.

Licence categories include regulated river (high security), regulated river (general security), unregulated river, aquifer access licences, supplementary water access licences, domestic and stock, and local water utility access licences.

Specific purpose category licences such as, for instance, local water utility, domestic and stock access licences and Aboriginal cultural licences, provide higher priority access to water than licences for most commercial purposes.

Share component

The share component is the licence holder's entitlement to a given number of shares in the available water that may be sustainably extracted in a water source.

The type of water access licence held affects how the share component is expressed as follows:

- The share component of all continuing and supplementary water access licences is expressed as a unit share of the water available in the water source (water availability may vary from year to year).
- In the case of specific purpose water access licences, the share component is expressed in megalitres per year.
- The amount of water made available depends on:
- the water sharing plans
- the extension of a water sharing plan or the making of a replacement plan
- decisions on seasonal water allocations in making available water determinations, which are largely influenced by climatic conditions.

The actual quantity of water available to be extracted in any year depends on the Available Water Determination (AWD).

AWDs are made under the *Water Management Act 2000*. Separate AWDs are generally made for each category of licence in a water source. However, AWDs can also be made for individual licences.

Water allocations are credited to a water allocation account according to the AWD. For example, if a share component is 120 shares and the AWD is 0.8 ML per share, then the amount of water credited to the account is 96 ML. The water allocated to the account is the amount that can be taken under the licence.

In some circumstances, some water sharing plans apply individual account limits or have localised impact management provisions that govern the amount of water that may be taken over a period of time. Other rules may apply in extreme circumstances, such as extended drought.

There is a public register of AWDs on the website.

Extraction component

This designates the part of the water source (or zone) where you can take water.

It may also set limits on the times, rates or circumstances of extraction. In some cases these limits can be a right to a share of the available flow on a particular day (unregulated rivers), or a share of the delivery capacity in a channel (regulated rivers).

Note: conditions on the licence and on the approval for the nominated works may include additional constraints on how water is to be extracted.



Nominated works

This shows the approval number for the works (pumps, bores etc) authorised to take water under the licence. Water may generally only be taken under the licence via these nominated works. The nominated works provide the link between the licence and the land where the water is used.

More information about the works approval, including conditions, is available from the website.

Conditions

To ensure equitable access to water, all water access licences in NSW are subject to mandatory conditions which are required to be imposed by the relevant water sharing plan or by the *Water Management Act 2000*.

A licence may also be subject to other conditions as determined by the Minister.

At the current time, licence conditions are not included on the Water Access Licence Register and therefore do not appear on the licence certificate or in a water access licence search.

Licence conditions can be viewed on the Water Access Licence Conditions Register on the website.

8. Notes

The NSW Office of Water reference number for the water access licence and the previous *Water Act 1912* licence number (where relevant) are shown for information and to assist in searches.

www.water.nsw.gov.au

NSW Office of Water | May 2010





WHERE DO I GET MORE INFORMATION?

NSW Office of Water

Contact the water licensing officer at your local office or t: 1800 353 104 or go to water licensing on the web at www.water.nsw.gov.au

The Office's website also includes information on water access and trade, and downloadable application forms for water dealings.

On-line public registers at http://registers.water.nsw.gov.au provide up to date information on approvals and other consents and activities under the *Water Management Act 2000*, including:

water access licences

- · licence conditions
- · available water determinations
- water allocation assignments (formerly known as temporary trades)
- assignment of shares (formerly known as permanent trades)

water access licence and use statistics

- · summaries by water source of number of licences, available water determinations and water usage
- summaries by water source of water allocation assignments

For Water Act 1912 licences and authorities, you can check if your Water Act 1912 licence or authority has been converted to a Water Management Act 2000 water access licence and approval.

State Water Corporation

Dubbo t: 02 6841 2000

email: statewater@statewater.nsw.gov.au

www.statewater.com.au

Land and Property Management Authority

t: 02 9228 6666 or 1300 052 637

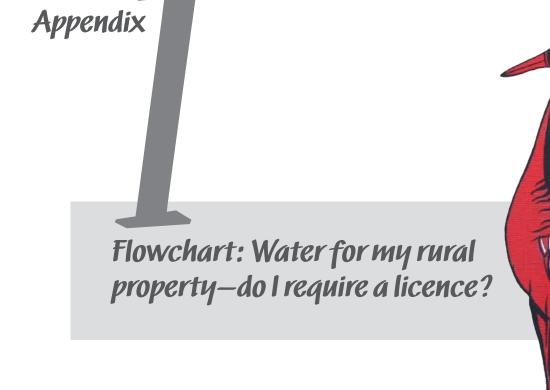
www.lpma.nsw.gov.au

The 'Land Titles' section of the Land and Property Management Authority website includes an option to search the Water Access Licence Register and downloadable forms and a list of fees for various dealings such as transfers, mortgages and term transfers.

www.water.nsw.gov.au

NSW Office of Water | May 2010

page 8



Water for my rural property—do I require a licence?

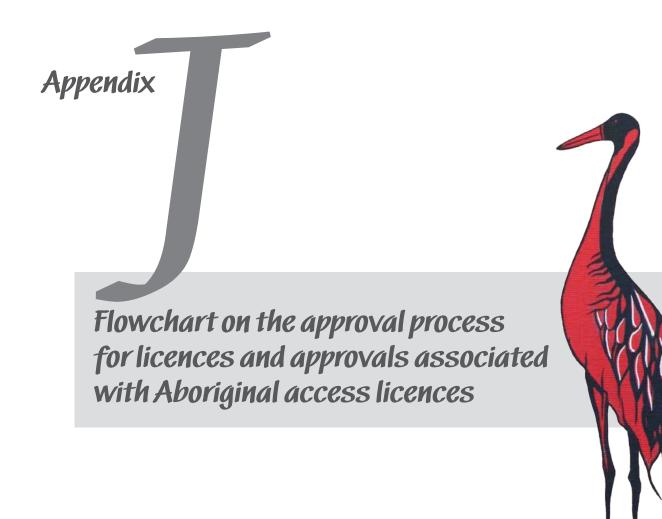
The requirement for a licence (or other approval) depends on how and why you want to use the water.

For domestic and stock use If your land does not front a river or lake If you want to sink a If your land fronts a river or lake bore or well to take groundwater If you want to build If you want to take a small dam water from the river Domestic and stock You must obtain Harvestable rights Domestic and stock consent from the rights apply apply1 rights apply NSW Office of You do not require You do not require You must obtain Water before taking any consent to take any consent to take consent to construct water or installing a the water. the water. your bore or well pump. from the NSW Office of Water. You do not need a licence to Rainwater tanks are exempt from the Office of Water's licensing requirements take groundwater for domestic and (Some local governments require development consent for rainwater tanks). stock use.

For commercial activities (e.g. irrigation, mining, aquaculture, feedlots, piggeries, poultry farms, golf/ sporting areas, guest accommodation, water bottling)



*Harvestable rights allow you to build small dams under specific circumstances only (see Chapter 5 'Water for basic rights').

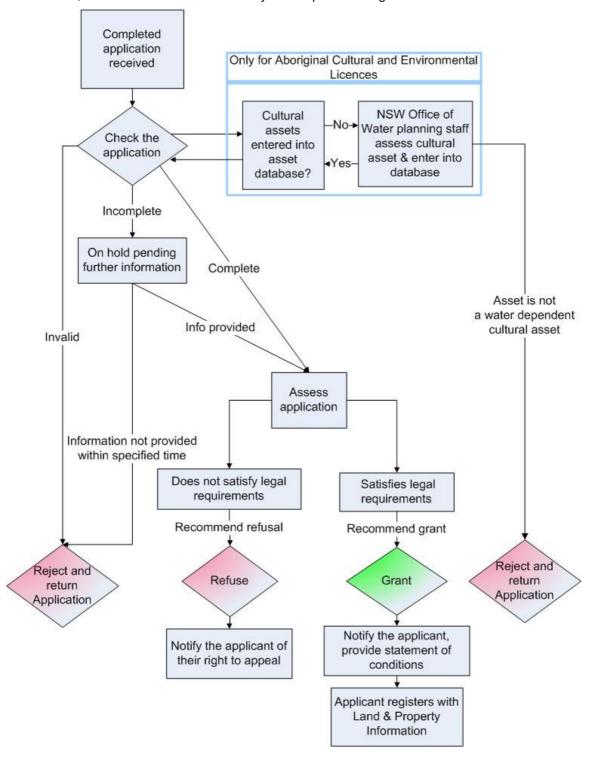




March 2012

Approval process for Aboriginal access licences

The access licence application process for Specific Purpose Access Licences – Aboriginal Cultural, Commercial, Environmental and Community Development categories.



Who can help me write an application?

The NSW Office of Water have dedicated staff to assist Aboriginal people and communities to apply for licences. To find a staff member near you call the NSW Office of Water on 1800 353 104.

How do I submit an application?

Applications can be submitted at any NSW Office of Water location, online at www.water.nsw.gov.au, or sent by mail to NSW Office of Water, Water Licensing, PO Box 3720, Parramatta, NSW, 2124.

How does the NSW Office of Water check my licence application?

Firstly we confirm that the applicant/s is an Aboriginal person by checking the self declaration and the certification by a registered organisation (e.g. Local Aboriginal Land Council). For Aboriginal community groups who apply we check that they are registered under the *Corporations (NSW South Wales) Act 1990*.

The next step in the assessment process is a validity check. The following validity check is done for all types of licences that are applied for:

- Are there any prohibitions (volumetric limit or have shares allocated in the Water Sharing Plan (WSP) been exhausted) preventing the licence being granted?
- Does the Water Management Act 2000 allow the licence to be granted?
- Does the current regulation (Water Management (General) Regulation 2011) or current WSP's allow the licence to be granted?
- Is the volume of water applied for within the WSP limit?
- Are there any Gazetted orders that prevent the licence being granted?
- Has the application fee been paid?
- If the application is for a cultural licence or environmental licence, has the asset been assessed by NSW Office of Water staff and entered into the database?

How does the NSW Office of Water assess my licence application?

There are three main legal requirements that NSW Office of Water must consider:

 Does the application meet the Water Management Principles as they are set out in Section 5 of the Water Management Act 2000?

- Does the application invoke any of the refusal triggers (eg minimal harm) as they are set out in Section 62(3) of the Water Management Act 2000?
- Does the application meet the WSP rules that are currently in force?

Do I need any further approvals to take water if my application is granted?

A water supply work and use approval is needed to take and use water.

Where can I find more information?

For more information about licensing and compliance visit the Office of Water website at www.water.nsw.gov.au under 'Water Licensing'.

For water licensing and compliance enquiries you can contact us:

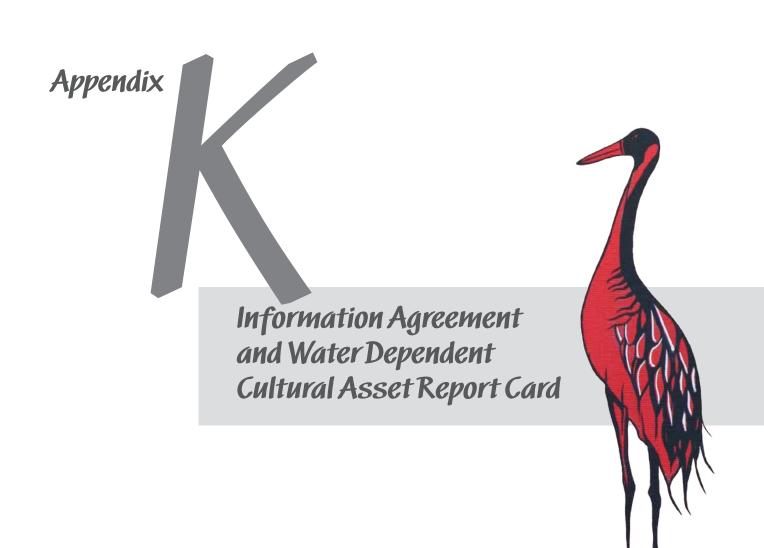
- by phone on 1800 353 104
- by emailing information@water.nsw.gov.au

© State of New South Wales through Department of Trade and Investment, Regional Infrastructure and Services 2012. You may copy, distribute and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Trade and Investment, Regional Infrastructure and Services as the owner.

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of publication, the State of New South Wales, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document. This information does not constitute legal advice. Users are advised to seek professional advice and refer to the relevant legislation, as necessary, before taking action in relation to any matters covered by this information sheet.

Published by the NSW Department of Primary Industries, NSW Department of Trade and Investment, Regional Infrastructure and Services.

NOW 12_092





NSW OFFICE of WATER

Information Agreement

NSW Water Dependent Aboriginal Cultural Assets

A National Water Commission funded project with the NSW Office of Water

L	agree, on//
to participate in the NSW Water Dependent Aborigi	inal Cultural Assets project being
conducted by the NSW Office of Water, in conjunct	tion with key agencies, Aboriginal
representative groups, Catchment Management Au	uthorities (CMA's) and the Aboriginal
communities of NSW	· · · · · · · · · · · · · · · · · · ·

This agreement is between the NSW Office of Water and the Aboriginal "knowledge holder" for use as follows:

- 1. The disclosure and storage of cultural information relevant to the NSW Water Sharing Planning process and Aboriginal water licencing.
- 2. Use by NSW Catchment Management Authorities, the Murray Darling Basin Authority and the National Water Commission for the purposes of future planning to meet Aboriginal cultural needs and values.
- 3. Use by the NSW ALC, NBAN and MLDRIN for the purposes of these groups informing the NSW water sharing planning process in relation to Aboriginal cultural needs and values.

I understand that the NSW Office of Water will consult with me if they or any group nominated above wish to use my information / material outside of those uses specified above.

I understand that the purpose of this project is to gather and record information about significant water dependent Aboriginal cultural assets throughout NSW.

I understand that my participation in this research (via interview, workshop, discussion, written documents etc) will involve the disclosure of information to the NSW Office of Water to be held in confidence and will incorporate my traditional knowledge relating to significant cultural sites that are water dependent.

1. Aboriginal knowledge holder

Traditional owner or significant community member authorised by the Traditional Owner for the disclosure of this information.



Name				
Address				
Phone	Mobile	Е	mail	
Traditional owner Gro				
Local Aboriginal Land				
Other organisation				

2. Identified asset(s)

This is the asset(s) as specified in Tab A, which will require water and/or protection measures to support Aboriginal cultural activities and may have the potential for the application of an Aboriginal Cultural water access licences.

3. Signed Disclosure

Iagree to disclose the information relevant to the area requiring water for cultural purposes in good faith that the NSW Office of water will store this information securely and it will be held in confidence.

Any information provided will be held on a database, which I as the provider of the information can obtain free and open access to the information I provide.

I am aware that I can contact the NOW project officers at any time if I have any concerns about the project. I also understand that I am free to withdraw my participation from this project up until such time as the asset is included in a statutory water sharing plan without giving a reason.

I agree that the NOW project staff have answered all my questions fully & clearly.

I affirm that I own the intellectual property rights of this information.

I understand that the correct protocols will be observed by the Office of Water in the access to the cultural asset site/s for planning or licensing activities as described in this agreement.

I understand that I can specify to the Office of Water how information can be publicly presented for planning activities as described in this agreement.



	1
Signed by	Date
Address and contact number	
Witnessed by	Date

5. Office of Water contact details:

Director Water Policy and Planning

Postal Address: PO Box 3720, Parramatta NSW 3720

Phone: 02 8838 7898

Mobile: 0417 205 843

Email:robert.o'neill@water.nsw.gov.au