



Calliope River Basin

water resource plan consultation report

January 2007

Prepared by

Water Planning (Central) and Water Services (Central West Region)

Department of Natural Resources and Water

This document has been prepared with all due diligence and care, based on the best available information at the time of publication. The department holds no responsibility for any errors or omissions within this document. Any decisions made by other parties based on this document are solely the responsibility of those parties. Information contained in this document is from a number of sources and, as such, does not necessarily represent government or departmental policy.

Printed January 2007

ISBN 1-7417-2374-4

© The State of Queensland (Department of Natural Resources and Water) 2007

Foreword

The *Water Resource (Calliope River Basin) Plan 2006* has been developed to advance the future sustainable management of surface water in the Central Queensland region.

The plan provides for:

- unallocated water to address future demand that cannot be met from existing entitlements
- overland flow water management
- amending area-based licences and licences limited only by pump size to include an annual volumetric limit
- metering arrangements that will be used to measure the volumes taken under water licences
- ecological outcomes for environmental values associated with surface-water flows.

One of the key mechanisms for implementing these provisions will be through the preparation of a resource operations plan for the Calliope River Basin. This plan will indicate rules for the release of unallocated water, as well as the monitoring requirements to meet the plan's purposes and outcomes.

The *Water Resource (Calliope River Basin) Plan 2006* has been finalised after taking into consideration the views of individuals, stakeholder groups and the general community provided through meetings, public information sessions and public submissions during the draft plan development and consultation process.

This report summarises the issues that were raised during consultation on the draft water resource plan, and how these issues were dealt with. I thank everyone who participated in the consultation process that has led to the development and finalisation of a water resource plan that not only allows for future growth but also supports the cultural and ecological needs of the Calliope River Basin.

Craig Wallace

Minister for Natural Resources and Water and

Minister Assisting the Premier in North Queensland

January 2007

Contents

FOREWORD	2
CHAPTER 1	INTRODUCTION	4
1.1	PURPOSE OF THIS REPORT	4
1.2	INTENT OF THE WATER RESOURCE PLAN	4
1.3	COPIES OF THE WATER RESOURCE PLAN.....	5
1.4	HISTORY OF THE WATER RESOURCE PLAN.....	5
1.5	OVERVIEW OF THE CALLIOPE RIVER BASIN.....	6
CHAPTER 2	CONSULTATION AND SUBMISSIONS ON THE DRAFT CALLIOPE RIVER BASIN WATER RESOURCE PLAN	9
CHAPTER 3	SUMMARY OF ISSUES RAISED IN SUBMISSIONS	10
3.1	UNALLOCATED WATER	10
3.2	OVERLAND FLOW WATER.....	11
3.3	VOLUMETRIC LIMITS ON LICENCES AND METERING.....	12
3.4	OUTCOME STRATEGIES	12
3.5	DEFINED SET OF ECOLOGICAL OUTCOMES.....	13
3.6	WATER-USE EFFICIENCY	14
3.7	POLICY CONSISTENCY	14
3.8	ISSUES TO BE CONSIDERED IN THE RESOURCE OPERATIONS PLAN.....	15
3.9	ISSUES OUTSIDE THE SCOPE OF THE WATER RESOURCE PLAN	15
CHAPTER 4	WATER RESOURCE PLAN FINALISATION	17
4.1	CHANGES MADE IN FINALISING THE PLAN	17
REFERENCES	18

Chapter 1 Introduction

1.1 Purpose of this report

This report, approved for release by the Minister for Natural Resources and Water, has been prepared to accompany the final water resource plan (the plan) for the Calliope River Basin.

Section 51 of the *Water Act 2000* specifies that the minister must prepare a report on the consultation process, including a summary of issues raised during the consultation process and how the issues have been dealt with.

The report incorporates:

- a background to the development of the plan (Chapter 1)
- an overview of consultation and community involvement in the development of the plan (Chapter 2)
- a summary of the issues raised during consultation and how the issues were addressed in finalising the plan (Chapter 3) — this chapter also explains how issues raised during consultation that are outside of the scope of the plan have been dealt with
- an outline of the finalisation of the plan, noting changes from and amendments to the Calliope River Basin draft Water Resource Plan (Chapter 4).

1.2 Intent of the water resource plan

In Queensland the Council of Australian Government's water-reform framework is enacted through the *Water Act 2000* (the Act). The Act provides for the development of water resource plans designed to bring about efficient and sustainable water use through a water allocation and management framework that gives security to water users and security of flow regime for the riverine environments, and provides mechanisms for dealing with future water requirements.

A water resource plan (WRP) for the Calliope River Basin was developed to better define water availability and establish an appropriate framework to secure present and future water needs.

Input into the draft plan and comments on its release were canvassed at public meetings as well as informal meetings and discussions. Formal consultation occurred through meetings of the community reference panel and the submission process. Consultation also took place with stakeholder groups and various government departments. Their concerns, aspirations and objectives were documented throughout the process. This report summarises these issues and how they have been addressed by the Minister for Natural Resources and Water in finalising the plan.

The draft plan, developed from findings of technical assessments (environmental, hydrological and socioeconomic) and through the consultation process, was released for public consultation in August 2006.

The draft plan provided for:

- 500 megalitres per annum of unallocated water for town water supplies and 5000 megalitres per annum for other purposes, including town water supplies, to address needs that cannot be met from existing entitlements or alternative sources, such as efficiency gains or recycling
- general and environmental outcomes for the sustainable management of surface water
- recognition of all existing entitlements
- water use to be limited to the provisions set out in the draft plan

- continued management of water resources under the licensing provisions of the Act
- regulation of overland flow water, with separate licences to be required for works and water for non-exempt structures able to hold above five megalitres
- conversion of area-based licences to licences with a defined volumetric limit
- conversion of licences specified only by pump size to volumetrically defined entitlements
- metering of all water licences subject to the Queensland government's metering policy
- monitoring and reporting on the effectiveness of the implemented plan
- implementation of the plan by a resource operations plan.

The overview report provided a plain English guide to the Calliope River Basin draft Water Resource Plan. The report summarised the assessments undertaken to develop the draft plan; it explained the key provisions of the plan and the reasoning behind them, and the process for finalising and implementing the plan, in accordance with Section 48 of the Act.

Issues that arose

Submissions received on the draft plan related to:

- unallocated water
- overland flow
- volumetric limits on licences
- metering
- WRP outcomes
- water-use efficiency
- policy consistency
- issues to be addressed in the resource operations plan
- issues outside the scope of the WRP.

How the issues were assessed

The Calliope River Basin Water Resource Plan project team (the project team) reviewed and analysed all submissions received on the draft plan. All submissions were recorded and assessed by the project team. A staff member outside the project team provided assistance in validating the submissions, ensuring that all the issues were identified. Issues raised in the submission process were referred to the minister for consideration in finalising the plan.

1.3 Copies of the water resource plan

Copies of the plan, this report and other relevant reference documents can be viewed and downloaded from the internet at <www.nrw.qld.gov.au/wrp/calliope.html>

1.4 History of the water resource plan

The minister released a public notification of intention to prepare a draft plan for the Calliope River Basin, supported by the simultaneous release of an information report and a moratorium notice that had been updated to include overland flow in March 2004. The intent of the moratorium was to

maintain the status quo, in relation to surface-water development, while the plan was being prepared.

A draft plan was developed in consultation with a community reference plan and other stakeholders, and included information from hydrological, environmental, economic and social assessments. The draft plan was released for public consultation in August 2006.

The plan includes water taken from all watercourses, lakes and springs, as well as overland flow water in the plan area. It does not regulate groundwater.

The public was invited to make submissions on the draft plan from its release until 25 September 2006. A total of six submissions were received. All issues raised were referred to the minister for his consideration.

The *Water Resource (Calliope River Basin) Plan 2006* has been developed in accordance with Part 3, Sections 35–51 of the *Water Act 2000*. The final plan was approved by Governor in Council on 14 December 2006, gazetted on 15 December 2006, and became subordinate legislation to the Act.

1.5 Overview of the Calliope River Basin

The Calliope River, located in the Curtis Region of Central Queensland, flows eastward from the Calliope Range for about 100 kilometres to its mouth on the coast just to the north of Gladstone. The catchment is bounded by the Calliope Range to the west and the Mt Larcom Range to the north. The catchment encompasses the central valley area of the Calliope Shire (including Calliope township) and the western parts of Gladstone City. With a relatively small catchment of 2236 square kilometres, the river's main tributaries are Oakey, Paddock, Double and Larcom creeks. The Calliope River Basin also includes Munduran Creek in the northern coastal area and Auckland Creek to the south of the Calliope River's mouth. A map of the plan area is shown in Figure 1.

Mean annual rainfall across the plan area (based on records from 1920 to 1969) varies between 800 and 1000 millimetres. About 60 per cent of this rain falls between December and March; the wet season also accounts for most of the river's estimated mean annual discharge of 153 000 megalitres, recorded at Castlehope gauging station.

The Calliope River is connected to the sea by a complex and extensive estuary. Tourism and commercial and recreational fishing, as well as the health of coastal zone habitats, rely on the river's flow regime.

About two-thirds of the basin's native vegetation has been cleared. The remainder is intact along the Calliope River and consists of a narrow, near-continuous riparian corridor of predominantly native vegetation (C&R Consulting 2005). The system supports several riverine and aquatic ecosystems of value.

All waterholes in the main trunk of the Calliope River occur naturally; however, some partial barriers have been created by structures such as the causeway where the Bruce Highway once crossed the river. Authorised structures principally associated with irrigation affect flows in the Auckland, Farmer, Poison, Calligooran, Ogre, Clyde, Targinie and Humpy creeks.

Water is important for indigenous communities, with part of the catchment in the country of the Goorang Goorang people. Archaeological sites of significance, similar to those found in the neighbouring Boyne River valley, could exist in the plan area. Knowledge of these sites is vested with the Goorang Goorang and other peoples.

Surface water in the plan area is currently managed through a licensing system, with extractions principally taken from the Calliope River and its tributaries. Some extractions also occur in the northern coastal area and from Auckland Creek to the south of the river's mouth. There are currently 59 licences to take water in the plan area.

Current water use is estimated to be between 1500 and 4500 megalitres per annum. The upper

figure of 4500 megalitres per annum assumes all licences are being used and, in the absence of metering data, usage rates for area-based licences have been estimated.

Pockets of irrigation, primarily for cattle-feed production is the dominate water use. Most urban-residential and industrial water is sourced from Awoonga Dam in the adjacent Boyne River Basin, which is subject to a separate water resource plan. A few landholders are expanding from cattle-feed production into horticulture and aquaculture on properties adjacent to reaches of the Calliope River with favourable topography.

Overland flow water comprises a comparatively small part of the surface water resources in the overall plan area. The development of this resource is currently confined to a few small farm storages mainly found in the Calliope Shire.

The Calliope River Basin encompasses the southern and eastern portions of the Gladstone State Development Area (GSDA), which is a significant industrial land bank established by the Queensland government in 1993. The purpose of the GSDA is to secure and protect a large area of suitable land with ready access to a deepwater port for large-scale industrial development over a 30–50-year timeframe. The GSDA is Queensland’s premier locality for major resource processing and energy-intensive projects. Land use in the GSDA is governed by a planning scheme that is controlled by the coordinator-general. The planning scheme is a key instrument in ensuring that industrial development in the GSDA is effectively protected and promoted. Water for these industrial users is supplied by Awoonga Dam in the adjacent Boyne River Basin; however, they release water into watercourses and construct and operate structures that affect overland flow water in the Calliope River Basin.

Chapter 2 Consultation and submissions on the draft Calliope River Basin Water Resource Plan

Community involvement has been important and beneficial in developing and finalising the WRP. The Minister for Natural Resources and Water (formerly Natural Resources, Mines and Water) established a community reference panel for advice on relevant matters in relation to the WRP. The panel raised issues to be addressed by the WRP, reviewed policy options and directions and provided two-way feedback between the department and the broader community.

Members were drawn from a representative range of community interests. This balance of representation was important to ensure that the interests and views of the community as a whole were reflected on the panel. Selection of members was based on advice provided to the minister by Department staff and the Fitzroy Basin Association. The panel included representatives from:

- recreational fishing
- commercial fishing
- Landcare
- local government
- conservation interests
- water users
- graziers
- East End Mine Action Group
- mining
- industry
- indigenous interests
- water service provider.

The community reference panel met four times during 2004–06. Informal meetings were also held with a number of stakeholder groups to gather information, discuss issues and to deal with concerns.

The Calliope River Basin draft Water Resource Plan was released in August 2006 for public review and comment. The Department of Natural Resources and Water held two public information sessions. These meetings were held at Calliope in the RSL Memorial Hall and at Gladstone in the Central Queensland University Engineering Centre. The purpose of these meetings was to provide a synopsis of the draft plan provisions, thus assisting the public to make informed submissions.

Departmental staff also presented the draft plan to the Central Queensland: A New Millennium Steering Committee on 19 September 2006. Attendees were encouraged to make submissions.

The closing date for the receipt of submissions was 5 pm on 25 September 2006. A total of six submissions were received. Groups that made submissions included state departments and agencies, an environmental interest group, a water service provider and a riparian landholder and irrigator with environmental and recreational fishing interests. Most of the submissions listed raised more than one issue, with some also expressing support for particular provisions listed in the draft plan. All submissions were referred to the minister for his consideration.

Chapter 3 Summary of issues raised in submissions

This chapter provides an outline of the issues raised in submissions received on the draft plan and how these issues were considered in finalising the plan. The following sections are discussed by submission topic.

3.1 Unallocated water

3.1.1 What the draft plan said

The draft plan proposed allocating 5500 megalitres per annum of unallocated water to meet demand that cannot be addressed by alternative sources, such as recycled water and water savings from improvements in the efficiency of water use. Of the 5500 megalitres per annum of unallocated water 500 megalitres per annum is to be allocated for town water supplies and 5000 megalitres per annum is to be allocated for other purposes, including town water supplies if required. Unallocated water may be granted or released under a process outlined in the resource operations plan.

3.1.2 Issues

One submission stated that it does not support the taking of additional water from the Calliope River for any reason. The submission suggested the WRP should explicitly seek to maintain and enhance the current conservation status of the river systems in the plan area. The submission suggested listing the Calliope as a 'River of Regional Significance' under an expanded Wild Rivers Act. This action would cap the level of water extraction from the Calliope River system at the current level and return flows to the system for the purpose of rehabilitation and restoration.

Another submission supported the reservation of a maximum of 5500 megalitres per annum of water for future allocation for town water supply and other uses. The submission states that this is seen as an appropriate balance between possible development needs in the next ten years and the environmental flow requirements to support the ecology of the Calliope River, Gladstone Harbour and The Narrows. The release of the whole or part of this reserve should only occur if a genuine, demonstrated need for the water for a high-value purpose is established and no viable alternative source (such as recycled water or gains from increased water-use efficiency) exists.

3.1.3 How the issues were assessed

The department carefully considered the information provided by the submissions on this issue. It noted that if no unallocated water was made available, then future growth, particularly for rural residential developments and agriculture, dependent on water supply from the Calliope River, would be limited and the plan would lack the flexibility to deal with this issue. Importantly, the plan only reserves the water and there is no guarantee that all or any of this volume will be released. Details of any grant or release of unallocated water would be provided in the resource operations plan in accordance with state guidelines.

In 2004 the government committed to developing legislation to protect the state's remaining wild rivers. As part of that commitment, the government named 19 potential wild-river areas, mostly located in the Gulf and Cape York regions. The Queensland Parliament passed the *Wild Rivers Act 2005* in October 2005. Under this Act the Minister for Natural Resources and Water can propose a river for declaration. The Wild Rivers Act does not automatically declare or list any river as wild. Rather it outlines a public planning process to declare a river 'wild'. In December 2005 the first six of these 19 rivers were nominated. Formal consultation closed in April 2006. The Premier announced in July 2006 the government's intention to declare these rivers. While the Calliope River might have many of its natural values intact, the government is focused on assessing the originally identified 19 rivers before giving consideration to other river systems.

Even if all of the 5500 megalitres per annum of unallocated water was taken up, the plan will protect at least 90 per cent of the mean annual flow recorded at Castlehope gauging station. Total stream discharge from the whole Calliope River Basin is actually higher, due to downstream tributary inflows and discharge from the northern coastal streams. Furthermore, not all licence holders are using their full entitlements.

3.1.4 What the final plan says

The amount of unallocated water allocated in the final plan is unchanged from the draft plan.

3.2 Overland flow water

3.2.1 What the draft plan said

The draft plan provides for the regulation of overland flow water.

An owner of land that has existing works can continue using those works to take overland flow water for one year after the commencement of this plan. After this period the taking of that overland flow water will not be authorised until details of the existing works are notified to the department. Existing overland flow works for stock or domestic purposes or for exempt storages will not have to be notified.

The plan authorises taking water from overland flow for, stock or domestic purposes, purposes required to meet the conditions for an environmentally relevant activity under the *Environmental Protection Act 1994* and for any purposes where the capacity of the works is less than five megalitres. The works associated with these types of authorised take will be self-assessable development and will need to comply with their respective self-assessment codes. No development permit will be required.

3.2.2 Issues

One submission asked if notification needs to take place for the transfer of water from one dam to another dam on a property.

Another stated that the plan should clarify the status of major residue storage areas (tailings dams or recycling ponds, for example) that may affect overland flow. The document might need some additional statements to ensure that no ambiguity or confusion arises in relation to major residue-storage areas that are presently located in or proposed for the catchments in the plan area. The submission refers in particular to storages that divert clean rainfall run-off from the catchment areas above the residue-storage areas, collect potential contaminated waters from within the storage areas and provide the capacity to store and return contaminated waters to the system and to ensure that the frequency and quality of releases from the dam are within acceptable criteria. The submission states that rainfall that flows into or enters the storage areas has potential to be contaminated.

3.2.3 How the issues were assessed

All works that allow the taking of overland flow other than for stock and domestic use or from minor exempt storages must be included in the notification. This is specified in the plan.

Overland flow storages that capture contaminated run-off from industrial sites are usually built for an environmentally relevant activity under the *Environmental Protection Act 1994*. As such, these works are authorised to take water and are a self-assessable development, and hence need to comply with the self-assessable code. No development permit is required for residue storages as long as they comply with the self-assessable code for an environmentally relevant activity.

3.2.4 What the final plan says

These issues were more a point of clarification. The final plan is unchanged from the draft plan.

3.3 Volumetric limits on licences and metering

3.3.1 What the draft plan said

The Overview Report outlined the proposal to align all area-based licences, volumetric licences and licences limited only by pump size to include annual volumetric limits. The draft plan provides for area-based licences to be converted at a rate of up to 7 megalitres per hectare. This is a maximum conversion rate, with most licences likely to be converted at a rate of between 4.5 megalitres per hectare and 6 megalitres per hectare. Volumetric limits for entitlements currently defined only by pump size will be established through a process to be set out in the resource operations plan.

The draft plan proposes that measuring devices (meters) will be installed to assess the volumes of water taken under all water licences in the draft plan area, consistent with the government's metering policy.

3.3.2 Issue

One submission supported the proposed issuing of volumetric limits on licences and the progressive installation of meters for all water used under a water licence.

Another submission queried if there was any control mechanism in the draft water resource plan on the volume (maximum) of water that can be pumped in any one year per licence.

3.3.3 How the issue was assessed

Submissions were in support of the volumetric limits and metering provisions in the draft plan.

The draft plan proposes to amend all licences to include a volumetric limit that will indicate a maximum volume of water that can be pumped in any one year.

3.3.4 What the final plan says

The final plan is unchanged from the draft plan.

3.4 Outcome strategies

3.4.1 What the draft plan said

General outcomes proposed in Section 8 of the draft plan include:

- (a) to provide for the use of all water entitlements and other authorisations in the plan area
- (b) to provide for continued use of all existing works
- (c) to make water available to sustain current levels of, and to provide for appropriate growth in, economic activity in the plan area
- (d) to support the water-related social and cultural values of communities in the plan area
- (e) to encourage continual improvement in the efficient use of water.

3.4.2 Issue

One submission sought the removal, change or addition of outcomes. Specifically it sought:

- the removal of outcome c, 'to make water available to sustain current levels of, and to provide for appropriate growth in, economic activity in the plan area'
- a change of outcome e, 'to encourage continual improvement in the efficient use of water', to 'to require the efficient use of water'
- to add another outcome, 'to rehabilitate degraded natural ecosystems'.

3.4.3 How the issue was assessed

The Department needs to consider environmental, economic, social and cultural aspects to have a sustainable plan. Therefore the outcome ‘to make water available to sustain current levels of, and to provide for appropriate growth in, economic activity in the plan area’ is considered important.

The draft plan does take into account the efficient use of water under general outcome (e) ‘to encourage continual improvement in the efficient use of water’. This was also dealt with in the draft plan at Section 21(1)(a)(iii) to the effect that in dealing with unallocated water, the chief executive must consider alternative water sources including, for example, recycled water and water savings from improvements in the efficiency of water use.

With regard to the suggested additional clause, water resource plans are concerned with the allocation and management of water. The degradation of ecosystems in the catchment involves many factors other than water, such as land-use changes. The addition of an outcome concerning the rehabilitation of degraded ecosystems is therefore outside the scope of the plan.

3.4.4 What the final plan says

The final plan is unchanged from the draft plan.

3.5 Defined set of ecological outcomes

3.5.1 What the draft plan said

Section 9 of the draft plan lists the ecological outcomes for water in the plan area. These are:

- to support natural ecosystems by minimising changes to natural flow regimes
- to maintain adequate water flows to protect the health of riparian vegetation and aquatic ecosystems in the plan area
- to maintain adequate freshwater outflows to The Narrows and the natural wetlands in the plan area.

Section 21 of the draft plan lists the matters the chief executive must consider in dealing with unallocated water. This section also lists a number of ecological conditions that must be considered when allocating unallocated water.

Section 23 of the draft plan states the monitoring requirements for the plan.

3.5.2 Issue

One submission stated that, while the draft plan specifies a list of ecological outcomes expected as a result of the draft plan’s implementation, these lack sufficient detail to enable effective monitoring of the success of the plan. It is recommended that these should be supported by a number of detailed outcomes that are quantifiable and can demonstrate the plan’s success.

3.5.3 How the issue was assessed

The plan provides a monitoring and reporting framework. Detailed monitoring and reporting provisions, including those to achieve ecological outcomes, will be included in the resource operations plan. The Environmental Protection Agency will provide input into the development of specific ecological monitoring and reporting for the Calliope River Basin which will be included in the resource operations plan.

The ecological outcomes currently in the plan suit the low level of development in the catchment. Water use in the Calliope River Basin is approximately 1–3 per cent of the mean annual flow at Castlehope gauging station. If the unallocated water of 5500 megalitres was added to current use, the overall use as a percentage of mean annual flow would be approximately 5–7 per cent of flows

at Castlehope gauging station. Below Castlehope gauging station, which is the only gauging station in the catchment, total discharge from the whole Calliope River Basin catchment is higher due to downstream tributary inflows and flows direct to the ocean from small northern coastal streams. Also, not all licence holders are fully using their entitlements.

Unallocated water will be released in stages, depending on water demand and any water entitlement granted will be subject to conditions that protect the plan outcomes, including the ecological outcomes mentioned in the plan.

3.5.4 What the final plan says

The final plan is unchanged from the draft plan.

3.6 Water-use efficiency

3.6.1 What the draft plan said

A general outcome proposed in Section 8 of the draft plan is to encourage the continual improvement in the efficient use of water. Under Section 21 of the draft plan it was proposed that in dealing with unallocated water the chief executive must consider alternative water sources, including, for example, recycled water and water savings from improvements in the efficiency of water use.

3.6.2 Issue

One submission raised the issue of water-use efficiency. In the draft plan there is mention of sustainability of water but not of water-use efficiency. The submission queried whether it was an intention of the water resource plan to address the issue of water-use efficiency in order to protect the long-term availability of water in the area.

3.6.3 How the issue was assessed

It is the intention of the draft plan to address the issue of water-use efficiency to protect the long-term availability of water in the area. This draft plan does this by encouraging the continual improvement in the efficient use of water (Section 8) and a requirement of the chief executive to consider water savings from efficiency improvements when dealing with unallocated water (Section 21).

3.6.4 What the final plan says

The final plan is unchanged from the draft plan.

3.7 Policy consistency

3.7.1 What the draft plan said

The draft plan endeavoured to be consistent where possible with other regional and state policies, including the Central Queensland Regional Water Supply Strategy (CQRWSS) and WRPs adjacent to the Calliope River Basin.

3.7.2 Issues

Two submissions were made regarding the draft plan's consistency with other regional and state policies. The submissions' comments were:

- Pleased to note that the draft plan largely takes into consideration the findings and proposals contained within the draft CQRWSS.

- The final plan documentation should more clearly indicate whether new water supply options in the Calliope River Basin were considered or dismissed as a means of addressing projected shortfalls in Gladstone.
- Check that the future water demand options and projections are consistent with the CQRWSS.
- Water management within the Calliope River Basin WRP must interface seamlessly with other WRPs in the Central Queensland area (being the Fitzroy and Boyne River Basin WRPs). Any incompatible planning outcomes, objectives or strategies between adjacent WRPs will inevitably lead to the emergence of discordant management and water market distortions.
- Support for the plan's linkages with the Central Queensland Regional Growth Management Framework.

3.7.3 How the issues were assessed

The development of the draft plan was done in parallel with the development of the CQRWSS. The CQRWSS recognises that the Calliope River Basin was not a suitable future water-supply option for the Gladstone area's for urban or industrial purposes. The final plan does not conflict with the CQRWSS or other WRPs in adjacent catchments.

3.7.4 What the final plan says

The final plan is unchanged from the draft plan.

3.8 Issues to be considered in the resource operations plan

Two submissions were received on the draft plan detailing issues that will be addressed in the resource operations plan. A resource operations plan will be developed to implement the *Water Resource (Calliope River Basin) Plan 2006*.

3.8.1 Issues

One submission asked if the draft plan explains how to access unallocated water or sets the pricing of the water. For example, if it is by a tender process or is there a minimum pricing level.

Another submission requested that water be made available at a sustainable level to protect the health of aquatic ecosystems in times of low rainfall and suggested that, in times of stress, irrigation should be stopped. As a result, domestic and stock water would be available at all times.

3.8.2 How the issues were assessed

The details for the release of unallocated water will be set out in the resource operations plan. They will be consistent with state guidelines and policies.

Section 21 of the plan allows for the chief executive to impose flow conditions on any new licence to take water. The details of the flow conditions to be attached to new licences will be detailed in the resource operations plan. Water-sharing rules will be included in the resource operations plan, as will provisions for the development of Critical Water Supply Arrangements.

3.9 Issues outside the scope of the water resource plan

There were several issues raised in submissions that are outside the scope of the water resource planning process.

3.9.1 Issues

One submission asked if the draft plan considered the possible occurrence of timber plantations in the future. The submission suggested that the plan should document any possible changes in the

hydrology of the area that could occur if timber plantations should be developed in the future.

Another submission suggested the plan should acknowledge the heavy-industry land uses and associated planning scheme for the Gladstone State Development Area. The submission suggested changes to the Overview Report that accompanied the draft plan.

Another submission suggested that any unused or underutilised licences need to be returned to the system through a process of equitable water entitlement acquisition by the government.

Another submission asked if the water resource plan is considering landowners accessing their water supply through other means, such as groundwater supplies.

3.9.2 How the issues were assessed

Current land uses and potential future changes were considered in the planning process. Any change in land use, such as large-scale plantations, that intercept 'significant' volumes of water will be dealt with through future water resource planning processes.

Industrial water requirements in the Gladstone area were considered in the development of the CQRWSS. Urban and industrial water for the Gladstone area will continue to be supplied by the Awoonga Dam in the adjacent Boyne River Basin.

The plan provides for the continuation of all water entitlements in the plan area. Any holder of a water licence may surrender their entitlement at any time through voluntary arrangements. As the plan's outcomes can still be achieved after taking into account full utilisation of existing entitlements, there are no substantial benefit to be gained by the acquisition of existing entitlements.

The plan does not provide for the regulation of groundwater. The department has previously assessed the groundwater risk in the Calliope River Basin and concluded that the groundwater resources are not extensive and as they are primarily used for stock and domestic purposes they are not under threat. Should this situation change the regulation of groundwater may be provided for in a future amendment to the plan.

3.9.3 What the final plan says

The final plan is unchanged from the draft plan.

Chapter 4 Water resource plan finalisation

The public were invited to submit opinions and views on the draft *Calliope River Basin Water Resource Plan*. All submissions received on the draft plan were collated by the Department and considered by the minister in preparing the final plan. A summary of these issues is given in Chapter 3.

The final WRP, gazetted on 15 December 2006, incorporated some changes made to the draft plan that better clarified some of the provisions of the final plan.

4.1 Changes made in finalising the plan

Some changes for clarification of provisions include:

- change to the wording of one of the purposes of the plan to make it more relevant to the plan area
- change to the wording of one of the plan's outcomes to make it more relevant to the plan area
- change of wording to more clearly describe the limitation on the taking of overland flow water
- change to the wording of one of the subsections regarding the relationship with the *Integrated Planning Act 1997* to correct a typographical error
- change to the wording regarding the limitation on the allocation of unallocated water to make it more clear
- removal of a matter the chief executive must consider in relation to unallocated water deemed to be not relevant to the plan area
- removal of a minor or stated amendment which allowed the department to undertake a minor amendment to the plan to change the total annual volume of unallocated water
- some minor changes to correct grammatical and formatting errors.

References

C&R Consulting [Eds: Hydrobiology P/L]. (June 2005), *Calliope River Basin Draft Water Resource Plan Ecological Assessment Report*. Department of Natural Resources and Mines, Queensland.