

Queensland

# Water Resource (Fitzroy Basin) Plan 2011

Explanatory Notes for SL 2011 No. 283

made under the Water Act 2000

## **General outline**

Short title

Water Resource (Fitzroy Basin) Plan 2011.

## **General Outline**

These explanatory notes are a 'plain English' version of the *Water Resource (Fitzroy Basin) Plan 2011* ('the plan'). They are intended to provide the reader with some explanation and background information on the clauses in the plan.

The numbering of the explanatory notes corresponds with the numbering of the plan. These notes should be read in conjunction with the plan. These explanatory notes are not intended to be comprehensive but merely a guide to assist the reader in understanding the plan.

### Short title

Water Resource (Fitzroy Basin) Plan 2011.

### **Authorising law**

Chapter 2, Part 3, Division 2 of the Water Act 2000.

### Policy objectives and the reasons for them

Section 38 of the *Water Act 2000* ('the Act') provides for the Minister to prepare a water resource plan for any part of Queensland to advance the sustainable management of water.

The *Water Resource (Fitzroy Basin) Plan 1999* was released as a Water Allocation Management Plan prior to the Act in December 1999. It was transitioned with some amendments under section 57 and section 1041 of the Act in 2003 - SL No.342. The plan managed water in a watercourse, lake and spring.

The *Water Resource (Fitzroy Basin) Plan 1999* was amended in 2005 to include overland flow water - SL No.166.

Subordinate legislation, including water resource plans, must be replaced within a ten year timeframe under the *Statutory Instruments Act 1992* (section 54 (1)). The objective of the plan is to provide a framework for the allocation and sustainable management of surface water (including overland flow water) and groundwater (subartesian water) in the plan area to meet future water requirements, including the protection of natural ecosystems and security of supply to water users. The plan area includes the Comet, Nogoa, Mackenzie, Isaac, Connors, Dawson and Fitzroy rivers. The plan area also includes the Callide, Carnarvon, Highlands, Isaac Connors and Fitzroy groundwater management areas.

### Achievement of policy objectives

The plan provides for the allocation and sustainable management of surface water (including overland flow water) and groundwater by—

- defining the availability of water in the plan area
- providing a framework for sustainably managing water and the taking of water
- · indentifying priorities and mechanisms or dealing with future water requirements
- providing a framework for establishing water allocations
- providing a framework for reversing, where practicable, degradation in natural ecosystems
- regulating the taking of overland flow water
- regulating the taking of groundwater.

## Consistency with policy objectives of authorising law

The subordinate legislation is consistent with the main objectives of the Act which is to ensure the "sustainable allocation and management of water and other resources".

## Inconsistency with policy objectives of other legislation

The subordinate legislation is consistent with the policy objectives of other legislation.

### Alternative ways of achieving policy objectives

The Act sets out the framework for the development of a water resource plan. There are no alternative means for achieving the policy objectives.

### Benefits and costs of implementation

Implementation of the plan will provide the benefits of a modernised water resource plan. These include provisions for reserves of unallocated water for future water needs, the conversion of entitlements to water allocations, amending water licences to include volumetric limits, and integration of water resource management through the management of groundwater.

## Consistency with fundamental legislative principles

The plan, which is subordinate legislation, is consistent with fundamental legislative principles.

## Consultation

Government departments and agencies affected by the changes have been consulted in respect of the plan. In addition to government consultation, cultural, economic,

environmental interest groups and water users have been consulted in accordance with the water resource planning process as outlined in the Act.

Outcomes of community consultation are outlined in a separate document Fitzroy Basin Water Resource Plan Consultation Report.

## **Notes on Provisions**

## Chapter 1 Preliminary

Chapter 1 provides preliminary information about the plan including the short title of the plan, the purposes of the plan and where definitions for particular words used in the plan can be found.

#### Short title

Clause 1 specifies the short title to the subordinate legislation as the *Water Resource* (*Fitzroy Basin*) *Plan 2011* ('the plan').

#### Purposes of plan

Clause 2 states the purposes of the plan. The purposes reflect the requirements of section 38 of the Act.

#### Definitions

Clause 3 specifies that certain terms are defined in the dictionary in schedule 13.

### Chapter 2 Plan area and water to which plan applies

Chapter 2 defines the plan area, the subcatchment areas, the groundwater management areas, groundwater units and groundwater sub-areas for the plan and the nodes mentioned in the plan. This chapter also states where information about the boundaries of the plan area and other areas referred to in the plan are held. The water to which the plan applies is also stated in this chapter of the plan.

#### Plan area

Clause 4 states that a map of the plan area is shown in schedule 1. The plan area includes the Comet, Nogoa, Mackenzie, Isaac, Connors, Dawson and Fitzroy rivers.

#### Subcatchment areas

Clause 5 states that a map of the subcatchment areas in the plan area is shown in schedule 2. The use of subcatchment areas provides for more effective management and planning of water resources by focusing on the ecological and consumptive needs of smaller areas within the overall plan area. The subcatchment areas in the plan area are—

- Downstream of Fitzroy Barrage
- Fitzroy
- Isaac Connors

- Lower Mackenzie
- Upper Mackenzie
- Nogoa
- Comet
- Upper Dawson
- Lower Dawson.

#### Groundwater management areas

Clause 6 states that a map of the groundwater management areas in the plan area is shown in schedule 3. All subartesian water (groundwater) is managed under the plan with specific management arrangements provided in five groundwater management areas—

- Fitzroy groundwater management area
- Callide groundwater management area
- Carnarvon groundwater management area
- Highlands groundwater management area
- Isaac Connors groundwater management area.

#### Groundwater units and groundwater sub-areas

Clause 7 states that certain groundwater management areas in the plan area are further subdivided into groundwater units and groundwater sub-areas so that more targeted management arrangements can be used in these areas. Groundwater units relate to certain aquifers in the groundwater management areas, such as quaternary alluvium aquifers, whilst groundwater sub-areas are a two dimensional footprint that relate to a groundwater unit. Six groundwater sub-area maps are shown in schedule 4 of the plan—

- Upper Callide groundwater sub-area
- Lower Callide groundwater sub-area
- Prospect Creek groundwater sub-area
- Don and Dee groundwater sub-area
- Isaac Connors Alluvium groundwater sub-area
- Sandy Creek Alluvium groundwater sub-area.

#### Information about areas

Clause 8 provides information for accessing further detail of the plan area boundaries which are held in digital electronic form at departmental offices where they can be inspected in detail.

#### Nodes

Clause 9 defines nodes mentioned in the plan. Nodes are generally defined as specific locations on a watercourse or in a groundwater management area within the plan area. Nodes can be used within the plan and the resource operations plan where a definitive location or reference point is necessary. For example, nodes are used in the

specification of environmental flow objectives as described under chapter 4, part 1 of the plan.

The surface water nodes used in the plan are numbered and their locations are shown on the map in schedule 5 part 1 and they are described in schedule 5 part 3.

The groundwater nodes used in the plan are numbered and their locations are shown on the map in schedule 5 part 2 and they are described in schedule 5 part 4.

#### Water to which plan applies

Clause 10 states that the plan applies to both surface water and groundwater within the plan area. Surface water to which the plan applies is water in a watercourse, lake or spring and overland flow water. The clause clarifies that the plan does not apply to water in springs that is either connected to artesian water or subartesian water connected to artesian water. Groundwater to which the plan applies is subartesian water not connected to artesian water.

### Chapter 3 Outcomes for sustainable management of water

Chapter 3 states the outcomes, including ecological outcomes, which the plan seeks to achieve through implementing particular management strategies. Inclusion of these outcomes meets the requirement in section 46(1)(e) of the Act.

There are four different types of outcomes specified under the plan-

- general outcomes
- specific surface water and groundwater outcomes
- general ecological outcomes, and
- specific ecological outcomes.

#### Outcomes for water in plan area

Clause 11 establishes that outcomes in clauses 12 to 15 have been developed whilst recognising that in some parts of the plan area the natural environment has been altered through water resource development.

The clause also establishes that water is to be allocated and managed in a way that seeks to achieve a balance in the general, specific surface water and groundwater, general ecological and specific ecological outcomes of the plan.

The term **balance**, as referred to above, does not necessarily imply that each outcome will be given equal weighting or that any specific weighting is attached to particular outcomes. Instead, the outcomes should be seen as a set of complementary responses that work together to achieve sustainable management of water in the plan area.

#### **General outcomes**

Clause 12 states the general outcomes for the allocation and sustainable management of water in the plan area. These outcomes give an overview of what the plan aims to achieve through implementing the specified management strategies. The outcomes include providing for existing water use, providing for the continued use of existing overland flow and groundwater works, protecting the probability of taking water under a water allocation, supporting water-related cultural values, providing for future water requirements, promoting water use efficiency and providing a flow regime that supports good water quality and values.

#### Specific surface water and groundwater outcomes

Clause 13 states the specific outcomes for the allocation and sustainable use of surface water and groundwater in particular parts of the plan area. These specific outcomes do not limit the outcomes in clauses 12, 14 and 15.

Specific surface water outcomes include making water available through future water infrastructure projects in the Isaac Connors, Upper and Lower Dawson and Fitzroy subcatchments to support demand for surface water from sectors such as mining, industry, agriculture and urban.

Specific groundwater outcomes include providing for sustainable groundwater management for the alluviums in the Upper Callide, Lower Callide and Prospect Creek groundwater sub-areas and Callide Valley Water Supply Scheme.

#### **General ecological outcomes**

Clause 14 states the general ecological outcomes for the plan area. The plan seeks to achieve these outcomes which include minimising changes to natural flow variability, maintaining flows for river connectivity, maintaining freshwater delivery to estuaries of watercourses and the Great Barrier Reef Lagoon, promoting an improved understanding of how flows affect ecosystem health, supporting surface water and groundwater interactions and supporting groundwater depended ecosystems.

#### Specific ecological outcomes

Clause 15 states the specific ecological outcomes for the allocation and management of water in particular parts of the plan area. These specific ecological outcomes do not limit the outcomes in clauses 12, 13 and 14.

These outcomes were indentified through community consultation and scientific assessments. The specific ecological outcomes relate to the protection of flows and groundwater levels which support ecological assets and ecosystem functions. For example the protection of flows and water quality for flow spawning fish and endemic species, groundwater levels to support ecosystems in certain areas and maintaining groundwater discharges to watercourses in the Isaac Connors groundwater management area.

## Chapter 4 Performance indicators and objectives

Chapter 4 states the performance indicators, environmental flow objectives and water allocation security objectives for the plan.

A performance indicator is defined in the Act to mean a measure that can be calculated and is stated in a water resource plan to assess the impact of an allocation or management decision or proposal on water allocations and natural ecosystems.

The environmental flow objectives and water allocation security objectives (defined in schedule 4 of the Act) are stated in schedules 6 and 7 of the plan respectively. They represent statistically derived values for performance indicators which are produced by the department's Integrated Quantity and Quality Model (IQQM) and Callide Valley groundwater computer program (see clauses 24 and 25).

Future activities that could potentially affect the allocation and management of water in the plan area (for example, new water resource development, water trades, proposed changes to operational rules, or strategies implemented in a resource operations plan) will only be approved if they are consistent with the objectives defined in schedules 6 and 7 of the plan. This requirement is separate to any other approvals or assessments that may be required-for example, approvals for works under the *Sustainable Planning Act 2009* or environmental impact assessments required by other legislation.

These performance indicators form the basis for measuring the achievements of the outcomes in Chapter 3.

## Part 1 Environmental flow objectives

Environmental flow objectives aim to protect the health of natural ecosystems from future decisions made under the plan. The objectives attempt to minimise changes to natural flow conditions or groundwater levels and are specified at nodes.

#### Division 1 Surface water

Division 1 states the environmental flow objectives and their performance indicators as they apply to surface water in the plan area.

#### Performance indicators for environmental flow objectives

Clause 16 states the performance indicators for the environmental flow objectives. Natural flow characteristics are maintained through this combination of performance indicators and objectives. These indicators specify the parts of the flow regime that will be subject to the limitations set out for the environmental flow objectives listed under schedule 6.

The specified performance indicators represent important key flow characteristics and are based on technical advice received during plan development. The variability and seasonality of flow regimes within the plan area are unique to each river system and are

often critical for many ecological processes. The performance indicators cover various aspects of the low, medium and high flow regime.

#### **Environmental flow objectives**

Clause 17 states that the environmental flow objectives for surface water are set out in schedule 6 parts 1 to 3. These objectives relate to the low flow, medium to high flow and first post-winter flow event performance indicators.

The objectives are statistically derived values that must be met and support the achievement of the general and specific ecological outcomes as set out in chapter 3. The plan's objectives are consistent with the additional unallocated water that is provided for in various parts of the plan area and balance environmental and consumptive requirements.

Any future decisions about the allocation and management of water in the plan area must comply with the environmental flow objectives. These decisions will be tested using the department's IQQM computer program or another approved method (see clause 24).

To allow for sound management of the water, the environmental flow objectives apply at various nodes around the Fitzroy Basin. These nodes are typically located near the end of water supply schemes, end of larger significant catchments and end of system.

#### Division 2 Groundwater

Division 2 states the environmental flow objectives and their performance indicators as they apply to groundwater in the plan area.

#### Performance indicators for environmental flow objectives—relevant groundwaterdependent ecosystems

Clause 18 states that the performance indicator for assessing groundwater levels to support relevant groundwater-dependent ecosystems in the Callide groundwater management area is the drawdown duration which ensures that a minimum water level is maintained subject to the values set out under schedule 6.

#### **Environmental flow objectives**

Clause 19 states that the environmental flow objectives for groundwater are set out in schedule 6, part 4. The objectives relate to the number of days that the water level is above the June 2007 groundwater level.

The objectives are statistically derived values that must be met and support the achievement of the general and specific ecological outcomes as set out in chapter 3.

Any future decisions about the allocation and management of water in the plan area must comply with the environmental flow objectives. These decisions in the Callide groundwater management area will be tested using the department's Callide Valley groundwater computer program or another approved method (see clause 25).

To allow for sound management of the groundwater, the environmental flow objectives apply at four nodes in the Callide groundwater management area.

### Part 2 Water allocation security objectives

Water allocation security objectives aim to ensure that future decisions about the allocation and management of water made under the plan will protect the probability of water users being able to obtain water under a water allocation.

#### Performance indicators for water allocation security objectives

Clause 20 states the performance indicators for the water allocation security objectives associated with both supplemented and unsupplemented surface water and groundwater water allocations. These indicators allow for water allocation security objectives to be established to protect the long-term probability of obtaining water under a water allocation.

The specified performance indicators represent the annual, monthly and other probabilities that are important to water allocation holders obtaining water from supplemented water supply schemes and those taking water from variable stream flows and aquifers.

#### Water allocation security objectives

Clause 21 states that the water allocation security objectives for the plan are set out in schedule 7. The objectives associated with supplemented water allocations are specified according to priority groups and are listed in part 1 of schedule 5 for the Callide, Dawson Valley, Lower Fitzroy, Fitzroy Barrage and Nogoa Mackenzie water supply schemes. The objectives associated with unsupplemented surface water are listed by water allocation group and detailed in schedule 7 part 2 and the objectives associated with unsupplemented groundwater are listed by water allocation group and detailed in schedule 7, part 3.

Water allocation security objectives are statistically derived values that provide a measure of how allocations would have been expected to perform using simulated historical data, generally assuming full use of existing water entitlements and development of the plan's additional unallocated water.

The objectives do not represent a prediction or guarantee of future performance of water allocations in any particular year. Instead, actual performance under the implemented plan will depend on prevailing climatic factors, water demand distribution patterns and water users' decisions about using their entitlements.

## Chapter 5 Strategies for achieving outcomes

Chapter 5 provides the strategies for achieving the plan outcomes discussed in chapter 3. Inclusion of these strategies meets the requirement in section 46(1)(f) of the Act.

# Part 1 Strategies for both surface water and groundwater

### Division 1 General provisions

Division 1 states the general provisions under which the strategies for surface water and groundwater are conceptualised. These include decisions to be consistent with objectives, assessing the impacts of decisions about surface water and groundwater, measuring devices and matters to be considered for environmental management rules, water sharing rules, water allocation change rules and infrastructure operating rules.

#### Application of pt 1

Clause 22 states that this part applies to both surface water (including overland flow water) and groundwater.

#### Decisions to be consistent with objectives

Clause 23 states that decisions made about the allocation and management of water in the plan area must be consistent with the environmental flow objectives and water allocation security objectives. This ensures that key aspects of environmental flows and water allocation security are maintained and establishes consistent and transparent considerations for decision making.

Decisions about water permits are excluded from this provision because these temporary entitlements are issued to support short-term projects, such as road construction and generally involve comparatively small volumes of water. However, separate consideration of the impacts on natural ecosystems and water authorisations is required in deciding whether to grant or refuse an application for a water permit under section 239 of the Act.

#### Assessing impact of decisions about surface water

Clause 24 states that the department's IQQM computer program is used to assess the consistency of decisions about the allocation and management of surface water in the plan area with the environmental flow objectives and water allocation security objectives.

The IQQM simulates all the major surface water processes that occur within a catchment including water extractions, instream losses and the climatic and seasonal variability in stream flows. The model was developed using historical data for the period 1900 to

2007 (107 years). As such, the testing of compliance with the plans objectives is done by using this simulation data.

The clause also states that if it is not practicable to use the IQQM, the chief executive may approve another method if satisfied that it will be at least as accurate as the IQQM in assessing consistency with plan objectives.

#### Assessing impact of decisions about groundwater

Clause 25 states that the department's Callide Valley groundwater computer program is used to assess the consistency of decisions about the allocation and management of groundwater in the Callide Valley alluviums with the environmental flow objectives and water allocation security objectives.

The Callide Valley groundwater computer program simulates groundwater levels in the Callide Valley alluviums including water extractions, aquifer losses and recharge and the climatic and seasonal variability of these levels. The model was developed using historical data for the period 1900 to 2007 (107 years). As such, the testing of compliance with the plans objectives is done by using this simulation data.

The clause also states that if it is not practicable to use the Callide Valley groundwater computer program, the chief executive may approve another method if satisfied that it will be at least as accurate as the Callide Valley groundwater computer program in assessing consistency with plan objectives.

#### **Measuring devices**

Clause 26 states that a measuring device will be used to measure the volume of water taken under interim water allocations, water allocations or water licences in the plan area. The requirement to meter these water entitlements will take effect from the day the water entitlements are declared to be metered entitlements under the *Water Regulation 2002*, part 7.

Measured water use is fundamental to the sustainable management of the state's water resources so that accurate information on the amount of water taken from catchments is recorded.

Metering is required for sound management decisions, both by the government and individual users. Metering will provide accurate water use data to ensure that users comply with the conditions of their water entitlements and assist users in using water more efficiently. It will also support improved planning for the future and a better understanding of how water resources support the rural economy, communities and the natural environment.

The installation of meters in the plan area and other parts of Queensland is part of the state-wide program.

#### Matters to be considered for environmental management rules

Clause 27 lists matters that the chief executive must consider in determining the environmental management rules that will be established under the resource operations plan. Matters include—

- streamflows required to maintain connectivity of low flow habitats, riffle habitats, natural seasonality of flows, replenishment of refuge pools, connectivity between rivers and their adjacent riverine environments, connectivity between surface water and groundwater, and first post-winter flow events
- distance between a water bore and a watercourse, lake, spring or area of ecological value
- groundwater levels required to maintain aquatic biota habitats in areas where there is surface water and groundwater interactions, relevant groundwater-dependent ecosystems, connectivity between groundwater and surface water, and natural seasonality of flows, and
- impact of taking or interfering with water on environmental attributes, and aesthetic and cultural values.

The chief executive will also consider any other relevant factors to ensure that the environmental management rules are sufficiently comprehensive to achieve the water resource plan outcomes.

#### Matters to be considered for water sharing rules

Clause 28 states matters the chief executive must consider in formulating water sharing rules for supplemented and unsupplemented surface water and groundwater that will be specified in the resource operations plan.

For supplemented surface water, the existing water sharing rules must be considered, as well as the extent to which existing supply arrangements are linked to the natural occurrence of streamflows and water availability. An assessment of the 30%, 50% and 70% water sharing indexes, as defined in the plan's dictionary, must also be considered to analyse any impact of the rules on unsupplemented water allocations.

For unsupplemented surface water, the water sharing rules are to be decided after considering existing water sharing arrangements, local availability of water, the conditions under which water may be taken, and the possible impacts the rules will have on all authorisations in the plan area. An assessment of the 30%, 50% and 70% water sharing indexes, as defined in the plan's dictionary, must also be considered to analyse any impact of the rules on unsupplemented water allocations.

For groundwater (both supplemented and unsupplemented), the water sharing rules are to be decided after considering existing water sharing arrangements, local availability of water, the connectivity between surface water and groundwater, the possible impacts the rules will have on all authorisations in the groundwater management areas, operating arrangements and supply requirements for any water infrastructure and the volumetric limits for water entitlements. In addition for rules relating to groundwater in the Upper Callide, Lower Callide and Prospect Creek groundwater sub-areas and Callide Valley Water Supply Scheme the range of historical water levels from 1970 to 2010 must be considered and in the Isaac Connors Groundwater Unit 1 the range of historical water levels and extraction in the Braeside Borefield must be considered.

The chief executive will also consider any other relevant factors in deciding the water sharing rules.

#### Matters to be considered for water allocation change rules

Clause 29 states matters the chief executive must consider in determining water allocation change rules to be included in the resource operations plan. Water allocation change rules are conditions that must be met to allow a permanent change of a water allocation, such as a change to the location or purpose.

In terms of surface water, matters to be considered include the impact to frequency, duration, magnitude and timing of water availability under water allocation changes and the impact of the change rules on unsupplemented water allocations.

In terms of groundwater, matters to be considered include the volume density relative to available water in a certain locality, the impact that proposed take could have on water attributes such as water quality, impact to existing management zones and the ability of an allocation holder to change priority group from medium to high B in the Callide Valley Water Supply Scheme.

The chief executive is not limited to these considerations and may consider other matters in determining water allocation change rules in the resource operations plan.

#### Matters to be considered for infrastructure operating rules

Clause 30 specifies matters that the chief executive must consider when determining the infrastructure operating rules for proposed and existing water infrastructure. The chief executive must consider the matters outlined in clause 30(1)(a) through (e) and may consider other matters as necessary.

The infrastructure operating rules specified in the resource operations plan will ensure that the infrastructure managed under the resource operations licence is consistent with achieving the plan's outcomes.

# Division 2 Continued effect of moratorium and interim arrangements for applications

Division 2 deals with the continued effect of moratoriums, arrangements for applications and sections of the Fitzroy Basin Resource Operations Plan which cease to have effect on the commencement of the water resource plan.

## Continued effect of moratorium notice published on 13 September 2001—Act, s 46(3)

A moratorium on works taking overland flow was announced on 13 September 2001 and amended on the 29 October 2001, 10 December 2003 and 17 May 2004 under section 26 of the Act. The effects of the moratorium notice were continued under the repealed Water Resource (Fitzroy Basin) Plan 1999 (section 28H) and effectively prevented landholders, with existing storages that stored both water taken from a watercourse and

overland flow water from reconfiguring existing storages or build new storages to store water from a watercourse (water harvesting). This applied to all the Fitzroy Basin until the resource operations plan deals with overland flow water. Exemptions included works for taking water associated mining, water permits and supplemented water.

Clause 31 of the plan amends section 28H of the previous water resource plan and continues, in part, the moratorium notice. This clause does not allow for the construction of additional works to take or store water taken under a number of water licences located in the plan area as listed in the plan. These water licences authorise the take of water from either the Comet River or Theresa Creek, and are held by landholders who take both water from the watercourse and overland flow water, and then store that water conjunctively in on-farm storages. This limitation will apply until these water licences are converted to water allocations in the resource operations plan. This clause provides more certainty and clarity for landholders in this area whilst reducing the risk of additional take of overland flow water.

## Continued effect of moratorium notice published on 14 December 2010—Act, s 46(3)

A moratorium was announced on the 14 December 2010 regarding-

- applications to take or interfere with underground water in the Callide, Fitzroy, Highlands and Great Artesian Basin declared subartesian areas (declared under the Water Regulation 2002)
- applications for or about a water licence to take water from a watercourse, lake or spring in the area downstream of the Fitzroy Barrage
- application for or about a water licence to interfere with the flow of water in a watercourse, lake or spring by impoundment
- works to take underground water in the parts of the Don River catchment and the Isaac and Connors rivers catchment.

This moratorium notice replaced the groundwater moratorium notices for the Callide subcatchment and the Isaac River and Connors River catchments which both had effect from 15 December 2006.

Clause 32 continues, in part, the effect of the moratorium notice. The clause applies to applications which would increase the amount of groundwater that may be taken from a groundwater management area and water that may be taken from a watercourse, lake or spring in the Downstream of Fitzroy Barrage subcatchment. The provision will remain in effect until this water is dealt with under the resource operations plan. Until then applications that meet this criteria will not be accepted, and those that were accepted but not processed before notification of the moratorium will not be dealt with.

This clause does not apply to an application related to-

- applications about unallocated water that can be granted under the water resource plan
- the take of water for stock or domestic purposes
- take of groundwater for mine dewatering except in Callide Groundwater Unit 1 (where applications will be refused)
- reinstating and replacing expired water licences under sections 221 and 229 of the Act.

This clause ensures that any future water allocation occurs sustainably through a market-based unallocated water release process that will be detailed in the finalised resource operations plan.

#### Particular applications made before commencement of plan

Clause 33 applies to applications made under the Act or repealed Act that were not finally decided before the commencement of the plan. These include applications for water licences to take groundwater from a groundwater management area and water from a watercourse, lake or spring in the Downstream of Fitzroy Barrage subcatchment and water licences to interfere with the flow of water by impounding water in the plan area.

Applications held by the chief executive must be refused if granting the application increases the amount of water taken or changes the interference with the water in the plan area.

However, this clause does <u>not</u> apply to applications made before the commencement of the plan to take groundwater for stock and domestic purposes, to take groundwater for mine dewatering or town water supply or for projects of state significance from areas other than Callide Groundwater Unit 1, to take water from a watercourse, lake or spring for particular purposes from the Downstream of Fitzroy Barrage subcatchment, to interfere with water by impoundment for particular purposes, to reinstate an expired licence under section 221 of the Act or to replace an expired licence with 1 or more licences under section 229 of the Act.

This clause ensures that any future water allocation occurs sustainably through a market-based unallocated water release process that will be detailed in the finalised resource operations plan.

## Particular provisions of the resource operations plan cease to have effect—Act, s 106A(3)

Clause 34 states that on commencement of the plan sections 6.1.2 up to and including 6.7 of Chapter 6 of the Fitzroy Basin Resource Operations Plan cease to have effect for the plan area.

Section 6.1.1 will remain in the Fitzroy Basin Resource Operations Plan to allow water licence applications for a water licence to take water for stock and domestic purposes not authorised under section 20 of the Act to be dealt with subject to the criteria listed in 6.1.1.

#### Interim arrangements for particular applications

Clause 35 states that an application for a water licence—made under section 206 of the Act—to take water from a watercourse, lake or spring in the plan area other than the subcatchment area of the Downstream of Fitzroy Barrage must be refused if granting means that it will increase the amount of water that will be taken in the plan area. This

provision applies until the resource operations plan states a process for deciding these applications.

This clause does not apply to an application made—

- in relation to the interim arrangements for unallocated water
- for stock or domestic purposes
- to reinstate an expired water licence under section 221 of the Act
- to reinstate an expired licence with 1 or more licences under 229 of the Act.

#### Interim arrangements for applications about unallocated water—Act, s 106A(3)

In combination with clause 35, clause 36 allows for water licence applications for either State purposes or Indigenous purposes to be decided until the resource operations plan states a process for such. Any water granted pursuant to a successful application, must be from the unallocated water reserves.

This clause specifies that water granted for State purposes can be granted from the strategic reserve, strategic infrastructure reserve or general reserve. Water granted for Indigenous purposes can only be granted from the strategic reserve.

#### Division 3 Unallocated water reserves

Division 3 deals with unallocated surface water and groundwater reserves held as strategic, strategic water infrastructure and general reserves. It also provides information about the process for dealing with unallocated water under the resource operations plan.

#### Subdivision 1 Preliminary

#### Application of div 3

Clause 37 states that Division 3 applies to unallocated water.

## Subdivision 2 Strategic reserve, strategic water infrastructure reserve and general reserve

## Unallocated water held as strategic reserve, strategic water infrastructure reserve and general reserve

Clause 38 states that unallocated water will be held as strategic reserve, strategic water infrastructure reserve and general reserve.

#### Subdivision 3 Unallocated water held as strategic reserve

#### Purpose for which unallocated water held as strategic reserve may be granted

Clause 39 states that unallocated water held as strategic reserve may only be made available for—

- a State purpose (a project of State or regional significance, town water supply or for use by Indigenous peoples for non-commercial purposes, including cultural and traditional purposes), or
- an Indigenous purpose (to help an Indigenous community achieve its economic and social aspirations).

#### **Reserve volumes**

Clause 40 states that Schedule 8 of the plan sets out the total volumes of unallocated surface water and groundwater available from the strategic reserve—

- Schedule 8 part 1 column 2 provides a total strategic reserve for a State purpose of 16 000 ML available in certain subcatchment areas as water licences.
- Schedule 8 part 1 column provides a total strategic reserve for an Indigenous purpose of 5000 ML available in certain subcatchment areas as water licences.
- Schedule 8 part 2 column 2 provides a total strategic reserve for a State purpose of 4950 ML available in certain groundwater management areas, groundwater units or groundwater sub-areas as water licences.

#### Period for which water is granted for particular State purpose

Clause 41 states that the right to take water under a water licence granted from the strategic reserve for a project of State significance (a project declared under the *State Development and Public Works Organisation Act 1971*, section 26, to be a significant project) or a project of regional significance (Clause 42) returns to the State when the project is completed.

The volume of water is granted only for the life of the project. Once the project is completed the volume of water is returned to the strategic reserve for State purposes. This allows water to be continually available for new and future projects which may only require water for a limited time.

#### Projects that may be considered to be of regional significance

Clause 42 states the factors the Chief Executive must consider in determining whether a project is of regional significance. The Chief Executive must have regard to the plan outcomes set out in chapter 3, the social and economic impacts the project would have on the region, and the public interest and welfare of the people in the region and any other relevant factors.

#### Period for which water is granted for particular Indigenous purpose

Clause 43 states that the right to take water under a water licence granted from the strategic reserve for an Indigenous purpose returns to the State when the project is completed.

The volume of water is granted only for the life of the project. Once the project is completed the volume of water is returned to the strategic reserve for Indigenous purposes. This allows water to be continually available for new and future projects which may only require water for a limited time. It also ensures that water is available to help

Indigenous communities in the plan area achieve their economic and social aspirations and is not granted for other purposes (such as those suited to the general reserve or strategic reserve) if the water returns to the State on completion of the project.

## Subdivision 4 Unallocated water held as strategic water infrastructure reserve

## Purpose for which unallocated water held as strategic water infrastructure reserve may be granted

Clause 44 states that unallocated water held as a strategic water infrastructure reserve may only be made available for water infrastructure mentioned in Clause 45.

#### **Reserve volumes**

Clause 45 states the following total nominal volumes for all supplemented water allocations to take unallocated water granted from the strategic water infrastructure—

- 90 000 ML available for water infrastructure on the Dawson River
- 56 400 ML available for water infrastructure on the Connors River, and
- 76 000 ML available for water infrastructure on the Fitzroy River.

#### Subdivision 5 Unallocated water held as general reserve

#### Purpose for which unallocated water held as general reserve may be granted

Clause 46 states that unallocated water held as a general reserve may be granted for any purpose.

#### **Reserve volumes**

Clause 47 states that Schedule 8 sets out the total volumes of unallocated surface water and groundwater available from the general reserve—

- Schedule 8 part 3 column 2 provides a total general reserve of 43 500 ML (stated as mean annual diversion) available as water licences or water allocations in certain subcatchment areas.
- Schedule 8 part 4 column 2 provides a total general reserve of 15 000 ML (stated as nominal volume) available as water allocations in certain subcatchment areas.
- Schedule 8 part 5 column 2 provides a total general reserve of 31 250 ML (stated as nominal entitlement) available as water licences in a certain groundwater management area, groundwater unit or groundwater sub-area.

## Subdivision 6 Dealing with unallocated water under the resource operations plan

#### Process for dealing with unallocated water

Clause 48 states criteria that the chief executive must consider when developing the process for dealing with unallocated water under the resource operations plan. These criteria seek to encourage sustainable and efficient use of water when providing additional water for consumptive use. The impact the proposed taking of, or interfering with, the water may have on the resource operations licence holders and interim resource operations licence holders will be considerations for the chief executive.

The considerations listed in this clause do not limit matters the chief executive may consider in developing and implementing the process for dealing with unallocated water.

#### Division 4 Callide Valley Water Supply Scheme

The supply of supplemented water in the Callide Valley Water Supply Scheme will be managed under a resource operations licence held by the owner of the water supply scheme.

#### Subdivision 1 Resource operations licence

#### Water allocations to be managed under a resource operations licence

Clause 49 states that supplemented water allocations that convert from interim water allocations in the Callide Valley Water Supply Scheme will be managed under a resource operations licence which will take effect once implemented under a resource operations plan.

#### Subdivision 2 Converting authorisations to water allocations to take supplemented water

#### Purpose of sdiv 2

Clause 50 states that this subdivision contains strategies for interim water allocations from the Callide Valley Water Supply Scheme that will convert to water allocations to take supplemented water under the resource operations plan.

The provisions are consistent with section 121(1)(a) of the Act, which specifies that on the day the resource operations plan commences, all authorisations to be converted under the plan will expire and that the chief executive will grant new water allocations.

## Converting interim water allocations to take water from Callide Valley Water Supply Scheme

Clause 51 states that an interim water allocation managed in the Callide Valley Water Supply Scheme will convert to a supplemented water allocation under the resource operations plan.

#### **Elements of water allocations**

Clause 52 lists the attributes that will be specified on supplemented water allocations. These elements include the location from which water may be taken, the purpose for which water may be taken, the nominal volume for the water allocation, the priority group to which the allocation belongs and any conditions that apply to the allocation. The following clauses in this subdivision describe how these elements are to be determined.

#### Location for taking water under a water allocation

Clause 53 states that the location for taking supplemented water stated on a water allocation must include the place at which water could have been taken under the existing authorisation. The location for a water allocation will be specified for surface water and groundwater allocations in the resource operations plan as zones.

Currently, holders of water entitlements in the Callide Valley Water Supply Scheme are limited to taking water from a specified 'place', which is usually identified by a lot and plan. By changing this location to a zone, the resource operations plan will allow water to be taken under a water allocation anywhere within a designated zone.

#### Purpose to be stated on a water allocation

Clause 54 states that the purpose stated on a supplemented water allocation will be 'agriculture' or 'any'.

Existing authorisations that would be converted to an allocation for an 'agriculture' purpose would currently have a stated purpose of stock, domestic, irrigation, stock intensive, agriculture or a similar purpose.

For other existing authorisations, the purpose on a supplemented water allocation must be 'any'. Typically these existing authorisations would currently have a stated purpose of town water supply, mining or industrial.

#### Nominal volume for a water allocation

Clause 55 states the nominal volumes for supplemented water allocations converted from interim water allocations. The nominal volume stated on supplemented water allocations converted from risk and high priority interim water allocations (surface water allocations) will be the same as the volume stated on the interim water allocation. However the nominal volume stated on a supplemented water allocation converted from

all other interim water allocations (groundwater allocations) will be based on a volume determined in section 140 of the plan.

#### Priority groups for water allocations

Clause 56 establishes the priority groups for supplemented water allocations in the Callide Valley Water Supply Scheme.

Supplemented water allocations managed in the Callide Valley Water Supply Scheme will belong to one of four priority groups (high A, medium, risk and high B).

Those authorisations indentified by the interim resource operations licence as high priority will belong to priority group high A. These authorisations are generally associated with urban and industrial use and are sourced from supplemented surface water. High A water allocations generally have a greater long-term probability of obtaining water that the other priority groups.

Those authorisations indentified by the interim resource operations licence as medium priority will belong to priority group medium. These authorisations are generally associated with agriculture and industry and are sourced from supplemented groundwater.

Those authorisations indentified by an interim resource operations licence as risk priority will belong to priority group risk. These authorisations are generally associated with agriculture and are sourced from supplemented surface water.

Interim water allocations 35687D and 47297D which are identified as medium priority on the interim water allocation will belong to priority group high B. These two authorisations supply supplemented groundwater for town water supply and by converting to high B will enable preferential access to groundwater.

#### **Conditions for water allocations**

Clause 57 states that the chief executive must consider any conditions stated on the authorisation from which the allocation was converted in deciding the conditions under which water may be taken.

### Part 2 Additional strategies for surface water

#### Division 1 Preliminary

Division 1 contains information about the application of part 2 and states the restrictions on taking water from waterholes and lakes.

#### Application of pt 2

Clause 58 states that part 2 applies to surface water in addition to the strategies outlined in part 1.

#### Restrictions on taking water from waterholes and lakes

Clause 59 applies to the chief executive's decision making about a water licence to take unsupplemented water, converting an authorisation to a water allocation to take unsupplemented water, or the management of water under a resource operations licence, a distribution operations licence or an interim resource operations licence.

If any of these authorisations allows the taking of water from a waterhole or lake the chief executive must consider the impact of take on cultural or ecological values and impose conditions on the entitlement to ensure the maintenance of these values.

Conditions do not need to be imposed if the chief executive is satisfied that the take of water will not adversely affect the cultural or ecological values and if the holder of the authorisation would suffer economically if conditions were imposed.

### Division 2 Dawson Valley Water Supply Scheme

Division 2 outlines strategies for interim water allocation 102930 to convert to a supplemented water allocation managed under the Dawson Valley Water Supply Scheme resource operations licence under the resource operations plan.

#### Water allocation to be managed under a resource operations licence

Clause 60 states that the supplemented water allocation converted from an interim water allocation 102930 is managed under a resource operations licence.

#### Conversion of interim water allocation 102930

Under the resource operations plan, the supplemented water allocation converted from interim water allocation 102930 is required to state a location relevant to the authorised activity, a purpose of 'agriculture', a nominal volume of 105ML and a priority group of medium.

# Division 3 Process for granting and amending interim resource operations licences

Division 3 outlines the different processes for granting or amending an interim resource operations licence including information to be included in any application, notification requirements, additional information that may be required, matters the chief executive must consider, and guidelines for making a decision.

This division outline a process where the application is by the proposed owner of particular infrastructure, where the chief executive deems it necessary to amend an interim resource operations licence and where the holder of an interim resource operations licence applies for an amendment.

The granting of interim water allocations is also dealt with in this division.

#### Subdivision 1 Preliminary

#### Application and purpose of div 3

Clause 62 states that this division provides a process for the granting or amendment of an interim resource operations licence to meet future water requirements. The process applies to an interim resource operations licence for new water infrastructure declared to be a significant project under section 26 of the *State Development and Public Works Act 1971*.

#### Division prevails if inconsistent with resource operations plan

The Fitzroy Basin Resource Operations Plan was amended in October 2010 to provide a similar process for granting and amending interim resource operations licences and a process for granting interim water allocations. Clause 63 states this division prevails over the provisions stated in the resource operations plan, particularly if there are any inconsistencies.

## Subdivision 2 Interim resource operations licence for particular infrastructure

#### Applying for, or to amend, interim resource operations licence

Clause 64 applies to a proposed owner of new water infrastructure declared to be a significant project under the *State Development and Public Works Organisation Act 1971*, section 26. The clause sets out the process for the owner to apply for, or to amend, an interim resource operations licence, including notice requirements. The clause also lists information to be provided by the applicant including proposed infrastructure details, impact assessments on a range of water supply and entitlement issues, mitigation measures, proposed operating arrangements and details of the proposed total interim water allocation and water users. The application will be accompanied by the fee prescribed under a regulation. The chief executive may give a copy of an application made under this clause to any entity the chief executive considers appropriate.

#### Additional information may be required

Clause 65 states the chief executive may give notice to an applicant, requesting additional information about an application, to assist the chief executive in properly deciding the application. The application lapses if the applicant fails to comply with the request for additional information within the reasonable time stated in the notice.

#### Matters the chief executive must consider

Clause 66 states that when deciding the application, the chief executive must consider all matters contained in the application and any additional information provided by the applicant, together with the public interest. Other matters deemed by the chief executive to be relevant may also be considered.

#### Deciding application for, or to amend, interim resource operations licence

Clause 67 states what the chief executive must approve or refuse the application. If satisfied that the application should be approved, or approved in part, the chief executive must approve all or part of the application, with or without conditions.

If the chief executive grants or amends the interim resource operations licence, the chief executive must reserve, from the strategic water infrastructure reserve, unallocated water required for any interim water allocations to which approval applies (see clause 75).

If the chief executive is not satisfied, the application must be refused.

#### Subdivision 3 Amendment by chief executive

#### Amending interim resource operations licence by chief executive-Act, s 184A

Clause 68 enables the chief executive to amend an interim resource operations licence granted or amended under clause 67 at any time, in order to meet future water requirements. The clause also allows for an amendment of an interim resource operations licence that was in existence on commencement of the plan to allow for changes that may be required as a consequence of granting a new interim resource operations licence for proposed infrastructure.

The chief executive must notify the holder of the interim resource operations licence prior to making the proposed amendment. The notice must state the reasons for the proposed amendment and that the holder may make written submissions about the proposed amendment. Other notification requirements are detailed in the clause.

#### Matters the chief executive must consider

Clause 69 states matters the chief executive must consider when deciding whether to amend the interim resource operations licence. The chief executive must consider any relevant original application by the holder, and any other additional information given, any submissions made by the holder about the proposed amendment and the public interest. The chief executive may also consider other relevant matters.

#### Deciding whether to amend interim resource operations licence

Clause 70 states that following consideration of matters described under clause 69, the chief executive may amend the interim resource operations licence to the extent considered appropriate.

#### Subdivision 4 Amendment on application by holder

## Amending interim resource operations licence on application by holder—Act, s 184A

Clause 71 enables the interim resource operations licence holder to apply for an amendment to an interim resource operations licence granted under clause 67. The clause outlines the details to be included in an application and permits the chief executive to give a copy of an application to any entity the chief executive considers appropriate.

#### Additional information may be required

Clause 72 states the chief executive may give notice to an applicant requesting additional information about an application, to assist the chief executive in properly deciding the application. If the applicant fails to comply with the request for additional information within the reasonable time stated in the notice the application lapses.

#### Matters the chief executive may consider

Clause 73 states that when deciding the application, the chief executive must consider all matters contained in the application and any additional information provided by the applicant, together with the public interest. Other matters may also be considered by the chief executive where relevant.

#### Deciding application to amend interim resource operations licence

Clause 74 states that the chief executive must approve or refuse the application. If satisfied that the application should be approved, or approved in part, the chief executive must approve all or part of the application, with or without conditions.

#### Subdivision 5 Granting interim water allocations

#### Granting interim water allocations—Act, s 189

Clause 75 applies if an interim resource operations licence is amended under clauses 67, 70 or 74.

The chief executive must be satisfied about a number of matters before deciding whether to grant interim water allocations. The chief executive may request additional information from the licence holder to assist in making a decision. This information

relates to the number of interim water allocations and the volume, purpose and priority group for each allocation, and the water sharing rules that are to apply.

# Division 4 Interference with water in a watercourse, lake or spring

Division 4 outlines additional limitations and considerations when dealing with applications for a water licence to interfere with the flow of water by impoundment, under section 206 of the Act.

#### Application of div 4

Clause 76 states that division 4 applies to applications made under section 206 of the Act for a water licence to interfere with water in a watercourse, lake or spring by impounding the flow of water. However, this division does not apply to an application made before the commencement of the division if the chief executive has decided not to grant the application and an interested person for the application has appealed, under chapter 6 of the Act, against the decision and the appeal has not been decided before the commencement.

#### Limitations on interference with water

Clause 77 states that a licence to interfere by impounding the flow of water may only be granted if the proposed interference (e.g. weir on a watercourse) is to store water taken under an authorisation for stock or domestic purposes, to provide a pumping pool for an existing or new authorisation, to provide improved security for town water supplies taken under an existing or new authorisation, to satisfy any requirements of an environmental authority issued under the *Environmental Protection Act 1994* or if the application is made in conjunction with the granting of unallocated water. Additional criteria that must be considered in deciding the applications are provided Clauses 78 to 82.

Clause 77 also provides for the granting of a water licence to interfere with the flow of water by impoundment if the impoundment was in existence immediately before 31 December 1999 (commencement date of repealed water resource plan).

#### Interference with water to enable take of water for stock or domestic purposes

Clause 78 applies if an application to interfere with water is to store water to be taken under an authorisation for stock or domestic purposes. In deciding the application the chief executive must consider-

- existing water supplies on the property is there an alternative source of water to satisfy stock or domestic needs
- the impact the proposed interference may have on matters listed in clause 27(1)(d) including in-stream water levels, water quality, baseflow, groundwater levels, natural movement of sediment, the movement of fish and other aquatic animals, and aesthetic and cultural values of the plan area.

In addition the proposed storage must not be greater than the storage capacity necessary to store water to be taken under an authorisation for stock or domestic purposes. These considerations do not limit the matters that the chief executive may consider in granting a water licence.

#### Interference with water for the provision of a pumping pool

Clause 79 applies if an application to interfere with water is to provide a pumping pool to enable water to be taken under a new or existing authorisation.

The proposed storage capacity of the pumping pool cannot be greater than the capacity required to enable the pump to function correctly and the storage capacity must not exceed 5 ML. In addition the impact the proposed interference may have on matters listed in clause 27(1)(d) including in-stream water levels, water quality, baseflow, groundwater levels, natural movement of sediment, the movement of fish and other aquatic animals, and aesthetic and cultural values of the plan area must be minimised.

In deciding the application to interfere with water, the chief executive must also consider any alternative methods for providing for the operation of the pump that may minimise impacts on matters described above, such as a pump well constructed in bed sand.

#### Interference with water to improve security for town water supplies

Clause 80 applies if an application to interfere with water is improve security for town water supplies taken under an existing or new authorisation.

The chief executive must not grant the application unless the town has appropriate water supply security strategies in place i.e. a water demand strategy or a drought management strategy and there is a demonstrated need for increased water supply reliability.

Additionally, in deciding the application the chief executive must consider the matters listed in clause 27(1)(d) including in-stream water levels, water quality, baseflow, groundwater levels, natural movement of sediment, the movement of fish and other aquatic animals, and aesthetic and cultural values of the plan area.

These considerations do not limit the matters that the chief executive may consider in granting a water licence to interfere for town water supply.

#### Interference with water to satisfy the requirements of an environmental authority

Clause 81 applies if an application to interfere with water is to fulfil the requirement of an environmental authority issued under the *Environmental Protection Act* 1994.

In deciding the application the chief executive must consider the matters listed in clause 27(1)(d) including in-stream water levels, water quality, baseflow, groundwater levels, natural movement of sediment, the movement of fish and other aquatic animals, and aesthetic and cultural values of the plan area. These considerations do not limit the

matters that the chief executive may consider in granting a water licence to interfere to satisfy the requirements of an environmental authority.

#### Interference with water related to the granting of unallocated water

Clause 82 applies if an application to interfere with water is related to and is made in conjunction with the granting of unallocated water. The interference (the size of the instream storage) must not be greater than is necessary for taking the related unallocated water.

In deciding the application the chief executive must consider the impact the proposed interference may have on the matters listed in clause 27(1)(d) including in-stream water levels, water quality, baseflow, groundwater levels, natural movement of sediment, the movement of fish and other aquatic animals, and aesthetic and cultural values of the plan area

The water licence for this interference may include flow conditions such as a pass flow condition.

#### Division 5 Granting particular water licence

Division 5 sets out the provisions for granting particular surface water licences.

#### Granting particular water licences

Clause 83 refers to an authority issued under the now repealed Water Act 1925-1983, section 4.

This clause states that the chief executive will grant a water licence to take water from Gogango Creek under section 212 to the Department of Education to replace an authority granted under section 4 of *Water Act 1925-1983*. The details of this water licence are described in Schedule 9, item 1.

#### Granting particular water licences to holder of mining lease 1804

Clause 84 provides a process, under section 212 of the Act, through which the chief executive can grant a water licence to take water from an impoundment authorised under water licence 38931F and owned by Queensland Coal Pty Ltd.

Provided Queensland Coal Pty Ltd provides additional information if requested by the chief executive within a reasonable period of time as stated in the request. The details of this water licence are described in Schedule 9, item 2.

# Division 6 Existing water allocations to take supplemented and unsupplemented water

#### Purpose of div 6

Clause 85 provides for the transitioning of existing supplemented and unsupplemented water allocations established under the repealed *Water Resource (Fitzroy Basin) Plan 1999*.

#### Existing water allocations to take supplemented water

Clause 86 states that water allocations to take supplemented water established under the repealed Water Resource (Fitzroy Basin) Plan 1999 will be transitioned on the commencement of the plan without amendment. The water allocations will continue to be managed under the resource operations licence and be subject to rules specified in the resource operations plan.

#### Existing water allocations to take unsupplemented water

Clause 87 states that water allocations to take unsupplemented water established under the repealed Water Resource (Fitzroy Basin) Plan 1999 will be transitioned on the commencement of the plan with amendment. Water allocations to take unsupplemented water will be amended under the resource operations plan to state:

- maximum rate equal to the rate stated on the existing water allocation, expressed in litres per second, multiplied by 1.3. Therefore if the water allocation currently had a maximum rate of 1000 litres per second under the resource operations plan this would increase to 1300 litres per second. This will ensure that existing water allocations are treated the same as those being converted under the plan.
- daily volumetric limit, calculated by multiplying the rate stated on the existing water allocation by 0.0864. For example if an existing water allocation had a rate of 1000 litres per second, the daily volumetric limit would be 86.4 ML/day. This will ensure that existing water allocations have the same elements as those being converted under the plan.

The water allocations will continue to be subject to rules specified in the resource operations plan.

# Division 7 Converting authorisations to water allocations to take unsupplemented water

#### Purpose of div 7

Clause 88 states that division 7 contains strategies for authorisations that will convert to unsupplemented water allocations under the resource operations plan.

These provisions are consistent with section 121 of the Act, which specifies that on the day the resource operations plan commences, all authorisations to be converted under the plan will expire and the chief executive will grant the new unsupplemented water allocations that are specified.

#### Authorisations to be converted to water allocations

Clause 89 states that the authorisations to be converted to unsupplemented water allocations are existing water licences for taking unsupplemented water from the following river and creek reaches in the plan area-

- Nogoa River from the upstream limit of Fairbairn Dam at AMTD 737.5km to its junction with Theresa Creek;
- Theresa Creek from its junction with retreat Creek at AMTD 15.0km to its junction with the Nogoa River;
- Retreat Creek, including anabranches, from its junction with Kettle Creek at AMTD 23.6km to its junction with Theresa Creek;
- Comet River, including anabranches, from Lake Brown gauging station AMTD 199.2km to its junction with the Nogoa River;
- Dawson River from the upstream limit of Glebe Weir at AMTD 356.5km to its junction with the Mackenzie River, including sections of tributaries where flows from Dawson River are accessible; and
- Dawson River from Utopia Downs gauging station at AMTD 453.5km to the upstream limit of Glebe Weir at AMTD 356.5km, including sections of tributaries where flows from Dawson River are accessible.

#### Elements of water allocations

Clause 90 sets out the attributes that will be specified on a water allocation to take unsupplemented water. They comprise the location at water may be taken, the purpose for which it may be taken, a nominal volume, a maximum rate at which water may be taken, daily and annual volumetric limits, the flow conditions that must be met before water can be taken under the allocation, the water allocation group to which the allocation belongs and the water management area to be defined in the resource operations plan that the allocation belongs. The water allocation may also state a monthly volumetric limit.

#### Water allocation groups

Each water allocation belongs to a water allocation group for which the plan specifies water allocation security objectives. Water allocation groupings are based on common locations and flow conditions for the water allocations.

Clause 91 states that schedule 11 column 3 provides the water allocation groups for the unsupplemented water allocation determined by place and flow condition.

#### Location for taking water under a water allocation

Clause 92 states that a location for taking water stated on a water allocation must include the place at which water could have been taken under the authorisation. The location for a water allocation will be specified as a particular reach of a watercourse (known as a zone) from which water may be accessed.

#### Purpose to be stated on a water allocation

Clause 93 states that the purpose to be stated on an unsupplemented water allocation will be 'agriculture' or 'any'.

Existing authorisations that would be converted to an unsupplemented allocation for 'agriculture' purpose would currently have a stated purpose of stock, domestic, irrigation, stock intensive, agriculture or a similar purpose.

For other authorisations, the purpose stated on a water allocation must be 'any'. Typically, these are existing authorisations that would currently have a stated purposes of town water supply, mining or industrial.

#### Nominal volume for a water allocation

Clause 94 lists the factors the chief executive will consider in determining the nominal volume for unsupplemented water allocations. They comprise the local availability of water, the conditions under which water may be taken under the authorisation (such as flow conditions), any volumetric limits stated on the existing authorisation and the simulated mean annual diversion for the entitlement. The simulated mean annual diversion is calculated using the IQQM computer program (see clause 24). It represents the simulated average volume of water that could have been taken under an authorisation or group of authorisations during the historic simulation period of record.

The nominal volume is an important element of an unsupplemented water allocation because it represents, in megalitres, the share of the total volume of water available to be taken by the holders of water allocations in water allocation groups in the plan area.

The nominal volume for an unsupplemented water allocation should not be confused with the annual volumetric limit which generally represents the maximum amount of water authorised to be taken in a water year. The amount of water that could actually be taken in any particular year will be subject to a number of factors including the local availability of water. In dry years, the amount of water available to be taken may be less than the nominal volume, while in wetter years the amount of water available to be taken may exceed the nominal volume.

#### Maximum rate for taking water

Clause 95 specifies how the maximum rate at which water may be taken under an unsupplemented water allocation is to be determined.

Clause 95(1)(a) states that where the existing authorisation states an authorised activity referring to the capability of a particular pump size that is listed in schedule 10, column 1, then the rate of take detailed in schedule 10, column 2 will apply. For a pump size other than mentioned in schedule 10, column 1, the rate is decided by the chief executive having regard to the rates stated for similar pump sizes in schedule 10, column 2.

Clause 95(1)(b) states that where the existing authorisation does not state an authorised activity referring to the capacity of particular pump size to take water but the associated development permit specifies a pump size that is listed in schedule 10, column 1, then the rate stated in column 2 of the schedule will apply. If the development permit states a

pump size that is not mentioned in schedule 8, column 1, then the chief executive must determine the maximum rate having regard to column 2 of the schedule.

However, for clause 95(1)(a) and 95(1)(b), if the holder of the authorisation satisfies the chief executive that the maximum rate of take is different from the rate decided, a new maximum rate will be decided by the chief executive. In deciding the maximum rate, the chief executive will have regard to the conditions under which water may be taken under the authorisation, the water taking capacity of the existing pump, the irrigation or water distribution system associated with the authorisation during the period of not more than 10 years prior to the commencement of the plan, and the efficiency of this water use.

For other authorisations where there is no authorised activity referring to the capacity of a particular pump and the associated development permit does not state a pump size for the works, clause 96(1)(c) provides for the maximum rate to be determined by the chief executive having regard to the type of authorisation and an estimate or measurement of the rate at which water can be taken under the authorisation. This situation would arise for an authorised diversion channel or similar.

The chief executive must ensure that the total volume that can be taken in a day at the maximum rate for the allocation is not less than the daily volumetric limit under section 96.

#### Daily volumetric limit for a water allocation

Clause 96 specifies how the daily volumetric limit for an unsupplemented water allocation is to be determined.

Section 96(1)(a) states that if the authorisation states a maximum rate in litres per second than this volume is to multiplied by 0.0864 to convert it into megalitres per day.

Clause 96(1)(b) states that where a maximum rate is not stated on the existing authorisation but an authorised activity refers to the capacity of a particular pump size in schedule 10, column 1, then the limit stated in schedule 10, column 3 applies. If the development permit states a pump size that is not mentioned in schedule 10, column 1, then the chief executive must determine the daily volumetric limit having regard to schedule 10, column 3.

Clause 96(1)(c) states that where a maximum rate or authorised activity referring to the capability of a pump size is not stated on the existing authorisation but the associated development permit states a pump size that is listed in schedule 10, column 1, then the limit stated in schedule 10, column 3 applies. If the development permit states a pump size that is not mentioned in schedule 10, column 1, then the chief executive must determine the daily volumetric limit having regard to schedule 10, column 3.

However, for clause 96(1)(b) and (c), if the holder of the authorisation satisfies the chief executive that the daily volumetric limit is different from the limit listed in schedule 10, the chief executive will determine a new limit having regard to the conditions under which water may be taken under the authorisation, the water taking capacity of the existing pump, the irrigation or water distribution system associated with the authorisation during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

If the daily volumetric limit or a maximum rate (litres/sec) is not stated on the existing authorisation, there is no authorised activity referring to the capacity of a particular pump and the associated development permit does not state a pump size for the works, clause 96(1)(c)(ii) provides for the daily volumetric limit to be determined by the chief executive having regard to the type of authorisation and an estimate or measurement of the rate at which water can be taken under the authorisation.

#### Annual volumetric limit for a water allocation

Clause 97 specifies how the annual volumetric limit for an unsupplemented water allocation is to be determined. The annual volumetric limit generally represents the maximum amount of water that can be taken under the authorisation in a water year.

For an authorisation which when converted will have a water allocation group of Class 0A, the annual volumetric limit will be the volume stated on the existing authorisation.

For an authorisation which when converted will have a water allocation group of either Class 9A, 9B, 10A, 10B, 11A, 11B, 12A or 13A, the annual volumetric limit is calculated by multiplying the daily volumetric limit determined under section 96 by the number of days stated in schedule 11, column 4 for the specified water allocation group.

For an authorisation which when converted will have a water allocation group of Class 8A, 10C or 13C and the authorisation states an area that may be irrigated, the annual volumetric limit will be determined by multiplying the area by 6. If the authorisation does not state an area, the annual volumetric limit will be determined by multiplying the daily volumetric limit under section 96 by the number of days stated in schedule 11, column 4 for the water allocation group.

#### **Conditions for water allocations**

Clause 98 states that the chief executive may determine and impose any condition on an unsupplemented water allocation if it is necessary to ensure the purpose and outcomes of the plan are achieved.

In deciding the flow conditions under which water may be taken under a water allocation, the chief executive must have regard to the conditions on the existing authorisation.

#### Monthly volumetric limit for a water allocation

Clause 99 states that for a water allocation converted from an authorisation that states an area that may be irrigated (an area based licence), a monthly volumetric limit for an unsupplemented water allocation may also be stated and is to be determined as follows.

When deciding the monthly volumetric limit for the water allocation the chief executive considers the volume of water required for the intended purpose. However, the monthly volumetric limit (expressed in megalitres) cannot be more than the area stated on the existing licence (in hectares), multiplied by 2. That is 2 megalitres per hectare.

#### Storing water taken under a water allocation

Clause 100 states that the chief executive may impose a condition on a water allocation that states woks that may be used to store the water taken under the allocation, for example a particular off-stream storage. In deciding whether to impose a condition the chief executive must have regard to the capacity of any existing overland flow works being used to store the water taken under the licence. This clause is to ensure plan outcomes are not compromised by actions that may increase the take of overland flow water beyond that provided for under division 8.

# Division 8 Water licences to take water from watercourse, lake or spring

Division 8 deals with water licences to take water from a watercourse, lake or spring. This division outlines the elements that must be stated on a water licence and how existing licences are to be amended to include these elements.

#### Subdivision 1 Form of water licences to take water from watercourse, lake or spring

Subdivision 1 outlines the elements that must be stated on a water licence to take water from a watercourse, lake or spring in the Fitzroy Basin.

#### Elements of water licences to take water from a watercourse, lake or spring

Clause 101 outlines the elements that must be stated on a water licence including the purpose for which water may be taken, the maximum rate at which water may be taken, the daily volumetric limit for the licence and the nominal entitlement for the licence. The purpose for which water may be taken must be stated on the licence as either 'stock and domestic', 'agriculture' or 'any'. Water licences may also state conditions, including flow conditions, conditions for storing water taken under the licence and may also state a monthly volumetric limit.

## Subdivision 2 Criteria for amending water entitlements to achieve plan outcomes

Subdivision 2 specifies how the elements of a water licence are to be determined when amending an existing water licence.

#### Definition for sdiv 2

Clause 102 defines the term amended water licence, a term used throughout this division.

#### Purpose to be stated on a water licence

Clause 103 states how the purpose stated on an amended water licence is to
be determined. If the purpose stated on the existing licence is stock or domestic, the purpose on the amended water licence must be 'stock and domestic'.

Where the existing licence states a purpose of irrigation, stock intensive, agriculture or similar, the purpose on the amended water licence must be 'agriculture'.

For other existing licences, the purpose stated on the amended water licence must be 'any'. This would typically apply to existing licences that would have a stated purpose of town water supply, mining industrial or waterharvesting.

#### Maximum rate for a water licence

Clause 104 specifies how the maximum rate at which water may be taken under an amended water licence is to be determined.

Clause 104(1)(a) states that if the existing licence stated both a maximum rate in litres per second and a daily volumetric limit, then the maximum rate on the amended water licence will be the maximum rate stated on the existing licence.

Clause 104(1)(b) states that if the existing licence did not state a maximum rate in litres per second and a daily volumetric limit, but stated an authorised activity referring to the capability for a particular pump size that is listed in schedule 10, column 1, then the rate stated in schedule 10, column 2 applies. For a pump size other than those found in schedule 10, column 1, the chief executive will decide the rate regarding similar pump sizes in schedule 10, column 2.

Clause 104(1)(c) states that if the existing licence did not state a maximum rate in litres per second and a daily volumetric limit, or an authorised activity referring to the capability for a particular pump size, but the associated development permit states a pump size that is listed in schedule 10, column 1, then the rate stated in schedule 10, column 2 applies. If the development permit states a pump size that is not mentioned in schedule 10, column 1, then the chief executive must determine a rate having regard to schedule 10, column 2.

Clause 104(1)(d) states that for another amended licence, the chief executive will decide the rate by considering the type of licence and an estimate or measurement of the rate at which water can be taken.

However for clauses 104(1)(b) and 104(1)(c), if the holder of the licence satisfies the chief executive that the rate of take is different from the rate listed in schedule 10, column 2, the chief executive will determine a new rate having regard to the conditions under which water may be taken, the water taking capacity of the pump, the irrigation or water distribution system associated with the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

#### Daily volumetric limit for a water licence

Clause 105 specifies how the daily volumetric limit for an amended water licence is to be determined.

Clause 105(1)(a) states that if the daily volumetric limit is stated on the existing licence then that same daily limit will apply to the amended water licence.

Clause 105(1)(b) states that if the daily volumetric limit is not stated on the existing licence but a maximum rate in litres per second is stated then the daily volumetric to be stated on the amended licence will be the maximum rate stated on the existing licence multiplied by 0.0864.

Clause 105(1)(c) states that if the existing licence stated neither a daily volumetric limit nor a maximum rate, but stated an authorised activity referring to the capability for a particular pump size that is listed in schedule 10, column 1, then the volume stated in schedule 10, column 3 applies. For a pump size other than those found in schedule 10, column 1, the chief executive will decide the volume regarding similar pump sizes in schedule 10, column 3.

Clause 105(1)(d) states that if the existing licence stated neither a daily volumetric limit nor a maximum rate nor an authorised activity referring to the capability for a particular pump size, but the associated development permit states a pump size that is listed in schedule 10, column 1, then the volume stated in schedule 10, column 3 applies. If the development permit states a pump size that is not mentioned in schedule 10, column 1, then the chief executive must determine a volume having regard to schedule 10, column 3.

Clause 105(1)(e) states that for another amended licence, the chief executive will decided the volume by considering the type of licence and an estimate or measurement of the daily rate at which water can be taken.

However for clauses 105(1)(c) and 105(1)(d) if the holder of the licence satisfies the chief executive that the daily volume is different from the volume listed in schedule 10, column 3, the chief executive will determine a new volume having regard to the conditions under which water may be taken, the water taking capacity of the pump, the irrigation or water distribution system associated with the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

#### Nominal entitlement for a water licence

Clause 106 specifies how the nominal entitlement for an amended water licence is to be determined. The nominal entitlement represents the maximum amount of water that can be taken under the water licence in a water year.

If the existing licence states the annual volume of water that may be taken under the licence, the stated volume will be the nominal entitlement for the amended water licence.

Where the existing licence does not state the annual volume of water that may be taken but states an area that may be irrigated under the licence, the nominal entitlement will be decided by the chief executive having regard to the volume of water required for the licence's intended purpose. This nominal entitlement must not be more than the volume, in megalitres, calculated by multiplying the area in hectares by 6. However if the holder of the licence satisfies the chief executive that the volume is different, the chief executive will determine a new volume haring regard to the intended purpose, the annual volumes

of water estimated to have been taken with the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

Where the existing licence states neither the annual volume of water that may be taken nor an area that may be irrigated under the licence (e.g. typical waterharvesting licence), then the nominal entitlement will be decided by the chief executive having regard to the conditions for taking water under the licence (e.g. flow threshold), the water taking capacity of any works (e.g. onfarm storages), the volume required for the intended purpose, the annual volumes of water estimated to have been taken with the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use. In these cases an assessment of the potential take of water after considering all of the above factors would assist the decision.

#### Monthly volumetric limit for a water licence

Clause 107 states the method for determining the monthly volumetric limit to be applied to existing water licences that state an area that may be irrigated.

When deciding the monthly volumetric limit for the water licence the chief executive considers the volume of water required for the intended purpose. However the monthly volumetric limit (expressed in megalitres) cannot be more than the area stated on the existing licence (in hectares), multiplied by 2.

#### **Conditions for water licences**

Clause 108 states that the chief executive may determine and impose any condition on an amended water licence if it is necessary to ensure the purpose and outcomes of the plan are achieved.

Examples of situations where it may be necessary to include other conditions on a water licence are—

- where water availability is limited during seasonal times of low flow; and
- where water availability during times of no flow is restricted to taking water from particular stream features such as waterholes.

In deciding the flow conditions under which water may be taken under an amended water licence, the chief executive must have regard to the conditions on the existing licence.

#### Storing water taken under a water licence

Clause 109 states that the chief executive may impose a condition on an unsupplemented water licence that states the works that may be used to store water taken under the licence, for example a particular on-farm storage.

In deciding whether to impose a condition, the chief executive must have regard to the capacity of any existing overland flow works being used to store the water taken under the licence. This clause is to ensure plan outcomes are not compromised by actions

that may increase the take of overland flow water beyond that provided for under division 9 of the plan.

# Division 9 Regulating overland flow water

Division 9 deals with the regulation of overland flow water in the plan area. This division outlines the limitation of taking overland flow water in the plan area, the taking of overland flow water using particular authorised existing overland flow works, the process for granting water licences under the resource operations plan, the elements to be stated on a water licence to take overland flow water and the relationship between works that allow the taking of overland flow water and the *Sustainable Planning Act 2009*.

#### Limitation on taking overland flow—Act, s 20(6)

Clause 110 specifies the situations in which a person may take overland flow water in accordance with section 20(6) of the Act. This means that the taking of overland flow in the plan area is prohibited unless authorised under this clause.

In the plan area, overland flow water may not be taken other than-

- for stock and domestic purposes (see schedule 4 of the Act for the definition of 'domestic purposes' and 'stock purposes'); or
- for another purpose, if the works that allow the take of overland flow water have a capacity of not more than:
  - 5ML if works are located in the Downstream of Fitzroy Barrage subcatchment, and
  - 50ML elsewhere in the Fitzroy Basin plan area; or
- under a water licence that authorises the take of overland flow; or
- the volume necessary to satisfy the requirements of an environmental authority issued under the Environmental Protection Act 1994; or
- the volume necessary to satisfy the requirement of a development permit for carrying out an environmentally relevant activity, other than mining or petroleum activity, under the Environmental Protection Act 1994; or
- for capturing contaminated agricultural runoff water (overland flow water that contains, or is likely to contain, excess nutrients or farm chemicals at levels potentially harmful to the quality of water in a watercourse); or
- if the take is incidental to the operation of a storage constructed to store coal seam gas water (defined under the Environmental Protection Act 1994) for which an entity holds an approval under the Waste Reduction and Recycling Act 2011, chapter 8; or
- if the take is incidental to the operation of a storage, constructed on a catchment of not more than 250 hectares located outside of the Downstream of Fitzroy Barrage subcatchment if that storage is primarily built to store other sources of water; or
- under section 111.

#### Taking water using particular existing overland flow works authorised

While clause 110 outlines when a person may take overland flow water, clause 111 provides for landowners with existing overland flow works in existence before 13 September 2001, to continue to use their works once they have notified the department of their works. This requirement to notify does not apply to landowners whose works are authorised to take overland flow water under clause 110(2)(a) to (g).

For example, works for taking only overland flow water for stock or domestic purposes do not need to be notified.

Clause 111 also provides for the holder of a mining tenement for land with existing overland flow works in existence at the commencement of this plan, to continue to use their works for a period of up to 12 months after the commencement of this plan or after they have notified the department of their works. Again, this requirement to notify does not apply to mining tenement holders whose works are authorised to take overland flow water under clause 110(2)(a) to (g).

Where notification is required and received by the department, the owner of land, holder of a mining tenement or petroleum tenure holder will be authorised to continue to take overland flow water using the notified works.

#### Granting water licences under the resource operations plan

Clause 112 applies if the resource operations plan states a process for granting a water licence to replace an authority given under clause 111 which allowed for the continued use of existing works to take overland flow water.

In following the process for granting a water licence, the chief executive must have regard to the average annual volume of overland flow water that could have been taken using the existing works immediately before the commencement of the plan. The chief executive must also consider the estimated annual volumes of overland flow water taken using the existing works during the period of not more than 10 years prior to the commencement of the plan.

Additionally, the chief executive may consider the extent to which the existing works allow the taking or storage of other water under another authorisation. For example, the existing overland flow works may also allow the storage of water taken from a watercourse under a water licence which may affect the amount of overland flow water captured by the existing overland flow works. This does not limit the maters the chief executive may consider.

In addition, the process may provide that the chief executive may require a certificate from a registered professional engineer of Queensland, which states information about the works including their capacity and rate at which water can be taken by the works.

#### Water licences to take overland flow water

Clause 113 outlines the elements that must be stated on a water licence to take overland flow water. The licence must state the purpose for which water may be taken, which must be either 'agriculture' or 'any'. The licence must also state at least one of the following—

- the maximum rate at which water may be taken under the licence
- the daily volumetric limit for the licence
- the nominal entitlement for the licence
- the maximum volume of water that may be stored under the licence.

Water licences to take overland flow water may also state any applicable conditions.

Relationship with Sustainable Planning Act 2009

Clause 114 states that certain works that allow the taking of overland flow water are assessable development for the *Sustainable Planning Act 2009*. For these works, development approval is required under the relevant code for assessable development prior to constructing works that allow the taking of overland flow water in the plan area. Works that are assessable development require a development permit under the *Sustainable Planning Act 2009*. Works for the taking of overland flow that are assessable for the *Sustainable Planning Act 2009*. Works for the taking of overland flow that are assessable for the *Sustainable Planning Act 2009* include:

- any works associated with the purchase of a water licence to take overland flow water
- · works which take contaminated agricultural runoff
- works which take overland flow water that is incidental to the operation of a storage constructed to store coal seam gas water for which an entity holds an approval under the *Waste Reduction and Recycling Act 2011*, chapter 8
- works which take overland flow water that is incidental to the operation of a storage located outside the Downstream of Fitzroy Barrage subcatchment and constructed to store water other than overland flow water on a catchment of not more than 250 hectares.

There are also certain works stated that are self-assessable development and do not require a development permit, but must still conform with the relevant self-assessable development code. Works for the taking of overland flow that are self-assessable for the *Sustainable Planning Act 2009* are—

- works for the taking of overland flow water only for stock or domestic purposes (and for no other purpose)
- works that allow the taking of overland flow water for any purpose which have a storage capacity of not more than 5 megalitres Downstream of Fitzroy Barrage and 50 megalitres in the remainder of the Fitzroy Basin, and
- works for the taking of only the amount of overland flow water necessary to satisfy the requirements of an environmental authority, or a development permit for carrying out an environmentally relevant activity, other than for a mining or petroleum activity, under the *Environmental Protection Act 1994*.

The repair and maintenance of both existing overland flow works to which clause 111 applies and works constructed under a development permit, is neither assessable nor self-assessable development, if the repair or maintenance does not alter the design (including storage size) of the works.

# Part 3 Additional strategies for groundwater

Part 3 deals with water licences to take groundwater. This part outlines:

- · the limitations on taking or interfering with groundwater
- the relationship between works that allow the taking of groundwater and the Sustainable Planning Act 2009
- elements that must be stated on a water licence and how existing licences are to be amended to include these elements
- the taking of groundwater using particular authorised groundwater works including the process for granting water licences under the resource operations plan

- the strategies for converting unsupplemented groundwater authorisation to water allocations
- the process to determine nominal entitlements on amended water licences, the nominal volume on converted groundwater supplemented water allocations and the annual volumetric limit on converted unsupplemented water allocations in the Upper Callide, Lower Callide and Prospect groundwater sub-areas and the Callide Valley Water Supply Scheme.

## Division 1 Preliminary

#### Application and purpose of pt 3

Clause 115 states that part 3 applies only to groundwater in a groundwater management area and states the strategies for the sustainable management outcomes mentioned in chapter 3.

#### Limitation on taking or interfering with groundwater—Act, s 20(6)

Clause 116 specifies the situations in which a person may take groundwater in accordance with 20(6) of the Act. This means that the taking of groundwater in a groundwater management area is prohibited unless authorised under this clause.

In a groundwater management area, groundwater may not be taken other than:

- under a water permit;
- under a water licence;
- under an interim water allocation;
- under a water allocation;
- under clause 124; or
- for the purpose of stock or domestic.

#### **Relationship with Sustainable Planning Act 2009**

Clause 117 states that works that allow the taking of groundwater within the Carnarvon groundwater management, including those works for taking groundwater for stock or domestic purposes, are assessable development for the *Sustainable Planning Act 2009*. This means that development approval is required under the relevant code for assessable development prior to constructing works that allow the taking of groundwater in the Carnarvon groundwater management area. However, a replacement water bore for which a development permit is held for the existing water bore is self-assessable development but must conform with the relevant self-assessable development code.

In a groundwater management area other than the Carnarvon groundwater management area, works that allow the taking of groundwater water are assessable development for the *Sustainable Planning Act 2009*, with the exception of works for stock and domestic purposes. Works that are for stock and domestic purpose are self-assessable development and do not require a development permit but must conform with the relevant self-assessable development code. A replacement water bore, constructed to replace the original water bore is self-assessable development and must conform with the relevant self-assessable development code.

## Division 2 Water licences to take groundwater

#### Subdivision 1 General

#### Elements of water licences

Clause 118 outlines the elements that must be stated on a water licence including the purpose for which water may be taken and the nominal entitlement for the licence. The purpose for which water may be taken must be stated on the licence as either 'agriculture' or 'any'. Water licences may also state conditions.

These requirements are not required for licences for mine dewatering granting under section 206 of the Act.

# Subdivision 2 Criteria for amending water entitlements to achieve plan outcomes

#### Definition for sdiv 2

Clause 119 defines the term *amended water licence*, a term used throughout this subdivision.

#### Purpose to be stated on a water licence

Clause 120 states how the purpose stated on an amended water licence is to be determined. If the purpose stated on the existing licence is agriculture, irrigation, stock intensive or similar, the purpose on the amended water licence must be 'agriculture'.

For other existing licences, the purpose stated on the amended water licence must be 'any'. This would typically apply to existing licences that would have a stated purpose of town water supply or industrial.

#### Nominal entitlement for a water licence

Clause 121 specifies how the nominal entitlement for an amended water licence is to be determined. The nominal entitlement represents the maximum amount of water that can be taken under the water licence in any water year.

If the existing licence is located in the Upper Callide or Prospect Creek groundwater subareas the nominal entitlement on the amended licence will be decided by the chief executive under clause 140.

If the existing licence is located elsewhere in the Fitzroy Basin and states the annual volume of water that may be taken under the licence, the stated volume will be the nominal entitlement for the amended water licence. If the existing licence does not state the annual volume of water that may be taken, the nominal entitlement will be decided by the chief executive. In making a decision, the chief executive will have regard to the conditions under which water may be taken under the existing licence, the water taking capacity of the existing works, the volume of water required for the licence's purpose,

the annual volumes of water estimated by the chief executive to have been taken under the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

#### **Conditions for water licences**

Clause 122 states that the chief executive may determine and impose any condition on an amended water licence if it is necessary to ensure the purpose and outcomes of the plan are achieved. In deciding the conditions under which water may be taken under an amended water licence, the chief executive must have regard to the conditions on the existing licence.

#### Subdivision 3 Dealing with particular existing groundwater works

#### **Definition for sdiv 3**

Clause 123 states that 'prescribed existing groundwater works' are works that the chief executive is satisfied were used, or were capable of being used, to take groundwater for a purpose—other than stock or domestic purposes— from the following—

- Isaac Connors Groundwater Unit1 in the Isaac Connors groundwater notification area and the works were in existence on 15 December 2006 (release date of original moratorium prior to its cancellation and coverage by a new moratorium on the 14 December 2010)- the; or
- Isaac Connors Groundwater Unit1 in the Isaac Connors groundwater notification area and the works were in existence on the 14 December 2010 (release date of moratorium; or
- Callide groundwater notification area and the works were in existence on the 14 December 2010 (release date of moratorium).

#### Taking groundwater using prescribed existing groundwater works

Clause 124 authorises the owner of land, in the Isaac Connors and Callide groundwater notification areas, on which existing groundwater works are situated to continue the take of groundwater using the works for a period of 1 year after the commencement of the plan.

If the landowner gives the chief executive notice of the existing groundwater works and any further information reasonably required by the chief executive about the works, of the commencement of the plan, then the landowner can continue to use the works.

Authorisation of the take of groundwater under this section ceases to apply if the owner is granted a water licence relating to the works. This is expected to occur through the resource operations plan.

#### Granting water licences for using prescribed existing groundwater works

Clause 125 states the chief executive may, under section 212 of the Act, grant a water licence to continue the take groundwater to a person authorised under the 124 (3).

The clause also states that the licence must be consistent with part 3.

#### Nominal entitlements for authorisations

Clause 126 applies when determining the nominal entitlement for a water licence mentioned in clause 125. The nominal entitlement represents the maximum amount of water that can be taken under the water licence in a water year.

The nominal entitlement is to be the estimated volume to take groundwater for the entitlement. This estimated volume means the lesser of:

- the volume worked out by multiplying the capacity of the existing groundwater works by the number of hours the chief executive decides having regard to the efficiency of use and availability of other water sources. However the number of hours must not be more than 2000 hours per year.
- the volume of groundwater taken using the existing groundwater works for irrigation purposes for each year during the period of not more than 10 years immediately before the commencement of this plan, if the volume is not more than 6ML of water for each hectare of property.

However if the holder of the licence satisfies the chief executive that the volume is different, the chief executive will determine a higher volume having regard to:

- the efficiency of the use of the groundwater mentioned in paragraph (c) or (d);
- the availability of groundwater in the aquifer to which the works relate;
- the availability of water sources in the area to which the entitlement relates; and
- the density of water bores for taking groundwater in the area which the entitlement relates.

In considering whether a higher volume was taken during the relevant period the chief executive must consider—

- the water-taking capacity of the prescribed existing groundwater works as at the commencement of this plan;
- the number of hours the works were operating during the relevant period;
- for works with irrigation purposes—the volume of groundwater estimated by the chief executive to have been taken during the relevant period for irrigating crops grown during the period; and
- for works for a purpose other than irrigation purposes—the volume of groundwater estimated by the chief executive to have been taken during the relevant period for the purpose.
- The chief executive is not limited when considering nominal entitlements for groundwater.

# Division 3 Converting authorisations to water allocations to take unsupplemented groundwater

Division 3 contains provisions for converting authorisations to water allocations to take unsupplemented groundwater including stating those authorisations to be converted to water allocations, the elements to be stated on the water allocations and how each of the elements is to be determined.

#### Purpose of div 3

Clause 127 states that division 3 contains strategies for authorisations that will convert to unsupplemented groundwater allocations under the resource operations plan.

These provisions are consistent with section 121 of the Act, which specifies that on the day the resource operations plan commences, all authorisations to be converted under the plan will expire and the chief executive will grant the new unsupplemented groundwater allocations that are specified.

#### Definition for div 3

Clause 128 defines the term *previous authorisation*, a term used throughout this subdivision.

#### Authorisations to be converted to water allocations

Clause 129 states that the authorisations to take unsupplemented groundwater to be converted to water allocations, are the water licences to take groundwater in the Lower Callide groundwater sub-area. Those licences for taking water for stock or domestic purposes will not be converted to water allocations.

#### **Elements of water allocations**

Clause 130 sets out the attributes that will be specified on a water allocation to take unsupplemented groundwater. They comprise the location at water may be taken, the purpose for which it may be taken, a nominal volume, an annual volumetric limit, the water allocation group to which the allocation belongs, conditions under which groundwater may be taken, and the groundwater management area to which the allocation belongs.

#### Location for taking water under a water allocation

Clause 131 states that a location for taking water stated on a water allocation must include the place at which water could have been taken under the previous authorisation. The location for a water allocation will be specified as a particular part of an aquifer (known as a zone) from which water may be accessed.

#### Purpose to be stated on a water allocation

Clause 132 states that the purpose to be stated on an unsupplemented groundwater allocation will be 'agriculture' or 'any'.

Previous authorisations that would be converted to an unsupplemented groundwater allocation for 'agriculture' purpose would currently have a stated purpose of stock intensive, irrigation, agriculture or a similar purpose.

For other authorisations, the purpose stated on a water allocation must be 'any'. Typically, these are previous authorisations would currently have a stated purposes of town water supply or industrial.

#### Nominal volume for a water allocation

Clause 133 lists the factors the chief executive will consider in determining the nominal volume for unsupplemented water allocations. They comprise the local availability of groundwater, the conditions under which groundwater may be taken under the authorisation, the annual volumetric limit for the proposed water allocation and the simulated mean annual diversion for the proposed water allocation. The simulated mean annual diversion is calculated using the Callide Valley groundwater computer program (see clause 25) and represents an assessment of the average volume of groundwater that could have been taken under an authorisation or group of authorisations during the historic simulation period of record.

The nominal volume is an important element of an unsupplemented groundwater allocation because it represents, in megalitres, the share of the total volume of water available to be taken by the holder of the water allocation in water allocation groups in the plan area. The nominal volume basically reflects the long-term average take for the water allocation.

The nominal volume for an unsupplemented groundwater allocation should not be confused with the annual volumetric limit which represents the maximum amount of water authorised to be taken in a water year. The amount of water that could actually be taken in any particular year will be subject to a number of factors including the local availability of water. When water levels in aquifers are low the amount of water available to be taken may be less, and when the levels are higher the volume available to be taken may be more.

#### Annual volumetric limit for a water allocation

Clause 134 states that the annual volumetric limit for a water allocation to take unsupplemented groundwater is to be decided by the chief executive under clause 140.

#### Water allocation groups

Clause 135 details the water allocation groups to which water allocations to take unsupplemented groundwater belong.

For a water allocation to take unsupplemented groundwater from the Lower Callide groundwater sub-area—

- the GW1A water allocation group is for water allocations converted from water authorisations 43919D and 68856D; and
- the GW1B water allocation group for all other water allocations.

This allows for two water allocations to be converted from water licences (43919D) and (68856D) held by Banana Shire Council for Goovigen and Jambin town water supplies to belong to their own water allocation group. This will allow for that allocation to have preferential access to available groundwater under future water sharing rules in the resource operations plan.

#### **Conditions for water allocations**

Clause 136 states that the chief executive may determine and impose any condition on an unsupplemented groundwater allocation if it is necessary to ensure the purpose and outcomes of the plan are achieved.

In deciding the conditions under which water may be taken under a groundwater allocation, the chief executive must have regard to the conditions on the previous authorisation.

# Division 4 Nominal entitlements for amended water licences and nominal volumes and annual volumetric limits for new supplemented groundwater allocations

Division 4 contains provisions for determining the nominal entitlements for amended water licences, nominal volumes for new supplemented water allocation and annual volumetric limits for new unsupplemented water allocations.

#### Application of div 4

Clause 137 states that division 4 applies to-

- interim water allocations mentioned in clause 51 and converted under section 121 of the Act to supplemented groundwater allocations (those medium priority interim water allocations supplied from the Callide Valley Water Supply Scheme).
- water licences mentioned in section 121(1) and amended under the resource operations plan (those water licences to take groundwater from the Upper Callide and Prospect Creek groundwater sub-areas).
- authorisations mentioned in clause 129 and converted under section 121 of the Act to unsupplemented groundwater allocations (those water licences to take groundwater from the Lower Callide groundwater sub-area).

#### Purpose of div 4

Clause 138 states that the purpose of division 4 is to provide nominal volumes for the supplemented water allocations to be converted from interim water allocations mentioned in section 137(a), nominal entitlements for the amended licences mentioned

in section 137(b) and the annual volumetric limit for unsupplemented water allocations to be converted from authorisations mentioned in section 137(c).

#### **Definitions for div 4**

Clause 139 defines a number of terms which are used throughout this division.

# Nominal entitlement for an amended water licence or nominal volume or annual volumetric limit for a water allocation

Clause 140 specifies that a water allocation, as set out in clause 137(a), is to have a nominal volume. It also specifies that a water licence mentioned in 137(b) is to have a nominal entitlement and a water allocation mentioned in 137(c) is to have an annual volumetric limit. These volumes are to be determined by adding the preliminarily volume determined under clause 141 with any additional volume determined under clause145.

#### Preliminary nominal volume, nominal entitlement or annual volumetric limit

Clause 141 determines the preliminary volume based on the 13-year history of use (1997–2010) of the existing authorisation. This will lead to a larger preliminary volume for active users who would typically have reasonable access to available water. Those authorisations that do not have a history of use will receive a preliminary volume of 5 ML but no greater than the authorisation's nominal entitlement.

The history of use methodology is based on linking the historic usage to the converting authorisation's earlier history. Clause 141(2) further states that the additional 5 ML mentioned in this clause, is to apply only to authorisations existing on 14 December 2010 (the date of the release of the draft plan) and that any subdivisions or amalgamations that occurred after July 2010 will be taken into account and the volumes adjusted accordingly.

#### 2010 authorisation volume

Clause 142 states that the 2010 authorisation volume for a 2010 authorisation is the mean—rounded up to the nearest megalitre—of the five largest annual adjusted use volumes for the 2010 authorisation.

#### Annual adjusted use volume

Clause 143 states how to determine the annual adjusted use volume for a 2010 authorisation for each water year in the history of use consideration period (1997-2010).

For 2010 authorisations not affected by subdivision or amalgamation during the history of use period, the volume is the deemed use for the authorisation as adjusted under subsection 2. For other 2010 authorisations, it is the sum of the deemed use for each earlier authorisation adjusted under subsections 2 and 3.

Subsection 2 states the process for adjusting the deemed use for an authorisation for each water year. The process has three parts and in this order—

- any deemed use for the authorisation can be attributed to the particular water year given that it is within the amount of the announced allocation volume
- any remaining deemed use up to the volume taken under carry over is to be attributed to the water year from which the carry over was derived
- any remaining deemed use up to the volume taken as a forward draw is to be attributed to the water year from which the forward draw was derived.

Subsection 3 also adjusts the deemed use for those authorisations subject to subdivision or amalgamation.

When adjusting authorisation with respect to amalgamation, the deemed use from all contributing authorisations is added to the amalgamation.

When adjusting for the subdivision of an authorisation, the deemed use is to be distributed between the resulting authorisations in the same ratio as the nominal entitlement of the subdivided authorisation was assigned to the resulting authorisations.

Subsection 4 defines 'announced allocation volume' as the volume of water authorised to be taken in a water year under the authorisation, not including any carry over or forward draw.

#### Deemed use for an authorisation

Clause 144 states how the deemed use for an authorisation is to be calculated.

Subsection 1 states that the deemed use for each 2007 authorisation and pre-2007 contributing authorisation is to be calculated by the chief executive for each water year in the HOU consideration period.

Subsection 2 outlines what the chief executive must consider and disregard when calculating the deemed use for an authorisation. The chief executive must consider—

- the accounted use for all water users in the Upper Callide, Lower Callide and Prospect Creek groundwater sub-areas and the Callide Valley Water Supply Scheme, and
- the volumes of water taken under a seasonal water assignment or temporary transfer arrangement.

The chief executive must disregard—

- the volumes of water considered to be taken under a stock or domestic accounting arrangement, and
- any volume of water taken that the chief executive is satisfied was not authorised to be taken under the authorisation.

Subsection 3 defines-

- 'stock or domestic accounting arrangement' means an arrangement that allows for a
  particular volume of water taken to be considered as water taken for stock or
  domestic purposes, and
- 'temporary transfer arrangement' means an arrangement that had the same effect as seasonal water assignment and was implemented prior to the commencement of the Act.

#### Additional nominal volume, nominal entitlement or annual volumetric limit

Clause 145 provides for the chief executive to determine an additional nominal volume for a supplemented water allocation, additional nominal entitlement for a water licence or additional annual volumetric limit for an unsupplemented water allocation (top-up volume) as long as the—

- total nominal volume for all converted groundwater allocations (preliminary volume and top-up volume) in the Callide Valley Water Supply Scheme does not exceed 14500ML, and
- total nominal entitlement for all amended groundwater licences (preliminary volume and top-up volume) in the Upper Callide and Prospect Creek groundwater sub-areas does not exceed 2500ML, and
- total annual volumetric limit for all converted groundwater allocations (preliminary volume and top-up volume) in the Lower Callide groundwater sub-area does not exceed 6000ML.

To be eligible for the top-up volume, the holder of the converting authorisation or amending authorisation (the relevant authorisation) must make a submission on the draft resource operations plan, to the chief executive, demonstrating why the preliminary volume does not meet the water needs of the potential productive capacity of their enterprise as at 14 December 2010 (the enterprise's productive capacity).

The purpose of the submissions process is to allow water users in the Callide Valley Water Supply Scheme and Upper Callide, Prospect Creek and Lower Callide groundwater sub-areas to apply for an additional allocation of water to top up their initial "history of use" allocation, if they have a substantial reason to believe that their water allocation in the draft Fitzroy Basin Resource Operation Plan is not sufficient to meet the potential productive capacity of their enterprise as it was at the date of the release of the draft plan.

An independent ROP Referral Panel will consider all submissions received in relation to the additional or top-up volume and make recommendations to the chief executive.

In determining the top-up volume for an authorisation, the chief executive is to consider—

- the information contained in the submission
- the nominal entitlement of the existing authorisation i.e. the preliminary volume plus any additional or top-up volume cannot exceed the volume already stated on the authorisation
- the preliminary volume for the relevant authorisation as determined under clause 141
- the extent to which the enterprise's productive capacity is dependent on groundwater and includes the efficient use of groundwater
- local availability of groundwater
- the overall volumetric caps set out for each of the three areas in subsection 2
- any other relevant matters.

Any activities undertaken to increase the potential productive capacity of the enterprise after 14 December 2010 are not eligible for consideration of an additional volume for the relevant authorisation.

# Chapter 6 Monitoring and reporting requirements

Chapter 6 states the provisions for monitoring and reporting for the plan area under-

- monitoring;
- monitoring programs undertaken by operators of infrastructure;
- · operators of infrastructure to give reports; and
- minister's report on plan—Act, s 53.

These provisions are essential elements of a water resource plans implementation because they provide a basis for measuring the effectiveness of the plan's strategies in achieving its outcomes.

#### Monitoring

Clause 146 details the water and natural ecosystems monitoring requirements for the plan. Detailed monitoring and reporting requirements will be specified in the resource operations plan.

Subsection 1 states that the monitoring requirements include water monitoring for stream flows, taking and diverting water, releases from water storages, water quantity for water storages—including inflow, storage volume or level and outflow— and groundwater levels. There are monitoring requirements for natural ecosystems in relation to the volume, frequency, duration and timing of stream flows and information on hydraulic habitat requirements of ecological assets in the plan area.

There are further monitoring requirements for groundwater developments including records of water bores drilled, existing overland flow works of which the chief executive is notified of under section 111 (3) and other water and natural ecosystems monitoring required by the chief executive.

Subsection 2 sates how these monitoring requirements are to be achieved. There are monitoring programs undertaken by operators of infrastructure for interfering with water under the resource operations plan, monitoring programs administered by the chief executive and relevant State agencies and other monitoring programs considered by the chief executive considered to be relevant to the matters mentioned in subsection 1.

#### Monitoring programs undertaken by operators of infrastructure

Clause 147 states that an operator of infrastructure for interfering with water must develop and undertake monitoring programs detailed for them in the resource operations plan.

The monitoring programs developed and undertaken by the operator must assist in enabling the chief executive to assess the effectiveness of the strategies outlined in chapter 5.

#### Operators of infrastructure to give reports

Clause 148 specifies that an operator of infrastructure for interfering with water must give a written report to the chief executive relating to the operation of infrastructure, detailing—

- the information obtained by the monitoring programs mentioned in clause 147;
- decision made by the operator in managing water and infrastructure or distributing water;
- information about non-compliance by the operator with the requirements of the resource operations plan; and
- any remedial or emergency action taken by the operator.

The extent to which this information is required to be provided by any particular operator will be specified in the resource operations plan.

This clause also specifies the timing for giving these written reports.

#### Minister's report on plan-Act, s 53

Clause 149 specifies the requirements for the preparation of the minter's report on the plan.

The intent of this report is to assess the effectiveness of the implementation of the plan in achieving the plan's outcomes.

The first report must be prepared for the financial year in which the plan commences. A subsequent report must be prepared for each financial year the plan is in force. Each report must be prepared within 6 months after the end of the financial year to which the report relates.

If the minister is satisfied about any of the matters outlined in clause 152 of this plan, as triggers for considering amending or replacing the pan, the report must include a consideration of the matters.

In accordance with section 1009 of the Act, the chief executive must make a copy of the report available for inspection or purchase by the public during office hours on business days, at the head office or the appropriate regional office of the department.

# Chapter 7 Implementing and amending this plan

Chapter 7 outlines the schedule for implementation of the plan, minor or stated amendments for the plan and triggers for the Minister to consider amending or replacing the plan.

The water resource plan will be primarily implemented through a resource operations plan. The resource operations plan will grant, and convert authorisations to, water allocations in accordance with the water resource plan. The resource operations plan will also define the day-to-day rules for the management of water in the water supply schemes to ensure the plan's outcomes are achieved. Water service providers will be

required to show through monitoring and reporting that operating arrangements for their supply infrastructure comply with these rules.

#### Implementation schedule

Clause 150 states the proposed arrangements for implementing the plan. The clause states that within 3 years after the commencement of the plan it is proposed to amend the resource operations plan in order to implement the plan. The key elements of the resource operations plan will be—

- to grant and convert existing authorisations to water allocations to take water in all priority areas
- to amend water licences in the Upper Callide Valley and Prospect Creek groundwater sub-areas
- to amend existing unsupplemented water allocation established under the repealed Water Resource (Fitzroy Basin) Plan 1999 in accordance with clause 87(2)
- to define the environmental management, infrastructure operating, water sharing, water allocation change and seasonal assignment rules for the Callide Valley Water Supply Scheme
- to establish a process to grant licences to take groundwater in the Callide groundwater notification area and the Isaac Connors groundwater notification area
- to establish a process to deal with unallocated water that is available to meet future water needs in the plan area
- to establish a process for granting or amending water licences to take overland flow water, and
- to implement the monitoring requirements mentioned in chapter 6.

This clause also defines 'priority area' as the Callide Valley Water Supply Scheme and the Lower Callide groundwater sub-area in the Callide groundwater management area. It also defines the following parts of the Fitzroy Basin—

- the Nogoa River from the upstream limit of the Fairbairn Dam at AMTD 737.5km to its junction with Theresa Creek
- Theresa Creek from its junction Retreat Creek at AMTD 15.0km to its junction with the Nogoa River
- Retreat Creek, including anabranches, from its junction with Kettle Creek at AMTD 23.6km to its junction with Theresa Creek
- the Comet River, including anabranches, from lake Brown gauging station AMTD 199.2km to its junction with the Nogoa River
- the Dawson River from the upstream limit of Glebe Weir at AMTD 356.5km to its junction with the Mackenzie River, including sections of tributaries where Dawson River flows are accessible, and
- the Dawson River from Utopia Downs gauging station at AMTD 453.5km to the upstream limit of Glebe Weir at AMTD 365.5km, including sections of tributaries where Dawson River flows are accessible.

#### Minor or stated amendment of plan—Act, s 57

Clause 151 states the types of amendments that may be made to the plan under section 57(b) of the Act. A minor amendment is one to correct a minor error or to make a change that is not a change of substance. A stated amendment is one that is listed in a water resource plan.

This clause provides for a number of amendments to be made to the plan-

- an amendment or addition of an environmental flow objective if this would achieve an
  equivalent or improved ecological outcome without adversely affecting the outcomes
  mentioned in chapter 3 or the water allocation security objectives mentioned in
  chapter 4, part 2
- an amendment or addition of a water allocation security objective if the amendment or addition does not adversely affect the outcomes mentioned in chapter 3 or the environmental flow objectives mentioned in chapter 4, part 1
- an amendment or addition of a node
- an amendment to subdivide a subcatchment area
- an amendment to adjust the boundaries of a groundwater management area and groundwater sub-area if more accurate information about the boundaries of the plan area of hydrological characteristics of the plan area becomes available
- an amendment or addition of a priority group
- an amendment or addition of a water allocation group
- an amendment of the capacity of works to take overland flow water mentioned in section 110(2)(b), and
- an amendment or addition of a monitoring or reporting requirement under chapter 6.

#### Amending or replacing plan

Clause 152 outlines the situations where the minister must consider amending the plan or preparing a new plan.

The minister must consider amending or replacing the plan if satisfied, in relation to the plan's general outcomes, water entitlements in the plan area are not sufficient to meet water needs and there are economically viable and ecologically sustainable uses for additional water.

In considering whether water entitlements are sufficient, the minister must have regard to a number of matters including the extent to which water is being taken under existing entitlements, the efficiency of water use, emerging water demands, water savings that may be made from improvements in water use efficiency or the use of water from other sources and the likely timeframe for additional water requirements.

Additionally, the minister must consider amending or replacing the plan if satisfied that the plan's specific surface water and groundwater outcomes under section 13, the general ecological outcomes under section 14 or the specific ecological outcomes under section 15 are not being met.

# Chapter 8 Repeal

#### Repeal

Clause 153 states that the Water Resource (Fitzroy Basin) Plan 1999 is repealed.

# Schedules

## Plan area

Schedule 1 contains a map showing the area to which the plan applies.

## Subcatchment areas

Schedule 2 contains a map showing the subcatchment areas within the Fitzroy Basin.

## Groundwater management areas

Schedule 3 contains a map of the groundwater management areas which includes boundaries of groundwater notification areas in the Fitzroy Basin.

## **Groundwater sub-areas**

Schedule 4 contains maps showing the groundwater sub-areas in the Fitzroy Basin-

- Map A Upper Callide groundwater sub-area
- Map B Lower Callide groundwater sub-area
- Map C Prospect Creek groundwater sub-area
- Map D Don and Dee groundwater sub-area
- Map E Isaac Connors Alluvium groundwater sub-area
- Map F Sandy Creek Alluvium groundwater sub-area.

# Nodes

Schedule 5 contains maps showing location of both surface water and groundwater nodes and lists the nodes referred to in the plan including a description of their location.

# **Environmental flow objectives**

Schedule 6 states the environmental flow objectives for the plan. Part 1 tabulates the seasonal base flow objectives for particular surface water nodes in the Fitzroy Basin. Part 2 tabulates the medium to high flow objectives for particular surface water nodes in the Fitzroy Basin. Part 3 tabulates and defines the first post winter flow event objectives

for various surface water nodes in the Fitzroy Basin. Part 4 tabulates the environmental flow objectives for groundwater nodes in the Fitzroy Basin.

# Water allocation security objectives

Schedule 7 states the water allocation security objectives for the plan. Part 1 states the water allocation security objectives for supplemented water by water supply scheme and priority group. Part 2 tabulates the water allocation security objectives for unsupplemented surface water by water allocation group. Part 3 states the water allocation security objectives for unsupplemented groundwater in the Lower Callide groundwater sub-area by water allocation group.

# **Unallocated water**

Schedule 8 tabulates the locations and available volumes of unallocated water.

- Part 1 tabulates the strategic reserve for surface water, in units of nominal entitlement, that may be granted as a water licence, by subcatchment for a state purpose or Indigenous purpose
- Part 2 tabulates the strategic reserve for groundwater, in units of nominal entitlement, that may be granted as a water licence, by groundwater management area, unit or sub-area
- Part 3 tabulates the general reserve for surface water, in units of mean annual diversion, that may be granted as a water licence or water allocation by subcatchment
- Part 4 tabulates the general reserve for surface water, in units of nominal volume, that may be granted as a water allocation by subcatchment, and
- Part 5 tabulates the general reserve for groundwater, in units of nominal entitlement, that may be granted as a water licence by groundwater management area, unit or sub-area.

# Water licences

Schedule 9 states the details of licences that may granted under clauses 83 and 84.

# Rates and pump size

Schedule 10 states the rates of take of water for various pump sizes. For each pump size stated, the maximum rate is expressed in litres per second and the daily volumetric limit in megalitres per day. See clauses 95(1), 96(1), 104(1) and 105(1) for more information.

# Water allocation groups to take unsupplemented surface water

Schedule 11 links with clause 91(2) and tabulates the water allocation groups (column 3) for water allocations to take unsupplemented surface water against the location (column 1) and flow conditions (column 2) of the converting authorisation.

The schedule also sets up the "number of days" (column 4) for the various water allocation groups. This is used in determining the annual volumetric limit for the allocation under clause 97.

## Formula for annual proportional flow deviation

Schedule 12 provides the formula for annual proportional flow deviation described in Schedule 6 environmental flow objectives part 2 for medium to high flow objectives.

### Dictionary

Schedule 13 contains the dictionary of defined terms used in the plan.

# ENDNOTES

- 1 Laid before the Legislative Assembly on . . .
- 2 The administering agency is the Department of Environment and Resource Management.

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