Department of Environment
and Resource Management

Mary Basin

Resource Operations Plan Explanatory Notes

September 2011

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Contents

Chapter 1 Preliminary

The purpose of these notes is to provide a plain English guide to the Mary Basin Resource Operations Plan 2011 (the plan). The rules and provisions of the plan implement the Water Resource (Mary Basin) Plan 2006 (the water resource plan). The numbering and partitioning of the explanatory notes correspond to those in the plan.

These notes are intended to assist the reader in understanding the plan's rules and provisions. These notes provide a simple explanation and background information on each of the chapters in the plan. The notes should be read in conjunction with the plan, as the detail is contained within the plan itself.

1 Short title

Subsection (1) declares the 'plan' will be known as the Mary Basin Resource Operations Plan 2011.

Subsection (2) states all references to this 'plan' in the document mean the Mary Basin Resource Operations Plan 2011.

2 Commencement of the resource operations plan

This section states that the rules and requirements of the plan begin on the first business day after the plan is notified in the Queensland Government Gazette. However, some requirements include a timeline for implementation, therefore the actual implementation of those requirements might occur after the plan has commenced.

3 Purpose of plan

This section states the purpose of the plan is to implement the water resource plan.

The plan sets out the rules and requirements that guide the day-to-day management of stream flows and water infrastructure in the plan area to achieve the outcomes and objectives of the water resource plan. The plan also sets out the rules for converting existing water entitlements to water allocations.

4 Interpretation of words used in this plan

This section advises the reader that the glossary is in Attachment 1 of the plan. The glossary explains particular terms used in the plan. Terms defined in the glossary of the water resource plan or the *Water Act 2000* are not defined in the plan.

5 Plan area

This section defines the area to which the plan applies. The plan area includes the Burrum River, Mary River, Maroochy River and Mooloolah River catchments and the catchments of a number of smaller coastal watercourses. A map of the plan area can be found in Attachment 2, Figure 1 of the plan.

6 Water to which this plan applies

The plan applies to surface water across the entire plan area and to subartesian water in the Cooloola Sandmass subartesian area.

The plan does not apply to subartesian water in any other part of the plan area, artesian water, or overland flow. Artesian water is water that occurs naturally in, or is introduced artificially into, an aquifer, which if tapped by a bore, would naturally flow to the surface. Overland flow is water, including floodwater, flowing over land, otherwise than in a watercourse or lake, after having fallen as rain or in any other way, or after rising to the surface naturally from underground.

The plan does not apply to groundwater (artesian or subartesian water) outside of the Cooloola Sandmass subartesian area. Further groundwater management would be addressed in future if assessments indicate that groundwater development may be impacting on the outcomes or objectives of the water resource plan.

7 Resource operations plan zones

This section states parts of the plan area have been further divided into 10 resource operations plan zones (zones) as shown on the maps in Attachment 2, Figures 2 to 10 of the plan. These zones specify the locations

of water allocations within a particular reach of the river and provide geographic limits for water trading that ensure the water resource plan's water allocation security objectives and environmental flow objectives are achieved.

Water allocation change rules provide for trading of water allocations between some zones.

8 Information about areas, schemes and zones

This section advises the reader the Department of Environment and Resource Management (the department) holds digital maps of the plan area, water supply schemes and all the zones relevant to the plan area. The maps show where the plan-related boundaries lie in relation to property boundaries and watercourses. The maps can be viewed at any of the department's offices and can be enlarged or reduced to show the details of any particular boundary.

9 Purpose of a water allocation

Subsection (1) states water can only be used for the purpose that is specified as part of the water allocation. When water is taken under a water allocation, it must be used for that purpose.

Subsection (2) states the subsection above does not apply when water is taken under a seasonal water assignment, unless the purpose is distribution loss.

Generally, seasonal water assignments can be used for any purpose except distribution loss.

Distribution loss water allocations provide for water losses associated with the distribution of water in a water supply scheme. Losses typically include evaporation and seepage linked with water delivery via channel systems.

10 Metering

This section states a meter must be used to measure the amount of water taken under a water allocation or seasonal water assignment in the plan area. The meter used must comply with the National Standards. This section only applies to water entitlements managed under a resource operations licence.

Stock and domestic water use (water taken under riparian water rights) will not be metered.

11 Departmental water monitoring data collection standards

The plan states any monitoring and data collection under the plan must be undertaken in accordance with the plan's requirements. It must also be consistent with the department's Water Monitoring Data Collection Standards (the collection standards).

The collection standards are available on the department's website at <www.derm.qld.gov.au >.

These standards will be updated as required to reflect industry best practice. It is the responsibility of the resource operations licence holder to ensure they are collecting data in accordance with the most recent version of the collection standards. The scheme licence holder will be notified of any substantive changes to the collection standards.

12 Departmental water monitoring data reporting standards

The plan states data must be transferred and published in accordance with the department's Water Monitoring Data Reporting Standards (the reporting standards).

The reporting standards are available on the department's website at <www.derm.qld.gov.au > and will be updated as required to reflect industry best practice. It is the responsibility of the resource operations licence holder to ensure that they are reporting data in accordance with the most recent version of the reporting standards. The scheme licence holder will be notified of any substantive changes to the reporting standards.

13 Implementation

This section is applicable where a resource operations licence holder is unable to meet the specified rules and requirements on plan commencement, or as the result of an operational or emergency incident.

Where this is the case, an interim program, approved by the chief executive, may be implemented until the requirements of the plan can be met. The interim program must include a timetable and interim methods, and cannot extend past the five year limit as specified by section 98(2)(f) of the *Water Act 2000*.

Accordingly, the chief executive and resource operations licence holder must implement the requirements of the plan as soon as practicable, but no later than five years from plan commencement. After this time, the resource operations licence holder must comply with the specified rules and requirements of the plan.

In situations where failure to comply is the result of an operational or emergency incident, the resource operations licence holder may implement approved interim arrangements. The resource operations licence holder may also apply to amend an existing interim program.

The approval of an interim program allows resource operations licence holders to transition to the rules and requirements of the plan. This means there may be cases where the methods of the approved interim program are inconsistent with the plan's rules and requirements. Where an inconsistency like this arises, the approved interim program overrides the rules and requirements of the plan while the program is in place.

14 Operating and environmental management rules and monitoring requirements

This section states that the resource operations licence holder is not obliged to comply with an operating or environmental management rule or requirement under the plan, where it would be unsafe, However, the resource operations licence holder must comply with all other rules and requirements of the plan, including reporting requirements.

In situations where carrying out an operating and environmental management rule or monitoring requirement would be unsafe, the resource operations licence holder must comply with the requirements for an operational or emergency incident. The resource operations licence holder may submit an interim program for achieving compliance with the plan rules and requirements under section 13 of the plan.

15 Sustainable management of water

This section specifies how the plan seeks to sustainably manage water resources in the plan area, as required under section 98(1)(e) of the *Water Act 2000*.

16 Addressing water resource plan outcomes

Subsection (1) specifies how the plan seeks to achieve the general outcomes and ecological outcomes set out in the water resource plan, as required under section 98(1)(g) of the *Water Act 2000*.

Subsection (2) states Attachment 3 of the plan sets out how the rules and requirements of the plan are linked to the outcomes of the water resource plan.

17 to 21 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 2 Unallocated water

Part 1 Preliminary

Unallocated water is water that can be made available for future consumption without compromising the environmental flow objectives or water allocation security objectives established in the water resource plan. The water resource plan reserves unallocated water held as strategic reserve, town water supply reserve and general reserve for future use. Chapter 2 deals with the availability and release of unallocated water as per the requirements of the water resource plan.

22 Scope of Chapter 2

This chapter specifies the process for making available and dealing with unallocated water in the plan area.

23 Record of volume of unallocated water

The chief executive may develop a register to record the volume of unallocated water that is available. If a register is created, it must be updated when an entitlement has been created under the unallocated water provisions.

24 Unallocated water reserves

This section explains that unallocated water, identified through the water resource planning process, is held under the plan in strategic, town water supply and general reserves.

25 Availability of strategic reserve

Under this section, unallocated water held in the strategic reserve (150, 000 megalitres) remains reserved for future use. Water entitlements may not be granted from the strategic reserve under the plan because the plan does not provide any process for the release of this water (an example of a water release process can be seen in section 27 of the town water supply reserve).

Any future grant of water entitlements from the strategic reserve would require an amendment to the plan, including public consultation and the receipt of submissions. Any future grant of unallocated water would also need to be in accordance with sections 30 to 32 of the water resource plan.

26 Availability of general reserve

Under this section, unallocated water held in the general reserve is reserved for future use. Like any grant of unallocated water from the strategic reserve, any grant of water entitlements from the general reserve would involve an amendment to the plan, including public consultation and the receipt of submissions.

In the future, water entitlements may be granted from the general reserve in accordance with sections 28 and 29 of the water resource plan. For example, the water allocations would only be granted for the take of unsupplemented water. The water resource plan states the volume of water and the subcatchment areas where the unallocated water may be granted.

Part 2 Granting unallocated water from the town water supply reserve

27 Process for granting unallocated water from the town water supply reserve

This section describes the process for granting unallocated water from the town water supply reserve to meet future water requirements. All or part of the town water supply reserve may be granted.

Under provisions in the *Water Act 2000*, the chief executive may grant either a water licence or a water allocation from the town water supply reserve. The water entitlement may only be granted after a properly made application has been received and assessed by the chief executive and a decision made on whether or not the application should be approved. Sections 34 and 35 of the water resource plan state the entities that may apply to request the release of unallocated water from the reserve, as well as the type and volume of water entitlements.

28 to 32 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 3 Granting, amending and converting authorisations

Part 1 Preliminary

33 Scope of Chapter 3

Chapter 3 states the process for:

- granting a resource operations licence to the Queensland Bulk Water Supply Authority, SunWater and Wide Bay Water Corporation
- converting to and granting supplemented water allocations
- granting water licences
- amending particular water licences.

Part 2 Granting resource operations licences

34 Granting a resource operations licence—the *Water Act 2000*, section 107

This section states the entities that will be granted a resource operations licence and the infrastructure to which the licences apply.

A resource operations licence is a licence granted under the *Water Act 2000* to make provision for management of supplemented water supply schemes (i.e. where water from storages can be used to supplement natural river flows). The resource operations licence will replace the current interim resource operations licence for each of the water supply schemes. Under the resource operations licence, the holder is required to comply with the rules and requirements of the plan.

Under subsection (1), the chief executive must grant to the Queensland Bulk Water Supply Authority resource operations licences for the Baroon Pocket, Mary Valley and Cedar Pocket water supply schemes. Resource operations licences must also be granted to SunWater for the Lower Mary River Water Supply Scheme, and to Wide Bay Water Corporation for the Teddington Weir and Wide Bay water supply schemes.

Attachment 4 identifies the infrastructure, including storages and associated works, and the watercourses used for water distribution that are associated with each water supply scheme.

Part 3 Converting to and granting of supplemented water allocations

Under this part, water licences in priority area one, as specified in the water resource plan, will be converted to water allocations. Water allocations are assets separate from land that allow water trading and encourage efficient use of water resources. Water allocations are personal assets and can be bought and sold just like land. Water allocations have a title similar to land titles and ownership will be registered on the Water Allocations Register (the register). All future dealings will also be recorded on the register.

Further information on water trading, water allocations and the register can be found on the water trading area of the department's website at <www.derm.qld.gov.au/water>.

35 Application of this part

This part defines the rules for converting existing water authorisations to supplemented water allocations. This section refers to Attachment 5, which lists relevant details of all supplemented water allocations to be converted and granted in place of existing water authorisations. Details of the converted and granted water allocations only apply at the time the plan commences and will not be updated to reflect any changes occurring after the plan commencement. On the day the final resource operations plan commences, all

authorisations to be converted under the plan expire and the chief executive will grant the holders of these expired water authorisations the water allocations stated in the plan. Water allocation ownership details are recorded on the state's Water Allocations Register.

36 Rules for converting existing authorisations under part 5, division 7 of the Water Resource (Mary Basin) Plan 2006

This section states the rules for converting existing water authorisations to supplemented water allocations.

All water allocations state the purpose for which water may be taken, the location from which water may be taken and a nominal volume for the allocation. These supplemented water allocations also specify the resource operations licence under which they are managed and the priority group to which the allocation belongs. The water allocations may be classed as either high priority or medium priority.

Under section 56 of the water resource plan, the purpose stated on the water allocation must be either 'distribution loss' or 'any'. The purpose must be 'distribution loss' if that was the purpose stated on the authorisation to be converted, otherwise the purpose on a water allocation must be 'any'.

The location from which water may be taken is specified as a resource operations plan zone or 'zone'.

As indicated under section 58 of the water resource plan, the nominal volume for a supplemented water allocation is the annual volume for supplemented water that is stated on the authorisation.

Section 59 of the water resource plan determines the priority group for supplemented water allocations in the plan area.

37 Granting of supplemented water allocations

The supplemented water allocations must be granted in accordance with Attachment 5. This attachment lists water allocations to be converted and granted in place of existing water authorisations. The attachment states the water allocation's relevant details such as:

- the water allocation number
- the water allocation holder/s, tenancy type and the share of the allocation
- the nominal volume (in megalitres) as previously stated on the authorisation
- location of the allocation (i.e. zone)
- priority group of the allocation (either medium or high priority)
- purpose of water use (either 'distribution loss' or 'any')
- the converting authorisation (the existing authorisation number).

On the day the plan commences, the existing authorisations expire and the chief executive will replace the authorisations with a water allocation. On this day, the registrar must record the details of the water allocations in the register. The water allocation takes effect the day it is registered. Within 30 business days after the plan commences, the chief executive must give the water allocation holder a notice about the granting of the water allocation.

Division 1 Water licences to be granted

This part facilitates the replacement of existing authorisations that were originally issued under the repealed *Local Government Act 1936–1975* to authorise the taking of water for urban water supplies. The new water licences will be granted with terms and conditions that mirror the existing authorisations, with additional operating rules and monitoring requirements, where appropriate, to satisfy water resource plan requirements.

The authorisations were originally issued to local governments. However, the transfer of water infrastructure and assets, under the *South East Queensland Water (Restructuring) Act 2007*, means some licences will be granted to the Queensland Bulk Water Supply Authority and the South East Queensland Water Grid Manager, rather than the relevant local government.

Under this part, particular water licences will be granted to the Queensland Bulk Water Supply Authority, the South East Queensland Water Grid Manager and Gympie Regional Council. There will also be an amendment to a particular water licence that is held by Gympie Regional Council.

Where particular issues were raised by the Technical Advisory Panel for the water resource plan, there are specific conditions for granting this water—in particular, environmental flow release requirements for Ewen Maddock Dam and Lake MacDonald.

38 Water licences to be granted to the Queensland Bulk Water Supply Authority

Within 30 business days of plan commencement, the chief executive must grant water licences listed in Attachment 6, Part 1, to the Queensland Bulk Water Supply Authority for the interference with flow and the take of water identified in this section. The details of the proposed water licences, including terms and conditions, are outlined in Attachment 6 Part 1 of the plan. Conditions include low flow releases from dams for the downstream environment.

39 Water licences to be granted to the South East Queensland Water Grid Manager

Within 30 business days of plan commencement, the chief executive must grant water licences listed in Attachment 6, Part 2 to the South East Queensland Water Grid Manager for the take of water identified in this section. The details of the proposed water licences, including terms and conditions, are outlined in Attachment 6, Part 2 of the plan.

40 Water licences to be granted to Gympie Regional Council

Within 30 business days of the plan commencement, the chief executive must grant water licences to take water and a water licence to interfere with the flow of water to Gympie Regional Council. The details of the proposed water licences, including terms and conditions, are outlined in Attachment 6, Part 3 of the plan.

Division 2 Amending particular water licences

41 Amending a water licence held by Gympie Regional Council

This section deals with the amendment of water licence 190498 held by Gympie Regional Council for the taking of subartesian water from the Cooloola Sandmass subartesian area.

The amendment adds terms and conditions that clearly specify the monitoring and reporting requirements provided for in sections 84 and 85 of the water resource plan. A requirement under section 84 of the water resource plan is for Gympie Regional Council to monitor the impact which taking water from the Cooloola Sandmass subartesian area has on aquatic ecosystems. The new condition, which will be added to the existing water licence, refers to the specific monitoring and reporting arrangements in Attachment 6, Part 4 of the plan.

42 to 46 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 4 Dealing with unsupplemented water licence applications

47 Scope of Chapter 4

Chapter 4 provides a process for dealing with applications for unsupplemented water licences to take or interfere with water from a watercourse, lake or spring.

The provisions of this chapter apply to applications, including those previously submitted, where no decision has been made. This includes applications that seek to:

- increase the annual volumetric limit for taking water
- increase interference with water
- change the location from which water may be taken
- increase the maximum rate for taking water
- change the conditions under which water may be taken.

This chapter does not apply to an application made under the following provisions of the *Water Act 2000*:

- section 221—reinstating an expired water licence
- section 224—amalgamating water licences
- section 225—subdividing a water licence
- section 229—effect of disposal of part of land to which a licence to take water attaches.

48 Dealing with applications

The chief executive cannot make a decision that would increase the average amount of water to be taken in the plan area. Also, the decision must not result in an inability to meet the outcomes and objectives of the water resource plan. If the chief executive believes granting the application would not have any impacts on the factors mentioned in subsection 1, the chief executive must deal with the application in line with the relevant provisions of the *Water Act 2000*. If the chief executive believes the granting the application may impact on the factors mentioned in subsection 1, the application must be refused.

49 to 53 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 5 Critical Water Supply Strategy

54 Scope of Chapter 5

Chapter 5 describes the critical water supply strategy that applies to all surface water in the plan area. This strategy is a requirement of section 66 of the water resource plan. These provisions are designed to preserve the supply of water for urban use during periods of critical water supply.

55 Water sharing and infrastructure operating rules for water managed under resource operations licences

This section states that the take of medium priority water must accord with sections 108 and 152 of the plan. These sections specify certain critical water storage conditions in the Mary Barrage and Teddington Weir under which water take for irrigation use under medium priority water allocations is prohibited.

56 Requirements for preparation of critical water supply arrangements

This section states the resource operations licence holder must prepare and submit to the chief executive critical water supply arrangements within 12 months of the plan commencement. The resource operations licence holder must develop the arrangements in consultation with affected stakeholder groups, and must consider a range of measures which could be required during periods of critical water supply. If a resource operations licence holder identifies additional measures, which would be required to preserve the supply of urban water during critical periods, the plan would need to be amended. The amendment process would include public consultation and an invitation for submissions before incorporating the changes.

57 Limiting the taking of water under water entitlements

During times of water emergencies or critical water supply shortages (i.e. drought), the chief executive can consider using section 22 or 25 of the *Water Act 2000* to ensure water is available for urban water use and essential services. Under these provisions of the *Water Act 2000*, the minister can publish a notice that prohibits or limits the take of water. These water restrictions can cover an individual person or limit the take under a water licence, permit or allocation.

58 to 62 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 6 Baroon Pocket Water Supply Scheme

Part 1 Preliminary

63 Scope of Chapter 6

Chapter 6 applies to the resource operations licence holder for the Baroon Pocket Water Supply Scheme and all water allocations within the scheme. It sets out the rules for the operation of the infrastructure within the Baroon Pocket Water Supply Scheme. The chapter also sets out the rules for environmental management, water sharing, dealings with water allocations and seasonal water assignments for the water managed under this water supply scheme. Implementing the rules in the chapter is the responsibility of the resource operations licence holder, except for the water allocation change rules, which are the responsibility of the chief executive.

Part 2 Operating and environmental management rules

64 Operating levels of storages

The minimum operating level is the level below which water cannot be released from infrastructure. This may be due to physical limitations of infrastructure or water quality issues. Attachment 4, Part 1, Table 2 details the minimum operating level and full supply level for Baroon Pocket Dam.

Subsection (2) states the resource operations licence holder must not release or supply water from the storage when the water level in that storage is at or below its minimum operating level as specified in Attachment 4, Part 1, Table 2.

65 Change in rate of release from infrastructure

This section states that the rate at which water is released from infrastructure in the water supply scheme must be incrementally changed to reduce the risk of environmental impacts. For example, a sudden stopping of water releases from the storage could, under certain circumstances, result in fish stranding in watercourses downstream. Similarly, a rapid drop in water levels within a storage, resulting from a release of a large volume of water, could lead to bank slumping or slip because of the hydraulic failure of waterlogged soil in the banks of the storage.

66 Quality of water released

Water quality can be affected by the depth or position within the storage from which it is released. Water released from the lower levels of the dam may have reduced dissolved oxygen levels, lower temperature or less desirable composition of solutes. Releases should be managed to optimise water quality and minimise the impact on aquatic habitats downstream of the storage.

Baroon Pocket Dam has a multi level off-take. This section states that when the resource operations licence holder releases water, they must release water from the off-take level that will provide the best quality of water.

67 Low flow release strategy for Baroon Pocket Dam

This section states that the resource operations licence holder must ensure a portion of each inflow into the dam is released if the dam water level is greater than the minimum operating level of 193.5 metres AHD. This release will provide benefits to the environment and riparian stock and domestic users downstream of the dam.

The required daily release volume is dependent on the inflow into the dam, based on the flow measured at the Gardeners Falls gauging station upstream of the dam impoundment. A minimum release of 1.5 megalitres per day is required for inflows of less than 5 megalitres per day. For inflows of between 5 megalitres per day and less than 10 megalitres per day, a release of at least 5 megalitres per day is required. For inflows greater than 10 megalitres per day, a release of at least 15 megalitres per day is required. This release is designed to maintain the low flow regime in Obi Obi Creek and is an improvement on the releases required under the interim resource operations licence.

68 Releases for downstream landowners on Obi Obi Creek

This section specifies the resource operations licence holder must make releases when requested by the Obi Obi Creek Water Advisory Committee. This section formalises the long-standing arrangements for compensation releases from the Baroon Pocket Water Supply Scheme for irrigators who own land downstream. Releases can occur only when the dam's storage level is above minimum operating level. The releases must be made the next business day following the request, be recorded and not exceed 2,000 megalitres per water year.

69 Relationship between sections 67 and 68 of the plan

This section clarifies the relationship between releases made under sections 67 and 68. Releases made under section 67 may include the volume of water required for release under section 68 for downstream landowners. For example, if the Obi Obi Creek Water Advisory Committee requests a release of 30 megalitres of water from the dam and a concurrent low flow release of 15 megalitres is required under section 67, 30 megalitres or more in total must be released to fulfil both sections. In dry times, the resource operations licence holder may need to release more water than requested by the committee to ensure the volume requested reaches downstream users and is not all absorbed by the environment.

Part 3 Water sharing rules

70 Taking water under a water allocation

This section states the volume of water taken under a water allocation in a water year must not be greater than the nominal volume stated for that water allocation.

71 Critical water supply arrangements

The purpose of the critical water supply arrangements is to set out rules for sharing water in times of severe water shortages. This section states the resource operations licence holder must prepare and submit to the chief executive critical water supply arrangements within 12 months of the plan commencement. The resource operations licence holder must develop the arrangements in consultation with affected stakeholder groups and must consider a range of measures which could be required during periods of critical water supply. If a resource operations licence holder identifies additional measures, which would be required to preserve the supply of urban water during critical periods, the plan would need to be amended. The amendment process would include public consultation and an invitation for submissions before incorporating the changes.

Part 4 Dealings with water allocations

Division 1 Subdivision and amalgamation of water allocations

72 Permitted subdivisions or amalgamations

This section states the subdivision and amalgamation of water allocations is permitted, provided that:

- the priority group and location does not change
- for subdivisions, the sum of the nominal volumes of the new water allocations equals the nominal volume of the water allocation being subdivided
- for amalgamations, the nominal volume of the new water allocation equals the sum of the nominal volumes of the water allocations being amalgamated.

73 Prohibited subdivisions or amalgamations

A subdivision is prohibited if the combined nominal volume of each new water allocation is not equal to the nominal volume of the water allocation being subdivided or if the locations and priority groups of the new water allocations are not the same as the water allocation being subdivided.

An amalgamation is prohibited if the nominal volume of the new water allocation is not equal to the combined nominal volume of the water allocations being amalgamated or if the locations and priority groups of the water allocations being amalgamated are not the same.

Division 2 Water allocation change rules

Water allocation change rules define conditions necessary to allow a permanent change to an attribute of a water allocation. The chief executive will deal with all applications to make a change to a water allocation under these rules.

A change to a water allocation could be a change to the:

- nominal volume
- location
- purpose
- flow conditions
- priority group
- maximum rate of take
- volumetric limit
- water allocation group
- other conditions required to be entered into the register.

It is important to note in the terminology of the plan that a change to location only occurs when a water allocation is traded to a different zone. A trade to another place within the same zone is not considered a change of location and it may occur without being specifically listed as a permitted change in the plan.

Accordingly, because there is only one zone in the Baroon Pocket Water Supply Scheme, the trading of a water allocation to another place within the scheme is not considered a change of location and can proceed.

74 Prohibited changes

This section lists the types of changes to water allocations that are not allowed. The chief executive cannot approve prohibited changes. The specified changes may pose a risk to achieving the water allocation security objectives and/or the environmental flow objectives outlined in the water resource plan or are otherwise inconsistent with the water resource plan outcomes.

75 Application for changes not specified as prohibited

Any changes not specified as permitted or prohibited may be applied for in accordance with section 130 of the *Water Act 2000*. Such applications will be assessed according to the criteria set out in the *Water Act 2000* and will be subject to public notification. In certain circumstances, the applicant may be required to pay the chief executive for the costs of researching and investigating the application.

Part 5 Seasonal water assignment rules

Seasonal water assignment rules allow the temporary transfer of the right to take water under a water allocation from one water allocation holder to another water user. A seasonal water assignment does not involve making a change to any of the details registered on the register for a water allocation. It is important to note a seasonal water assignment involves the assignment of a specified volume of water and not the nominal volume. Where there is a change (i.e. increase) to an announced allocation, the water allocation holder will be entitled to the additional water, not the assignee.

More information about seasonal water assignments is provided in the Seasonal Water Assignments and Water Leases brochure, which is available on the department's website at <www.derm.qld.gov.au>.

76 Maximum water use

This section specifies the maximum volume of water that may be used in a zone in the Baroon Pocket Water Supply Scheme is the volume shown in Attachment 4, Part 1, Table 3. This section also specifies the volume of water used in a zone is the sum of the water use for all the water allocations in the zone for the water year.

77 Seasonal water assignment rules

The resource operations licence holder that delivers water to the assignee is responsible for dealing with applications for seasonal water assignments. Seasonal assignments of a volume of water are permitted provided they do not result in water use in the zone exceeding the maximum water use volume in Attachment 4, Part 1, Table 3. The maximum water use volume is set at a level in accordance with the water allocation security objectives that apply to water allocations for the scheme.

78 to 82 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 7 Cedar Pocket Water Supply Scheme

Part 1 Preliminary

83 Scope of Chapter 7

Chapter 7 applies to the resource operations licence holder for the Cedar Pocket Water Supply Scheme and all water allocations within the scheme. It sets out the rules for the operation of the infrastructure within the scheme. The chapter also sets out the rules for environmental management, water sharing, dealings with water allocations and seasonal water assignment for the water managed under this water supply scheme. Implementation of the rules in the chapter is the responsibility of the resource operations licence holder, except for the water allocation change rules, which are the responsibility of the chief executive.

Part 2 Operating and environmental management rules

84 Use of watercourses for distribution

This section states for distributing water the resource operations licence holder must use only the watercourses listed in Attachment 4, Part 2, Table 2. The prescribed watercourses are those that have historically been used for distributing water within the scheme.

85 Operating levels of storages

The minimum operating level is the level below which water cannot be released from infrastructure. This may be due to physical limitations of infrastructure or water quality issues. Attachment 4, Part 2, Table 3 details the minimum operating level and full supply level for Cedar Pocket Dam.

Subsection (2) states the resource operations licence holder must not release or supply water from the dam when the water level in the dam is at or below its minimum operating level as specified in Attachment 4, Part 2, Table 3.

86 Change in rate of release from infrastructure

This section provides that the rate at which water is released from Cedar Pocket Dam must be incrementally changed to reduce the risk of adverse environmental impacts. For example, suddenly stopping water releases from the dam could, under certain circumstances, result in fish stranding in watercourses downstream. Similarly, a rapid drop in water levels within a storage, resulting from a release of a large volume of water, could lead to bank slumping or slip because of the hydraulic failure of waterlogged soil in the banks of the storage.

Part 3 Water sharing rules

Division 1 Announced allocation rules

87 Announced allocation

This section requires the resource operations licence holder for the Cedar Pocket Water Supply Scheme to calculate and publish announced allocations throughout the water year. Announced allocations represent the share of water available to be taken under each entitlement, expressed as a percentage of the entitlement's nominal volume.

For example, where the nominal volume of a water allocation equals 100 megalitres (ML) and the announced allocation equals (=) 80 per cent, the water allocation volume is calculated as follows—

Nominal volume of water allocation = 100 ML

Announced allocation = 80 per cent

Water allocation volume = (100 x 80) ÷ 100 = 80 ML

This section specifies the general rules to take into account when determining the announced allocations. The initial announced allocation percentage must be set on the first day of the water year (currently 1 July) and will be revised during the water year in response to inflows or other factors that may increase the announced allocation percentage by five per cent or more. Each new or revised announced allocation must be posted on the resource operations licence holder's website within five business days of being set.

The announced allocation can only be used within the relevant water year and cannot be less than zero or more than 100 per cent. Announced allocations cannot be reduced within the water year. This fulfils the environmental flow objectives and water allocation security objectives of the water resource plan.

88 Calculation of announced allocations

This section provides the formula for calculating announced allocations for medium priority water allocations located within the Cedar Pocket Water Supply Scheme.

Attachment 4, Part 2, Table 5 defines the announced allocation parameters used in the formula. The formula takes into account the total volume of available water in storage that is accessible for water allocations and adjusts for volumes of water taken in the water year.

89 Taking water under a water allocation

This section states the announced allocation percentage is the percentage of the nominal water allocation that can be taken in the water year, unless Cedar Pocket Dam overflows.

90 Taking water in a water year in which Cedar Pocket Dam overflows

Subsection 1 allows a water allocation holder to take up to twice the nominal volume in any water year in which Cedar Pocket Dam overflows. In the event of an overflow, water allocation holders can take a volume equal to their nominal volume over the rest of the water year, regardless of how much water they have already taken during the water year prior to the overflow.

These provisions are required because Cedar Pocket Dam is a relatively small storage that can refill several times throughout the water year depending on rainfall events.

This section ensures the total volume of water taken during a water year must not exceed twice the nominal volume for the water allocation.

Division 2 Critical water supply arrangements

91 Critical water supply arrangements

The critical water supply arrangements are rules for sharing water in times of severe shortages. This section states the resource operations licence holder must prepare and submit to the chief executive critical water supply arrangements within 12 months of plan commencement. The resource operations licence holder must develop the arrangements in consultation with affected stakeholder groups, and must consider measures required during periods of critical water supply. If a resource operations licence holder identifies additional measures, which would be required to preserve the supply of urban water during critical periods, the plan would need to be amended. The amendment process would include public consultation and an invitation for submissions before incorporating the changes.

Part 4 Dealings with water allocations

Division 1 Subdivision or amalgamation of water allocations

92 Permitted subdivisions or amalgamations

This section states subdivision or amalgamation of water allocations is permitted provided that:

- the priority group and location does not change
- for subdivisions, the sum of the nominal volumes of the new water allocations equals the nominal volume of the water allocation being subdivided

- for amalgamations, the nominal volume of the new water allocation equals the sum of the nominal volumes of the water allocations being amalgamated.

93 Prohibited subdivisions or amalgamations

A subdivision is prohibited if the combined nominal volume of each new water allocation is not equal to the nominal volume of the water allocation being subdivided or if the locations and priority groups of the new water allocations are not the same as the water allocation being subdivided.

An amalgamation is prohibited if the nominal volume of the new water allocation is not equal to the combined nominal volume of the water allocations being amalgamated or if the locations and priority groups of the water allocations being amalgamated are not the same.

Division 2 Water allocation change rules

Water allocation change rules define conditions necessary to allow a permanent change to an attribute of a water allocation. The chief executive will deal with all applications to make a change to a water allocation under these rules.

A change to a water allocation could be a change to the:

- nominal volume
- location
- purpose
- flow conditions
- priority group
- maximum rate of take
- volumetric limit
- water allocation group
- other conditions required to be entered into the register.

It is important to note in the terminology of the plan that a change to location only occurs when a water allocation is traded to a different zone. A trade to another place within the same zone is not considered a change of location and may occur without being specifically listed as a permitted change in the plan.

Accordingly, because there is only one zone in the Cedar Pocket Water Supply Scheme, the trading of a water allocation to another place within the scheme is not considered a change of location and can proceed.

94 Prohibited changes

This section lists the types of changes to water allocations that are not allowed. The chief executive cannot approve prohibited changes. The specified changes may pose a risk to achieving the water allocation security objectives and/or the environmental flow objectives outlined in the water resource plan or are otherwise inconsistent with the water resource plan outcomes.

95 Application for changes not specified as prohibited

Any changes not specified as permitted or prohibited may be applied for in accordance with section 130 of the *Water Act 2000*. Such applications will be assessed according to the criteria set out in the *Water Act 2000* and will be subject to public notification. In certain circumstances, the applicant may be required to pay the chief executive for the costs of researching and investigating the application.

Part 5 Seasonal water assignment rules

Seasonal water assignment rules allow the temporary transfer of the right to take water under a water allocation from one water allocation holder to another water user. A seasonal water assignment does not involve making a change to any of the details registered in the register for a water allocation. It is important to note a seasonal water assignment involves the assignment of a specified volume of water and not the

nominal volume. Where there is a change (i.e. increase) to an announced allocation, the water allocation holder will be entitled to the additional water, not the assignee.

More information about seasonal water assignments is provided in the Seasonal Water Assignments and Water Leases brochure, which is available on the department's website at <www.derm.qld.gov.au>.

96 Maximum water use

This section specifies the maximum volume of water that may be used in a zone in the Cedar Pocket Water Supply Scheme is the volume shown in Attachment 4, Part 2, Table 4. This section also specifies the volume of water used in a zone is the sum of the water use for all the water allocations in the zone for the water year.

97 Seasonal water assignment rules

The resource operations licence holder that delivers water to the assignee is responsible for dealing with applications for seasonal water assignments. Seasonal assignments of a volume of water are permitted provided they do not result in water use in the zone exceeding the maximum water use volume in Attachment 4, Part 2, Table 4. The maximum water use volume is set at a level in accordance with the water allocation security objectives that apply to water allocations for the scheme.

Under subsection 2, the resource operations licence holder cannot approve a seasonal water assignment if the purpose of the water allocation is distribution loss. The seasonal water assignment can only be approved when the purpose is distribution loss if the assignment is to the same person and has the same purpose.

Under subsection 3, the resource operations licence holder that will deliver water to the assignee is responsible for dealing with the water application.

98 to 102 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 8 Lower Mary River Water Supply Scheme

Part 1 Preliminary

103 Scope of Chapter 8

Chapter 8 applies to the resource operations licence holder for the Lower Mary River Water Supply Scheme and all water allocations within the scheme. It sets out the rules for the operation of infrastructure within the scheme. The chapter also sets out the rules for environmental management, water sharing, dealings with water allocations and seasonal water assignment for the water managed under this water supply scheme. Implementation of the rules in the chapter is the responsibility of the resource operations licence holder, except for the water allocation change rules, which are the responsibility of the chief executive.

Part 2 Operating and environmental management rules

104 Use of watercourses for distribution

This section states the resource operations licence holder must use only the watercourses which are listed in Attachment 4, Part 3, Table 3 for the distribution of water. The prescribed watercourses are those that have historically been used for the distribution of water within the scheme.

105 Operating levels of storages

The minimum operating level is the level below which water cannot be released from infrastructure. This may be due to physical limitations of infrastructure or water quality issues. Attachment 4, Part 3, Table 4 details the minimum operating level and full supply level for the Mary River and Tinana Barrages.

Subsection (2) states the resource operations licence holder must not release or supply water from the storage when the water level in that storage is at or below its minimum operating level as specified in Attachment 4, Part 3, Table 4.

106 Change in rate of release from infrastructure

This section states that the rate at which water is released from Mary Barrage and Tinana Barrage must be incrementally changed to reduce the risk of adverse environmental impacts. For example, suddenly stopping releases of water from these storages could, under certain circumstances, result in fish stranding in watercourses downstream of the storage. Similarly, a rapid drop in water levels within a storage, resulting from a release of a large volume of water, could lead to bank slumping or slip because of the hydraulic failure of waterlogged soil in the banks of the storage.

107 Operation of Mary Barrage and Tinana Barrage fishways

This section states the resource operations licence holder for the Mary Barrage and the Tinana Barrage may release water through the fishway.

The Mary Barrage Fish Ladder Operational Rules Water Management Specification is an agreement between SunWater and the Department of Employment, Economic Development and Innovation. It describes the operational rules for the Mary River fish ladder to ensure a balance between providing for fish movement and maintaining the reliability of supply for SunWater’s customers.

Part 3 Water sharing rules

Division 1 Prohibition on taking water

108 Prohibition on taking water

This section states the times when the take or supply of medium priority water for irrigation is prohibited from the Mary Barrage on the Mary River. These provisions are designed to keep a certain volume of water in the Mary Barrage to ensure a continued supply to the city of Maryborough.

The take and supply of medium priority water is prohibited when the water level in the barrage is equal to or less than EL 1.0 metre AHD (Australian Height Datum). Restricting irrigation use at this level would protect at least 1000 megalitres of water that can then be accessed by SunWater to supplement high priority urban water requirements out of Teddington Weir.

In past periods of critical water supply, for example in 2003, the department imposed similar prohibitions and restrictions on taking water for irrigation from the Mary Barrage and Teddington Weir impoundment under the provisions of section 22 of the *Water Act 2000*. By clearly specifying these rules in the plan there is a greater level of certainty regarding how water will be managed during critical supply periods.

After a prohibition has been introduced under this section, water take or supply for medium priority water allocations cannot recommence until the storage level is above 1.2 metres AHD. The resource operations licence holder for the Lower Mary River Water Supply Scheme must notify all water allocation holders when the water restrictions on take begins and ceases.

Note these restrictions would not prevent the take of medium priority water for uses other than irrigation.

Division 2 Announced allocation rules

109 Announced allocation

This section requires the resource operations licence holder for the Lower Mary River Water Supply Scheme to calculate and publish medium priority announced allocations throughout the water year. Announced allocations represent the share of water available to be taken under each entitlement expressed as a percentage of the entitlement's nominal volume.

For example, where the nominal volume of a water allocation equals 100 megalitres (ML) and the announced allocation equals (=) 80 per cent, the water allocation volume is calculated as follows—

Nominal volume of a water allocation = 100 ML

Announced allocation = 80 per cent

Water allocation volume = (100 x 80) ÷ 100 = 80 ML

This section specifies the general rules to take into account when determining the announced allocations for medium priority water allocations. The announced allocation formula is in section 110 of the plan. The initial announced allocation percentage must be set on the first day of the water year (currently 1 July) and will be revised during the water year in response to inflows or other factors that may increase the announced allocation percentage by five per cent or more. Each new or revised medium priority announced allocation must be posted on the resource operations licence holder's website within five business days of being set.

The announced allocation can only be used within the relevant water year and cannot be less than zero or more than 100 per cent. Announced allocations cannot be reduced within the water year.

110 Calculation of announced allocations

Subsection (1) provides the formula for calculating announced allocations for medium priority water allocations in the Lower Mary River Water Supply Scheme.

Attachment 4, Part 3, Table 5 defines the announced allocation parameters used in the formula. The formula takes into account the total volume of water available in storage that is accessible for water allocations and adjusts for volumes of water taken in the water year and transmission and operational losses.

The formula also includes parameters (BW and BWT) that account for the water that can be transferred from the Lower Mary River Water Supply Scheme to the Teddington Weir Water Supply Scheme under the bulk water transfer provisions stated in section 113 of the plan.

111 Taking water under a water allocation

This section states the maximum volume of water that can be taken under a medium priority water allocation in a water year is the nominal volume of the water allocation multiplied by the announced allocation and divided by 100. The volume of water taken at any time during a water year under a medium priority water allocation or seasonal water assignment must not be greater than the volume allowed under an announced allocation at that time.

Division 3 Critical water supply arrangements

112 Critical water supply arrangements

The purpose of the critical water supply arrangements is to set out rules for sharing water in times of severe water shortages. This section states the resource operations licence holder must prepare and submit to the chief executive critical water supply arrangements within 12 months of the plan commencement. The resource operations licence holder must develop the arrangements in consultation with affected stakeholder groups, and must consider a range of measures which could be required during periods of critical water supply. If a resource operations licence holder identifies additional measures, which would be required to preserve the supply of urban water during critical periods, the plan would need to be amended. The amendment process would include public consultation and an invitation for submissions before incorporating the changes.

Division 4 Bulk water transfer from the Lower Mary River Water Supply Scheme to the Teddington Weir Water Supply Scheme

This division sets out the rules for transferring water from the Lower Mary River Water Supply Scheme to the Teddington Weir Water Supply Scheme.

113 Rules for bulk water transfer to the Teddington Weir Water Supply Scheme

Subsection (1) provides for transferring water to supply medium priority demand in Teddington Weir if requested by the resource operations licence holder for the Teddington Weir Water Supply Scheme. The 7.96 metre limitation in Teddington Weir reflects the original agreed-to level for the commencement of the transfer of water for medium priority supplementation. The 1.0 metre level limitation in the Mary Barrage reflects that water transfer for medium priority demand in Teddington Weir would not be appropriate if irrigation on the Mary Barrage was prohibited.

Subsection (2) limits the transfer volumes under subsection (1) to no more than the amount needed to supplement medium priority demand in Teddington Weir.

Subsection (3) provides for water transfer to supply high priority demand in Teddington Weir if requested by the resource operations licence holder for the Teddington Weir Water Supply Scheme. The 7.7 metre limitation in Teddington Weir is the water level at which medium priority access to water in Teddington Weir is prohibited, and only high priority demand is met in these circumstances. The 0.5 metre water level in the Mary Barrage is the agreed-to minimum level at which water would be transferred.

Subsection (4) allows for additional transfers to supply high priority demand in Teddington Weir, if agreed to by resource operations licence holders, where the water level in the Mary Barrage is below the 0.5 metre level and irrigation is prohibited in Teddington Weir. This would allow for additional water to be accessed, in an emergency situation, down to the 0.15 metre Mary Barrage minimum operating level.

Subsection (5) limits the transfer volumes under subsections (3) and (4) to no more than that required to supplement high priority demand in Teddington Weir, in excess of the 6819 megalitre entitlement located in

the weir that is independent of supplementation from the Mary Barrage. At the time of the release of the plan, this would allow up to 1360 megalitres of water to be transferred in a water year.

Subsection (6) prohibits transfers of water from occurring to supply medium priority demand in Teddington Weir if irrigation is prohibited in the Mary Barrage. This ensures that Teddington Weir irrigators are not provided with water when access to irrigation is not available from the Mary Barrage, and it reflects the fact that Teddington Weir irrigators should generally have a similar level of reliability to irrigators on the Mary Barrage. Subsection (6) also specifies that a water transfer, commenced under subsections (1), (3) and (4), must cease when the prescribed water levels are reached.

Examples of transfer events

A transfer event commenced under subsection (1) when the water level in the Mary Barrage is at 1.2 metres AHD and the water level in Teddington Weir is at 7.8 metres AHD, must cease if the barrage water level dropped to 0.9 metres AHD and the Teddington Weir water level rose to 8.0 metres AHD.

A transfer event commenced under subsection (3) when the water level in the Mary Barrage is at 0.9 metres AHD and the water level in Teddington Weir is at 7.0 metres AHD must cease if the barrage water level remained at 0.9 metres AHD and the Teddington Weir water level rose to 8.0 metres AHD.

Part 4 Dealings with water allocations

Division 1 Subdivision or amalgamation of water allocations

114 Permitted subdivisions or amalgamations

This section states subdivision and amalgamation of water allocations is permitted provided that:

- the priority group and location does not change
- for subdivisions, the sum of the nominal volumes of the new water allocations equals the nominal volume of the water allocation being subdivided
- for amalgamations, the nominal volume of the new water allocation equals the sum of the nominal volumes of the water allocations being amalgamated.

115 Prohibited subdivisions or amalgamations

A subdivision is prohibited if the combined nominal volume of each new water allocation is not equal to the nominal volume of the water allocation being subdivided or if the locations and priority groups of the new water allocations are not the same as the water allocation being subdivided.

An amalgamation is prohibited if the nominal volume of the new water allocation is not equal to the combined nominal volume of the water allocations being amalgamated or if the locations and priority groups of the water allocations being amalgamated are not the same.

Division 2 Water allocation change rules

Water allocation change rules define conditions necessary to allow a permanent change to an attribute of a water allocation. The chief executive will deal with all applications to make a change to a water allocation under these rules.

A change to a water allocation could be a change to the:

- nominal volume
- location
- purpose
- flow conditions
- priority group

- maximum rate of take
- volumetric limit
- water allocation group
- other conditions required to be entered into the register.

It is important to note in the terminology of the plan, a 'change' to location only occurs when a water allocation is traded to a different zone. A trade to another place within the same zone is not considered a change of location and it may occur without being specifically listed as a permitted change in the plan.

116 Permitted changes

Subsection (1) states when a change of location is permitted and zones where such a change is permitted. The change must not result in more than the maximum or less than the minimum total nominal volume for a zone for a priority group.

Subsection (2) refers the reader to Attachment 4, Part 3, Table 9 and Attachment 4, Part 5, Table 5, which describes the maximum and minimum total nominal volumes for the priority groups for water allocations for each zone.

Subsection (3) describes how the total nominal volume in a zone is calculated.

In the terminology of the plan, a change to location only occurs when a water allocation is traded to a different zone. A trade to another property within the same zone is not considered a change in location.

117 Prohibited changes

This section lists the types of changes to water allocations that are not allowed. The chief executive cannot approve prohibited changes. The specified changes may pose a risk to achieving the water allocation security objectives and/or the environmental flow objectives outlined in the water resource plan or are otherwise inconsistent with the water resource plan outcomes.

118 Application for changes not specified as permitted or prohibited

Any changes not specified as permitted or prohibited may be applied for in accordance with section 130 of the *Water Act 2000*. Such applications will be assessed according to the criteria set out in the *Water Act 2000* and will be subject to public notification. In certain circumstances, the applicant may be required to pay the chief executive for the costs of researching and investigating the application.

Part 5 Seasonal water assignment rules

Seasonal water assignment rules allow the temporary transfer of the right to take water under a water allocation, from one water allocation holder to another water user. A seasonal water assignment does not involve making a change to any of the details registered on the register for a water allocation. It is important to note that a seasonal water assignment involves the assignment of a specified volume of water and not the nominal volume. Where there is a change (i.e. increase) to an announced allocation, the water allocation holder will be entitled to the additional water, not the assignee.

More information about seasonal water assignments is provided in the Seasonal Water Assignments and Water Leases brochure, which is available on the department's website at <www.derm.qld.gov.au>.

119 Maximum water use

This section specifies that the maximum volume of water that may be used in a Lower Mary River Water Supply Scheme zone is the volume shown in Attachment 4, Part 3, Table 10. The one zone (LMRS1) has a total volume of 34 462 megalitres. This section also specifies the total volume of water used in a zone is the sum of the water use for all the water allocations in the zone for the water year. These volumes are inclusive of all priority groups, i.e. medium and high priority water allocations.

120 Seasonal water assignment rules

The resource operations licence holder for the Lower Mary River Water Supply Scheme is responsible for dealing with applications for seasonal water assignments within that scheme. Seasonal water assignments of

a volume of water are permitted provided they do not have the purpose of 'distribution loss' and do not result in water use in the zone exceeding the maximum water use volume in Attachment 4, Part 3, Table 10. The maximum water use volume has been set at a level in accordance with the water allocation security objectives that apply to water allocations for the scheme.

Part 6 Interscheme trading and bulk water transfer agreement

This part provides for an agreement between the resource operations licence holders for the Lower Mary River and Teddington Weir water supply schemes to, among other things, facilitate the transfers provided in section 113 of the plan.

121 Interscheme trading and bulk water transfer agreement

Subsection (1) states an interscheme trading and bulk water transfer agreement must be in place between the resource operations licence holders for the Lower Mary River and Teddington Weir water supply schemes.

Subsection (2) states the matters the agreement must address, which are the resource operations licence holders monitoring and reporting requirements, meter reading and water charges, a change of location or seasonal assignment of a water allocation between the two water supply schemes, and the transfer of water from the Mary Barrage to Teddington Weir.

Subsection (3) states there may be other issues that need to be covered under the agreement and that subsection (2) does not list all possible matters.

122 to 126 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 9 Mary Valley Water Supply Scheme

Part 1 Preliminary

127 Scope of Chapter 9

Chapter 9 applies to the resource operations licence holder for the Mary Valley Water Supply Scheme and all water allocations within the scheme. It sets out the rules for operating infrastructure within the scheme. The chapter also sets out the rules for environmental management, water sharing, dealings with water allocations and seasonal water assignment for the water managed under this water supply scheme. Implementing the rules in the chapter is the responsibility of the resource operations licence holder, except for the water allocation change rules, which are the responsibility of the chief executive.

Part 2 Operating and environmental management rules

128 Use of watercourses for distribution

This section states the resource operations licence holders for the Mary Valley Water Supply Scheme must only use the watercourses listed in Attachment 4, Part 4, Table 3 for the distribution of water. The prescribed watercourses are those that have historically been used for distributing water within the scheme.

129 Operating levels of storages

The minimum operating level is the level below which water cannot be released from infrastructure. This may be due to physical limitations of infrastructure or water quality issues. Attachment 4, Part 4, Table 4 provides details of the minimum operating level and full supply level for Borumba Dam and Imbil Weir.

Subsection (2) states the resource operations licence holder must not release or supply water from the storage when the water level in that storage is at or below its minimum operating level specified in Attachment 4, Part 4, Table 4.

Under subsection (3) no releases will be made for medium priority users if the water level in the Borumba Dam is at or below 123.74 metres.

130 Change in rate of release from infrastructure

This section states the rate at which water is released from storages in the Mary Valley Water Supply Scheme must be incrementally changed to reduce the risk of adverse environmental impacts. For example, suddenly stopping releases of water from these storages could, under certain circumstances, result in fish stranding in watercourses downstream of the storage. Similarly, a rapid drop in water levels within a storage, resulting from the release of a large volume of water could lead to bank slumping or slip because of the hydraulic failure of waterlogged soil in the banks of the storage.

Part 3 Water sharing rules

Division 1 Announced allocation rules

131 Announced allocation

This section requires the resource operations licence holder for the Mary Valley Water Supply Scheme to calculate and publish announced allocations throughout the water year. Announced allocations represent the share of water available to be taken under each entitlement expressed as a percentage of the entitlement's nominal volume.

For example, where the nominal volume of a water allocation equals (=)100 megalitres (ML) and the announced allocation = 80 per cent, the water allocation volume is calculated as follows—

Nominal volume of a water allocation = 100 ML

Announced allocation = 80 per cent

Water allocation volume = (100 x 80) ÷ 100 = 80 ML

This section specifies the general rules to take into account when determining the high priority and medium priority announced allocations for the Mary Valley Water Supply Scheme. The initial announced allocation percentage must be set on the first day of the water year (currently 1 July) and will be revised during the water year in response to inflows or other factors that may increase the announced allocation percentage by five per cent or more. Each new or revised announced allocation must be posted on the resource operations licence holder website within five business days of being set.

The announced allocation can only be used within the relevant water year and cannot be less than zero per cent or more than 100 per cent. Announced allocations cannot be reduced within the water year.

132 Calculation of announced allocations

Subsection (1) states the announced allocation for high priority water must be 100 per cent when the announced allocation for medium priority water is greater than zero per cent. When medium priority announced allocations are zero per cent the high priority announced allocation must be calculated using the formula in this subsection.

Subsection (2) provides the formula for calculating high priority water allocations.

Subsection (3) provides the formula for calculating medium priority water allocations.

Subsection (4) refers the reader to Attachment 4, Part 4, Table 5, which states the announced allocation parameters used in the formulae. The formulae take into account the total volume of water available in storage that is accessible for water allocations. The formulae also accounts for volumes of water taken in the water year, and transmission and operational losses.

133 Taking water under a water allocation

Traditional announced allocations for water supply schemes are calculated using the volume of water in storage at the time of the announcement, plus the minimum volume of water likely to flow in to the storage over the rest of the water year. This approach is used for water supply schemes where the major water storage captures water from a large percentage of the available catchment.

However, in the Mary Valley Water Supply Scheme the major storage (Borumba Dam) captures water from only a small percentage of the catchment. In this case, the water available to water allocation holders in zones MVASA, and MVASB of the water supply scheme is derived from both natural stream flows and releases made from Borumba Dam.

To recognise this extra source of water, the plan provides for the announcement of stream flow periods. A water allocation holder may take water during a notified stream flow period, as well as water available under the announced allocation formula, provided the total volume of water taken does not exceed the nominal volume associated with the water allocation.

Subsection (1) states the total volume of water taken during a water year, including water taken during stream flow periods and under an announced allocation, must not exceed the nominal volume for the water allocation for the specified priority groups.

Subsection (2) states the volume of water taken under an allocation in a water year must not exceed, for that entitlement, the nominal volume of the water allocation multiplied by the announced allocation for medium priority water allocations and divided by 100.

Subsection (3) states during an announced stream flow period for the zone to which a water allocation applies, volumes of water in addition to that mentioned in subsection (2) may be taken under the water allocation, providing the total water taken does not exceed the nominal volume for the water allocation.

134 Stream flow period

Under subsection (1) the stream flow period for a zone or part of zone is defined by the start and end times announced and notified by the resource operations licence holder under subsection (2).

Subsection (3) outlines the flow conditions that must apply before the resource operations licence holder may start a stream flow period for the specified zones.

Subsection (4) outlines a resource operations licence holder must end a stream flow period for a zone when the conditions prescribed in subsection (2) are not met.

Division 2 Critical water supply arrangements

135 Critical water supply arrangements

The purpose of the critical water supply arrangements is to set out rules for the sharing of water in times of severe water shortages. This section states the resource operations licence holder must prepare and submit to the chief executive critical water supply arrangements within 12 months of the plan commencement. The resource operations licence holder must develop the arrangements in consultation with affected stakeholder groups and must consider a range of measures which could be required during periods of critical water supply. If a resource operations licence holder identifies additional measures, which would be required to preserve the supply of urban water during critical periods, the plan would need to be amended. The amendment process would include public consultation and an invitation for submissions before incorporating the changes.

Part 4 Dealings with water allocations

Division 1 Subdivision or amalgamation of water allocations

136 Permitted subdivisions or amalgamations

This section states subdivision and amalgamation of water allocations is permitted provided that:

- the priority group and location does not change
- for subdivisions, the sum of the nominal volumes of the new water allocations equals the nominal volume of the water allocation being subdivided
- for amalgamations, the nominal volume of the new water allocation equals the sum of the nominal volumes of the water allocations being amalgamated.

137 Prohibited subdivisions or amalgamations

A subdivision is prohibited if the combined nominal volume of each new water allocation is not equal to the nominal volume of the water allocation being subdivided or the locations and priority groups of the new water allocations are not the same as the water allocation being subdivided.

An amalgamation is prohibited if the nominal volume of the new water allocation is not equal to the combined nominal volume of the water allocations being amalgamated or the locations and priority groups of the water allocations that are being amalgamated are not the same.

Division 2 Water allocation change rules

Water allocation change rules define conditions necessary to allow a permanent change to an attribute of a water allocation. The chief executive will deal with all applications to make a change to a water allocation under these rules.

A change to a water allocation could be a change to the:

- nominal volume

- location
- purpose
- flow conditions
- priority group
- maximum rate of take
- volumetric limit
- water allocation group
- other conditions required to be entered into the register.

It is important to note in the terminology of the plan, a change to location only occurs when a water allocation is traded to a different zone. A trade to another place within the same zone is not considered a change of location and it may occur without being specifically listed as a permitted change in the plan.

138 Permitted changes

Subsection (1) states a change to a location of a water allocation is permitted if it will not result in a total nominal volume outside the prescribed minimum and maximum values for a priority group.

Subsection (2) refers the reader to Attachment 4, Part 4, Table 9 which describes the maximum and minimum total nominal volumes per zone for both the medium and high priority groups.

Subsection (3) provides a definition of the total nominal volume in a zone.

In the terminology of the plan, a change to location only occurs when a water allocation is traded to a different zone. A trade to another property within the same zone is not considered a change in location.

139 Prohibited changes

This section lists the types of changes to water allocations that are not allowed. The chief executive cannot approve prohibited changes. The specified changes may pose a risk to achieving the water allocation security objectives and/or the environmental flow objectives outlined in the water resource plan or are otherwise inconsistent with the water resource plan outcomes.

There is no trading into and out of Pie Creek, McIntosh Creek and Calico Creek due to system constraints and abandonment issues.

140 Application for changes not specified as permitted or prohibited

Any changes not specified as permitted or prohibited may be applied for in accordance with section 130 of the *Water Act 2000*. Such applications will be assessed according to the criteria set out in the *Water Act 2000* and will be subject to public notification. In certain circumstances, the applicant may be required to pay the chief executive for the costs of researching and investigating the application.

Part 5 Seasonal water assignment rules

Seasonal water assignment rules allow the temporary transfer of the right to take water under a water allocation from one water allocation holder to another water user. A seasonal water assignment does not involve making a change to any of the details registered on the register for a water allocation. It is important to note seasonal assignment involves the assignment of a specified volume of water and not the nominal volume. Where there is a change (i.e. increase) to an announced allocation, the water allocation holder will be entitled to the additional water, not the assignee.

More information about seasonal water assignments is provided in the Seasonal Water Assignments and Water Leases brochure, which is available on the department's website at <www.derm.qld.gov.au>.

141 Maximum water use

This section specifies the maximum volume of water that may be used in a zone is the volume shown in Attachment 4, Part 4, Table 10. This section also specifies the volume of water used in a zone is the sum of

the water use for all the water allocations in the zone for the water year. These volumes are inclusive of all priority groups i.e. medium and high priority water allocations.

142 Seasonal water assignment rules

The resource operations licence holder that will be delivering the water is responsible for dealing with applications for seasonal water assignments in that scheme. Seasonal assignments of a volume of water are permitted provided they do not have the purpose of 'distribution loss' and do not result in water use in the zone exceeding the maximum water use volume in Attachment 4, Part 4, Table 10. The maximum water use volume has been set at a level in accordance with the water allocation security objectives that apply to water allocations for the scheme.

143 to 147 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 10 Teddington Weir Water Supply Scheme

Part 1 Preliminary

148 Scope of Chapter 10

Chapter 10 applies to the resource operations licence holder for the Teddington Weir Water Supply Scheme. It sets out the rules for operating the infrastructure within the scheme. The chapter also sets out the rules for environmental management, water sharing, dealings with water allocations, and seasonal water assignment for the water managed under this water supply scheme. Implementing the rules is the responsibility of the resource operations licence holder, except for the water allocation change rules which are the responsibility of the chief executive.

Part 2 Operating and environmental management rules

149 Use of watercourses for distribution

This section states the resource operations licence holder for the Teddington Weir Water Supply Scheme must use only those watercourses listed in Attachment 4, Part 5, Table 3 for distribution of water. The prescribed watercourses are those that have historically been used for distributing water within the scheme.

150 Operating levels of storages

The minimum operating level is the level below which water cannot be released from infrastructure. This may be due to physical limitations of infrastructure or water quality issues. Attachment 4, Part 5, Table 4 details the minimum operating level and full supply level for Teddington Weir and Talegalla Weir.

Subsection (2) states the resource operations licence holder must not release or supply water from the storage when the water level in that storage is at or below its minimum operating level specified in Attachment 4, Part 5, Table 4.

151 Change in rate of release from infrastructure

This section states the rate at which water is released from the storages in the Teddington Weir Water Supply Scheme must be incrementally changed to reduce the risk of adverse environmental impacts. For example, suddenly stopping water releases from the storage could, under certain circumstances, result in fish stranding in watercourses downstream of the storage. Similarly, a rapid drop in water levels within a storage, resulting from the release of a large volume of water could lead to bank slumping or slip because of the hydraulic failure of waterlogged soil in the banks of the storage.

Part 3 Water sharing rules

Division 1 Prohibition on taking water

152 Prohibition on taking water

These provisions are designed to keep a certain volume of water to ensure continued supply to the city of Maryborough.

Water cannot be taken from Teddington Weir for medium priority irrigation use when the water level in the weir is at or below 7.7 metres AHD.

In past periods of critical water supply, the department imposed similar prohibitions and restrictions on taking water for irrigation. For example in 2003, there were prohibitions and restrictions on taking water from the Mary Barrage and Teddington Weir impoundment, under the provisions of section 22 of the *Water Act 2000*. By clearly specifying these rules in the plan there is a greater level of certainty regarding how water will be managed during critical supply periods.

The resource operations licence holder for the Teddington Weir Water Supply Scheme must notify all water allocation holders in the scheme when the restrictions on water take begin and cease.

Division 2 Announced allocation rules

153 Announced allocation

This section requires the resource operations licence holder for the Teddington Weir Water Supply Scheme to publish announced allocations throughout the water year for the medium priority entitlements it manages. Announced allocations represent the share of water available to be taken under each entitlement expressed as a percentage of the entitlement's nominal volume.

For example, where the nominal volume of a water allocation equals (=)100 megalitres (ML) and the announced allocation = 80 per cent, the water allocation volume is calculated as follows— Nominal volume of a water allocation = 100 ML Announced allocation = 80 per cent Water allocation volume = (100 x 80) ÷ 100 = 80 ML

This section specifies the announced allocation for the Teddington Weir Water supply Scheme must be the same as the announced allocation for the Lower Mary River Water Supply Scheme.

The initial announced allocation percentage must be set on the first day of the water year (currently 1 July) and will be revised during the water year in response to inflows or other factors that may increase the announced allocation percentage by five per cent or more. Each new or revised announced allocation must be posted on the resource operations licence holder website within five business days of being set.

The announced allocation can only be used within the relevant water year and cannot be less than zero per cent or more than 100 per cent. Announced allocations cannot be reduced within the water year.

154 Taking water under a water allocation

This section states the maximum volume of water that can be taken under a medium priority water allocation in a water year is the nominal volume of the water allocation multiplied by the announced allocation and divided by 100.

Division 3 Critical water supply arrangements

155 Critical water supply arrangements

The purpose of the critical water supply arrangements is to set out rules for the sharing of water in times of severe water shortages. This section states the resource operations licence holder must prepare and submit to the chief executive critical water supply arrangements within 12 months of the plan commencement. The resource operations licence holder must develop the arrangements in consultation with affected stakeholder groups and must consider a range of measures which could be required during periods of critical water supply. If a resource operations licence holder identifies additional measures, which would be required to preserve the supply of urban water during critical periods, the plan would need to be amended. The amendment process would include public consultation and an invitation for submissions before incorporating the changes.

Part 4 Dealings with water allocations

Division 1 Subdivision or amalgamation of water allocations

156 Permitted subdivisions or amalgamations

This section states subdivision and amalgamation of water allocations is permitted provided that:

- the priority group and location does not change
- for subdivisions, the sum of the nominal volumes of the new water allocations equals the nominal volume of the water allocation being subdivided

- for amalgamations, the nominal volume of the new water allocation equals the sum of the nominal volumes of the water allocations being amalgamated.

157 Prohibited subdivisions or amalgamations

A subdivision is prohibited if the combined nominal volume of each new water allocation is not equal to the nominal volume of the water allocation being subdivided or the locations and priority groups of the new water allocations are not the same as the water allocation being subdivided.

An amalgamation is prohibited if the nominal volume of the new water allocation is not equal to the combined nominal volume of the water allocations being amalgamated or the locations and priority groups of the water allocations being amalgamated are not the same.

Division 2 Water allocation change rules

Water allocation change rules define conditions necessary to allow a permanent change to an attribute of a water allocation. The chief executive will deal with all applications to make a change to a water allocation under these rules.

A change to a water allocation could be a change to the:

- nominal volume
- location
- purpose
- flow conditions
- priority group
- maximum rate of take
- volumetric limit
- water allocation group
- other conditions required to be entered into the register.

It is important to note in the terminology of the plan, a change to location only occurs when a water allocation is traded to a different zone. A trade to another place within the same zone is not considered a change of location and it may occur without being specifically listed as a permitted change in the plan.

158 Permitted changes

Subsection (1) states when a change of location is permitted and zones where such changes are permitted. The change must not result in more than the maximum or less than the minimum total nominal volume for a zone for a priority group.

Subsection (2) refers to Attachment 4, Part 3, Table 9 and Attachment 4, Part 5, Table 5, which describes the maximum and minimum total nominal volumes for the priority groups for water allocations for each zone.

Subsection (3) describes how the total nominal volume in a zone is calculated.

In the terminology of the plan, a change to location only occurs when a water allocation is traded to a different zone. A trade to another property within the same zone is not considered a change in location.

159 Prohibited changes

This section lists the types of changes to water allocations not allowed. The chief executive cannot approve prohibited changes. The specified changes may pose a risk to achieving the water allocation security objectives and/or the environmental flow objectives outlined in the water resource plan or are otherwise inconsistent with the water resource plan outcomes.

160 Application for changes not specified as permitted or prohibited

Any changes not specified as permitted or prohibited may be applied for in accordance with section 130 of the *Water Act 2000*. Such applications will be assessed according to the criteria set out in the *Water Act 2000*

and will be subject to public notification. In certain circumstances, the applicant may be required to pay the chief executive for the costs of researching and investigating the application.

Part 5 Seasonal water assignment rules

Seasonal water assignment rules allow the temporary transfer of the right to take water under a water allocation from one water allocation holder to another water user. A seasonal water assignment does not involve making a change to any of the details registered in the register for a water allocation. It is important to note seasonal assignment involves the assignment of a specified volume of water and not the nominal volume. Where there is a change (i.e. increase) to an announced allocation, the water allocation holder will be entitled to the additional water, not the assignee.

More information about seasonal water assignments is provided in the Seasonal Water Assignments and Water Leases brochure, which is available on the department's website at <www.derm.qld.gov.au>

161 Maximum water use

This section specifies that the maximum volume of water that may be used in a zone is the volume shown in Attachment 4, Part 5, Table 6. This section also specifies the volume of water used in a zone is the sum of the water use for all the water allocations in the zone for the water year. These volumes are inclusive of all priority groups, i.e. medium and high priority water allocations.

162 Seasonal water assignment rules

The resource operations licence holder is responsible for dealing with applications for seasonal water assignments within the scheme. Seasonal water assignments of a volume of water are permitted provided they do not have the purpose of 'distribution loss' and do not result in water use in the zone exceeding the maximum water use volume in Attachment 4, Part 5, Table 6. The maximum water use volume has been set at a level in accordance with the water allocation security objectives that apply to water allocations for the scheme.

Part 6 Interscheme trading and bulk water transfer agreement

This part provides for an agreement between the resource operations licence holders for the Lower Mary River and Teddington Weir water supply schemes to, among other things, facilitate the transfers provided in section 113 of the plan.

163 Interscheme trading and bulk water transfer agreement

Subsection (1) states an interscheme trading and bulk water transfer agreement must be in place between the resource operations licence holders for the Lower Mary River and Teddington Weir water supply schemes.

Subsection (2) states the matters the agreement must address, which are the resource operations licence holders' monitoring and reporting requirements, meter reading and water charges, a change of location or seasonal assignment of a water allocation between the two water supply schemes, and the transfer of water from the Mary Barrage to Teddington Weir.

Subsection (3) states there may be other issues that need to be covered under an agreement, and subsection (2) does not list all possible matters.

164 to 168 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 11 Wide Bay Water Supply Scheme

Part 1 Preliminary

169 Scope of Chapter 11

Chapter 11 applies to the resource operations licence holder for the Wide Bay Water Supply Scheme. It sets out the rules for operating the infrastructure within the scheme. The chapter also sets out the rules for environmental management, water sharing, dealings with water allocations and seasonal water assignment for the water managed under this water supply scheme. The resource operations licence holder is responsible for implementing these rules, except for the water allocation change rules which are the responsibility of the chief executive.

Part 2 Operating and environmental management rules

170 Use of watercourses for distribution

This section states the resource operations licence holder for the Wide Bay Water Supply Scheme must use only those watercourses listed in Attachment 4, Part 6, Table 4 for distributing water. The prescribed watercourses are those that have historically been used for distributing water within the scheme.

171 Operating levels for storages

The minimum operating level is the level below which water cannot be released from infrastructure. This may be due to physical limitations of infrastructure or water quality issues. Attachment 4, Part 6, Table 7 details the minimum operating level and full supply level for Burrum weirs 1 and 2, and Lenthalls Dam.

Subsection (2) states the resource operations licence holder must maintain the nominal operating level of the infrastructure specified in Attachment 4, Part 6, Table 7. The resource operations licence holder may maintain the level by making releases from the upstream infrastructure between October and April. The nominal operating level of the Burrum Weir 1 and Burrum Weir 2 is set to maximise the opportunities for overtopping flows to the estuary. These overtopping flows provide brackish habitat—a mix of seawater and freshwater, giving the water a lower salt level than seawater—and are directly linked to achieving the water resource plan's ecological outcomes for the Burrum River.

172 Change in rate of release from infrastructure

This section states the rate at which water is released from the storages in the Wide Bay Water Supply Scheme must be incrementally changed to reduce the risk of adverse environmental impacts. For example, suddenly stopping water releases from the storage could, under certain circumstances, result in fish stranding in watercourses downstream of the storage. Similarly, a rapid drop in water levels within a storage, resulting from a large volume of water, could lead to bank slumping or slip because of the hydraulic failure of waterlogged soil in the banks of the storage.

173 Quality of water released

Water quality can be affected by the depth or position within the storage from which it is released. Water released from the lower levels of the dam may have reduced dissolved oxygen levels, lower temperature or less desirable composition of solutes. Releases should be managed to optimise water quality and minimise the impact on aquatic habitats downstream of the storage.

Lenthalls Dam has a multi level off-take. This section states that when the resource operations licence holder releases water, they must release water from the off-take level that will provide the best water quality.

174 Low flow release strategy for Lenthalls Dam

This section provides a low flow release strategy for water releases from Lenthalls Dam and states the conditions under which the resource operations licence holder for the Wide Bay Water Supply Scheme must make low flow releases. Low flow releases must be made from Lenthalls Dam from October to April inclusive and are intended to be passed through to the estuary where possible.

Wide Bay Water undertook to construct a fishway on the Burrum Weir 1 (tidal barrage) during the application to raise Lenthalls Dam. In addition to maintaining the future fishway operation, the low flow releases aim to provide brackish habitat in the Burrum River estuary, and for migration cues for aquatic biota.

175 High flow release strategy for Lenthalls Dam

This section states that the resource operations licence holder for the Wide Bay Water Supply Scheme must release one large flow from Lenthalls Dam annually between October and April, provided that a sufficiently large inflow enters the dam. The release is required when the first inflow of at least 5000 megalitres per day enters the dam between October and April each year, and continues until daily inflows fall to less than 5000 megalitres per day. This means that if another inflow of water equal to, or greater than, 5000 megalitres per day enters the dam between October and April of the same year, another release is not required.

The release aims to provide a freshwater inflow to the Burrum River estuary to mitigate impacts of the raising of the Lenthalls Dam spillway and to provide a flushing flow to the estuary. This aims to provide habitat to maintain fisheries productivity in the Burrum River by increasing the available brackish habitat.

176 Operating rules for Wongi Waterholes

Wongi Waterholes are located upstream of Lenthalls Dam on the Burrum River, and are a unique ecosystem composed of waterholes - important for several cultural, social and environmental reasons. The raising of the spillway on Lenthalls Dam has increased the risk of inundating these waterholes. This inundation can occur for longer than that which occurred naturally, for example, when there is significant flow over the raised spillway.

To date, the resource operations licence holder has been responsible for placing earthen walls upstream of the dam, along with pumps and one-way gates to manage this potential inundation risk. In addition, the licence holder operates the Lenthalls Dam crest gates to minimise inundation periods.

This section relates only to the removal of floodwater from the waterholes and the placing of this water into the downstream watercourse.

Subsection (1) ensures the resource operations licence holder removes all floodwater contained above the natural full supply level in the waterholes.

Subsection (2) describes when and how the resource operations licence holder must remove the floodwater.

Subsection (3) explains the floodwater that is removed from the waterholes must be immediately put into the Lenthalls Dam system immediately downstream of Wongi Waterholes.

Subsection (4) explains this section does not authorise the take, supply or use of floodwater removed from the waterhole. It also explains water is not to be removed below the natural full supply level of the waterholes.

Subsection (5) explains the crest gates of Lenthalls Dam must be operated when the water reaches the levels as specified in Attachment 4, Part 6, Table 10.

Subsection (6) specifies the gates of the dam can be manually opened below the levels specified in Attachment 4, Part 6, Table 10 to help reduce the level of flood water in the waterholes.

Part 3 Water sharing rules

Division 1 Announced allocation rules

177 Announced allocation

This section requires the resource operations licence holder for the Wide Bay Water Supply Scheme to calculate and publish announced allocations throughout the water year. Announced allocations represent the share of water available to be taken under each entitlement, expressed as a percentage of the entitlement's nominal volume.

For example, where the nominal volume of a water allocation equals (=)100 megalitres (ML) and the announced allocation = 80 per cent, the water allocation volume is calculated as follows—

Nominal volume of a water allocation = 100 ML

Announced allocation = 80 per cent

Water allocation volume = (100 x 80) ÷ 100 = 80 ML

This section specifies the general rules to consider when determining the announced allocations for the Wide Bay Water Supply Scheme. The initial announced allocation percentage must be set on the first day of the water year (currently 1 July), and will be revised during the water year in response to inflows or other factors that may increase the announced allocation percentage by five per cent or more. Each new or revised announced allocation must be posted on the resource operations licence holder website within five business days of being set.

The announced allocation can only be used within the relevant water year and cannot be less than zero per cent or more than 100 per cent. Announced allocations cannot be reduced within the water year. This fulfils the environmental flow objectives and water allocation security objectives of the water resource plan.

178 Calculation of announced allocations

This section states the announced allocation for medium priority water allocations is determined based on the announced allocation value shown in Attachment 4, Part 6, Table 9. This table states the medium priority announced allocation corresponding to specified levels in Lenthalls Dam, in metres AHD and percentage of full capacity. The announced allocation and storage level relationship is based on the historical operating arrangements that were in force through the interim resource operations licence under the *Water Act 2000*.

The nominal volume of a medium priority water allocation in the scheme is multiplied by the announced allocation percentage to calculate the volume that may be taken by the water allocation holder in the water year. The announced allocations for medium priority water allocations will not drop below 40 per cent even when the storage level in Lenthalls Dam is quite low. Holders of medium priority water allocations can continue to take some of their water allocation when the storage is above the minimum operating level. This will not significantly impact on the availability of high priority water. The medium priority water allocation holders must have access to water at these levels to ensure the water resource plan's water allocation security objectives are met.

179 Taking water under a water allocation

This section states the maximum volume of water that can be taken under a water allocation in a water year is the nominal volume of the water allocation multiplied by the announced allocation and divided by 100.

Division 2 Critical water supply arrangements

180 Critical water supply arrangements

The purpose of the critical water supply arrangements is to set out rules for the sharing of water in times of severe water shortages. This section states the resource operations licence holder must prepare and submit to the chief executive critical water supply arrangements within 12 months of the plan commencement. The resource operations licence holder must develop the arrangements in consultation with affected stakeholder groups and must consider measures which could be required during periods of critical water supply. If a resource operations licence holder identifies additional measures, which would be required to preserve the supply of urban water during critical periods, the plan would need to be amended. The amendment process would include public consultation and an invitation for submissions before incorporating the changes.

Part 4 Dealings with water allocations

Division 1 Subdivision or amalgamation of water allocations

181 Permitted subdivisions or amalgamations

This section states subdivision and amalgamation of water allocations is permitted provided that:

- the priority group and location does not change
- for subdivisions, the sum of the nominal volumes of the new water allocations equals the nominal volume of the water allocation being subdivided
- for amalgamations, the nominal volume of the new water allocation equals the sum of the nominal volumes of the water allocations being amalgamated.

182 Prohibited subdivisions or amalgamations

A subdivision is prohibited if the combined nominal volume of each new water allocation is not equal to the nominal volume of the water allocation being subdivided or the locations and priority groups of the new water allocations are not the same as the water allocation being subdivided.

An amalgamation is prohibited if the nominal volume of the new water allocation is not equal to the combined nominal volume of the water allocations being amalgamated or the locations and priority groups of the water allocations being amalgamated are not the same.

Division 2 Water allocation change rules

Water allocation change rules define conditions necessary to allow a permanent change to an attribute of a water allocation. The chief executive will deal with all applications to make a change to a water allocation under these rules.

A change to a water allocation could be a change to the:

- nominal volume
- location
- purpose
- flow conditions
- priority group
- maximum rate of take
- volumetric limit
- water allocation group
- other conditions required to be entered into the register.

It is important to note in the terminology of the plan, a change to location only occurs when a water allocation is traded to a different zone. A trade to another place within the same zone is not considered a change of location and it may occur without being specifically listed as a permitted change in the plan.

Accordingly, because there is only one zone in the Wide Bay Water Supply Scheme, the trading of a water allocation to another place within the scheme is not considered a change of location and can proceed.

183 Prohibited changes

This section lists the types of changes to water allocations not allowed. The chief executive cannot approve prohibited changes. The specified changes may pose a risk to achieving the water allocation security objectives and/or the environmental flow objectives outlined in the water resource plan or are otherwise inconsistent with the water resource plan outcomes.

184 Application for changes not specified as prohibited

Any changes not specified as permitted or prohibited may be applied for in accordance with section 130 of the *Water Act 2000*. Such applications will be assessed according to the criteria set out in the *Water Act 2000* and will be subject to public notification. In certain circumstances, the applicant may be required to pay the chief executive for the costs of researching and investigating the application.

Part 5 Seasonal water assignment rules

Seasonal water assignment rules allow the temporary transfer of the right to take water under a water allocation from one allocation holder to another water user. A seasonal water assignment does not involve making a change to any of the details registered on the register for a water allocation. It is important to note seasonal assignment involves the assignment of a specified volume of water and not the nominal volume. Where there is a change (i.e. increase) to an announced allocation, the water allocation holder will be entitled to the additional water, not the assignee.

More information about seasonal water assignments is provided in the Seasonal Water Assignments and Water Leases brochure, which is available on the department's website at <www.derm.qld.gov.au>.

185 Maximum water use

This section specifies the maximum volume of water that may be used in a zone is the volume shown in Attachment 4, Part 6, Table 8. This section also specifies the volume of water used in a zone is the sum of the water use for all the water allocations in the zone for the water year. These volumes are inclusive of all priority groups (i.e. medium and high priority water allocations). There is only one zone within this scheme.

186 Seasonal water assignment rules

The resource operations licence holder is responsible for dealing with applications for seasonal water assignments within the scheme. Seasonal water assignments of a volume of water are permitted provided they do not result in water use in the zone exceeding the maximum water use volume as stated in Attachment 4, Part 6, Table 8. The maximum water use volume has been set at a level in accordance with the water allocation security objectives that apply to water allocations for the scheme.

187 to 191 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 12 Performance assessment

192 Water monitoring

This section states the chief executive must collect and record data to determine current and future trends in water use, trading, groundwater levels, seasonal water assignment and water use efficiency. Several years of data collection may be required before trends can be determined. Data will be collected from a variety of sources, including water meters, agency monitoring programs and associated programs. This data will be made available to the public. These activities will also contribute to an improved information base for future water resource planning within the plan area.

193 Natural ecosystems monitoring

This section states the chief executive must undertake natural ecosystems monitoring. Natural ecosystems monitoring will involve identifying ecological assets linked to the ecological outcomes of the water resource plan. An ecological asset can be a species, a group of species, a biological function, or particular ecosystem or place of value for which water is critical.

It is impractical to monitor every species or process linked with the identified ecological assets. Instead, indicators that represent each asset will be monitored. Monitoring an indicator will involve looking for evidence that the water requirements of an ecological asset or its indicator have been met. A detailed understanding of the biology of organisms is needed to identify critical ecological responses. Breeding behaviour and successful recruitment, which depend on specific aquatic conditions, for example, water depth, water velocity, length of time of inundation and seasonal timing.

The department will use a risk assessment framework to determine if environmental flow provisions specified in the rules of the plan provide opportunities for critical ecological responses to occur.

Where required, further investigations will help increase our understanding of organism's environmental water requirements. The monitoring program will be altered when necessary in response to new and improved information.

As further information is obtained, and there is an increased understanding of the biology of a particular organism, it's envisaged that ongoing assessment of the links between water management and achieving ecological outcomes will be more accurate and informative.

Sites for natural ecosystem monitoring will be established at locations where either the plan’s rules and requirements have an influence on the indicators of the ecological assets, or where it is suitable to carry out investigations to increase the department’s understanding of the organisms’ environmental water requirements. The timing and nature of data collected will be determined by the specific flow events that occur within the plan area or by the type of investigative work undertaken.

194 Assessment

An assessment of the overall performance of the water resource plan will be based on an analysis of the data collected under the plan. The assessment will allow the chief executive to determine if the strategies of the water resource plan have achieved the general and ecological outcomes of the water resource plan.

Where it's determined that the general or ecological outcomes in the water resource plan are not being achieved, the minister must consider amending the water resource plan in accordance with section 90 of the water resource plan. The findings and progress of the assessment will be presented with all of the other monitoring results in the minister’s annual report.

195 to 199 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 13 Resource operations licence holder monitoring and reporting

Part 1 Preliminary

200 Scope of Chapter 13

Chapter 13 outlines the monitoring and reporting requirements that apply to the resource operations licence holders listed in this section, and all water allocations associated with the water supply schemes mentioned. Monitoring and reporting is designed for compliance purposes, and to determine if the rules in the plan have been implemented. Implementation of the rules is directly linked to the strategies for achieving the water resource plan's outcomes. Monitoring and reporting helps to demonstrate the effectiveness of the plan in achieving the outcomes specified in the water resource plan.

201 Monitoring data must be made available

This section states the resource operations licence holders must retain all data that forms the basis for decisions regarding the operation of storages to allow for those decisions to be fully audited if needed. The chief executive may request any data, at any time, to check compliance of the resource operations licence holders with the rules and requirements specified in the plan.

Part 2 Monitoring requirements

Division 1 Water quantity

202 Stream flow and storage water level data

This section states the resource operations licence holders must record details relating to storage volume and height and stream flow data. Attachment 7, Tables 1 to 6 specify the locations where continuous time series height and volume data, and daily flow data are required. This information is needed to ensure the accuracy of the model used as the basis of the plan. The resource operations licence holder can determine how they will measure the data and must supply the chief executive with their proposed technique within 40 business days after the release of the draft plan.

203 Releases from storages

This section states the resource operations licence holders must measure and record details relating to all releases made from the listed storages. The details include the volume released, the rates of release, and the reason for releases.

204 Water diversions

This section states the resource operations licence holder must measure and record the daily volume of water diverted from the Mary River or Mary Barrage to the locations listed.

This information will allow the department to update the model for the plan area.

205 Announced allocations

This section states the resource operations licence holder must record the announced allocation determined for medium and high priority allocations if they are required, the date they were determined and the value of each parameter applied for calculating the announced allocation.

206 Seasonal water assignment of water allocations

This section requires the resource operations licence holders to record the details of the seasonal water assignments. The recorded details must include the name of the assignee/s—the person/s that an interest or right is being transferred to —and assignor/s—the person/s transferring that right, the volume of water seasonally assigned and the effective dates of the assignments.

Division 2 Impact of storage operation on natural ecosystems

207 Application of this division

This section lists the infrastructure to which this division applies.

208 Water quality

There is well-documented evidence that the operation of water storages can result in water quality problems within the storage (e.g. low dissolved oxygen levels), and downstream water quality changes that could affect the water resource plan's outcomes.

Such impacts are primarily due to stratification within the storage. That is, the water stored in the impoundment separates into chemically distinct layers. Deeper water (below the 'thermocline') is, among other things, often very low in dissolved oxygen and temperature. If this water is released downstream there may be unacceptable impacts on stream health.

Not all storages will result in such impacts on water quality. The risk-based approach will identify those storages most likely to cause an impact. Preliminary data analysis suggests stratification is more likely to occur in storages with water depths greater than approximately four metres. Water quality data for these storages will need to be collected. An annual review of the monitoring data will provide for appropriate adjustments to apply from the following water year in order to improve management of storages including minimising impacts on downstream water quality.

More detail on the risk-based approach can be found in the department's collection standard, which is referenced in section 11 of this plan and is available on the department's website at <www.derm.qld.gov.au> or alternatively, inspected at any of the department's offices.

209 Bank condition

Infrastructure management can affect bank condition. This section states the resource operations licence holders are required to assess any instances of impact on bank condition resulting from the operating the infrastructure. Resource operations licence holders are responsible for mitigating adverse effects on bank conditions via the management practices associated with operating infrastructure.

Resource operations licence holders may become aware of instances of bank slumping and/or erosion via internal and/or external sources including inspections, reports from staff, the public and landholders, or through local and state government agencies. The distance of influence is the area downstream of the storage that may be potentially impacted by infrastructure releases. If there are instances of bank collapse and/or erosion, the resource operations licence holder must investigate the situation to determine if the incident was associated with the release.

210 Fish stranding

Fish stranding applies to fish and other aquatic animals such as platypuses and turtles. This stranding may occur if the water level downstream of a storage suddenly recedes due to the cessation of a water release leaving fish or other aquatic animals stranded. It is the responsibility of the resource operations licence holders to assess any instances of fish stranding and to take all appropriate measures to minimise their occurrence.

Resource operations licence holders may become aware of fish strandings via any internal and/or external sources, including inspections, reports from staff, the public and landholders, or through local and state government agencies. This section states the resource operations licence holder, on becoming aware of a fish stranding incident, must investigate the incident and determine if it resulted from operating their infrastructure.

Part 3 Monitoring requirements for water taken by water users

211 Application of this part

This part specifies the monitoring requirements that apply within the listed water supply schemes. This part does not apply to the resource operations licence holder for the Wide Bay Water Supply Scheme. Alternative requirements for the Wide Bay Water Supply Scheme can be found under section 214 of the plan.

212 Water taken by water users

This section states the resource operations licence holders must record the water volume taken by each water user by zone for every quarter of the water year. This section applies only to those water entitlements managed under the relevant resource operations licence. This information must be collated as the total volume of water taken for each zone for each quarter, and the total volume of water taken for the water year for each water user. The total volume of water entitled to be taken by all water users must also be recorded. This information may be used to check compliance by individual allocation holders, and to determine the need for a Land and Water Management Plan.

Part 4 Additional monitoring requirements for specific resource operations licence holders

213 Application of this part

This part only applies to the resource operations licence holders for Baroon Pocket and Wide Bay Water supply schemes. The monitoring required under this part is in addition to the monitoring required under Part 2 of this chapter. This additional monitoring is required, as these two water supply schemes have different and specific issues that cannot be addressed only by the monitoring requirements stated under Part 2 of this chapter. The resource operations licence holder for the Baroon Pocket Water Supply Scheme must also monitor the take of water as specified under Part 3 of this chapter.

214 Monitoring requirements for the resource operations licence holder for the Wide Bay Water Supply Scheme

Subsection (a) states the resource operations licence holder must record the total volume of high priority water taken each quarter, and the total volume of medium priority water taken each water year.

Subsection (b) states the resource operations licence holder must record information in relation to managing Wongi Waterholes.

Wongi Waterholes are located upstream of the impoundment of Lenthalls Dam on the Burrum River and are a unique ecosystem of waterholes important for several cultural, social and environmental reasons. The raising of the spillway on Lenthalls Dam has increased the risk of inundation to these waterholes. This inundation can occur for a longer period than that which occurs naturally, for example, when there is significant flow over the raised spillway. To date, the resource operations licence holder has been responsible for placing earthen walls upstream of the dam, along with pumps and one-way gates to manage this potential inundation risk. The monitoring of the matters mentioned in subsection (b) will help identify whether managing the infrastructure has minimised the risk of inundating the waterholes.

215 Monitoring requirements for the resource operations licence holder for the Baroon Pocket Water Supply Scheme

This section states the resource operations licence holder for the Baroon Pocket Water Supply Scheme must record the details of Obi Obi Creek Water Advisory Committee requests for water releases from Baroon Pocket Dam for downstream users. The original Order in Council authorisation for Baroon Pocket Dam included a requirement to make releases totalling up to 2000 megalitres per water year as a compensation flow to downstream users on Obi Obi Creek. The interim resource operations licence for the water supply scheme continued these rules and ensured releases were made in accordance with the directions given by the chief executive. The chief executive considered the dam level, and the purpose for which the water would be

used, and determined the total of all releases made over the water year for downstream water users could not be more than 2000 megalitres per water year.

Part 5 Reporting requirements

Division 1 General reporting requirements

216 Reporting requirements

This section states the resource operations licence holders' requirements for quarterly, annual, operational and emergency reports. The department's Water Monitoring Data Reporting Standard specifies the timeframes for reports. The Water Monitoring Data Reporting Standard is available on the department's website at <www.derm.qld.gov.au>.

Division 2 Quarterly reporting

217 Quarterly report by the resource operations licence holder

This section identifies the data measured, collected and recorded that must be submitted to the chief executive on a quarterly basis. Generally, this data will be used by the department to confirm compliance by the resource operations licence holders with the rules and requirements of the plan.

Subsection (3) identifies that subsection (2) (f) does not apply to the resource operations licence holder for the Wide Bay Water Supply Scheme. This is a very specific arrangement made between the chief executive and the resource operations licence holder. The reporting on the total volume of water taken from each zone in this scheme, and entitled to be taken in each zone, is only required on an annual basis.

Division 3 Annual reporting

218 Annual reporting by the resource operations licence holder

This section states resource operations licence holders must submit an annual report. The annual report is based on data provided to the chief executive each quarter and information provided in operational and emergency reports during the water year. The report allows the chief executive to review the resource operations licence holders' operations for the water year. Annual reporting is more intensive and detailed than quarterly reporting, as trends can be more readily identified. The annual report covers water quantity monitoring results, water quality monitoring results and discussion on any issues faced by resource operations licence holders due to implementing and applying the rules and requirements of the plan.

219 Water quantity reporting

This section states the annual report submitted by the resource operations licence holders must include data collected during the water year relating to the operation and environmental effects of storages, water allocation and use.

220 Impact of storage operation on natural ecosystems

This section provides prescriptive guidelines for the resource operations licence holders to prepare their annual report. The annual report provides the licence holders with a chance to discuss any implementation or compliance issues. Infrastructure operation requirements in the plan are based on existing works and any substantial changes to these works (excluding minor changes such as repairs or replacement of components due to regular maintenance) must be reported to ensure the chief executive is kept up to date with water supply scheme arrangements. This will allow the chief executive to assess any potential impacts of these changes on the water resource plan's water allocation security and environmental flow objectives.

Division 4 Operational reporting

221 Operational reporting

This section provides prescriptive guidelines for the resource operations licence holders to notify the chief executive about the operation of the water supply scheme. The resource operations licence holders must notify the department within one business day of becoming aware of an operational incident or making a

decision regarding the availability of water being taken under allocation—for example, a revision of an announced allocation.

An operational report on the incidents listed in this section must be provided to the chief executive. The report must include the details of the incident, including the cause, and any incident responses. Any other supporting information must be attached to the report. Also outlined are the requirements of reporting a decision about the availability of water taken under allocations — for example, announced allocations and restrictions on medium priority water. In brief, the resource operations licence holders must provide the chief executive with details of the decision and the supporting information that justifies the decision.

Division 5 Emergency reporting

222 Emergency reporting

Emergency reports are required to make the department aware of any emergencies that may affect the resource operations licence holders' ability to implement the requirements of the plan. This report provides information to assist the chief executive in determining if any immediate action is required in response to the emergency. Resource operations licence holders must notify the chief executive of any emergency and must provide a full report on the emergency. An emergency for the purpose of the plan includes an occurrence that, by the nature of its severity, extent or timing, might be regarded as an emergency—for example contamination of water supply, structural damage to infrastructure or a danger to human health.

Part 6 Additional reporting requirements for specific resource operations licence holders

223 Application of this part

This part applies only to the resource operations licence holders for the Baroon Pocket Water Supply Scheme and the Wide Bay Water Supply Scheme and states the specific additional reporting required for these schemes. Licence holders must report on the monitoring undertaken under Part 2 of this chapter. The resource operations licence holder for the Baroon Pocket Water Supply Scheme must also report on the monitoring undertaken under Part 3 of this chapter.

224 Reporting requirements for the resource operations holder for the Wide Bay Water Supply Scheme

Subsection (1) states the resource operations licence holder must report on the total volume of high priority water taken and submit data and details in relation to the management of Wongi Waterholes. The resource operations licence holder must include this information in their quarterly report.

Subsection (2) states the resource operations licence holder must report on the total volume of medium priority water taken during the water year. This information must be included in the resource operations licence holder's annual report.

225 Reporting requirements for the resource operations holder for the Baroon Pocket Water Supply Scheme

This section states the resource operations licence holder must report on the details of requests made by the Obi Obi Creek Water Advisory Committee for water releases from Baroon Pocket Dam for downstream water users. This information must be included in the resource operations licence holder's quarterly report.

226 to 230 Section numbers not used

These numbers have intentionally been left blank to accommodate future amendments without the need for the plan to be renumbered.

Chapter 14 Amendments to the resource operations plan

Part 1 Preliminary

231 Scope of Chapter 14

The *Water Act 2000* provides for amendments to be made to resource operations plans. This chapter states the types of amendments that may be made to the plan.

232 Commencement of amendments under Parts 2 and 3

This section states an amendment to the plan made under Chapter 14, Part 2 takes effect on the day the amended plan is gazetted or, if the amendment specifies a date for its commencement, the date specified.

Part 2 Amendments not requiring public notification

233 Application of Part 2

Section 106(b) of the *Water Act 2000* provides for amendments to be made to a resource operations plan where the amendment is stated in the resource operations plan as being able to be made under section 106(b). These amendments do not require public notification and advertising. This section describes the amendments to the plan that may be made under section 106(b) of the *Water Act 2000*.

234 Amendment necessary to implement an amendment to the Water Resource (Mary Basin) Plan 2006

This section states any amendment needed as the result of an amendment to the water resource plan, may be made to this plan.

235 Amendment to monitoring requirements

Subsection (1) states an amendment may be made to this plan to improve monitoring requirements or to make them more efficient.

Subsection (2) gives examples of the type of amendments that could occur under this section. There are no restrictions on the amendments that can be made to the monitoring and assessment provisions in the plan.

236 Amendment to reporting requirements

This section states this plan may be amended with added reporting requirements for compliance purposes.

237 Amendment to infrastructure details

This section states an amendment may be made to the infrastructure details if the amendment does not affect water resource plan outcomes, and if the amendment is for installing a fish transfer device, the modification or installation of multi-level inlet works, the specification of storage curves, or the inclusion of infrastructure details not included at the time of plan release.

238 Amendment to operating rules for Wongi Waterholes

This section states an amendment may be made to this plan to increase the minimum rate of take for removing water above the natural full supply level of Wongi Waterholes.

239 Amendment to gauging station specification

This section states amendments may be made to this plan as a result of changes to the specifications of a gauging station.

Part 3 Amendments requiring public notification

240 Application of Part 3

Section 105 of the *Water Act 2000* allows amendments to be made through a formal process detailed in the *Water Act 2000*. This process requires public notification, advertising, receipt of submissions and consideration of a number of factors listed in section 99 of the *Water Act 2000*. This part describes the amendments that may be made to the plan under section 105(6) of the *Water Act 2000*.

241 Amendments under the *Water Act 2000*

This section describes a range of amendments that could be made under section 105(6) of the *Water Act 2000* to include additional requirements for managing water in the plan area. This section does not limit the type of amendments that can occur under section 105(6) of the *Water Act 2000*.