Fitzroy Basin
Resource Operations Plan

September 2014
Amended September 2015

Queensland Government

This publication has been compiled by Water Policy—Department of Natural Resource and Mines.

Contents

Chapter 1 Preliminary

1 Short title

(1) This resource operations plan may be cited as the Fitzroy Basin Resource Operations Plan 2014[1].

(2) Reference in this document to 'this plan' means the Fitzroy Basin Resource Operations Plan 2014.

2 Commencement of the resource operations plan amendment

This plan amendment commences—

(a) on the first business day after 14 sitting days have passed since the Water Resource (Fitzroy Basin) Amendment Plan (No.1) 2015 was tabled in the Legislative Assembly; and

(b) the effect of the Water Resource (Fitzroy Basin) Amendment Plan (No.1) 2015 has not ceased due to the disallowance provisions stated in section 50 of the *Statutory Instruments Act 1992*.

3 Purpose of plan

This plan implements the Water Resource (Fitzroy Basin) Plan 2011.

4 Interpretation of words used in this plan

The dictionary in attachment 1 defines particular words used in this plan.

5 Plan area

This plan applies to the area shown as the plan area on the map in attachment 2.

6 Water to which this plan applies

(1) This plan applies to the following water (surface water) in the plan area—

(a) water in a watercourse or lake; and

(b) water in a spring not connected to—

(i) artesian water; or

(ii) subartesian water connected to artesian water.

(c) overland flow water other than water in a spring connected to water managed in subsection (b).

(2) This plan also applies to underground water that is subartesian water not connected to artesian water (groundwater) in the plan area.

7 Resource operations licence holder

(1) A resource operations licence holder for this plan is the resource operations licence holder for the—

(a) Dawson Valley Water Supply Scheme;

(b) Nogoa Mackenzie Water Supply Scheme;

(c) Lower Fitzroy Water Supply Scheme;

(d) Fitzroy Barrage Water Supply Scheme; and

(e) Callide Valley Water Supply Scheme.

[1] To allow for future amendments to this plan, some section numbers have been deliberately left blank. This will facilitate any plan amendments that may occur without the need for the whole plan to be renumbered.

(2) The extent of the water supply schemes listed in subsection (1) is shown on the map in attachment 3.

8 Water management areas

Each of the following water management areas as shown in the map in attachment 4 is a water management area for this plan—

(a) Dawson Valley Water Management Area;

(b) Nogoa Mackenzie Water Management Area;

(c) Comet Water Management Area;

(d) Theresa Retreat Water Management Area;

(e) Fitzroy Water Management Area; and

(f) Lower Callide groundwater sub-area.

9 Resource operations plan zones

(1) Each of the zones shown on the maps in attachment 5 is a resource operations plan zone (zone) for this plan.

(2) Each surface water zone is described in the tables in attachment 5 and includes—

(a) each part of a watercourse, lake or spring that lies within the zone; and

(b) those sections of tributaries and anabranches where there is access to flow or pondage from a watercourse or lake within the zone.

10 Information about areas, schemes and zones

(1) The location of the boundaries of the plan area, water supply schemes, water management areas and resource operations plan zones are held in digital electronic form by the department.

(2) The information held in digital electronic form can be reduced or enlarged to show the details of the boundaries[2].

11 Metering

The resource operations licence holder must meter the taking of water under all water allocations and seasonal water assignments managed under their resource operations licence.

12 Departmental water monitoring data collection standards and data reporting standards

(1) Where this plan requires monitoring by the resource operations licence holder, including measurement, collection, analysis and storage of data, the resource operations licence holder must ensure the monitoring is consistent with the Water Monitoring Data Collection Standards[3].

(2) Where this plan requires transfer of data or reporting by a resource operations licence holder, the resource operations licence holder must ensure the transfer or reporting is consistent with the Water Monitoring Data Reporting Standards[4].

[2] The boundaries held in digital electronic form may be inspected at any of the department's offices.

[3] The Water Monitoring Data Collection Standards can be inspected at any of the department's offices or accessed online at: <www.dnrm.qld.gov.au>

[4] The Water Monitoring Data Reporting Standards can be inspected at any of the department's offices or accessed online at: <www.dnrm.qld.gov.au>

13 Interim program

(1) This section applies where a resource operations licence holder is unable to meet the requirements of this plan.

(2) The resource operations licence holder must—

(a) within two months of commencement of this plan, submit a statement of programs currently in existence to the chief executive for approval; and

(b) within 6 months of commencement of this plan, submit an interim program for meeting the requirements of this plan to the chief executive for approval.

(3) The resource operations licence holder may at any time submit an interim program or an amendment to an existing program to the chief executive for approval if the holder proposes to operate in a way that is different to the requirements of this plan.

(4) Any submitted interim program or amendment to an existing program by the resource operations licence holder must include a timetable and interim methods to be used.

(5) In considering any submitted program, the chief executive—

(a) may request additional information from the resource operations licence holder; and

(b) must consider the public interest.

(6) In deciding any submitted program, the chief executive may either—

(a) approve the program, including with conditions; or

(b) amend and approve the amended program; or

(c) request the resource operations licence holder to submit a revised program.

(7) Within 10 business days of making a decision on a submitted program, the chief executive must notify the resource operations licence holder of the decision.

(8) Following approval of the program by the chief executive, the resource operations licence holder must—

(a) publish details of the approved program on their internet site; and

(b) operate in accordance with the approved program.

(9) Where there is conflict between the provisions of this plan and an approved program, the program prevails for the time it is in place.

14 Operating and environmental management rules and monitoring requirements

(1) The operating and environmental management rules and monitoring requirements of this plan do not apply in situations where implementing the rules or meeting the requirements would be unsafe to a person or persons.

(2) Where subsection (1) applies, the resource operations licence holder must comply with the reporting requirements for operational or emergency prescribed in chapter 20, section 401.

15 Addressing water resource plan outcomes

Attachment 6 lists the outcomes of the Water Resource (Fitzroy Basin) Plan 2011 and how this plan addresses those outcomes.

16 to 21 section numbers not used

Chapter 2 Unallocated water

22 Scope of chapter 2

This chapter states the process for making available and dealing with unallocated water mentioned in chapter 5, part 1, division 3 of the Water Resource (Fitzroy Basin) Plan 2011.

23 Record of volume of unallocated water

The chief executive may keep a register of the volume of unallocated water available.

Part 1 Granting from strategic water infrastructure reserve[5]

24 Process for granting particular water allocations from the strategic water infrastructure reserve for water infrastructure on the Fitzroy River—*Water Act 2000,* section 122 and 212

(1) The chief executive may accept a submission for making unallocated water available from the strategic water infrastructure reserve for water infrastructure on the Fitzroy River—

(a) from Gladstone Area Water Board for up to 30 000 ML of the reserve for urban and industrial water supplies;

(b) from a local government authority for up to 4000 ML of the reserve for urban water supplies for the Capricorn Coast; and

(c) from a person or entity for up to the remaining 42 000 ML of the reserve.

(2) The submission must be supported by sufficient information to enable the chief executive to assess the submission against the outcomes and objectives of the Water Resource (Fitzroy Basin) Plan 2011.

(3) The chief executive may grant a supplemented water allocation through an amendment to this plan that includes infrastructure operating and environmental management rules for the new water infrastructure and water sharing rules for the water allocation being granted.

(4) Despite subsection (3), the chief executive may grant the water entitlement to the Gladstone Area Water Board in the form of a water licence that includes the following elements if the board's submission demonstrates to the satisfaction of the chief executive that there is a formal agreement in place for the construction of a pipeline that will be used to access water under this entitlement—

(a) a nominal entitlement no greater than 30 000 ML; and

(b) a flow condition equivalent to at least 432 ML per day passing the Fitzroy Barrage.

[5] Section 45 of the Water Resource (Fitzroy Basin) Plan 2011 states all the strategic water infrastructure reserves for the Fitzroy Basin.

Part 2 Granting from strategic reserve or general reserve[6]

25 Scope of part 2

This part applies to unallocated water held as—

(a) strategic reserve; and

(b) general reserve.

26 Process for granting unallocated water held as strategic or general reserve—*Water Act 2000*, sections 122 and 212

The process for granting unallocated water must be in accordance with the requirements prescribed in part 2, division 1C of the Water Regulation 2002.

27 Limitation on making unallocated water available to protect strategic water infrastructure reserve for water infrastructure on the Connors River

Unallocated water is not available to be granted from the Connors River from upstream of its junction with Funnel Creek at AMTD 51.9km on the Connors River.

28 Determining elements of unsupplemented water allocations

The chief executive, in granting any unsupplemented water allocation from the general reserve for surface water, must grant the allocation in accordance with section 90 of the Water Resource (Fitzroy Basin) Plan 2011 and table 1 of this plan.

Table 1: Determining elements of unsupplemented water allocations

Location	Zone	Flow conditions	Water allocation group	Annual volumetric limit (ML/year)	Maximum rate (Litres/second)
Nogoa Mackenzie Water Management Area	Mackenzie A Mackenzie B Mackenzie C Mackenzie D Mackenzie E	4320 ML/day passing flow	Class 1B	Nominal volume multiplied by 1.20	Nominal volume multiplied by 0.78468
Fitzroy Water Management Area	Fitzroy A Fitzroy B Fitzroy C Fitzroy D Fitzroy E	4320 ML/day passing flow	Class 5B	Nominal volume multiplied by 1.35	Nominal volume multiplied by 0.48438

29 to 39 section numbers not used

[6] Sections 40 and 47 of the Water Resource (Fitzroy Basin) Plan 2011 state all the strategic and general surface water and groundwater reserves for the Fitzroy Basin.

Chapter 3 Granting, converting and amending authorisations and transitional arrangements for particular entitlements

Part 1 Rules for converting to and granting unsupplemented water allocations, *Water Act 2000*, sections 121 and 122

40 Rules for converting existing water authorisations and granting unsupplemented water allocations

The chief executive must convert existing water licences[7] and grant unsupplemented water allocations for the Lower Callide groundwater sub-area—in accordance with attachment 7, part 1.

Part 2 Amending existing water allocations

41 Amending particular existing supplemented water allocations—Amendment to the Water Resource (Fitzroy Basin) Plan 2011, section 50

The chief executive must amend particular existing supplemented medium priority water allocations in the Callide Valley Water Supply Scheme—in accordance with attachment 8, part 1.

Division 1 Granting a water licence to take treated coal seam gas water—*Water Act 2000,* section 212

42 Process for granting a water licence to take treated coal seam gas water

(1) The chief executive may accept a submission from SunWater Limited for a water licence to take treated coal seam gas water that has been discharged into the Dawson Valley Water Supply Scheme.

(2) The submission must include all of the following—

(a) demonstration that the proposed taking of water under the proposed water licence is consistent with the relevant authorities required for distribution of treated coal seam gas water;

(b) an assessment of the potential impacts upon existing water entitlement holders and natural ecosystems within the plan area; and

(c) demonstration that the submission has been developed in consultation with water users within the extent of the Upper Dawson sub-scheme.

(3) The chief executive may require the submitter to give additional information.

(4) If the submitter fails, without reasonable excuse, to comply with the requirements for additional information within the reasonable time stated in the requirement, the submission lapses.

(5) The chief executive may approve the submission if satisfied doing so would not—

[7] See sections 127 to 136 of the Water Resource (Fitzroy Basin) Plan 2011.

(a) increase the amount of water taken from natural flows within the plan area; and

(b) adversely impact on the outcomes of the Water Resource (Fitzroy Basin) Plan 2011; and

(c) adversely affect other water authorisations.

(6) If the chief executive is satisfied the submission should be approved wholly or in part, the chief executive may grant the water licence.

(7) A licence granted by the chief executive under this section must include, but is not limited to—

(a) purpose—'Any'; and

(b) conditions—which have the following effect—

(i) the volume of water taken under the water licence in a water year does not exceed the volume of treated coal seam gas water discharged into the scheme for that water year;

(ii) the water taken under the authority of the licence must be managed in accordance with the operating and water accounting rules specified in chapter 5;

(iii) monitoring and reporting on water taken in accordance with the relevant requirements of this plan; and

(iv) the water granted only for the life of the project.

Part 3 Amending water licences—*Water Act 2000,* section 217

43 Amending water licences

Within 120 business days of the commencement of this plan, the chief executive must amend water licences in accordance with attachment 9, parts 1and 2.

44 Amending existing water licences—Amendment to the Water Resource (Fitzroy Basin) Plan 2011, section 106A

Within 120 business days of the commencement of this plan, the chief executive must amend water licences in the in the Don and Dee Rivers and Alma Creek Water Management Area in accordance with attachment 9, part 3.

Part 4 Transitional arrangements for particular entitlements

45 Transitional arrangements for particular entitlements in the Lower Callide groundwater sub-area

(1) This section applies to unsupplemented water allocations in the Lower Callide groundwater sub-area granted under section 40 of this plan.

(2) Despite section 333 of this plan, for the 2015/16 water year—the volume of water that may be taken under a water allocation belonging to water allocation group GW1B is the announced entitlement decided by chief executive under section 66 of the Water Regulation 2002 for 1 July 2015.

(3) Despite section 333 of this plan and the announced entitlement decided by the chief executive under section 66 of the Water Regulation 2002 for 1 July 2015, for the 2015/16 water year—the volume of water that may be taken under a water allocation belonging to water allocation group GW1A is the volume stated on the water allocation granted on commencement of this plan.

46 to 60 section numbers not used

Chapter 4 Water supply schemes—general provisions

61 Application of chapter 4

This chapter contains general provisions which apply to the resource operations licence holder and all supplemented water allocations.

62 Infrastructure details

Attachment 10, parts 1 to 5 of this plan sets out the infrastructure details of the water supply schemes.

Part 1 Operating and environmental management rules—general

63 Quality of water released

Where a storage is fitted with multi-level inlet works, the resource operations licence holder must draw water from the inlet level that optimises the quality of water released.

64 Change in rate of release from infrastructure

The resource operations licence holder must minimise the occurrence of adverse environmental impacts by ensuring that any change in the rate of release of water from a storage into a watercourse occurs incrementally.

65 Seasonal base flow management strategy

(1) Each day, the resource operations licence holder must release from the storage stated in column 1, table 2, an amount of water that is the lesser of—

(a) the estimated daily inflow to the storage; and

(b) the volume stated in column 2.

(2) Subsection (1) does not apply for a storage—

(a) when the estimated daily inflow to the storage is less than the minimum inflow stated in column 3; or

(b) when the water level in the storage is below the minimum level stated in column 4; or

(c) when the first post-winter flow management strategy stated in column 5 is in effect; or

(d) for Tartrus Weir—during the period from 1 January to 31 August.

(3) Despite subsections (1) and (2), the resource operations licence holder may, for the purpose of implementing this strategy,—

(a) release plus or minus 20 per cent of the volume required under the strategy over a 48 hour period;

(b) delay the commencement and cessation of a release by up to 48 hours; and

(c) in determining the estimated daily inflows to the storage, not include any water which was released from an upstream storage to maintain the nominal operating level of the storage or to supply water users.

(4) For this section, estimated daily inflow to the storage means—

(a) For the Fitzroy Barrage—the inflow into Eden Bann Weir measured at the Gauging Station—Fitzroy River at Riverslea (GS130003B).

(b) For all other storages—the inflow into the storage measured at the closest upstream gauging station or local headwater gauging station.

Table 2: Seasonal Base Flow Requirements and Parameters

Column 1	Column 2	Column 3	Column 4	Column 5
Storage	**Volume**	**Minimum estimated daily inflow to the storage**	**Storage level**	**First post-winter flow management strategy**
Theodore Weir	100 ML/d	60 ML/d	EL 133.0 m AHD	Upper Dawson sub-scheme first post winter management strategy
Moura Weir	110 ML/d	70 ML/d	EL 102.8 m AHD	Upper Dawson sub-scheme first post winter management strategy
Neville Hewitt Weir	110 ML/d	70 ML/d	EL 77.0 m AHD	Lower Dawson sub-scheme first post winter management strategy
Bedford Weir	220 ML/d	100 ML/d	EL 118.86 m AHD	Lower Mackenzie first post-winter flow management strategy
Bingegang Weir	220 ML/d	100 ML/d	EL 100.34 m AHD	Lower Mackenzie first post-winter flow management strategy
Tartrus Weir	240 ML/d	150 ML/d	EL 81.36 m AHD	
Fitzroy Barrage	350 ML/d	220 ML/d	EL 2.3 m AHD	

66 Release volumes

Releases required under section 65 are in addition to releases required for—

(a) supplying water to a water allocation holder; and

(b) maintaining the nominal operating level in a downstream storage.

Part 2 Dealing with water allocations—general

Division 1 Subdivisions or amalgamations of water allocations

67 Subdivisions and amalgamations

(1) Subdivision of a water allocation is permitted where—

(a) the sum of the nominal volumes of the new water allocations is equal to the nominal volume of the water allocation that is being subdivided; and

(b) the location and priority group of the new water allocations are the same as that of the water allocation that is being subdivided.

(2) Amalgamation of water allocations is permitted where—

(a) the nominal volume of the new water allocation is equal to the sum of the nominal volumes of the water allocations that are being amalgamated;

(b) the location and priority group of the water allocations that are being amalgamated are the same; and

(c) the location and priority group for the new water allocation are the same as that of the water allocations that are being amalgamated.

Division 2 Water allocation change rules

Subdivision 1 Assessed changes

68 Assessed changes

(1) The holder of a water allocation that states the purpose as ‘distribution loss’ may apply to the chief executive under section 129A of the *Water Act 2000* to change the purpose of the water allocation to ‘any’.

(2) The water allocation holder must provide information with the application detailing that there is sufficient volume held under water allocations to provide for distribution losses within the system.

Subdivision 2 Other changes

69 Application for changes not specified as permitted, prohibited or assessed

An application for a change to a water allocation that is not specified as permitted, prohibited or assessed in this chapter or chapters 5, 6, 7, or 8 of this plan may be made in accordance with section 130 of the *Water Act 2000*.

70 to 79 section numbers not used

Chapter 5 Dawson Valley Water Supply Scheme

80 Application of chapter 5

This chapter applies to—

(a) the resource operations licence holder for the Dawson Valley Water Supply Scheme; and

(b) all water allocations associated with the Dawson Valley Water Supply Scheme.

81 Sub-schemes within the Dawson Valley Water Supply Scheme

(1) The sub-schemes within the Dawson Valley Water Supply Scheme are—

(a) the Upper Dawson sub-scheme; and

(b) the Lower Dawson sub-scheme.

(2) The extent of each sub-scheme is—

(a) described in table 3; and

(b) shown in the map in attachment 3.

Table 3: Extent of Dawson Valley Water Supply Scheme sub-schemes

Sub-scheme	Description
Upper Dawson sub-scheme	The Dawson River from the upstream limit of Glebe Weir (AMTD 356.5 km) to the effective upstream limit of Neville Hewitt Weir (AMTD 107 km).
Lower Dawson sub-scheme	The Dawson River from the effective upstream limit of Neville Hewitt Weir (AMTD 107 km) to the downstream limit of Boolburra waterhole (AMTD 18.37 km).

Part 1 Operating and environmental management rules

Division 1 Operating rules

82 Use of watercourses for distribution

(1) For the distribution of supplemented water, the resource operations licence holder may use the Dawson River from the upstream limit of Glebe Weir (AMTD 356.5 km) to the downstream limit of the Boolburra waterhole (AMTD 18.37 km), including sections of tributaries where supplemented water is accessible.

(2) For the distribution of treated CSG water, the resource operations licence holder may use the Dawson River from Glebe Weir (AMTD 326.2 km) to the downstream extent of the Dawson Valley Water Supply Scheme (AMTD 18.37 km), including sections of tributaries where treated CSG water is accessible.

83 Operating levels of storages

(1) The minimum operating levels and nominal operating levels for Glebe Weir, Gyranda Weir, Theodore Weir, Moura Weir and Neville Hewitt Weir are specified in table 4.

(2) The resource operations licence holder may release supplemented water from a storage only if the release is necessary to—

(a) supply water for a water allocation;

(b) maintain a downstream storage at or above its minimum operating level;

(c) meet the minimum waterhole level requirements in section 84; and

(d) comply with the environmental management rules in section 65 of this plan and division 2 of this part.

(3) Despite subsection (2) the resource operations licence holder may only release or supply supplemented water from a storage if the water level in that storage is above its minimum operating level, unless authorised by the chief executive.

Table 4: Operating levels of storages

Storage	Minimum operating level (m AHD)	Nominal operating level (m AHD)
Glebe Weir	EL 160.66	Not applicable
Gyranda Weir	EL 150.08	EL 152.12
Theodore Weir	EL 126.95	EL 132.73
Moura Weir	EL 97.0	EL 102.55
Neville Hewitt Weir	EL 72.53	Not applicable

84 Minimum levels in waterholes

Supplemented water and treated CSG water may be taken in the following circumstances unless otherwise authorised by the chief executive—

(a) from the waterhole known locally as Boolburra waterhole (nominally AMTD 18.37 km on the Dawson River) if the water level in Neville Hewitt Weir is—

(i) above EL 77.0 m AHD—the water must not be taken when the waterhole level is more than 0.5 metres below its cease to flow level; or

(ii) below EL 77.0 m AHD—the water must not be taken when the waterhole level is more than 1.2 metres below its cease to flow level; and

(b) for a waterhole within the extent of the Dawson Valley Water Supply Scheme other than the waterhole known locally as Boolburra waterhole—the water must not be taken when the level in the waterhole is more than 0.5 metres below its cease to flow level.

85 Diversions to Moura Offstream Storage

(1) Water may be diverted by the resource operations licence holder to the Moura Offstream Storage at a rate not exceeding 173 ML/day, subject to the following flow conditions—

(a) for the duration of the Upper Dawson first post-winter flow management period in chapter 10, section 239—the flow passing Moura Weir is more than 2 592 ML/day; and

(b) at other times—the flow passing Moura Weir is more than 432 ML/day.

(2) Treated CSG water may be diverted by the resource operations licence holder to Moura Offstream Storage at any time.

(3) The chief executive must notify the resource operations licence holder the start of the Upper Dawson first-post winter flow management period if activated before 1 October, otherwise the strategy is activated on 1 October.

(4) The chief executive must notify the resource operations licence holder the end of the Upper Dawson first post-winter flow management period.

(5) The resource operations licence holder must implement the elevated flow condition described in subsection (1)(a) within 24 hours if the Dawson first post-winter flow management period is activated before 1 October.

Division 2 Environmental management rules

86 Release volumes

Release volumes from storages required under this division are to be—

(a) in addition to releases required for—

(i) supplying water to a water allocation holder; or

(ii) maintaining nominal operating levels in downstream storages; and

(b) made with consideration of the maximum outlet capacity of the storage works.

87 Definition for division 2

In this division—

estimated daily inflow, for a storage, means the inflow into a storage measured at the closest upstream gauging station or local headwater gauging station.

88 Notification of first post-winter flow event

The chief executive must—

(a) determine when a first post-winter flow event occurs in the Dawson River—

(i) immediately downstream of Glebe Weir; and

(ii) immediately downstream of Neville Hewitt Weir; and

(b) notify the resource operations licence holder when a first post-winter flow event occurs.

89 Upper Dawson sub-scheme first post-winter flow management strategy

(1) This section applies if the resource operations licence holder has been notified by the chief executive of a first post-winter flow event occurring in the Dawson River between Glebe Weir and the effective upstream limit of Gyranda Weir.

(2) The resource operations licence holder must implement the Upper Dawson sub-scheme first post-winter flow management strategy within one day after notification.

(3) For 21 days from when the implementation of the strategy begins, the resource operations licence holder must release from—

(a) Moura Weir each day—

(i) if the estimated daily inflow to Moura Weir is greater than or equal to 35 ML/day—the lesser of—

(A) the estimated daily inflow to Moura Weir; and

(B) the maximum discharge capacity of Moura Weir outlet works; or

(ii) otherwise—zero.

(b) Gyranda Weir each day—

(i) if the estimated daily inflow to Gyranda Weir is greater than or equal to 30 ML/day—the lesser of—

(A) the estimated daily inflow to Gyranda Weir; and

(B) the maximum discharge capacity of Gyranda Weir outlet works; or

(ii) otherwise—zero.

(4) Subsection (3)(a) does not apply when—

(a) Moura Weir is below EL 103.15 m AHD; or

(b) Moura Weir spills.

(5) Subsection (3)(b) does not apply when—

(a) Gyranda Weir is below EL 154.9 m AHD; or

(b) Gyranda Weir spills.

90 Lower Dawson sub-scheme first post-winter flow management strategy

(1) This section applies if the resource operations licence holder has been notified by the chief executive of a first post-winter flow event occurring in the Dawson River downstream of Neville Hewitt Weir.

(2) The resource operations licence holder must implement the Lower Dawson sub-scheme first post-winter flow management strategy within one day after notification.

(3) For 21 days from when the implementation of the strategy begins, the resource operations licence holder must release from Neville Hewitt Weir each day—

(a) if the estimated daily inflow to Neville Hewitt Weir is greater than or equal to 35 ML/day—the lesser of—

(i) the estimated daily inflow to Neville Hewitt Weir; and

(ii) the maximum discharge capacity of Neville Hewitt Weir outlet works; or

(b) otherwise—zero.

(4) Subsection (3)(a) does not apply when—

(a) Neville Hewitt Weir is below EL 77.0 m AHD; or

(b) Neville Hewitt Weir spills.

Part 2 Water sharing rules

91 Announced allocations

(1) The water year for the Dawson Valley Water Supply Scheme is from 1 October to 30 September in the following year.

(2) The resource operations licence holder must—

(a) set an announced allocation for each sub-scheme for water allocations belonging to the high, medium and medium A priority groups to take effect on the first day of each water year;

(b) following the commencement of a water year—

(i) if the announced allocation percentage is less than 100 per cent—recalculate the announced allocation—

(A) within two weeks after a major inflow occurs; and

(B) within five business days of the first calendar day of each quarter for the water year, unless a major inflow has occurred within the previous two weeks.

(ii) reset the announced allocation—if a recalculation indicates that the announced allocation would—

(A) increase by five or more percentage points; or

(B) increase to 100 per cent; and

(c) make public details of the announced allocations, including parameters used in determining the announced allocations, within five business days of setting or resetting an announced allocation.

(3) The announced allocation that is set for the Upper Dawson sub-scheme must be—

(a) for the medium priority group—the lesser of—

(i) the announced allocation calculated for the medium priority group in the Upper Dawson sub-scheme using the formula under section 92 rounded to the nearest per cent; and

(ii) 100 per cent;

(b) for the medium A priority group—the lesser of—

(i) the announced allocation calculated for the medium A priority group in the Upper Dawson sub-scheme using the formula under section 92 rounded to the nearest per cent; and

(ii) 100 per cent; and

(c) for the high priority group—

(i) if the announced allocation for both the medium and medium A priority groups in the Upper Dawson sub-scheme is—

(A) greater than zero—100 per cent; or

(B) zero—100 per cent and restrictions under section 94 may apply.

(4) Despite subsection (3), the resource operations licence holder may set the announced allocation for medium and medium A priority water allocations in the Upper Dawson sub-scheme to exceed 100 per cent to supply treated coal seam gas water taking into account the projected treated coal seam gas water availability.

(5) The announced allocation that is set for the Lower Dawson sub-scheme must be—

(a) for the medium priority group—the lesser of—

(i) the announced allocation calculated for the medium priority group in the Lower Dawson sub-scheme using the formula under section 92 rounded to the nearest per cent; and

(ii) 100 per cent; and

(b) for the high priority group—

(i) if the announced allocation for the medium priority group in the Lower Dawson sub-scheme is—

(A) greater than zero—100 per cent; or

(B) zero—100 per cent and restrictions under section 94 may apply.

(6) Despite subsections (3) and (5) the announced allocations that are set must—

(a) not be less than zero; and

(b) not be reduced during the water year.

92 Calculation of announced allocations

(1) The resource operations licence holder must calculate the announced allocation in the Upper Dawson sub-scheme for water allocations belonging to the medium A and medium priority groups using the formula—

$$(AAm * MPA) + (AAma * MAPA) = (UV + IN + INCSG - HPA - RE - TOL - UCSG + DIV - VIWY)$$

Where:

If AAma < = 20 per cent, AAm = 0 per cent

If AAma > 20 per cent and < 100 per cent, AAm = AAma–20 per cent

If AAm $\geq$ 80 per cent, AAma = 100 per cent

(2) The resource operations licence holder must calculate the announced allocation in the Lower Dawson sub-scheme for water allocations belonging to the medium priority using the formula—

$$AAm = \frac{(UV + IN - HPA - RE - TOL + DIV - VIWY) * 100}{MPA}$$

(3) In this section the parameters for the formulae are—

Parameter	Definition
AA_m	The announced allocation for water allocations belonging to the medium priority group in a sub-scheme.
AA_{ma}	The announced allocation for water allocations belonging to the medium A priority group in the Upper Dawson sub-scheme.
MPA	Medium priority allocations—the sum of the nominal volumes for all water allocations belonging to the medium priority group in a sub-scheme.
MAPA	Medium A priority allocations—the sum of the nominal volumes for all water allocations belonging to the medium A priority group in the Upper Dawson sub-scheme.
HPA	High priority allocations—the sum of the nominal volumes for all water allocations belonging to the high priority group in a sub-scheme.
DIV	Diversions—the sum of the diversions for all water allocations in a sub-scheme during the current water year. In the Lower Dawson sub-scheme, DIV is the volume of supplemented water diversions for all water allocations in the sub-scheme during the current water year, excluding any water taken in the current water year that had been carried over. In the Upper Dawson sub-scheme, DIV is the volume of supplemented water diversions for all water allocations in the sub-scheme during the current water year, excluding any water taken in the current water year that had been carried over.
UV	Useable volume (UV) for a storage, is the volume of stored supplemented water that can be used to supply water allocations through to the end of a water year and is calculated as— UV = ASV–DSV where— ***adjusted storage volume*** (ASV) means the storage volume, in megalitres, equating to the current storage level adjusted for the projected storage loss (SL). ***projected storage loss*** (SL) means the combined evaporation and seepage losses, in megalitres, that are expected to occur from the storages through to the end of the water year. ***dead storage volume*** (DSV) means the volume of water, in megalitres, that cannot be released or used from the storage under normal operating conditions. For the purposes of this section— UV for the Upper Dawson sub-scheme is the sum of the useable volumes for Glebe Weir, Gyranda Weir, Theodore Weir, Moura offstream storage and Moura Weir. UV for the Lower Dawson sub-scheme is the useable volume for Neville Hewitt Weir. Evaporation and seepage is specified in millimetres for each month in table 5 for each of the sub-schemes. To determine the projected storage loss (SL), the value next to the current month is multiplied by the current surface area of the storage. The storage loss for each summed to give the total storage loss. DSV is specified for each of the storages in attachment 10, part 1. Storage volumes are derived from the relevant storage volume/level curve referenced in attachment 10, part 1.

Parameter	Definition
IN	Inflow—the allowance for natural inflows used in the calculation of the announced allocation. The inflows to be used are specified in table 6. The value which must be used for inflows is the value in the table for the month in which the calculation is undertaken.
RE	Reserve—the volume reserved for supplying high priority allocations in future years derived from table 7.
TOL	Transmission operating loss—the allowance for the expected instream losses associated with the supply of water allocations over the remainder of the water year and is calculated as— Upper Dawson sub-scheme— $TOL = \frac{TOL1 * (MPA + MAPA + HPA - DIV)}{MPA + MAPA + HPA}$ Lower Dawson sub-scheme— $TOL = \frac{TOL2 * (MPA + HPA - DIV)}{MPA + HPA}$ where— TOL1 for the Upper Dawson sub-scheme is derived from table 8 using linear interpolation of the announced allocation for the medium priority group. TOL2 for the Lower Dawson sub-scheme is derived from table 9 using linear interpolation of the announced allocation for the medium priority group.
VIWY	Net Carryover volume—the sum of the available carryover volumes for a sub-scheme determined under section 95.
INCSG	The projected inflow of treated CSG water to the scheme, based on production estimates of treated CSG water, which is available for supplemented take.
UCSG	Unsupplemented use of treated CSG water (UCSG), where a licence has been granted under section 46 of this plan, the sum of the water used during the current water year under the licence. This water is not available for supplemented take.

Table 5: Projected storage losses (mm)

Month in which announced allocation is calculated	Upper Dawson sub-scheme	Lower Dawson sub-scheme
October	990	990
November	990	990
December	990	990
January	990	990
February	990	990
March	815	815
April	645	645
May	515	515
June	420	420
July	340	340
August	255	255
September	145	145

Table 6: Inflow allowances (ML)

Month	Upper Dawson sub-scheme inflows (ML)	Lower Dawson sub-scheme inflows (ML)
October	2500	700
November	1555	432
December	1447	432
January	1379	47
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0

Table 7: Reserve volumes (ML)

Month in which announced allocation is calculated	Upper Dawson sub-scheme reserve (ML)	Lower Dawson sub-scheme reserve (ML)
October	2500	700
November	1555	432
December	1447	432
January	1379	47
February	4000	1500
March	4000	1500
April	4000	1500
May	4000	1500
June	4000	1500
July	4000	1500
August	4000	1500
September	4000	1500

Table 8: TOL1 for Upper Dawson sub-scheme

AAm (%)	TOL1 (ML)
0	250
10	550
50	1300
80	1700
100	1850

Table 9: TOL2 for Lower Dawson sub-scheme

AAm (%)	TOL2 (ML)
0	100
60	400
100	550

93 Taking water under a water allocation

(1) The volume of water taken under a water allocation in a water year must not exceed the nominal volume of the allocation multiplied by the announced allocation.

(2) For a water allocation that has changed its priority group—the announced allocation for the new priority group must not apply until the water year following the year in which the change was registered.

(3) Subsection (1) does not include a volume of water permitted—to be carried over from the previous water year as specified in section 95.

94 Fourth quarter restriction period

(1) The resource operations licence holder must activate a restriction period after the 1st of July when the fourth quarter unused entitlement is more than 5 per cent greater than the total available supply

(2) When a restriction period is activated under subsection (1) the resource operations licence holder must—

(a) discontinue supply under the announced allocation arrangements;

(b) identify water entitlements which have essential water needs and determine a nominated required volume;

(c) allocate essential water needs entitlements a volume that is the lesser of—

(i) total available supply; or

(ii) 10 per cent of the total nominal volume of the high priority entitlements;

(d) determine the remaining available supply;

(e) allocate fourth quarter unused entitlements a volume equal to the remaining available water supply; and

(f) regularly review the total available supply and the announced volume yet to be supplied.

(3) During the restriction period if a review of the total available supply determines the total available supply is 10 per cent greater than currently allocated under the restriction period, the resource operations holder must—

(a) determine the additional available supply;

(b) allocate essential water needs entitlements a volume that is the lesser of—

(i) the additional available supply; or

(ii) the difference between the nominated required volume and the volume currently allocated to the essential water needs entitlements; and

(c) any remaining volume in supply is to be allocated to the fourth quarter unused entitlements.

(4) Despite subsections (2) and (3) any allocation must not exceed an individual's entitlement.

(5) The resource operations licence holder must cease restrictions if—

(a) if the announced allocation for medium and medium A priority allocation increases; or

(b) at the end of the water year.

(6) In this section—

fourth quarter unused entitlement means total volume in each entitlement's water account following meter readings after 1st of July.

essential water needs means part of a town water supply required for essential services included drinking water and sanitation but excluding lawns and gardens. The resource operations licence holder in conjunction with water allocation holders may establish additional essential purposes.

total available supply is useable volume for each storage adjusted to account for next year's high priority requirement and any transmission operation losses.

Total available supply = UV–RE–TOL, where the parameters for this formula are defined in the table under section 92.

nominated required volume is the volume to meet essential water needs as negotiated between the resource operations holder and essential water needs entitlement holders.

95 Orange Creek Weir release period for medium priority and medium A priority water allocations in the Upper Dawson sub-scheme

(1) The Orange Creek Weir release period for the Upper Dawson sub-scheme starts at such time the resource operations licence holder notifies under subsection (2).

(2) The resource operations licence holder may notify medium priority and medium A priority water allocation holders in the Upper Dawson sub-scheme of the activation of the Orange Creek Weir release period to make available supplies of water stored in Orange Creek Weir.

96 Carryover

(1) The resource operations licence holder may, subject to this section, allow a holder of a water allocation belonging to the high, medium or medium A priority groups, to carry over part of any unused water from one water year to the next water year.

(2) If a fourth quarter restriction period has been activated under section 94 during the current water year—carryover is not permitted.

(3) For each sub-scheme the total volume of unused water that is permitted to be carried over to the next water year is the lesser of—

(a) the total volume of unused water for that sub-scheme at the end of the water year; and

(b) 10 per cent of the total nominal allocation for that sub-scheme.

(4) The volume of water that may be carried over by a water user must not exceed the nominal volume of the water allocation.

(5) Any volume of water that is carried over into a water year that is unused by the water allocation holder as at the date of either of the following events, must be deducted from the volume of water available to the allocation holder—

(a) at 1 November; or

(b) for the Upper Dawson sub-scheme—at the time Gyranda Weir spills; or

(c) for the Lower Dawson sub-scheme—at the time Neville Hewitt Weir spills.

(6) The resource operations licence holder must make public the methodology for determining the volume of water permitted to be carried over by each water user if the volume determined under subsection (3)(b) is less than the total volume of unused water for the scheme.

(7) In this section—

unused water means the volume of water not taken under section 93.

Part 3 Dealing with water allocations

Division 1 Water allocation change rules

97 Scope of division 1

This division provides for changes to water allocations managed under a resource operations licence for the Dawson Valley Water Supply Scheme that are permitted and prohibited changes. Assessed changes and other changes are provided for in chapter 4, part 2.

98 Definitions for division 1

In this division—

total nominal volume in a zone means the sum of the nominal volumes of all water allocations in the same priority group—

(a) for the zone or zones; and

(b) for which relevant valid change certificates have been issued under section 129 of the *Water Act 2000*.

99 Permitted changes

(1) This section applies to a water allocation with a purpose of 'agriculture' or 'any'.

(2) The following changes to a water allocation are permitted—

(a) a change to the location for the taking of water under a water allocation if the change—

(i) results in the location of the allocation being zones Dawson B, C, D, E, F, G, H, I, J, K, L or M; and

(ii) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 10;

(b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'; and

(c) a change to the priority group—

(i) from medium A to medium—if the change would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 10;

(ii) from medium to medium A if—

(A) the location of the medium A priority water allocation is zone Dawson I; and

(B) the change would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 10;

(iii) from medium to high if—

(A) the location for the high priority water allocation is zones Dawson C or B;

(B) the nominal volume is changed by dividing the nominal volume of the allocation belonging to the medium priority group by 3 and rounding down to the nearest whole number; and

(C) the change would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 10; or

(iv) from high to medium if—

(A) the location for the medium priority water allocation is zones Dawson C or B;

(B) the nominal volume is changed by multiplying the nominal volume of the allocation belonging to the high priority group by 3; and

(C) the change would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 10.

(3) Subsection (2) does not apply if the change is prohibited under section 100.

Table 10: Limits of total nominal volume in a zone

Priority group	Nominal Volume	Zones							
		Dawson L and M	Dawson K and J	Dawson I	Dawson H	Dawson G, F and E	Dawson D	Dawson C	Dawson B
High	Maximum Volume (ML)	0	600	1060		3519	1200	0	350
							1200		
	Minimum Volume (ML)	-	200	662		3119	998		
Medium A	Maximum Volume (ML)	0		19 456	0	0			
Medium		1760	9850	30 500[8]		14 450	8838	1942	733
							8838		
Medium A	Minimum Volume (ML)	-		3405	-	-			
Medium		560	6350	25 500[10]		9450	6838		

100 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location if the change would result in the location being other than zones Dawson B, C, D, E, F, G, H, I , J, K, L or M;

(b) a change to the location of a medium A priority water allocation from zone Dawson I; and

(c) a change that would result in the total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 10.

Part 4 Seasonal water assignment rules

101 Seasonal water assignment rules—*Water Act 2000*, section 146B

(1) The holder of a water allocation may enter into an arrangement for a seasonal water assignment in relation to the allocation under section 146B of the *Water Act 2000* only if the holder of the resource operations licence consents to the arrangement.

(2) Water supplied under a seasonal water assignment may be used for any purpose.

102 to 125 section numbers not used

[8] Volume includes medium A.

Chapter 6 Nogoa Mackenzie Water Supply Scheme

126 Application of chapter 6

This chapter applies to—

(a) the resource operations licence holder for the Nogoa Mackenzie Water Supply Scheme; and

(b) all water allocations associated with the Nogoa Mackenzie Water Supply Scheme.

Part 1 Operating and environmental management rules

Division 1 Operating rules

127 Use of watercourses for distribution

The resource operations licence holder may use the watercourses listed in table 11 for the distribution of supplemented water, including sections of tributaries where supplemented water is accessible.

Table 11: Watercourses authorised to be used for distribution of supplemented water

Name	Description
Nogoa River	The Nogoa River from the upstream limit of Fairbairn Dam (AMTD 737.5 km) to the Comet River junction (AMTD 611.5 km).
Mackenzie River	The Mackenzie River from the Comet River junction (AMTD 611.5 km) to the Springton Creek junction (AMTD 339.3 km).
Retreat Creek	Retreat Creek from the confluence of Drain RR6 (approximate AMTD 9.5 km) to the Blair Athol Railway line crossing of Retreat Creek (approximate AMTD 3.0 km) by supplemented water releases from Emerald irrigation area.

128 Operating levels of storages

(1) The minimum operating levels and nominal operating levels for Fairbairn Dam, Selma Weir, Bedford Weir, Bingegang Weir and Tartrus Weir are specified in table 12.

(2) The resource operations licence holder may release water from a storage only if the release is necessary to—

(a) supply water to a water allocation holder;

(b) maintain a downstream storage at or above its minimum operating level;

(c) meet the minimum waterhole level requirements in section 129; and

(d) comply with the environmental management rules in section 65 of this plan division 2 of this part.

(3) Despite subsection (2) the resource operations licence holder may only release or supply water from a storage when the water level in that storage is above its minimum operating level, unless authorised by the chief executive.

Table 12: Operating levels of storages

Storage	Minimum operating level (m AHD)	Nominal operating level (m AHD)
Fairbairn Dam	EL 185.85	not applicable
Selma Weir	EL 165.52	not applicable
Bedford Weir	EL 115.08	EL 118.38
Bingegang Weir	EL 97.74	EL 99.94
Tartrus Weir	EL 76.85	EL 79.25

129 Minimum levels in waterholes

(1) For waterholes listed in table 13, supplemented water must not be taken from a waterhole when its level is more than 1 metre below its cease to flow level, unless otherwise authorised by the chief executive.

(2) For waterholes not listed in table 13 and are within the extent of the Nogoa Mackenzie Water Supply Scheme—supplemented water must not be taken when the level in the waterhole is more than 0.5 metres below its cease to flow level, unless otherwise authorised by the chief executive.

Table 13: Minimum levels in waterholes

Waterhole (AMTD) (approximate location of the waterhole)
467.2 km to 436.6 km
429.5 km (Tartrus Weir)–419.2 km
412.3 km
408.5 km
378.8 km
373.2 km (10 Mile Waterhole)
371.3 km (10 Mile Waterhole)
357.9 km

Division 2 Environmental management rules

130 Release volumes

Release volumes from storages required under this division are to be—

(a) in addition to releases required for—

(i) supplying water to a water allocation holder; or

(ii) maintaining nominal operating levels in downstream storages; and

(b) made with consideration of the maximum outlet capacity of the storage works.

131 Definition for division 2

In this division—

estimated daily inflow, for a storage, means the inflow into a storage measured at the closest upstream gauging station or local headwater gauging station.

132 Notification of first post-winter flow event

The chief executive must—

(a) determine when a first post-winter flow event occurs in the Mackenzie River—

(i) immediately downstream of the Comet River junction; and

(ii) immediately downstream of Bingegang Weir; and

(b) notify the resource operations licence holder when a first post-winter flow event occurs.

133 Upper Mackenzie first post-winter flow management strategy

(1) This section applies if the resource operations licence holder has been notified by the chief executive of a first post-winter flow event occurring in the Mackenzie River immediately downstream of the Comet River junction.

(2) The resource operations licence holder must implement the Upper Mackenzie first post-winter flow management strategy within one day after notification.

(3) For 19 days from when the implementation of the strategy begins, the resource operations licence holder must release from Fairbairn Dam each day—

(a) if the estimated daily inflow to Fairbairn Dam is greater than or equal to 20 ML/day—the lesser of—

(i) the estimated daily inflow to Fairbairn Dam; and

(ii) the maximum discharge capacity of Fairbairn Dam outlet works; or

(b) otherwise—zero.

(4) Subsection (3) does not apply when—

(a) Fairbairn Dam is below EL 195.1 m AHD; or

(b) Fairbairn Dam spills.

134 Lower Mackenzie first post-winter flow management strategy

(1) This section applies if the resource operations licence holder has been notified by the chief executive of a first post-winter flow event occurring in the Mackenzie River immediately downstream of Bingegang Weir.

(2) The resource operations licence holder must implement the Lower Mackenzie first post-winter flow management strategy within one day after notification.

(3) For 21 days from when the implementation of the strategy begins, the resource operations licence holder must release from Bedford Weir each day—

(a) if the estimated daily inflow to Bedford Weir is greater than or equal to 50 ML/day—the lesser of—

(i) the estimated daily inflow to Bedford Weir; and

(ii) the maximum discharge capacity of Bedford Weir outlet works; or

(b) otherwise—zero.

(4) Subsection (3) does not apply when—

(a) Bedford Weir is below EL 118.86 m AHD; or

(b) Bedford Weir spills.

Part 2 Water sharing rules

135 Announced allocations

(1) The water year for the Nogoa Mackenzie Water Supply Scheme is from 1 July to 30 June in the following year.

(2) The resource operations licence holder must—

(a) set an announced allocation for water allocations belonging to the high and medium priority groups to take effect on the first day of each water year;

(b) following the commencement of a water year—

(i) if the announced allocation percentage is less than 100 per cent—recalculate the announced allocation—

(A) within two weeks after a major inflow occurs; and

(B) within five business days of the first calendar day of every quarter, unless a major inflow has occurred within the previous two weeks; or

(ii) reset the announced allocation—if a recalculation indicates that the announced allocation would—

(A) increase by five or more percentage points; or

(B) increase to 100 per cent; and

(c) make public details of the announced allocations, including parameters used in determining the announced allocations, within five business days of setting or resetting an announced allocation.

(3) The announced allocation that is set by the resource operations licence holder must be—

(a) for the medium priority group—the lesser of—

(i) the announced allocation calculated for the medium priority group under section 136 rounded to the nearest per cent; and

(ii) 100 per cent;

(b) for the high priority group—

(i) if the announced allocation for the medium priority group is greater than zero—100 per cent; or

(ii) otherwise—the lesser of—

(A) the announced allocation calculated for the high priority group under section 136 rounded to the nearest per cent; and

(B) 100 per cent.

(4) Despite subsection (3) the announced allocations that are set by the resource operations licence holder must—

(a) not be less than zero; and

(b) not be reduced during the water year.

136 Calculation of announced allocations

(1) The resource operations licence holder must calculate the announced allocation—

(a) for water allocations belonging to the medium priority group using the formula—

$$AAm = \frac{(UV - HPA - RE - TOL + DIV - VIWY) * 100}{MPA}$$

(b) for water allocations belonging to the high priority group using the formula—

$$AAh = \frac{(UV - TOL + DIVH - VIWY) * 100}{HPA}$$

(2) In this section the parameters for the formulae are—

Parameter	Definition
AA_m	The announced allocation for water allocations belonging to the medium priority group.
AA_h	The announced allocation for water allocations belonging to the high priority group.
MPA	Medium priority allocations—the sum of the nominal volumes for all water allocations belonging to the medium priority group.
HPA	High priority allocations—the sum of the nominal volumes for all water allocations belonging to the high priority group.
DIV	Diversions—the sum of the diversions for all water allocations during the current water year.
DIVH	High priority diversions—the sum of the diversions for all high priority water allocations during the current water year.
UV	Useable volume (UV) for a storage, is the volume of stored water that can be used to supply water allocations through to the end of a water year and is calculated as— UV = ASV–DSV where— adjusted storage volume (ASV) means the storage volume, in megalitres, equating to the current storage level adjusted for the projected storage loss (SL). projected storage loss (SL) means the combined evaporation and seepage losses, in megalitres, that are expected to occur from the storage through to the end of the water year. dead storage volume (DSV) means the volume of water, in megalitres, that cannot be released or used from the storage under normal operating conditions. For the purposes of this section— UV is the sum of the useable volumes for Fairbairn Dam, Bedford Weir, Bingegang Weir and Tartrus Weir. Evaporation and seepage is specified in millimetres for each month in table 14 for specific storages. To determine the projected storage loss (SL), the value next to the current month is multiplied by the current surface area of the storage. The storage loss for each storage is determined and then summed to give the total storage loss. DSV is specified for each of the storages in the attachment 10, part 2. Storage volumes are derived from the relevant storage volume/level curve in attachment 10, part 2.
RE	Reserve—the volume reserved for supplying high priority allocations in future years. RE must be determined from the following relationship— RE = (RES * HPA) /44398 Where RES is the reserve volume for the current month at the time of the calculation given in table 15.
TOL	Transmission operating loss—the allowance for the expected instream losses associated with the supply of water allocations over the remainder of the water year. TOL is derived from table 16 using linear interpolation of the announced allocation for the medium priority group.
VIWY	Net Carryover volume—the sum of the available carryover volumes for the scheme determined under section 138.

Table 14: Project storage losses (mm)

Month in which announced allocation is calculated	Fairbairn Dam (mm)	Bedford, Bingegang and Tartrus Weirs (mm)
July	1660	1770
August	1580	1680
September	1470	1570
October	1340	1420
November	1170	1240
December	990	1050
January	770	830
February	580	620
March	410	440
April	260	290
May	160	170
June	75	85

Table 15: Reserves (ML)

Month in which announced allocation is calculated	Reserve (ML)
July	54 700
August	60 200
September	65 700
October	71 200
November	76 800
December	82 300
January	87 800
February	93 300
March	98 800
April	104 300
May	109 900
June	115 400

Table 16: Transmission and operational losses (ML)

Month in which announced allocation is calculated	AAm = 0%	AAm = 100%
July	9020 * F_0	25 880 * F_{100}
August	8250 * F_0	24 610 * F_{100}
September	7490 * F_0	23 340 * F_{100}
October	6750 * F_0	21 250 * F_{100}
November	5980 * F_0	17 450 * F_{100}
December	5240 * F_0	16 030 * F_{100}
January	4470 * F_0	12 400 * F_{100}
February	3710 * F_0	7920 * F_{100}
March	3020 * F_0	4700 * F_{100}
April	2250 * F_0	3600 * F_{100}
May	1510 * F_0	2520 * F_{100}
June	740 * F_0	1420 * F_{100}
where: F_0 = HPA / 44 398 F_{100} = (HPA + MPA) / 235 323		

137 Taking water under a water allocation

(1) The volume of water taken under a water allocation in a water year must not exceed the nominal volume of the allocation multiplied by the announced allocation.

(2) For a water allocation belonging to the high priority group that has changed its priority group from medium—the announced allocation for the high priority group must not apply until the water year following the year in which the change was registered.

(3) Subsection (1) does not include a volume of water permitted to be carried over from the previous water year as specified in section 138.

138 Carryover

(1) The resource operations licence holder may, subject to this section, allow a holder of a water allocation belonging to the high or medium priority groups, to carry over part of the water allocation holder's unused water from one water year to the next water year.

(2) The total volume of unused water for the scheme that is permitted to be carried over by the resource operations licence holder to the next water year is the lesser of—

(a) the total volume of unused water for the scheme at the end of the water year; and

(b) the maximum volume in table 17.

(3) The volume of water that may be carried over by a water user must not exceed the nominal volume of the water allocation.

(4) Any volume of water that is carried over into a water year, and that is unused by the water allocation holder as at the date of either of the following events, must be deducted from the volume of water available to the allocation holder—

(a) the end of the water year; or

(b) when the Fairbairn Dam spills.

(5) The resource operations licence holder must make public the methodology for determining the volume of water permitted to be carried over by each water user if the volume determined under subsection (2)(b) is less than the total volume of unused water permitted to be carried over for the scheme.

(6) In this section—

unused water means the volume of water referred to under section 137 that was not taken.

Table 17: Maximum volume for carryover (ML)

Storage level of Fairbairn Dam at 1 July (m AHD)	Maximum volume for carryover (ML)
> EL 197 m	150 000
between EL 197 m and EL 193 m	75 000
< EL 193 m	25 000

Part 3 Dealing with water allocations

Division 1 Water allocation change rules

139 Scope of division 1

This division provides for changes to water allocations managed under a resource operations licence for the Nogoa Mackenzie Water Supply Scheme that are permitted and prohibited changes. Assessed changes and other changes are provided for in chapter 4, part 2.

140 Definitions for division 1

In this division—

total nominal volume in a zone means the sum of the nominal volumes of all water allocations in the same priority group—

(a) for the zone or zones; and

(b) for which relevant valid change certificates have been issued under section 129 of the *Water Act 2000*.

141 Permitted changes

(1) This section applies to a water allocation with a purpose of 'agriculture' or 'any'.

(2) The following changes to a water allocation are permitted—

(a) a change to the location for the taking of water under a water allocation if the change—

(i) results in the location of the allocation being either zones Mackenzie B, C, D, E, F, G, H, I, J, K, L, M or N; and

(ii) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 18;

(b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any';

(c) a change to the priority group—

(i) from medium to high if—

(A) the storage level in Fairbairn Dam is not less than EL 199.5 m AHD on the date the application for the change is received by the chief executive; and

(B) the nominal volume is also changed by dividing the nominal volume of the allocation belonging to the medium priority group, by 3 and rounding down to the nearest whole number; and

(C) the change would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 18; or

(ii) from high to medium if—

(A) the nominal volume is also changed by multiplying the nominal volume of the allocation belonging to the high priority group, by 3; and

(B) the change would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 18.

(3) Subsection (2) does not apply if the change is prohibited under section 142.

Table 18: Limits of total nominal volume[9] in a zone

Priority group	Nominal volume	Zone groups			
		Mackenzie J to N	Mackenzie H to I	Mackenzie E to G	Mackenzie B to D
High	Maximum volume (ML)				700
		56 000			
	Minimum volume (ML)	0	12 000	10 000	0
Medium	Maximum volume (ML)		18 000		18 182
		191 000			
	Minimum volume (ML)	0			5182
Medium and high	Maximum volume (ML)		46 000		

142 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location if the change would result in the location being other than zones Mackenzie B, C, D, E, F, G, H, I, J, K, L, M or N; and

(b) a change that would result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes for the zones in table 18.

[9] A blank cell in table 18 means there is no maximum limit on the total nominal volume specific to that zone group.

Part 4 Seasonal water assignment rules

143 Seasonal water assignment rules—*Water Act 2000*, section 146B

(1) The holder of a water allocation may enter into an arrangement for a seasonal water assignment in relation to the allocation under section 146B of the *Water Act 2000* only if—

(a) the holder of the resource operations licence consents to the arrangement; and

(b) the potential take volume for each zone group in table 19 is—

(i) less than or equal to the maximum volume for the zone group specified in table 19; and

(ii) greater than or equal to the minimum volume for the zone group specified in table 19.

(2) Water supplied under a seasonal water assignment may be used for any purpose.

(3) In this section—

potential take volume, for a zone group, means the volume calculated using the formula—

$$NV_{zg} + SWA_{in} — SWA_{out}$$

where—

NV_{zg} = the sum of the nominal volumes for all water allocations located within a zone group at the start of the water year.

SWA_{in} = the volume seasonally assigned into the zone group for the current water year.

SWA_{out} = the volume seasonally assigned out of the zone group for the current water year.

Table 19: Maximum and minimum volumes[10] for seasonal water assignment

Volume	Zone groups			
	Mackenzie J to N	Mackenzie I & H	Mackenzie E to G	Mackenzie B to D
Maximum volume (ML)		46 000		18 882
Minimum volume (ML)	0	12 000	10 000	5182

144 to 161 section numbers not used

[10] A blank cell in table 19 means there is no maximum limit on the volume for seasonal water assignment specific to that zone group

Chapter 7 Lower Fitzroy and Fitzroy Barrage water supply schemes

162 Application of chapter 7

This chapter applies to—

(a) the resource operations licence holder for the Lower Fitzroy Water Supply Scheme;

(b) the resource operations licence holder for the Fitzroy Barrage Water Supply Scheme; and

(c) all water allocations associated with the schemes.

163 Definitions for chapter 7

In this chapter—

(a) ***schemes*** means—

(i) Lower Fitzroy Water Supply Scheme; and

(ii) Fitzroy Barrage Water Supply Scheme.

(b) ***schemes licence holders*** means—

(i) the resource operations licence holder for the Lower Fitzroy Water Supply Scheme; and

(ii) the resource operations licence holder for the Fitzroy Barrage Water Supply Scheme.

Part 1 Operating rules

164 Use of watercourses for distribution

(1) For the Lower Fitzroy Water Supply Scheme the resource operations licence holder may use the Fitzroy River from the upstream limit of Eden Bann Weir (AMTD 183.4 km) to the Fitzroy Barrage (AMTD 59.6 km) for the distribution of supplemented water, including sections of tributaries where supplemented water is accessible.

(2) For the Fitzroy Barrage Water Supply Scheme the resource operations licence holder may use the Fitzroy River from the upstream limit of the Fitzroy Barrage (AMTD 115.0 km) to the Fitzroy Barrage (AMTD 59.6 km) for the distribution of supplemented water, including sections of tributaries where supplemented water is accessible.

165 Operating levels of storages

(1) The minimum operating levels and nominal operating levels for the Eden Bann Weir and the Fitzroy Barrage are specified in table 20.

(2) The resource operations licence holder for the Lower Fitzroy Water Supply Scheme may release water from the Eden Bann Weir only if the release is necessary to—

(a) supply water to a water allocation holder;

(b) maintain the Fitzroy Barrage at or above its minimum operating level;

(c) meet the minimum waterhole level requirements in section 166.

(d) comply with the environmental management rules in section 65 of this plan.

(3) The resource operations licence holder for the Lower Fitzroy Water Supply Scheme must make releases from Eden Bann Weir to maintain the Fitzroy Barrage at its nominal operating level unless below a level specified in subsection (4).

(4) Despite subsections (2) and (3) the resource operations licence holder for the Lower Fitzroy Water Supply Scheme may only—

(a) release water from Eden Bann Weir when the water level in Eden Bann Weir is above EL 9.55 m AHD except—

(i) to supply water allocation holders located in zone Fitzroy A if the water level in the Fitzroy Barrage is above EL -0.5 m AHD; or

(ii) to supply water allocation holders located in zone Fitzroy B; and

(b) release or supply water from Eden Bann Weir when the water level in Eden Bann Weir is above its minimum operating level, unless authorised by the chief executive.

(5) The resource operations licence holder for the Fitzroy Barrage Water Supply Scheme may release water from the Fitzroy Barrage only if the release is necessary to—

(a) comply with the environmental management rules in section 65 of this plan; and

(b) pass flows above the Fitzroy Barrage's full supply level.

(6) Despite subsection (5)(a) the resource operations licence holder for the Fitzroy Barrage Water Supply Scheme may only supply water from the Fitzroy Barrage when the water level in the Fitzroy Barrage is above its minimum operating level, unless authorised by the chief executive.

Table 20: Operating levels of storages

Storage	Minimum operating level (m AHD)	Nominal operating level (m AHD)
Eden Bann Weir	EL 7.25	Not applicable
Fitzroy Barrage	EL -1.2	EL 3.38

166 Minimum levels in waterholes

For a waterhole within the extent of the Lower Fitzroy Water Supply Scheme—supplemented water must not be taken when the level in the waterhole is more than 0.5 metres below its cease to flow level, unless otherwise authorised by the chief executive.

Part 2 Water sharing rules

167 Water year

The water year for the schemes is from 1 July to 30 June in the following year.

168 Taking water under a water allocation

In the schemes the volume of water taken under a water allocation in a water year must not exceed the nominal volume.

169 Medium priority restriction period

(1) The schemes licence holders must—

(a) commence a medium priority restriction period during the water year when the water level in the Fitzroy Barrage is below EL 0.75 m AHD; and

(b) cease a medium priority restriction period when the water level in the Fitzroy Barrage is above EL 0.85 m AHD.

(2) During a medium priority restriction period the schemes licence holders must—

(a) cease supply of water to medium priority water allocations;

(b) for each high priority water allocation—

(i) assign a high priority demand pattern; and

(ii) restrict supply of water to high priority water allocations based on the assigned high priority demand pattern; and

(c) For the period stated in column 1 of table 21, the combined total of the high priority demand patterns for all high priority water allocations must not exceed the percentage limit in the adjacent column 2 in table 21.

(3) In this section—

(a) ***high priority demand pattern*** means a demand pattern negotiated with high priority water users to be implemented when a medium priority restriction period commences. It is the maximum amount of water that may be supplied under a high priority water allocation for a specified calendar period; and

(b) a ***specified calendar period*** means—a specified date, week or month.

Table 21: Maximum percentage of total high priority water allocation that may be assigned to specified calendar periods under the high priority demand pattern

Column 1	Column 2
Period	**Percentage of total high priority allocation**
July to September	31
October to December	34
January to March	34
April to June	31

170 Other restrictions

The schemes licence holders may implement further restrictions on the supply of high priority water during a medium priority restriction period in consultation with high priority water allocation holders.

Part 3 Dealing with water allocations

Division 1 Water allocation change rules

171 Scope of division 1

This division provides for changes to water allocations managed in the Fitzroy Barrage and Lower Fitzroy water supply schemes under a resource operations licence that are permitted and prohibited changes. Assessed changes and other changes are provided in chapter 4, part 2.

172 Definition for division 1

In this division—

total nominal volume in a zone means the sum of the nominal volumes of all water allocations in the same priority group—

(a) for the zone or zones; and

(b) for which relevant valid change certificates have been issued under section 129 of the *Water Act 2000*.

173 Permitted changes

(1) This section applies to a water allocation with a purpose of 'agriculture' or 'any'.

(2) The following changes to a water allocation are permitted—

(a) in the Lower Fitzroy Water Supply Scheme a change to the location for the taking of water under a water allocation if the change results in the location of the allocation being in zones Fitzroy A, B or C;

(b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'; and

(c) in the schemes a change to the priority group—

(i) from medium to high if the nominal volume is also changed by dividing the nominal volume of the allocation belonging to the medium priority group, by 1.5 and rounding down to the nearest whole number;

(ii) from high to medium if the nominal volume is also changed by multiplying the nominal volume of the allocation belonging to the high priority group, by 1.5; and

(iii) if the change would result in a total nominal volume for high priority water allocations being less than the maximum volume or greater than the minimum volume specified in table 22.

(3) Subsection (2) does not apply if the change is prohibited under section 174.

Table 22: Maximum and minimum volumes of high priority water allocations in the Lower Fitzroy Water Supply Scheme and Fitzroy Barrage Water Supply Scheme

Water Supply Scheme	Priority group	Maximum volume (ML)	Minimum volume (ML)
Lower Fitzroy—zone Fitzroy A, B and C	High	25 800	25 200
Fitzroy Barrage—zone Fitzroy A	High	51 200	48 800

174 Prohibited changes

The following changes to a water allocation are prohibited—

(a) in the Lower Fitzroy Water Supply Scheme a change to the location if the change would result in the location being other than zones Fitzroy A, B or C;

(b) in the Fitzroy Barrage Water Supply Scheme a change to the location if the change would result in the location being other than zone Fitzroy A; and

(c) a change that would result in the total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 22.

Part 4 Seasonal water assignment rules

175 Seasonal water assignment rules—*Water Act 2000*, section 146B

(1) The holder of a water allocation may enter into an arrangement for a seasonal water assignment in relation to the allocation under section 146B of the *Water Act 2000* only if—

(a) the resource licence holder for the scheme to which the seasonal assignment applies consents to the arrangement; and

(b) during a medium priority restriction—

(i) for a seasonal water assignment from a medium priority water allocation—the supply of water must cease in accordance with section 169; and

(ii) for a seasonal water assignment from a high priority water allocation—

(A) a high priority demand pattern defined in section 169 must be assigned to the seasonal assignment from a high priority water allocation;

(B) the high priority demand pattern for the original high priority water allocation must be adjusted to account for the seasonal assignment; and

(C) the combined high priority demand pattern for the seasonal assignment and original high priority water allocation must not exceed the high priority demand pattern for the original high priority water allocation.

(2) If the water allocation is being seasonally assigned from one scheme into another scheme, the scheme licence holder that consents to the arrangement must notify the other scheme licence holder of the consent having been given

(3) Water supplied under a seasonal water assignment may be used for any purpose.

176 to 190 section numbers not used

Chapter 8 Callide Valley Water Supply Scheme

191 Application of chapter 8

This chapter applies to—

(a) the resource operations licence holder for the Callide Valley Water Supply Scheme; and

(b) all water allocations associated with the Callide Valley Water Supply Scheme.

192 Definitions for chapter 8

In this chapter—

(a) ***Awoonga CS Energy storage account*** means the account established under section 194 that states the volume of water that was transported from Awoonga Dam for CS Energy Ltd and currently stored in Callide Dam;

(b) ***Awoonga Callide Power Management storage account*** means the account established under section 194 that states the volume of water that was transported from Awoonga Dam for Callide Power Management Pty Ltd and currently stored in Callide Dam; and

(c) ***Callide storage account*** means the account established under section 194 that states the volume of natural inflow water that was captured by Callide Dam and currently stored in the dam.

Part 1 Operating rules

193 Use of watercourses for distribution

The resource operations licence holder may use the watercourses listed in table 23 for the distribution of supplemented water.

Table 23: Watercourses authorised to be used for distribution of supplemented water

Name	Description
Callide Creek	The part of Callide Creek from, and including, the impounded area of Callide Dam (AMTD 94 km) downstream to approximate AMTD 47.5 km.
Kroombit Creek	The part of Kroombit Creek from, and including, the impounded area of Kroombit Dam (AMTD 73 km) downstream to AMTD 9 km.
Kariboe Creek	The part of Kariboe Creek from the Callide Diversion Channel outfall (approximate AMTD 8 km) downstream to AMTD 3.5 km.

194 Storage accounts for Callide Dam

(1) The resource operations licence holder must—

(a) establish accounts for the water stored in Callide Dam being—

(i) the Awoonga CS Energy storage account;

(ii) the Awoonga Callide Power Management storage account; and

(iii) the Callide storage account; and

(b) make public details of the monthly account balances, within five business days of the end of each month.

(2) The volumes of water in each storage account must—

(a) be determined and recorded at the end of each month by the resource operations licence holder; and

(b) sum to the volume of water stored in Callide Dam.

(3) The balance in the Awoonga CS Energy storage account—

(a) may have a maximum deficit of 3000 ML; and

(b) must return to a zero balance when Callide Dam spills.

(4) The balance in the Awoonga Callide Power Management storage account—

(a) may have a maximum deficit of 2700 ML; and

(b) must return to a zero balance when Callide Dam spills.

(5) In determining the volume in Awoonga CS Energy, Awoonga Callide Power Management and Callide Valley storage accounts, the resource operations licence holder must conduct a monthly storage water reconciliation using the formulas—

(a) The Callide volume account equal to—

$$V_{Ecal} = V_E — V_{E\ cse} — V_{E\ cpm}$$

(b) The Awoonga CS Energy account volume equal to—

$$V_{E\ cse} = V_{B\ cse} — D_{A\ cse} + I_{A\ cse} — SL_{A\ cse}$$

(c) The Awoonga Callide Power Management account volume equal to—

$$V_{E\ cpm} = V_{B\ cpm} — D_{A\ cpm} + I_{A\ cpm} — SL_{A\ cpm}$$

(6) In this section the parameters for the formulae are—

Parameter	Definition
V_E	The total volume stored in Callide Dam at the end of the month as calculated using the Callide Dam storage curve.
$V_{E\ cal}$	The volume stored at the end of the month in the Callide storage account and available for supply to water allocations within the Callide Valley Water Supply Scheme.
$V_{E\ cse}$	The volume of Awoonga Water Supply Scheme water stored at the end of the month in the Awoonga CS Energy storage account and available for re-lift from Callide Dam by CS Energy.
$V_{E\ cpm}$	The volume of Awoonga Water Supply Scheme water stored at the end of the month in the Awoonga Callide Power Management storage account and available for re-lift from Callide Dam by Callide Power Management.
$V_{B\ cse}$	The volume of Awoonga Water Supply Scheme water stored at the beginning of the month in the Awoonga CS Energy storage account.
$V_{B\ cpm}$	The volume of Awoonga Water Supply Scheme water stored at the beginning of the month in the Awoonga Callide Power Management storage account.
$D_{T\ cse}$	Total diversion by CS Energy in that month.
$D_{CVWSS\ cse}$	Total diversion of Callide Valley Water Supply Scheme water by CS Energy in that month.
$D_{A\ cse}$	The diversion of Awoonga Water Supply Scheme water by CS Energy in that month: $D_{A\ cse} = D_{T\ cse} – D_{CVWSS\ cse}$
$D_{A\ cpm}$	The diversion of Awoonga Water Supply Scheme water by Callide Power Management in that month.
I_{TA}	The total volume of Awoonga Water Supply Scheme water delivered to Callide Dam in that month.
$I_{A\ cse}$	The total volume of Awoonga Water Supply Scheme water delivered to Callide Dam in the last month for CS Energy.

<table>
<tr><th>Parameter</th><th>Definition</th></tr>
<tr><td>$I_{A\ cpm}$</td><td>The total volume of Awoonga Water Supply Scheme water delivered to Callide Dam in the last month for Callide Power Management:
$I_{A\ cpm} = I_{TA} - I_{A\ cse}$</td></tr>
<tr><td>SL_T</td><td>Total Callide Dam evaporation and seepage for that month.
Total Callide Dam evaporation (modified by the Pan Factor) in that month is calculated using the total evaporation for that month at Thangool Airport (Site Number 039089) available on the website of the Bureau of Meteorology.
The Pan Factor (PF) to be used for each month is shown in the following table:
<table>
<tr><th>Month</th><th>PF</th><th>Month</th><th>PF</th></tr>
<tr><td>July</td><td>0.76</td><td>January</td><td>0.82</td></tr>
<tr><td>August</td><td>0.81</td><td>February</td><td>0.82</td></tr>
<tr><td>September</td><td>0.79</td><td>March</td><td>0.83</td></tr>
<tr><td>October</td><td>0.81</td><td>April</td><td>0.79</td></tr>
<tr><td>November</td><td>0.82</td><td>May</td><td>0.75</td></tr>
<tr><td>December</td><td>0.83</td><td>June</td><td>0.71</td></tr>
</table>
Total Callide Dam seepage is calculated at a standard rate of 25mm per month.
The surface area of the storage of the last day of the month is used to determine the evaporation and seepage volume.</td></tr>
<tr><td>$SL_{A\ cse}$</td><td>The portion of evaporation and seepage for that month to be attributed to Awoonga CS Energy storage account volume:
$SL_{A\ cse} = SL_T \times (V_{Ee\ cse} / V_E)$; and if
$V_{Ee\ cse} < 0$ then $SL_{A\ cse} = 0$</td></tr>
<tr><td>$SL_{A\ cpm}$</td><td>The portion of evaporation and seepage for that month to be attributed to Awoonga Callide Power Management storage account volume:
$SL_{A\ cpm} = SL_T \times (V_{Ee\ cpm} / V_E)$; and if
$V_{Ee\ cpm} < 0$ then $SL_{A\ cpm} = 0$</td></tr>
<tr><td>$V_{Ee\ cse}$</td><td>The approximated end of month volume for the Awoonga CS Energy storage account volume:
$V_{Ee\ cse} = V_{B\ cse} - D_{A\ cse} + I_{A\ cse}$</td></tr>
<tr><td>$V_{Ee\ cpm}$</td><td>The approximated end of month volume for the Callide Power Management storage account volume:
$V_{Ee\ cpm} = V_{B\ cpm} - D_{A\ cpm} + I_{A\ cpm}$</td></tr>
</table>

195 Release rules for Callide Dam and Kroombit Dam

(1) The resource operations holder may release water from either Callide or Kroombit Dams only if the release is—

(a) for groundwater recharge or the supply of water for stock and domestic purposes; and

(b) in accordance with an approved release strategy.

(2) The resource operations licence holder must submit a proposed release strategy for Callide and Kroombit Dams to the chief executive within 40 business days of the commencement of this plan.

(3) The proposed release strategy must—

(a) be consistent with the limitations on releases for groundwater recharge from Callide Dam stated in table 24;

(b) identify measures that attempt to ensure release strategies benefit those allocations accessing groundwater; and

(c) be developed in consultation with the resource operations licence holder's Irrigation Advisory Committee for the scheme.

(4) The chief executive may either—

(a) request further information; or

(b) approve the release strategy with or without change; or

(c) require the resource operations licence holder to submit a revised release strategy.

Table 24: Callide Dam release limitations

Volume in Callide storage account	Limitations on releases
> 33 000 ML	No constraints on releases to Callide, Kroombit and Kariboe Creeks for groundwater recharge.
20 000 ML–33 000 ML	Volume to be released for groundwater recharge is limited to 30% of monthly inflows with the maximum volume capped at 2 500 ML in any water year.
< 20 000 ML	No releases for groundwater recharge.

Part 2 Water sharing rules

196 Taking of water under water licences 613582 held by CS Energy and 613583 held by Callide Power Management

(1) This section applies to water licences 613582 held by CS Energy and 613583 held by Callide Power Management.

(2) Water may be taken from the Callide Dam impoundment except when there is less than 20 000 ML stored in the Callide storage account and—

(a) for water licence 613582 granted to CS Energy—the Awoonga CS Energy storage account is in deficit; and

(b) for water licence 613583 granted to Callide Power Management—the Awoonga Callide Power Management storage account is in deficit.

197 Announced allocations

(1) The water year for the Callide Valley Water Supply Scheme is from 1 July to 30 June in the following year.

(2) The resource operations licence holder must—

(a) set an announced allocation for water allocations belonging to the high A, high B and medium priority groups to take effect on the first day of each water year;

(b) for allocations belonging to the medium priority group—

(i) recalculate the announced allocation for each zone following increases to groundwater levels that have resulted from a recharge event if the current allocation is less than 100 per cent; and

(ii) reset the announced allocation for a zone only if a recalculation indicates that the announced allocation would—

(A) increase by five or more percentage points; or

(B) increase to 100 per cent; and

(c) make public details of the announced allocation, including the monitoring bore levels used for determining the announced allocation for water allocations belonging to the medium priority group, on the resource operations licence holder's internet site within five business days of setting or resetting an announced allocation.

(3) The announced allocation that is set by the resource operations licence holder must be—

(a) for the high A priority group—100 per cent;

(b) for the high B priority group—100 per cent; and

(c) for water allocations located within each zone that belong to the medium priority group—the announced allocation calculated under section 198.

198 Calculation of announced allocation for the medium priority group

(1) This section applies to water allocations belonging to the medium priority group.

(2) For each zone, the announced allocation for water allocations located in that zone must be calculated as follows by the resource operations licence holder—

(a) determine the groundwater level for each assessment site in the zone;

(b) for groundwater levels that are above or within the range specified in table 25 for the zone—

(i) round down each level to a groundwater level mentioned in the table; and

(ii) select the corresponding announced allocation in the table; and

(c) for groundwater levels that are below the range specified in table 25 for the zone—the announced allocation is zero per cent.

(3) If the monitoring bore for the assessment site cannot be used, the resource operations licence holder may use another method of determining the groundwater level for the site, subject to approval by the chief executive.

(4) In this section—

assessment site means a geographical location referred to in table 25 stated in eastings (E) and northings (N) as Map Grid of Australia 1994 (MGA94) zone 56 coordinates.

Table 25: Announced allocation for water allocations belonging to the medium priority group

Announced allocation (%)	Zone 3B Assessment Site— E: 242701, N: 7306915 Hodgetts Road (RN 13030140)	Zone 3A Assessment Site— E: 242847, N: 7304097 Burnett Highway (RN 13030234)	Zone 5 Assessment Site— E: 249632, N: 7301930 Dawson Highway (RN 13030126)	Zone 7 Assessment Site— E: 246932, N: 7297130 Meissners Road (RN 13030259)	Zone 8B Assessment Site— E: 250477, N: 7295924 Van Itallies Road (RN 13030747)	Zone 8A Assessment Site— E: 254746, N: 7296907 Mullers Road (RN 13030079)	Zone 10B Assessment Site— E: 251641, N: 7292284 Hintons Lane (RN 13030699)
	Groundwater level (EL–metres AHD)						
100	>145.17	>150.34	>161.35	>158.70	>174.18	>184.37	>175.91
95	144.51	149.62	161.04	158.38	173.17	183.74	175.31
90	143.85	148.90	160.73	158.07	172.16	183.12	174.70
85	143.19	148.18	160.42	157.76	171.16	182.49	174.10
80	142.53	147.46	160.11	157.45	171.02	181.87	173.49
75	141.87	146.74	159.79	157.13	170.89	181.24	172.89
70	141.70	146.64	159.48	157.02	170.76	181.12	172.75

Announced allocation (%)	Zone 3B Assessment Site— E: 242701, N: 7306915 Hodgetts Road (RN 13030140)	Zone 3A Assessment Site— E: 242847, N: 7304097 Burnett Highway (RN 13030234)	Zone 5 Assessment Site— E: 249632, N: 7301930 Dawson Highway (RN 13030126)	Zone 7 Assessment Site— E: 246932, N: 7297130 Meissners Road (RN 13030259)	Zone 8B Assessment Site— E: 250477, N: 7295924 Van Itallies Road (RN 13030747)	Zone 8A Assessment Site— E: 254746, N: 7296907 Mullers Road (RN 13030079)	Zone 10B Assessment Site— E: 251641, N: 7292284 Hintons Lane (RN 13030699)
	Groundwater level (EL–metres AHD)						
65	141.52	146.54	159.17	156.90	170.63	180.99	172.62
60	141.35	146.43	158.86	156.79	170.50	180.87	172.49
55	141.17	146.33	158.55	156.67	170.36	180.74	172.36
50	141.00	146.23	158.28	156.56	170.23	180.62	172.23
45	140.83	146.13	158.00	156.44	170.10	180.49	172.09
40	140.65	146.03	157.73	156.32	169.97	180.37	171.96
35	140.48	145.93	157.46	156.21	169.84	180.24	171.83
30	140.30	145.82	157.19	156.09	169.83	180.12	171.70
25	140.29	145.72	156.91	155.98	169.82	179.99	171.57
20	140.28	145.62	156.64	155.86	169.81	179.87	171.55
15	140.26	145.60	156.37	155.75	169.80	179.74	171.54
10	140.25	145.58	156.09	155.63	169.80	179.72	171.53
5	140.23	145.56	155.82	155.60	169.79	179.70	171.52
0	<140.22	<145.54	<155.75	<155.57	<169.78	<179.68	<171.51

199 Taking water under a water allocation belonging to the high A priority group

(1) This section applies to a water allocation belonging to the high A priority group.

(2) The volume of water taken under a water allocation in a water year must not exceed the nominal volume of the allocation multiplied by the announced allocation.

200 Taking water under a water allocation belonging to the risk priority group

(1) This section applies to a water allocation belonging to the risk priority group.

(2) Water may only be taken under a water allocation during periods of flow in either Callide or Kroombit Creeks, including times when water is being released under section 195.

(3) The volume of water taken under a water allocation in a water year must not exceed the nominal volume of the water allocation.

201 Taking water under a water allocation belonging to the high B or medium priority groups

(1) This section applies to a water allocation belonging to the high B or medium priority groups.

(2) The volume of water taken under a water allocation in a water year must not exceed the nominal volume of the allocation multiplied by the announced allocation.

(3) For a water allocation belonging to the high B priority group that has changed its priority group from medium—the announced allocation for the high B priority group must not apply until the water year following the year in which the change was registered.

(4) Groundwater may be taken under a water allocation if the point of take is within the zone specified as the location for the allocation.

(5) Surface water may also be taken under a water allocation if—

(a) the take is from—

(i) Callide Creek when water is being released from Callide Dam; or

(ii) Kroombit Creek when water is being released from Kroombit Dam; or

(iii) Kariboe Creek when water is being released from Callide Dam to Kariboe Creek via the Callide Diversion Channel;

(b) the point of take is within the zone specified as the location for the allocation; and

(c) the allocation holder has written approval from the resource operations licence holder.

(6) Subsection (2) does not include the volume of water permitted to be carried over into the next water year as specified in section 202 of this plan.

202 Carryover

(1) The resource operations licence holder may, subject to this section, allow a holder of a water allocation belonging to the high B or medium priority groups, to carry over part of the water allocation holder's unused groundwater from one water year to the next water year.

(2) The total volume of unused water for the scheme that is permitted to be carried over to the next water year is the lesser of—

(a) 1 500 ML; and

(b) 80 per cent of the total volume of unused groundwater for the scheme at the end of the water year.

(3) The resource operations licence holder must make public the methodology for determining the volume of water permitted to be carried over by each water user if the volume determined under subsection (2)(b) is greater than 1 500 ML.

(4) The volume of water that may be carried over by a water user must not exceed the nominal volume of the water allocation.

(5) Any volume of water that is carried over into a water year, and that is unused by the water allocation holder at the end of December, must be deducted from the volume of water available to the water allocation holder.

(6) In this section—

unused groundwater means the volume of water not taken under section 201.

Part 3 Dealing with water allocations

Division 1 Water allocation change rules

203 Scope of division 1

This division provides for changes to water allocations managed under a resource operations licence that are permitted and prohibited changes. Other changes are provided in chapter 4, part 2.

204 Definitions for division 1

In this division—

total nominal volume in a zone means the sum of the nominal volumes of all water allocations in the same priority group—

(a) for the zone or zones; and

(b) for which relevant valid change certificates have been issued under section 129 of the *Water Act 2000*.

205 Permitted changes

(1) The following changes to a water allocation are permitted—

(a) a change to the location for the taking of water under a water allocation if the change—

(i) for an allocation belonging to risk priority group—results in the location of the allocation being zones Callide B or C; or

(ii) for an allocation belonging to high B priority group—

(A) results in the location of the allocation being zones Callide 3B, 3A or 5; and

(B) would not result in a total nominal volume in a zone that is greater than the maximum volumes or lesser than the minimum volumes for the zones in table 26; or

(iii) for an allocation belonging to medium priority group—

(A) results in the location of the allocation being zones Callide 3B, 3A, 5, 7, 8B, 8A or 10B; and

(B) would not result in a total nominal volume in a zone that is greater than the maximum volumes in table 26;

(b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'; and

(c) a change to the priority group—

(i) from medium to high B if—

(A) the nominal volume is also changed by dividing the nominal volume of the allocation belonging to the medium priority group by three, and rounding down to the nearest whole number; and

(B) the change would not result in a total nominal volume in a zone that is greater than the maximum volumes in table 26; or

(ii) from high B to medium if—

(A) the nominal volume is also changed by multiplying the nominal volume of the allocation belonging to the high B priority group by three; and

(B) the change would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in table 26.

(2) Subsection (1) does not apply if the change is prohibited under section 206.

Table 26: Limits of total nominal volume in a zone

Priority Group	Nominal Volume	Zones						
		Zone 3B	Zone 3A	Zone 5	Zone 7	Zone 8B	Zone 8A	Zone 10B
High B	Maximum volume (ML)	100	500	1200	0			
			1200					
	Minimum volume (ML)	1066			-			
Medium	Maximum volume (ML)	3230	3905	2510	1965	1079	1300	1949
			5815					
Total	Maximum volume (ML)	14 624						

206 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location of an allocation belonging to high A priority group if the change would result in the location being other than zone Callide A;

(b) a change to the location of an allocation belonging to risk priority group if the change would result in the location being other than zones Callide B or C;

(c) a change to the priority group—if the allocation belongs to the high A or risk priority groups; and

(d) a change that would result in the total nominal volume in a zone that is greater than the maximum volumes or lesser than the minimum volumes in table 26.

Part 4 Seasonal water assignment rules

207 Seasonal water assignment rules—*Water Act 2000*, section 146B

(1) The holder of a water allocation may enter into an arrangement for a seasonal water assignment in relation to the allocation under section 146B of the *Water Act 2000* only if—

(a) either—

(i) the zone from which the extraction is to occur under the assignment is the same as the location for the allocation; or

(ii) otherwise—for allocations belonging to the high B and medium priority groups—the approval would result in a potential take volume for a zone that is less than or equal to the total allowable take volume for that zone; and

(b) the holder of the resource operations licence consents to the arrangement.

(2) In this section—

potential take volume, for a zone, means the volume calculated using the formula—

$$NV_{high\ B} + (NV_{medium} * AA_{medium}) + SWA_{in} — SWA_{out}$$

where—

$NV_{high\ B}$ = the sum of the nominal volumes for the water allocations belonging to high B priority group that are located in the zone.

NV_{medium} = the sum of the nominal volumes for the water allocations belonging to medium priority group that are located in the zone.

AA_{medium} = the announced allocation for the water allocations belonging to medium priority group that are located in the zone.

SWA_{in} = the volume seasonally assigned into the zone for the current water year.

SWA_{out} = the volume seasonally assigned out of the zone for the current water year.

total allowable take volume, for a zone, means the volume calculated using the formula—

$$NV_{high\ B} + (MVL * AA_{medium})$$

where—

NV_{highB} = the sum of the nominal volumes for the water allocations belonging to high B priority group that are located in the zone.

MVL = the maximum nominal volume for the medium priority group for the zone in table 26.

AA_{medium} = the announced allocation for the water allocations belonging to medium.

208 to 219 section numbers not used

Chapter 9 Water management areas—general provisions

Part 1 Water sharing rules—general

220 Application of chapter 9

This chapter contains general provisions, which apply to all water allocations in a water management area.

221 Water allocation holder data collection and transfer

(1) For surface water taken under a water allocation with a flow condition greater than zero, the water allocation holder or any assignee must record meter readings, time and date—

(a) at the start of taking water; and

(b) at the end of taking water.

(2) Following the end of taking water, the water allocation holder or any assignee must transfer the data recorded under subsection (1) to the chief executive—

(a) for the Dawson, Nogoa Mackenzie and Fitzroy water management areas—within 24 hours; and

(b) for the Comet and Theresa Retreat water management areas—within five business days.

(3) For the Dawson, Nogoa Mackenzie and Fitzroy water management areas—the chief executive will advise the resource operations licence holder for the respective water supply scheme of the meter readings and the authorised quantities of unsupplemented water taken within 7 business days of the conclusion of announced periods for all management reaches in the respective water management area.

222 Taking water under a water allocation with multi-year accounting

(1) This section applies to water allocations in the Dawson, Nogoa Mackenzie, Comet and Theresa Retreat water management areas that state a condition that the take of water under the allocation is managed under a multi-year accounting water sharing rule.

(2) The chief executive must establish a volumetric account for each water allocation holder by location and water allocation group.

(3) The maximum opening account balance for the volumetric account is equal to the sum of the annual volumetric limits of the allocations owned by the water allocation holder, multiplied—

(a) for the Dawson, Comet and Theresa Retreat water management areas—by 1.5; and

(b) for the Nogoa Mackenzie Water Management Area—by 2.

(4) The minimum account balance that may be held in the volumetric account is zero megalitres.

(5) Water taken under allocations must be deducted from the volumetric account.

(6) At the start of each water year the chief executive must—

(a) credit the volumetric account with—

(i) for the first water year after water allocations are changed to be managed under this section—the sum of the annual volumetric limits of these allocations; and

(ii) for subsequent water years—the sum of the annual volumetric limits multiplied by—

(A) for the Dawson Water Management Area—0.95;

(B) for the Nogoa Mackenzie Water Management Area—1.00; and

(C) for the Comet Water Management Area and Theresa Retreat Water Management Area—0.85; and

(iii) limit the account balance to the maximum opening account balance.

(7) In this section—

(a) ***account balance*** means a volume of water, in megalitres, held in a volumetric account at any time during a year.

(b) ***maximum opening account balance*** means the maximum volume of water, in megalitres, that can be held in a volumetric account at the commencement of a water year.

Part 2 Dealing with water allocations—general

Division 1 Subdivision and amalgamation of water allocations

223 Permitted subdivisions and amalgamations

(1) Subdivision of a water allocation is permitted where—

(a) the new water allocations state the same water allocation group and location as the allocation that is being subdivided;

(b) for surface water allocations—

(i) the nominal volume, annual volumetric limit, daily volumetric limit and maximum rate of each of the new water allocations are in the same proportions as the nominal volume, annual volumetric limit, daily volumetric limit and maximum rate of the allocation that is being subdivided; and

(ii) the sums of the nominal volumes, annual volumetric limits, daily volumetric limits and maximum rates of the new water allocations are equal to the nominal volume, annual volumetric limit, daily volumetric limit and maximum rate of the allocation that is being subdivided; and

(c) for the Lower Callide groundwater sub-area—

(i) the nominal volume and annual volumetric limit of each of the new water allocations are in the same proportions as the nominal volume and annual volumetric limit of the allocation that is being subdivided; and

(ii) the sums of the nominal volumes and annual volumetric limits of the new water allocations are equal to the nominal volume and annual volumetric limit of the allocation that is being subdivided.

(2) Amalgamation of water allocations is permitted where—

(a) the allocations being amalgamated state the same water allocation group and location; and

(b) for surface water allocations—the nominal volume, annual volumetric limit, daily volumetric limit and the maximum rate for the new water allocation is equal to the sum of the nominal volumes, annual volumetric limits, daily volumetric limits and maximum rates of the allocations being amalgamated; and

(c) for the Lower Callide groundwater sub-area—the nominal volume and annual volumetric limit for the new water allocation is equal to the sum of the nominal volumes and annual volumetric limits of the allocations being amalgamated; and

(d) if any of the allocations states a condition that the take of water is managed under a multi-year accounting water sharing rule, the amalgamated allocation is to have the same condition.

(3) This section does not apply if—

(a) the allocation states a location which includes an AMTD; and

(b) the allocation, located in the Lower Callide groundwater sub-area, has a condition that allows for the take of water from Callide Creek.

Division 2 Water allocation change rules

Subdivision 1 Permitted changes

224 Purpose

A change to the purpose of a water allocation is permitted where the change results in the purpose being 'agriculture' or 'any'.

225 Change to allow multi-year accounting

A change that adds a condition of a water allocation that allows the taking of water under the allocation to be managed under a multi-year accounting water sharing rule is permitted for—

(a) water allocations belonging to water allocation group classes 10A, 10B, 11A, 11B, 12A and 0A; and

(b) water allocations in the Comet Water Management Area and Theresa Retreat Water Management Area.

226 Change to a flow condition for water allocations that state an AMTD

A change to the flow condition of a water allocation that states a location that includes an AMTD is permitted if—

(a) for water allocations belonging to water allocation group class 10C, 4C or 6C—the change results in a flow condition being stated on the water allocation that allows water to be taken under the water allocation when there is a passing flow of 9 ML per day;

(b) for water allocations belonging to water allocation group class 9A—the change results in a flow condition being stated on the water allocation that allows water to be taken under the water allocation when there is a passing flow of 432 ML per day;

(c) for water allocations belonging to water allocation group class 9B—the change results in a flow condition being stated on the water allocation that allows water to be taken under the water allocation when there is a passing flow of 1037 ML per day;

(d) for a water allocation located in zone Theresa A—the change results in a flow condition being stated on the water allocation that allows water to be taken under the water allocation when there is a passing flow of 173 ML per day; and

(e) for a water allocation located in zone Retreat A—the change results in a flow condition being stated on the water allocation that allows water to be taken under the water allocation when there is a passing flow of 260 ML per day.

227 Change to AMTD location

A change to the location of a water allocation to remove the AMTD is permitted if the allocation includes the relevant flow condition stated in section 226.

Subdivision 2 Prohibited changes

228 Prohibited changes—general

(1) The following changes to water allocations are prohibited—

(a) a change to the purpose that would result in the purpose being other than 'agriculture' or 'any';

(b) a change to the daily volumetric limit, annual volumetric limit or flow condition that would result in an increase in the simulated mean annual diversion for the allocation; and

(c) a change to the water allocation group.

(2) Subsection (1) prohibited changes are in addition to prohibited changes specified in chapters 10, 11, 12, 13, 14 and 15.

Subdivision 3 Assessed changes

229 Assessed changes

(1) The holder of a water allocation may apply to the chief executive under section 129A of the *Water Act 2000* to—

(a) remove a condition about water taken under the authority only being stored in particular notified existing storages only if the water allocation holder provides information with the application detailing—

(i) any proposed changes to the particular notified existing works;

(ii) any proposed new works for storing water taken under the water allocation;

(iii) how the existing and proposed storages and associated works are to be operated; and

(iv) how any proposals under subsections (a), (b) or (c) could alter the volume of overland flow water taken.

(b) remove a multi-year accounting condition.

(2) In making a decision about an application made in accordance with—

(a) subsection (1)(a) the chief executive may remove or amend the condition; and

(b) subsection (1)(b) the chief executive may remove the condition if satisfied a change to the accounting method for the water allocation does not increase the volume of water available to be taken under the allocation.

Subdivision 4 Other changes

230 Application for changes not specified as permitted, prohibited or assessed

An application for a change to a water allocation that is not specified as permitted, prohibited or assessed in this chapter or chapters 10, 11, 12, 13, 14 or 15 may be made in accordance with section 130 of the *Water Act 2000*.

231 to 235 section numbers not used

Chapter 10 Dawson Valley Water Management Area

236 Application of chapter 10

This chapter applies to water allocations to take unsupplemented water located in the Dawson Valley Water Management Area.

Part 1 Water sharing rules

237 Water year

The water year is the 12 month period beginning 1 October and ending 30 September.

238 Taking water under a water allocation

(1) Water may be taken under a water allocation only during an announced period.

(2) The total volume of water taken under an allocation in a water year must not exceed the annual volumetric limit for the allocation unless the water is taken under the provisions of chapter 9, section 222.

(3) The volume of water taken under an allocation in a day must not exceed the daily volumetric limit for the allocation.

(4) Subsection (1) does not apply to allocations belonging to water allocation group classes 10C, 13A and 13C.

239 Announced period for water allocations

(1) This section applies to water allocations belonging to water allocation group classes 10A, 10B, 11A, 11B and 12A.

(2) The chief executive must announce the start and end of an announced period during which water may be taken under water allocations.

(3) For each location mentioned in table 27, the chief executive must determine the start of the announced period for each flow condition based on an estimate of when the stream flow at the flow management location for the location of the water allocation in table 27, exceeds the flow condition.

(4) The chief executive may delay the notification of the start of an announced period for a maximum of 24 hours, provided the end of the announced period is extended by a similar time.

(5) The chief executive will determine the end of each announced period based on an estimate of when the stream flow at the flow management location for the location of the water allocation in table 27, is less than the relevant flow condition.

(6) The announced period should not vary by more than 12 hours from the period of time during which the flow conditions for the location are exceeded.

(7) Despite subsections (2) to (6) the chief executive—

(a) must ensure that the announced period does not include any period when the stream flow at the relevant flow management location is less than 2 592 ML per day during—

(i) the Upper Dawson first post-winter flow management period, for water allocations located in zones Dawson F to M and belonging to water allocation group classes 11A and 12A; and

(ii) the Lower Dawson first post-winter flow management period, for water allocations located in zones Dawson A to E and belonging to water allocation group class 10A; and

(b) may extend a subsequent announced period to adjust for any variations in excess of 12 hours.

(8) If the flow management location in table 27 cannot be used the chief executive may use another method of determining stream flow for the flow management location.

(9) In this section—

Upper Dawson first post-winter flow management period means the period that—

(a) starts at the earlier of—

(i) the activation of the Upper Dawson sub-scheme first post-winter flow management strategy under chapter 5, section 89 of this plan; or

(ii) 1 October; and

(b) ends at the earlier of—

(i) 6 days of flow greater than 1 296 ML per day at any flow management location in table 27 that is upstream of the junction of Mimosa Creek and the Dawson River since the start of the period; or

(ii) the finalisation of the Upper Dawson sub-scheme first post-winter flow management strategy under chapter 5, section 89 of this plan; or

(iii) 30 April.

Lower Dawson first post-winter flow management period means the period that—

(a) starts at the earlier of—

(i) the activation of the Lower Dawson sub-scheme first post-winter flow management strategy under chapter 5, section 90 of this plan; or

(ii) 1 October; and

(b) ends at the earlier of—

(i) six days of flow greater than 1 296 ML per day at any flow management location in table 27 that is downstream of the junction of Mimosa Creek and the Dawson River since the start of the period; or

(ii) the finalisation of the Lower Dawson sub-scheme first post-winter flow management strategy under chapter 5, section 90 of this plan ;or

(iii) 30 April.

Table 27: Flow management (gauging station) locations for water allocations with a flow condition

Location	Flow management (gauging station) location
Dawson A Dawson B	GS 130362B—Dawson River at Knebworth
Dawson C Dawson D Dawson E	GS 1303074A—Dawson River at Bindaree
Dawson F Dawson G	GS 130350C—Dawson River at Moura Weir headwater
Dawson H Dawson I	GS 130317B—Dawson River at Woodleigh
Dawson J	GS 130358A—Dawson River at Isla–Delusion Crossing
Dawson K	GS 130354B—Dawson River at Gyranda Weir
Dawson L Dawson M	GS 130345B—Dawson River at Glebe Weir Tailwater
Dawson N	GS 130302A—Dawson River at Taroom
Dawson O	GS 130324A—Dawson River at Utopia Downs

240 Taking water under particular water allocations

(1) This section applies to water allocations belonging to water allocation group classes 10C, 13A and 13C.

(2) Water may be taken under a water allocation only when the stream flow at the flow management location for the location of the allocation in table 27, exceeds the flow condition stated on the allocation.

(3) Despite subsection (2) the taking of water under a water allocation with no flow condition is permitted at any time.

Part 2 Dealing with water allocations

Division 1 Water allocation change rules

241 Scope of division 1

This division provides for changes to a water allocation to take unsupplemented water that are permitted and prohibited changes that are in additional to changes stated in chapter 9, part 2.

Subdivision 1 Permitted changes

242 Location

(1) A change to the location for the taking of water under a water allocation is permitted if the change—

(a) for an allocation belonging to water allocation group classes 10A and 10B—results in the location being zones Dawson A to E;

(b) for an allocation belonging to water allocation group classes 11A and 11B—results in the location being zones Dawson F to J;

(c) for an allocation belonging to water allocation group class 12A—results in the location being zones Dawson K to M; and

(d) for an allocation belonging to water allocation group class 13C—results in the location being zones Dawson N or O.

(2) A change to the location of a water allocation belonging to water allocation group class 13C is permitted if—

(a) for an allocation to be located in zone Dawson N—the allocation has a flow condition of 11 ML per day; and

(b) for an allocation to be located in zone Dawson O—the allocation has a flow condition of 20 ML per day.

243 Daily volumetric limit

A change to the daily volumetric limit of a water allocation is permitted if the change results in—

(a) for an allocation belonging to water allocation group classes 10A, 11A, 12A and 13A—the daily volumetric limit being equal to the annual volumetric limit for the allocation divided by 20; and

(b) for an allocation belonging to water allocation group class 10B and 11B—the daily volumetric limit being the annual volumetric limit for the allocation divided by 19.

Subdivision 2 Prohibited changes

244 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location of an allocation—

(i) belonging to water allocation group classes 10A and 10B—to a zone other than zones Dawson A to E;

(ii) belonging to water allocation group class 10C—to a zone other than zone Dawson A;

(iii) belonging to water allocation group classes 11A and 11B—to a zone other than zones Dawson F to J;

(iv) belonging to water allocation group class 12A—to a zone other than zones Dawson K to M;

(v) belonging to water allocation group class 13A—to a zone other than zone Dawson N; and

(vi) belonging to water allocation group 13C—to a zone other than zones Dawson N or O;

(b) for allocations belonging to water allocation group classes 10A, 10B, 10C, 11A, 11B, 12A and 13A—a change to the flow condition that would result in a lower flow condition;

(c) for allocations belonging to water allocation group class 13C—a change to the flow condition that would result in a flow condition that is—

(i) for allocations located in zone Dawson N—less than 11 ML per day; and

(ii) for allocations located in zone Dawson O—less than 20 ML per day; and

(d) for allocations belonging to water allocation group classes 10C and 13C—a change that adds a condition to an allocation that allows the taking of water under the allocation to be managed under a multi-year accounting water sharing rule.

Part 3 Seasonal water assignment rules

245 Seasonal water assignment rules—*Water Act 2000*, section 144

The chief executive may approve a seasonal assignment for a water allocation to take unsupplemented water that has not been taken in the current water year where—

(a) for water allocations belonging to water allocation group—

(i) classes 10A and 10B where the location of the seasonally assigned volume is zones Dawson A to E; or

(ii) classes 11A and 11B where the location of the seasonally assigned volume is zones Dawson F to J; or

(iii) class 12A where the location of the seasonally assigned volume is zones Dawson K to M; or

(iv) class 10C—

(A) with a flow condition of 9 ML per day where the location of the seasonally assigned volume is zone Dawson A; or

(B) with a no flow condition where the location of the seasonally assigned volume is on the same waterhole as the allocation from which it is assigned; and

(v) class 13A where the location of the seasonally assigned volume is zone Dawson N; or

(vi) class 13C where the location of the seasonally assigned volume is zones Dawson N and O;

(b) the amount seasonally assigned must not exceed—

(i) the unused annual volumetric limit of a water allocation; or

(ii) for a water allocation that states a condition with a multi-year accounting sharing rule—the remaining account balance;

(c) the flow condition under which water may be taken under seasonal assignment is the same as the flow condition for the water allocation that is being seasonally assigned unless—

(i) for a water allocation belonging to class 13C where—

(A) the location for the seasonally assigned volume is zone Dawson N the flow condition is to be 11 ML/day; or

(B) the location for the seasonally assigned volume is zone Dawson O the flow condition is to be 20 ML/day; and

(d) the daily volumetric limit for taking water under the seasonal assignment must be in proportion to—the volume of water being seasonally assigned and the daily volumetric limit stated on the water allocation being assigned.

246 to 251 section numbers not used

Chapter 11 Nogoa Mackenzie Water Management Area

252 Application of chapter 11

This chapter applies to water allocations to take unsupplemented water located in the Nogoa Mackenzie Water Management Area.

Part 1 Water sharing rules

253 Water year

The water year is the 12 month period beginning 1 July and ending 30 June.

254 Taking water under a water allocation

(1) Water may be taken under a water allocation only during an announced period.

(2) The total volume of water taken under an allocation in a water year must not exceed the annual volumetric limit for the allocation unless the water is taken under the provisions of chapter 9, section 222.

(3) The volume of water taken under an allocation in a day must not exceed the daily volumetric limit for the allocation.

(4) Subsection (1) does not apply to water allocations belonging to water allocation group class 4C.

255 Announced period for water allocations

(1) This section applies to water allocations belonging to water allocation group classes 0A, 1A, 1B, 2A, 2B and 3A.

(2) The chief executive must announce the start and end of an announced period during which water may be taken under water allocations.

(3) For each location mentioned in table 28, the chief executive must determine the start of the announced period for each flow condition based on an estimate of when the stream flow at the flow management location for the location of the allocation in table 28, exceeds the flow condition.

(4) Despite subsection (3) for water allocation group 0A located in zone Mackenzie L, the chief executive must determine the start of the announced period based on an estimate of when the stream flow exceeds the flow condition at both the following flow management locations—

(a) GS130216A–Nogoa River at Fairbairn Dam; and

(b) GS130219A–Nogoa River at Duckponds.

(5) The chief executive may delay the notification of the start of an announced period for a maximum of 24 hours, provided the end of the announced period is extended by a similar time.

(6) The chief executive will determine the end of each announced period based on an estimate of when the stream flow at the flow management location/s for the location of the water allocation in table 28, is less than the flow condition for the location.

(7) The announced period should not vary by more than 12 hours from the period of time during which the flow conditions for the location are exceeded.

(8) Despite subsections (2) to (7) the chief executive—

(a) must ensure that the announced period does not include any period when the stream flow at the relevant flow management location is less the 4 320 ML per day during—

(i) the Upper Mackenzie first post-winter flow management period, for water allocations located in—

(A) zones Mackenzie I to K and belonging to water allocation group 2A;

(B) zone Mackenzie L and belonging to water allocation group 3A and 0A; and

(C) zones Mackenzie M to N and belonging to water allocation group 0A; and

(ii) the Lower Mackenzie first post-winter flow management period, for water allocations located in—

(A) zones Mackenzie A to E and belonging to water allocation group 1A; and

(B) zones Mackenzie F to H and belonging to water allocation group 2A; and

(b) may extend a subsequent announced period to adjust for any variations in excess of 12 hours.

(9) If the flow management location in table 28 cannot be used the chief executive may use another method of determining stream flow for the flow management location.

(10) In this section—

Upper Mackenzie first post-winter flow management period means the period that—

(a) starts at the earlier of—

(i) the activation of the Upper Mackenzie first post-winter flow management strategy under chapter 6, section 133 of this plan; or

(ii) 1 October; and

(b) ends at the earlier of—

(i) for water allocations located in—

(A) zones Mackenzie I to K and belonging to water allocation group 2A—6 days since of flow was greater than 2 592 ML per day at GS 130113A–Mackenzie River at Rileys Crossing since the start of the period; and

(B) zones Mackenzie L to N and belonging to water allocation groups 3A and 0A—4 days of flow greater than 2 592 ML per day at GS 130219A–Nogoa River at Duckponds since the start of the period; or

(ii) the finalisation of the Upper Mackenzie first post-winter flow management strategy under chapter 6, section 133 of this plan; or

(iii) 30 April.

Lower Mackenzie first post-winter flow management period means the period that—

(a) starts at the earlier of—

(i) the activation of the Lower Mackenzie first post-winter flow management strategy under chapter 6, section 134 of this plan; or

(ii) 1 October; and

(b) ends at the earlier of—

(i) for water allocations located in—

(A) zones Mackenzie A to E and belonging to water allocation group 1A—8 days of flow greater than 2 592 ML per day at GS130105A—Mackenzie River at Coolmaringa since the start of the period; and

(B) zones Mackenzie F to H and belonging to water allocation group 2A—6 days of flow was greater than 2 592 ML per day at GS 130110B since—Mackenzie River at Bingegang Weir TW; or

(ii) the finalisation of the Lower Mackenzie first post-winter flow management strategy under chapter 6, section 134 of this plan; or

(iii) 30 April.

Table 28: Flow management (gauging station) locations for water allocations with a flow condition of 2 592 ML/day or 4 320 ML/day

Location	Flow management (gauging station) location
Mackenzie A Mackenzie B	GS130105A—Mackenzie River at Coolmaringa
Mackenzie C Mackenzie D Mackenzie E	GS130109B—Mackenzie River at Tartrus Weir head water
Mackenzie F Mackenzie G	GS 130110B—Mackenzie River at Bingegang Weir tail water
Mackenzie H	GS 130111B—Mackenzie River at Bedford Weir tail water
Mackenzie I Mackenzie J Mackenzie K	GS 130113A—Mackenzie River at Rileys Crossing
Mackenzie L	GS 130219A—Nogoa River at Duckponds
Mackenzie M Mackenzie N	GS130216B—Nogoa River at Fairbairn Dam head water

256 Taking water under particular water allocations

(1) This section applies to water allocations belonging to water allocation group class 4C.

(2) Water may be taken under a water allocation only when the passing flow at the junction of the Mackenzie River with Springton Creek, exceeds the flow condition stated on the water allocation.

(3) Despite subsection (2) the taking of water under a water allocation with no flow condition is permitted at any time.

Part 2 Dealing with water allocations

Division 1 Water allocation change rules

257 Scope of division 1

This division provides for changes to a water allocation to take unsupplemented water that are permitted and prohibited changes that are in additional to changes stated in chapter 9, part 2.

Subdivision 1 Permitted changes

258 Location

A change to the location for the taking of water under a water allocation is permitted if the change—

(a) for an allocation belonging to water allocation group classes 1A and 1B—results in the location being zones Mackenzie A to E;

(b) for an allocation belonging to water allocation group classes 2A and 2B—results in the location of the allocation being from zones Mackenzie F to K;

(c) for an allocation belonging to water allocation group class 0A—results in the location of the allocation being from zones Mackenzie L to N; and

(d) for an allocation belonging to water allocation group class 4C with a location which includes an AMTD—results in the allocation being located on the same waterhole as determined by the chief executive.

Subdivision 2 Prohibited changes

259 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location of an allocation—

(i) belonging to water allocation group class 0A—to a zone other than zones Mackenzie L to N;

(ii) belonging to water allocation group classes 1A, 1B, 2A or 2B—to a zone other than zones Mackenzie A to K;

(iii) belonging to water allocation group class 3A—to a zone other than zone Mackenzie L; and

(iv) belonging to water allocation group class 4C—to a zone other than zone Mackenzie A;

(b) a change to the flow condition if the change would result in a lower flow condition; and

(c) for water allocations belonging to water allocation group classes 1A, 1B, 2A, 2B, 3A and 4C a change that adds a condition to an allocation that allows the taking of water under the allocation to be managed under a multi-year accounting water sharing rule.

Part 3 Seasonal water assignment rules

260 Seasonal water assignment rules—*Water Act 2000*, section 144

The chief executive may approve a seasonal assignment for a water allocation to take unsupplemented water that has not been taken in the current water year where—

(a) for water allocations belonging to water allocation group—

(i) classes 1A and 1B where the location of the seasonally assigned volume is zones Mackenzie A to E; or

(ii) classes 2A and 2B where the location of the seasonally assigned volume is zones Mackenzie F to K; or

(iii) class 3A where the location of the seasonally assigned volume is zones Mackenzie L; or

(iv) class 0A where the location of the seasonally assigned volume is zones Mackenzie N and M; or

(v) class 4C—

(A) with a flow condition of 9 ML per day where the location of the seasonally assigned volume is zone Mackenzie A; or

(B) with a no flow condition where the location of the seasonally assigned volume is on the same waterhole as the allocation from which it is assigned; and

(b) the amount seasonally assigned must not exceed—

(i) the unused annual volumetric limit of a water allocation; or

(ii) for a water allocation that states a condition with a multi-year accounting sharing rule—the remaining account balance.

(c) the flow condition under which water may be taken under seasonal assignment is the same as the flow condition for the allocation that is being seasonally assigned; and

(d) the daily volumetric limit for taking water under the seasonal assignment must be in proportion to—the volume of water being seasonally assigned and the daily volumetric limit stated on the water allocation being assigned.

261 to 270 section numbers not used

Chapter 12 Comet Water Management Area

271 Application of chapter 12

This chapter applies to water allocations to take unsupplemented water located in the Comet Water Management Area.

Part 1 Water sharing rules

272 Water year

The water year is the 12 month period beginning 1 July and ending 30 June.

273 Taking water under a water allocation

(1) Water may be taken under a water allocation only when the stream flow at the flow management location for the location of the allocation in table 29, exceeds the flow condition stated on the allocation.

(2) The total volume of water taken under an allocation in a water year must not exceed the annual volumetric limit for the allocation unless the water is taken under the provisions of chapter 9, section 222.

(3) The volume of water taken under an allocation in a day must not exceed the daily volumetric limit for the allocation.

(4) Subsection (1) does not apply to an allocation with a location which includes an AMTD where the taking of water under the water allocation is permitted—

(a) only when the stream flow exceeds the flow conditions stated on the allocation; or

(b) if the water allocation has no flow condition—at any time.

Table 29: Flow management locations for water allocations with a flow condition

Location	Flow management location
Comet A	GS 130504B—Comet River at Comet Weir
Comet B	GS 130510A—Comet River at Springsure Creek junction
Comet C	GS 130506A—Comet River at The Lake

Part 2 Dealing with water allocations

Division 1 Water allocation change rules

274 Scope of division 1

This division provides for changes to a water allocation to take unsupplemented water that are permitted and prohibited changes that are in additional to changes stated in chapter 9, part 2.

Subdivision 1 Permitted changes

275 Location

(1) A change to the location for the taking of water under a water allocation is permitted if the change would not result in a total annual volumetric limit in a zone that is greater than the maximum volume for a zone for a water allocation group in table 30.

(2) In this section—***total annual volumetric limit in a zone*** means the sum of the annual volumetric limits of all water allocations belonging to the same water allocation group—

(a) for the zone; and

(b) for which relevant valid change certificates have been issued under section 129 of the *Water Act 2000*.

Table 30: Maximum total annual volumetric limits of water allocations by water allocation group and zone

Water allocation group	Comet A	Comet B	Comet C
	ML		
Class 9A	16 500	13 500	12 000
Class 9B	10 000	18 000	10 000

276 Daily volumetric limit

A change to the daily volumetric limit of a water allocation is permitted if the change results in—

(a) for an allocation belonging to water allocation group class 9A—the daily volumetric limit being equal to the annual volumetric limit for the allocation divided by 24; and

(b) for an allocation belonging to water allocation group class 9B—the daily volumetric limit being the annual volumetric limit for the allocation divided by 20.

Subdivision 2 Prohibited changes

277 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location if the change would result in a total annual volumetric limit in a zone that exceeds the maximum volume for a zone for a water allocation group in table 30;

(b) a change to the location of an allocation belonging to—

(i) water allocation group class 9A if the flow condition of the allocation is not 432 ML per day; and

(ii) water allocation group class 9B if the flow condition of the allocation is not 1037 ML per day; and

(c) a change to the flow condition if the change would result in a lower flow condition.

Part 3 Seasonal water assignment rules

278 Seasonal water assignment rules—*Water Act 2000*, section 144

The chief executive may approve a seasonal assignment of a water allocation to take unsupplemented water that has not been taken in the current water year where—

(a) for allocations belonging to the water allocation group classes 9A and 9B—the location from which water may be taken under the assignment is zones Comet A, B or C;

(b) the flow condition under which water may be taken under seasonal assignment is—

(i) for an allocation belonging to water allocation group class 9A—432 ML per day; and

(ii) for an allocation belonging to water allocation group class 9B—1037 ML per day;

(c) the amount seasonally assigned must not exceed—

(i) the unused annual volumetric limit of a water allocation; or

(ii) for a water allocation that states a condition with a multi-year accounting sharing rule—the remaining account balance; and

(d) the daily volumetric limit for taking water under the seasonal assignment must be in proportion to—the volume of water being seasonally assigned and the daily volumetric limit stated on the water allocation being assigned.

279 to 291 section numbers not used

Chapter 13 Theresa Retreat Water Management Area

292 Application of chapter 13

This chapter applies to water allocations to take unsupplemented water located in the Theresa Retreat Water Management Area.

Part 1 Water sharing rules

293 Water year

The water year is the 12 month period beginning 1 July and ending 30 June.

294 Taking water under a water allocation

(1) Water may be taken under a water allocation only when the stream flow at Theresa Creek at Gregory Highway GS 130206A, exceeds the flow condition stated on the allocation.

(2) The total volume of water taken under an allocation in a water year must not exceed the annual volumetric limit for the allocation unless the water is taken under the provisions of chapter 9, section 222.

(3) The volume of water taken under an allocation in a day must not exceed the daily volumetric limit for the allocation.

(4) Subsection (1) does not apply to an allocation with a location which includes an AMTD where the taking of water under the water allocation is permitted—

(a) only when the stream flow exceeds the flow conditions stated on the allocation; or

(b) if the water allocation has no flow condition—at any time.

Part 2 Dealing with water allocations

Division 1 Water allocation change rules

295 Scope of division 1

This division provides for changes to a water allocation to take unsupplemented water that are permitted and prohibited changes that are in additional to changes stated in chapter 9, part 2.

Subdivision 1 Permitted changes

296 Location

A change to the location for the taking of water under a water allocation is permitted if the change—

(a) results in the location of the allocation being zones Theresa A, Theresa B or Retreat A;

(b) for an allocation located in zones Retreat A or Theresa A resulting in the location being zone Theresa B—results in the flow condition being 691 ML per day;

(c) for an allocation located in zones Retreat A or Theresa B resulting in the location being zone Theresa A—results in the flow condition being 691 ML per day; and

(d) for an allocation located in zones Theresa A or Theresa B resulting in the location being zone Retreat A—results in the flow condition being 260 ML per day.

297 Daily volumetric limit

A change to the daily volumetric limit of a water allocation is permitted if the change results in the daily volumetric limit being equal to the annual volumetric limit for the allocation divided by 24.

Subdivision 2 Prohibited changes

298 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location that would result in the location being other than zones Theresa A, Theresa B or Retreat A;

(b) for an allocation located in zone Theresa A—a change to the location which removes the AMTD if the flow condition of the allocation is not 173 ML per day;

(c) for an allocation located in zone Retreat A—a change to the location which removes the AMTD if the flow condition of the allocation is not 260 ML per day; and

(d) a change to the flow condition if the change would result in a lower flow condition.

Part 3 Seasonal water assignment rules

299 Seasonal water assignment rules—*Water Act 2000*, section 144

The chief executive may approve a seasonal assignment for a water allocation to take unsupplemented water that has not been taken in the current water year where—

(a) the location from which water may be taken under the assignment is zones Theresa A, Theresa B or Retreat A;

(b) the flow condition under which water may be taken under seasonal assignment is—

(i) for a location from which water may be taken of zone Theresa A—691 ML per day;

(ii) for a location from which water may be taken of zone Theresa B—691 ML per day;

(iii) for a location from which water may be taken of zone Retreat A—260 ML per day;

(c) the amount seasonally assigned must not exceed—

(i) the unused annual volumetric limit of a water allocation; or

(ii) for a water allocation that states a condition with a multi-year accounting sharing rule—the remaining account balance; and

(d) the daily volumetric limit for taking water under the seasonal assignment must be in proportion to—the volume of water being seasonally assigned and the daily volumetric limit stated on the water allocation being assigned.

300 to 310 section numbers not used

Chapter 14 Fitzroy Water Management Area

311 Application of chapter 14

This chapter applies to water allocations to take unsupplemented water located in the Fitzroy Water Management Area.

Part 1 Water sharing rules

312 Water year

The water year is the 12 month period beginning 1 July and ending 30 June.

313 Taking water under a water allocation

(1) Water may be taken under a water allocation during an announced period.

(2) The total volume of water taken under an allocation in a water year must not exceed the annual volumetric limit for the allocation.

(3) The volume of water taken under an allocation in a day must not exceed the daily volumetric limit for the allocation.

(4) Subsection (1) does not apply to water allocations belonging to water allocation group classes 6C or 7D.

314 Announced period for water allocations

(1) This section applies to water allocations belonging to water allocation group classes 5A and 5B.

(2) The chief executive must announce the start and end of an announced period during which water may be taken under water allocations.

(3) The chief executive must determine the start of the announced period for each flow condition based on an estimate of when the stream flow at Fitzroy River at The Gap GS 130005A, exceeds the flow condition and Eden Bann Weir is spilling.

(4) The chief executive may delay the notification of the start of an announced period for a maximum of 72 hours, provided the end of the announced period is extended by a similar time.

(5) The chief executive will determine the end of each announced period based on an estimate of when the stream flow at Fitzroy River at The Gap GS 130005A, is less than the relevant flow condition.

(6) The announced period should not vary by more than 48 hours from the period of time during which the flow conditions for the location are exceeded.

(7) If the flow management location Fitzroy River at The Gap GS 130005A cannot be used the chief executive may use another method of determining stream flow for the flow management location.

(8) Despite subsections (2) to (6) the chief executive—

(a) must ensure that the announced period does not include any period when the stream flow at the relevant flow management location is less than 6000 ML per day during the Fitzroy first post-winter flow management period; and

(b) may extend a subsequent announced period to adjust for any variations in excess of 48 hours.

(9) In this section—***Fitzroy first post-winter flow management period*** means the period that—

(a) starts—1 October; and

(b) ends at the earlier of—

(i) A total volume of 90 000 ML has passed Eden Bann Weir since the flow first exceeded 4320 ML per day at Fitzroy River at The Gap GS 130005A and Eden Bann Weir is spilling; and

(ii) 30 April.

315 Taking water under particular water allocations

(1) This section applies to water allocations belonging to water allocation group classes 6C and 7D.

(2) Water may be taken under a water allocation only when the stream flow at Fitzroy River at Riverslea GS130003B exceeds the flow condition stated on the allocation.

(3) Despite subsection (2) the taking of water under a water allocation with no flow condition is permitted at any time.

Part 2 Dealing with water allocations

Division 1 Water allocation change rules

316 Scope of division 1

This division provides for changes to a water allocation to take unsupplemented water that are permitted and prohibited changes that are in additional to changes stated in chapter 9, part 2.

Subdivision 1 Permitted changes

317 Location

A change to the location for the taking of water under a water allocation is permitted if the change—

(a) for an allocation belonging to water allocation group classes 5A or 5B—results in the location being zones Fitzroy A to E;

(b) for an allocation belonging to water allocation group classes 6C or 7D—results in the location being zones Fitzroy D or E; and

(c) for an allocation belonging to water allocation group class 6C with a location which includes an AMTD—results in the allocation being located on the same waterhole as determined by the chief executive.

318 Daily volumetric limit

A change to the daily volumetric limit of a water allocation is permitted if the change results in—for an allocation belonging to water allocation group class 5A—the daily volumetric limit being equal to the annual volumetric limit for the allocation divided by 72.

Subdivision 2 Prohibited changes

319 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to a location of an allocation belonging to water allocation group classes 5A or 5B—to a zone other than zones Fitzroy A to E; and

(b) a change to a location of an allocation belonging to water allocation group classes 6C or 7D—to a zone other than zones Fitzroy D or E.

Part 3 Seasonal water assignment rules

320 Seasonal water assignment rules—*Water Act 2000*, section 144

The chief executive may approve a seasonal assignment for a water allocation to take unsupplemented water that has not been taken in the current water year where——

(a) for water allocations belonging to water allocation group—

(i) classes 5A and 5B where the location of the seasonally assigned volume is zones Fitzroy A to E; or

(ii) class 7D where the location of the seasonally assigned volume is zones Fitzroy D or E; or

(iii) class 6C—

(A) with a flow condition of 9 ML per day where the location of the seasonally assigned volume is zones Fitzroy D or E; or

(B) with no flow condition where the location of the seasonally assigned volume is on the same waterhole as the allocation from which it is assigned;

(b) the amount seasonally assigned must not exceed the unused annual volumetric limit of a water allocation;

(c) the flow condition under which water may be taken under seasonal assignment is the same as the flow condition for the allocation that is being seasonally assigned; and

(d) the daily volumetric limit for taking water under the seasonal assignment must be in proportion to—the volume of water being seasonally assigned and the daily volumetric limit stated on the water allocation being assigned.

321 to 330 section numbers not used

Chapter 15 Lower Callide groundwater sub-area

331 Application of chapter 15

This chapter applies to water allocations to take unsupplemented groundwater located in the Lower Callide groundwater sub-area.

Part 1 Water sharing rules

332 Water year

The water year is the 12 month period beginning 1 July and ending 30 June.

333 Announced allocation

(1) The chief executive must—

(a) set an announced allocation for water allocations located within each zone and belonging to water allocation groups GW1A and GW1B to take effect on the first day of each water year;

(b) following commencement of a water year for water allocations belonging to water allocation group GW1B—

(i) recalculate the announced allocation for each zone following increases to groundwater levels that have resulted from a recharge event if the current announced allocation is less than 100 per cent; and

(ii) reset the announced allocation for a zone only if a recalculation indicates that the announced allocation would—

(A) increase by five or more percentage points; or

(B) increase to 100 per cent; and

(c) make public details of the announced allocation, including parameters for determining the announced allocation within five business days of setting or resetting an announced allocation.

(2) The announced allocation that is set by the chief executive must be—

(a) for water allocation group GW1A—100 per cent; and

(b) for water allocations located within each zone that belong to water allocation group GW1B—the announced allocation calculated under section 334.

334 Calculation of announced allocation for water allocation group GW1B

(1) This section applies to water allocations belonging to water allocation group GW1B.

(2) For each zone, the announced allocation for water allocations located in that zone may be calculated by the chief executive as follows—

(a) determine the groundwater level for each assessment site in the zone;

(b) for groundwater levels that are above or within the range specified in table 31 for the zone—

(i) round down each level to a groundwater level mentioned in the table; and

(ii) select the corresponding announced allocation in the table; and

(c) for groundwater levels that are below the range specified in table 31 for the zone—the announced allocation is zero per cent.

(3) If the monitoring bore for the assessment site cannot be used, the chief executive may use another method of determining the groundwater level for the site.

(4) In this section—

assessment site means a geographical location referred to in table 31 stated in eastings (E) and northings (N) as Map Grid of Australia 1994 (MGA94) zone 56 coordinates.

Table 31: Announced allocation for water allocations

Announced allocation (%)	Zone 1 Assessment site— E: 224742, N: 7333892 Lake Pleasant Road (RN13030769)	Zone 2B Assessment site— E: 226520, N: 7328990 Lake Pleasant Road (RN13030777)	Zone 2A Assessment site— E: 237540, N: 7314079 Argoon Rd (RN13030160)
	Groundwater level (EL–metres AHD)		
100	> 109.98	> 112.80	> 130.67
95	109.74	112.65	130.43
90	109.50	112.50	130.19
85	109.26	112.35	129.95
80	109.03	112.20	129.71
75	108.79	112.05	129.47
70	108.55	111.90	129.23
65	108.47	111.75	129.15
60	108.40	111.60	129.07
55	108.32	111.45	128.99
50	108.25	111.30	128.91
45	108.17	111.18	128.83
40	108.10	111.06	128.75
35	108.02	110.94	128.67
30	107.95	110.83	128.59
25	107.87	110.71	128.51
20	107.80	110.59	128.43
15	107.72	110.47	128.41
10	107.65	110.35	128.40
5	107.62	110.33	128.38
0	< 107.60	< 110.30	< 128.37

335 Taking water under a water allocation

The volume of water taken under a water allocation in a water year must not exceed the annual volumetric limit of the water allocation multiplied by the announced allocation.

Part 2 Dealing with water allocations

Division 1 Water allocation change rules

336 Scope of division 1

This division provides for changes to a water allocation to take unsupplemented water that are permitted and prohibited changes that are in additional to changes stated in chapter 9, part 2.

337 Definitions for division 1

In this division—

(a) ***AVL_i*** means the sum of the annual volumetric limits of all water allocations located in zone i at the release of the final resource operations plan.

(b) ***total annual volumetric limit in a zone*** means the sum of the annual volumetric limits of all water allocations—

(i) for the zone; and

(ii) for which relevant valid change certificates have been issued under section 129 of the *Water Act 2000*.

338 Permitted changes

The following changes to water allocations are permitted—

(a) a change to the location if the change—

(i) results in the location of the allocation being either zone 1, 2B or 2A; and

(ii) for allocations belonging to water allocation group GW1B—would not result in a total annual volumetric limit in a zone that is greater than the maximum volume for that zone in table 32;

(b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'; and

(c) a change to remove a condition that allows for the take of water from Callide Creek.

Table 32: Maximum volume limits for zones

Zone 1	Zone 2B	Zone 2A
1900 ML	4200 ML	1200 ML

339 Prohibited changes

The following changes to a water allocation are prohibited—

(a) a change to the location of a water allocation belonging to water allocation group GW1B if the change would result in a total annual volumetric limit in a zone that exceeds the maximum volume for each zone identified in table 32;

(b) a change to the annual volumetric limit;

(c) a change to the nominal volume if the change would result in the nominal volume not being the same as the annual volumetric limit for the water allocation; and

(d) a change to add a condition that allows for the take of water from a watercourse.

Part 3 Seasonal water assignment rules

340 Seasonal water assignment rules—*Water Act 2000*, section 144

(1) The chief executive may approve a seasonal assignment of a water allocation to take unsupplemented groundwater where—

(a) the zone from which the extraction is to occur under the assignment is the same as the location for the allocation; or

(b) otherwise—the approval would result in a potential take volume for a zone that is less than or equal to the total allowable take volume for that zone.

(2) In this section—

potential take volume, for a zone, means the volume calculated using the formula—

$$VL_{GW1A} + (VL_{GW1B} * AA_{GW1B}) + SWA_{in} — SWA_{out}$$

where—

VL_{GW1A} = the sum of the annual volumetric limits for the water allocations belonging to water allocation group GW1A that are located in the zone

VL_{GW1B} = the sum of the annual volumetric limits for the water allocations belonging to water allocation group GW1B that are located in the zone

AA_{GW1B} = the announced allocation for the water allocations belonging to water allocation group GW1B that are located in the zone

SWA_{in} = the volume seasonally assigned into the zone for the current water year

SWA_{out} = the volume seasonally assigned out of the zone for the current water year

total allowable take volume, for a zone, means the volume calculated using the formula—

$$MVL * AA_{GW1B}$$

where—

MVL = the maximum volume for the zone in table 32

AA_{GW1B} = the announced allocation for the water allocations belonging to water allocation group GW1B that are located in the zone.

341 to 347 section numbers not used

Chapter 16 Seasonal water assignment and water sharing rules for particular water licences

Part 1 Seasonal water assignment for particular water licences

348 Seasonal water assignment areas

Seasonal water assignments of water licences are, subject to the rules in section 349, allowed in the following areas—

(a) the ponded area of Teviot Creek Dam located on Teviot Creek at AMTD 31.0 km; and

(b) the ponded area of Burton Gorge Dam located in the Isaac River at AMTD 280.7 km.

349 Rules for seasonal water assignment

(1) The holder of a water licence mentioned in subsection (2) may apply under section 142 of the *Water Act 2000* for a seasonal water assignment.

(2) Seasonal water assignments are permitted only for water licences that—

(a) take water from the ponded area of Teviot Creek Dam and the ponded area of Burton Gorge Dam;

(b) specify the amount of water to be taken; and

(c) are metered entitlements.

(3) The amount of water that may be seasonally assigned under a water licence in a water year may not exceed the unused portion of water for that water licence.

350 Water year

The water year is from 1 July to 30 June the following year.

Part 2 Water sharing rules for water licences in the Don and Dee Rivers and Alma Creek Water Management Area

351 Water Year

The water year is from 1 July to 30 June the following year.

352 Water sharing rules

(1) This section applies to water licences which take water from a watercourse in the Don and Dee Rivers and Alma Creek Water Management Area.

(2) An advisory group representing water licence holders in the Don and Dee Rivers and Alma Creek Water Management Area must submit, within six months of commencement of this plan, proposed water sharing rules to the chief executive.

(3) The proposed water sharing rules must—

(a) identify management arrangements to improve the sharing of available water during periods of no and low flow;

(b) be developed with adequate consultation with persons affected by the proposed rules;

(c) be consistent with the outcomes and objectives of the Water Resource (Fitzroy Basin) Plan 2011, including water allocation security objectives and environmental flow objectives; and

(d) preferentially apply to licences with a condition consistent with section 48 of this plan.

(4) The chief executive may—

(a) approve the water sharing rules; or

(b) approve the water sharing rules with the amendments the chief executive considers appropriate.

(5) Within 10 business days of making a decision on the submitted water sharing rules, the chief executive must notify the advisory group of the approval, including the date the approval takes effect.

(6) Following approval of the water sharing rules by the chief executive, the advisory group must—

(a) advise, in writing, all the holders of water licences of the approved water sharing rules; and

(b) implement the water sharing rules so that the taking of water under water licences in the Don and Dee Rivers and Alma Creek Water Management Area is consistent with these arrangements.

(7) The advisory group may at any time write to the chief executive to amend or replace existing water sharing rules.

353 to 355 section numbers not used

Chapter 17 Dealing with water licence applications

356 Water licence applications to which this chapter applies

(1) This chapter applies to each application for a water licence made under either section 206 or 216 of the *Water Act 2000* if granting the application would have one or more of the following effects on water to which this plan applies—

(a) increase the annual volume of the water allowed to be taken under authorisations;

(b) increase the nominal entitlement for taking water under the licences, if any;

(c) increase the maximum area to be irrigated under authorisations;

(d) increase the interference with water;

(e) increase the daily or monthly volumetric limit for taking water under the licence, if any;

(f) change the location from which water may be taken;

(g) increase the maximum rate for taking water; and

(h) change the conditions under which the water may be taken.

(2) This chapter applies even if the application was made before the commencement of this plan.

(3) This chapter does not apply to—

(a) an application made under the following provisions of the *Water Act 2000*—

(i) section 221—reinstating an expired water licence;

(ii) section 224—amalgamating water licences;

(iii) section 225—subdividing a water licence; and

(iv) section 229—effect of disposal of part of land to which a water licence to take water attaches.

(b) an application to interfere with, or increase the interference with, water in a watercourse, lake or spring by impounding flow of water made in accordance with chapter 5, part 2, division 4 of the Water Resource (Fitzroy Basin) Plan 2011;

(c) an application made in accordance with chapter 2 of this plan; and

(d) an application made in accordance with chapter 18 of this plan.

357 Applications to be refused

The chief executive must refuse an application to which this chapter applies unless this chapter explicitly provides for granting the application.

358 Application to amend a water licence granted under section 42 of this plan

(1) This section applies to an application to amend a water licence granted under section 42 of this plan.

(2) The chief executive may grant the application only if the chief executive is satisfied that—

(a) the proposed taking of water under the proposed water licence is consistent with the relevant authorities required for the discharge of treated coal seam gas water; and

(b) there are no negative impacts upon water entitlement holders and natural ecosystems within the plan area; and

(3) there is demonstrated additional demand for treated coal seam gas water by unsupplemented water allocation holders.

359 Application to increase the maximum rate at which water may taken

(1) For an application to amend a water licence to increase the maximum rate at which water may be taken, the chief executive may grant the application only if there is an existing development permit associated with the water licence and—

(a) the maximum rate specified in the existing water licence is less than—

(i) if there is an existing development permit associated with the water licence that states a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the rate stated in schedule 10, column 2 of the Water Resource (Fitzroy Basin) Plan 2011; or

(ii) if there is an existing development permit associated with the water licence that states a pump size other than a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the rate decided by the chief executive having regard to the rates stated for similar pump sizes in schedule 10, column 2 of the Water Resource (Fitzroy Basin) Plan 2011; and

(b) where schedule 10 of the Water Resource (Fitzroy Basin) Plan 2011 does not apply—the works authorised by an existing development permit associated with the water licence have the capacity to take water at a rate greater than the maximum rate specified in the existing water licence.

(2) The chief executive must refuse the application if the maximum rate sought under the application exceeds—

(a) if there is an existing development permit associated with the water licence that states a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the rate stated in schedule 10, column 2 of the Water Resource (Fitzroy Basin) Plan 2011;

(b) if there is an existing development permit associated with the water licence that states a pump size other than a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the rate decided by the chief executive having regard to the rates stated for similar pump sizes in schedule 10, column 2 of the Water Resource (Fitzroy Basin) Plan 2011; and

(c) the rate at which the works authorised by an existing development permit associated with the water licence are capable of taking water.

360 Application to increase the daily volumetric limit

(1) For an application to amend a water licence to increase the daily volumetric limit, the chief executive may grant the application only if there is an existing development permit associated with the water licence and—

(a) the daily volumetric limit specified on the existing water licence is less than—

(i) if there is an existing development permit associated with the water licence that states a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the daily volumetric limit stated in schedule 10, column 3 of the Water Resource (Fitzroy Basin) Plan 2011; and

(ii) if there is an existing development permit associated with the water licence that states a pump size other than a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the daily volumetric limit decided by the chief executive having regard to the limits stated for similar pump sizes in schedule 10, column 3 of the Water Resource (Fitzroy Basin) Plan 2011.

(b) where schedule 10 of the Water Resource (Fitzroy Basin) Plan 2011 does not apply—the works authorised by an existing development permit associated with the water licence have the capacity to take water at a rate greater than the daily volumetric limit specified on the existing water licence.

(2) The chief executive must refuse the application if the daily volumetric limit applied for exceeds—

(a) if there is an existing development permit associated with the water licence that states a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the daily volumetric limit stated in schedule 10, column 3 of the Water Resource (Fitzroy Basin) Plan 2011;

(b) if there is an existing development permit associated with the water licence that states a pump size other than a pump size mentioned in schedule 10, column 1 of the Water Resource (Fitzroy Basin) Plan 2011—the daily volumetric limit decided by the chief executive having regard to the limits stated for similar pump sizes in schedule 10, column 3 of the Water Resource (Fitzroy Basin) Plan 2011; and

(c) the maximum volume the works authorised by an existing development permit associated with the water licence are capable of taking in a day at the maximum rate decided.

361 Application to change location where water may be taken

(1) This section applies to an application to amend the location from which water may be taken under a water licence if the change would result in the new location being a parcel of land contiguous to the existing location.

(2) The chief executive may grant the application.

(3) Despite subsection (2), if the licence states a zone from which water may be taken—the application must be refused if the proposed change would result in water being taken from within a different zone.

362 Applications to take water for the removal of mine site seepage or runoff from a watercourse

(1) This section applies to an application to take water from a watercourse where—

(a) the applicant is the holder of a mining tenure; and

(b) the application is for the taking of water for the purpose of the removal of mine site seepage or runoff that has unavoidably entered or proposed to enter a watercourse.

(2) The chief executive may grant the application only if the chief executive is satisfied that the arrangements for the mine site seepage or runoff entering a watercourse is authorised by the relevant environmental authority.

(3) A water licence to which this section applies must have a condition that water can only be taken if the effect on naturally occurring flow in the watercourse downstream of the mining tenure is inconsequential.

(4) In this section—***mining tenure*** means a mineral development licence or mining lease granted under the *Mineral Resources Act 1989.*

363 to 370 section numbers not used

Chapter 18 Overland flow water

Part 1 Granting water licences for taking overland flow water—*Water Act 2000*, section 212

371 Granting a water licence

(1) The chief executive may grant a licence for the take of overland flow water to replace the authority under section 111(4) of the Water Resource (Fitzroy Basin) Plan 2011 in the following circumstances—

(a) at any time; or

(b) if a submission has been made by a prescribed person or prescribed tenure holder requesting a water licence for the take of overland flow water.

(2) Before granting a water licence under subsection (1), the chief executive may require an authorisation holder to provide a certified report for existing overland flow works in accordance with section 372;

(3) In making a decision about granting a licence under subsection (1), the chief executive—

(a) must consider—

(i) a notice mentioned in section 111(3) of the Water Resource (Fitzroy Basin) Plan 2011;

(ii) the average annual volume of overland flow water that could have been taken, immediately before the commencement of the Water Resource (Fitzroy Basin) Plan 2011, using the existing overland flow works to which the authority relates;

(iii) the annual volumes of overland flow water estimated by the chief executive to have been taken using the works during the period, of not more than 10 years, immediately before the commencement of the Water Resource (Fitzroy Basin) Plan 2011;

(iv) if a certified report has been required under subsection (2)—the information provided; and

(v) any other matters the chief executive considers relevant.

(b) may consider the extent to which the works, immediately before the commencement of the Water Resource (Fitzroy Basin) Plan 2011, allowed—

(i) the taking of other water under another authorisation; or

(ii) the storage of other water taken under another authorisation.

(4) The chief executive may decide to grant the water licence to replace the authority if the licence states—

(a) the maximum volume that may be stored under the licence; and

(b) location.

(5) The chief executive may impose a condition on the water licence that water taken under the licence may only be stored in particular works.

372 Certified reports for existing overland flow works

(1) A certified report is a report prepared in accordance with the standards and requirements of the chief executive.

(2) The purpose of the certified report is to provide the chief executive with an accurate representation of—

(a) the infrastructure to which the report relates;

(b) how the infrastructure is operated; and

(c) the ability of the infrastructure to take overland flow water.

(3) The certified report must be verified and signed by a registered professional engineer.

373 to 375 section numbers not used

Chapter 19 Performance assessment

376 Water monitoring

(1) The chief executive must measure or collect and keep publicly available, records of—

(a) water quantity;

(b) water taken;

(c) groundwater levels;

(d) nominal volume of water permanently traded and seasonally assigned;

(e) the number of permanent trades and seasonal assignments; and

(f) prices for water permanently traded.

(2) The chief executive must collect information on—

(a) future consumptive demands for water,

(b) the construction of new bores; and

(c) existing overland flow works notified under section 111(3) of the Water Resource (Fitzroy Basin) Plan 2011.

(3) The chief executive may use information collected to support water resource assessment and reporting.

377 Natural ecosystems monitoring

The chief executive must collect and keep publicly available information on ecological assets that are linked to the general ecological outcomes and specific ecological outcomes of the Water Resource (Fitzroy Basin) Plan 2011.

378 Assessment and reporting

The chief executive must make ongoing assessments of whether the trends in the data measured, collected and recorded under sections 376 and 377 of this plan indicate that outcomes specified in the Water Resource (Fitzroy Basin) Plan 2011 are being achieved.

379 to 380 section numbers not used

Chapter 20 Resource operations licence holder monitoring and reporting

381 Scope of chapter 20

This chapter sets out the monitoring and reporting requirements that apply to the resource operations licence holder for the—

(a) Dawson Valley Water Supply Scheme;

(b) Nogoa Mackenzie Water Supply Scheme;

(c) Lower Fitzroy Water Supply Scheme;

(d) Fitzroy Barrage Water Supply Scheme; and

(e) Callide Valley Water Supply Scheme.

382 Monitoring data must be made available

The resource licence holder must provide any monitoring data required under this chapter to the chief executive upon request and within the time requested.

Part 1 Monitoring requirements

Division 1 Water quantity

383 Stream flow and storage water level data

(1) The resource operations licence holder must record water level and volume and stream flow data in accordance with attachment 11.

(2) Infrastructure inflows may be determined based upon an infrastructure inflow derivation technique supplied by the resource operations licence holder and approved by the chief executive.

384 Releases from storages

(1) The resource operations licence holder must measure and record for each release of water from storages listed in attachment 11—

(a) the daily volume released; and

(b) the release rate, and for any change in release rate—

(i) the date and time of the change; and

(ii) the new release rate; and

(c) the reason for each release.

(2) In addition to the requirements under subsection (1), storage outlets with selective withdrawal capabilities, the resource operation licence holder must record—

(a) the inlet level used for each release of water; and

(b) the reason for deciding to release from that particular inlet level.

385 Monitoring Callide Groundwater Unit 1

(1) The resource operations licence holder must monitor the groundwater levels in Callide Groundwater Unit 1 in accordance with the approved monitoring network program for the Callide Groundwater Unit 1.

(2) The resource operations licence holder must within 2 months of commencement of this plan submit a proposed monitoring network program for Callide Groundwater Unit 1 to the chief executive for approval.

(3) The resource operations licence holder may apply to amend the monitoring network program.

(4) In considering any submitted program or application to amend the program the chief executive may either—

(a) request further information; or

(b) approve the program with or without change; or

(c) require the resource operations licence holder to submit a revised program.

386 Use of waterholes

For each day that supplemented water is taken from a waterhole, the resource operations licence holder must measure and record the level of the water in the waterhole when it is drawn below the level specified in sections 84, 129 and 166 of this plan.

387 Water diversions

(1) The resource operations licence holder must measure and record the daily total volumes of water delivered to—

(a) for the Dawson Valley Water Supply Scheme—

(i) Gibber Gunyah channel system;

(ii) Theodore channel system;

(iii) Moura Offstream Storage; and

(iv) Moura Weir from Moura Offstream Storage;

(b) for the Nogoa Mackenzie Water Supply Scheme—

(i) Selma channel system;

(ii) Weemah channel system;

(iii) Blackwater pipeline; and

(iv) Retreat Creek from the confluence of Drain RR6 (approximate AMTD 9.5 km) to the Blair Athol Railway line crossing of Retreat Creek (approximate AMTD 3.0 km);

(c) for the Lower Fitzroy and Fitzroy Barrage water supply schemes—Stanwell pipeline;

(d) for the Callide Valley Water Supply Scheme—Callide diversion channel.

(2) The methodology for determining the volume delivered must be approved by the chief executive.

388 Water discharged

The resource operations licence holder must measure and record the daily total volumes of water discharged by—

(a) Woleebee Creek to Glebe Weir pipeline; and

(b) Awoonga Dam to Callide pipelines.

389 Announced allocations

The resource operations licence holder must record details—

(a) of announced allocation determinations for—

(i) medium priority allocation;

(ii) medium A priority allocation;

(iii) high priority allocation;

(iv) high A priority allocation; and

(v) high B priority allocation;

(b) the date announced allocations are determined; and

(c) the value of each parameter applied for calculating the announced allocation.

390 Restrictions

(1) The resource licence holder must record details of any restriction on volumes for each priority group that may be supplied, including—

(a) the start and end date; and

(b) the volume of water to be supplied.

(2) Subsection (1) does not apply if the restriction is a result of announced allocation.

391 Carryover

The resource operations licence holder must record details of the total volume of water carried over to the water year from the previous water year.

392 Water taken by water users

(1) The resource operations licence holder must on an annual basis, measure and record the total volume of water taken by each water user for each zone.

(2) In addition to subsection (1) the resource operations licence holder must, on an annual basis—

(a) keep separate records of groundwater and surface water taken for high B and medium priority water allocations in the Callide Valley Water Supply Scheme; and

(b) measure and record the volume of water taken under the water licence granted under section 42 of this plan.

(3) The resource operations licence holder must on a monthly basis provide a reconciliation of Awoonga CS Energy, Awoonga Callide Power Management and Callide storage accounts in accordance with section 194 of this plan.

393 Seasonal water assignment of a water allocation

The resource operations licence holder that gives consent to a seasonal water assignment must record details of seasonal water assignment arrangements, including—

(a) name of the assignee and the assignor;

(b) volume of the assignment;

(c) the location—

(i) from which it was assigned; and

(ii) to which it was assigned;

(d) effective date of the seasonal water assignment.

Division 2 Impact of infrastructure operation on natural ecosystems

394 Water quality

The resource operations licence holder must monitor and record water quality data in relation to relevant infrastructure listed in attachment 10, parts 1 to 5.

395 Bank condition

(1) The resource operations licence holder must inspect banks for evidence of collapse and/or erosion identified within ponded areas of each storage listed in attachment 11 and downstream reaches, following instances of—

(a) rapid water level changes; or

(b) large flows through storage, or

(c) other occasions when collapse and/ or erosion of banks may be likely.

(2) For subsection (1), downstream of the relevant infrastructure means the distance of influence of infrastructure operations.

396 Fish stranding

The resource operations licence holder must record and assess reported instances of fish stranding in watercourses and ponded areas associated with the operation of the resource operations licence holder's infrastructure as listed in attachment 10, parts 1 to 5 to determine if any instance is associated with the operation of that infrastructure.

Part 2 Reporting requirements

397 Reporting requirements

The resource operation licence holder must provide—

(a) annual reports for the previous water year; and

(b) operational or emergency reports.

Division 1 Annual reporting

398 Annual report

(1) The resource operations licence holder must submit an annual report to the chief executive after the end of the water year.

(2) The annual report must include—

(a) water quantity monitoring results required under section 399 of this plan;

(b) details of the impact of infrastructure operation on natural ecosystems as required under section 400 of this plan; and

(c) a discussion on any issues that arose as a result of the implementation and application of the rules and requirements of this plan.

399 Water quantity monitoring—annual report

(1) The resource operations licence holder must include in the annual report—

(a) a summary of announced allocation determinations, including—

(i) an evaluation of the announced allocation procedures and outcomes; and

(ii) the date and value for each announced allocation;

(b) instances where any restrictions, other than an announced allocation, have been implemented including—

(i) an evaluation of the effectiveness of the limitation or restriction procedures and outcomes; and

(ii) the date and value for each restriction;

(c) details of seasonal water assignments, specified by each scheme, including—

(i) the total number of seasonal water assignments; and

(ii) the total volume of water seasonally assigned;

(d) a summary of carry over determinations, including—

(i) the total carry over to the water year from the previous water year; and

(ii) the total carry over from the water year to the next water year;

(e) the total annual volume of water taken by all water users, specified by zone and scheme, including—

(i) the total volume of supplemented water taken;

(ii) the total volume of supplemented water entitled to be taken; and

(iii) the basis for determining the total volume entitled to be taken;

(f) details of waterhole monitoring which has been undertaken under section 386 of this plan;

(g) details of environmental releases, specified by each scheme and storage, including—

(i) an overview of first post-winter and seasonal base flow management strategy implementation; and

(ii) the date, storage level, storage inflow and storage outflow for each day during implementation of the first post-winter or seasonal base flow strategy;

(h) all details of changes to the storage and delivery infrastructure or the operation of the storage and infrastructure that may impact on compliance with rules in this plan;

(i) details of any new monitoring devices used such as equipment to measure stream flow;

(j) the details and status of any programs implemented under section 13 of this plan;

(k) the total volume of treated CSG water discharged from the Woleebee Creek pipeline into Glebe Weir; and

(l) the volume of water taken under a water licence granted under section 42 of this plan.

(2) The annual report for the Callide Valley Water Supply Scheme must also include—

(a) for the Awoonga CS Energy and Callide Power Management storage accounts—

(i) the total volume of Awoonga Water Supply Scheme water at the start and end of the water year;

(ii) the total volume delivered to Callide Dam from the Awoonga Water Supply Scheme;

(iii) the total attributed Callide Dam storage loss; and

(iv) the total volume of water from Awoonga Water Supply Scheme which is used in the Callide Valley Water Supply Scheme.

(b) for the Callide storage account—

(i) the total volume of water supplied to each high priority water allocation holder;

(ii) the total volume of water released to medium priority groundwater allocations; and

(iii) the total attributed storage loss.

400 Impact of infrastructure operation on natural ecosystems

The resource operations licence holder must include in their annual report—

(a) a summary of the environmental considerations made by the resource operations licences holder in making operational and release decisions;

(b) a summary of the environmental outcomes of the decision including any adverse environmental impacts;

(c) a summary of bank condition and fish stranding monitoring and assessment including—

(i) results of investigations of bank slumping and/or erosion identified in ponded areas and/or downstream of the storages;

(ii) results of any investigations of fish stranding downstream of the storages; and

(iii) changes to the operation of the storage to reduce instances of bank slumping and/or erosion or fish stranding; and

(d) a discussion and assessment of the following water quality issues—

(i) thermal and chemical stratification in the storage;

(ii) contribution of the storage and its management to the quality of water released;

(iii) cyano-bacterial population changes in response to stratification in the storage; and

(iv) any proposed changes to the monitoring program as a result of evaluation of the data.

Division 2 Operational or emergency reporting

401 Operational or emergency reporting[11]

(1) The resource operations licence holder must notify the chief executive within one business day of becoming aware of—

(a) any of the following operational incidents—

(i) a non-compliance by the resource operations licence holder with the rules in this plan; and

(ii) instances of fish stranding or bank slumping downstream of the storages listed in attachment 11; and

(b) an emergency where, as a result of the emergency, the resource operations licence holder cannot comply with a rule in this plan.

(2) The resource operations licence holder must provide to the chief executive upon request and within the timeframe requested a report which includes details of—

(i) the incident or emergency;

(ii) conditions under which the incident or emergency occurred;

(iii) any responses or activities carried out as a result of the incident or emergency; and

[11] This does not preclude requirements for dam safety under the *Water Act 2000* and any other applicable legislation.

(iv) in relation to an emergency only, any rules specified in this plan that the resource operations licence holder is either permanently or temporarily unable to comply with due to the emergency.

402 to 411 section numbers not used

Chapter 21 Amendments to the resource operations plan

412 Scope of chapter 21

This chapter states the types of amendments that can be made to this plan under section 106(b) of the *Water Act 2000.*

413 Minor or stated amendment of this plan—*Water Act 2000*, section 106

The following types of amendment may be made to this plan under section 106(b) of the *Water Act 2000*—

(1) An amendment may be made to this plan if the chief executive is satisfied that the proposed amendment would not cause any significant detrimental impact on—

(a) existing water entitlement holders; or

(b) the availability of water for—

(i) ecological assets; or

(ii) natural ecosystems.

(2) The amendments under subsection (1) may include, but are not limited to, the following—

(a) an amendment that is necessary to implement an amendment to the Water Resource (Fitzroy Basin) Plan 2011 made under section 57 of the *Water Act 2000*;

(b) an amendment that provides for improved or more efficient monitoring and reporting requirements;

(c) an amendment to remove granting, amending and converting provisions and associated attachments, once the granting, converting or amending has occurred in accordance with the plan; and

(d) an amendment to infrastructure details, operating and environmental management rules, dealings with water allocations, water sharing rules or seasonal water assignment rules.

Attachment 1 Dictionary

section 4

Term	Definition
AHD	Australian Height Datum, which references a level or height to a standard base level.
AMTD	Adopted Middle Thread Distance, is the distance in kilometres, measured along the middle of the watercourse, that a specific point in the watercourse is from— • the watercourse's mouth; or • if the watercourse is not a main watercourse—the watercourse's confluence with its main watercourse.
announced allocation	For a water allocation managed under a resource operations licence, means a number, expressed as a percentage, which is used to determine the maximum volume of water that may be taken in a water year under the authority of a water allocation.
announced period	The period of time, as determined and announced by the chief executive, when water may be taken in a water year under the authority of a water allocation.
assignee	The person or entity to whom an interest or right to water is being transferred (e.g. seasonally assigned).
assignor	The person or entity who transfers an interest or right in water to an assignee (e.g. a seasonal assignment).
barrage	A barrier constructed across a watercourse to prevent the inflow of tidal water.
carryover	The volume of water permitted to be carried over from the unused portion of the entitlement at the end of the previous water year.
cease to flow level	For a waterhole, the level at which water stops flowing from a waterhole over its downstream control.
channel system	A system of channels, canals, pumps and pipelines and other works used for the distribution of water to water users in a water supply scheme.
cumec	Cubic metre per second.
department	Department of Natural Resource and Mines
dead storage	For a dam or weir, the specified minimum volume of water within the ponded area of the storage that cannot be released or used from the storage under normal operating conditions.
distribution loss	Water that is lost when delivering water for water allocations in reticulated areas via constructed infrastructure through processes such as (but not limited to) evaporation, seepage, pipeline leakage, accidental loss through temporary pipe failure (breaks), loss through pressure relief systems and scouring.
EL	Elevation level
emergency	An occurrence that by 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).
existing development permit	A development permit that is in effect at the commencement of this plan.
fish stranding	When fish are stranded or left out of the water on the bed or banks of a watercourse, on infrastructure such as spillways and causeways or left isolated in small and/or shallow pools, from which they cannot return to deeper water. This also applies to other aquatic species such as platypus and turtles.
first poster-winter flow	The first flow event in a year that— (1) Starts between 15 September and 10 April in the year; (2) Despite (1) if the flow starts in September, the water temperature must be is at least 24 degrees Celsius; (3) In the Dawson River immediately downstream of Glebe Weir— (a) is the first streamflow rise of at least 1000 ML/d that occurs at Glebe Weir Tailwater GS130345B; (b) after evaluation of streamflow and catchment rainfall would suggest an extended period of flow of a flow greater than 46 ML/d (Baseflow); (c) has at least 15 days of flow greater subsection (b).

Term	Definition
	(4) In the Dawson River immediately downstream of Neville Hewitt Weir— (a) is the first streamflow rise of at least 1200 ML/d that occurs at Beckers GS130322A; (b) after evaluation of streamflow and catchment rainfall would suggest an extended period of flow of a flow greater than 78 ML/d (Baseflow); (c) has at least 15 days of flow greater subsection (b). (5) In the Mackenzie River immediately downstream of the Comet River junction— (a) is the first streamflow rise of at least 2000 ML/d that occurs at Riley's Crossing GS130113A; (b) after evaluation of streamflow and catchment rainfall would suggest an extended period of a flow greater than 156 ML/d (Baseflow); (c) has at least 15 days of flow greater subsection (b). (6) In the Mackenzie River immediately downstream of Bingegang Weir— (a. is the first streamflow rise of at least 2600 ML/d that occurs at Bingegang Weir Tailwater GS130110B; (b) after evaluation of streamflow and catchment rainfall would suggest an extended period of flow of a flow greater than 163 ML/d (Baseflow); (c) has at least 15 days of flow greater subsection (b).
full supply level	The specified maximum volume of water within the ponded area of a dam, weir or barrage, which corresponds to the full supply level
inlet	Infrastructure comprised of an entrance channel, intake structure, and gate or valve which allow for water to be taken from the ponded area of a dam, weir or barrage and discharged via an outlet into the watercourse downstream of the storage
location	For a water allocation, means— (a) the zone from which water under the water allocation can be taken; or (b) an AMTD within a zone, from which water under the water allocation can be taken. For a water licence, means the section of the watercourse, lake, spring or aquifer abutting or contained by the land described on the water licence at which water may be taken. For a water licence to take overland flow water, means land described on the water licence at which water may be taken.
mean annual diversion	The long-term average annual volume of water diverted.
megalitre (ML)	One million litres.
minimum operating level	For a dam or weir, is the volume of water within the ponded area of a dam, weir or barrage below which water cannot be released or taken from the infrastructure under normal operating conditions.
multi-level off-take	An off-take arrangement that allows stored water to be released downstream from selected levels below the stored water surface.
nominal entitlement	See section 65 of the Water Regulation 2002.
outlet	Means an arrangement on a dam or weir that allows stored water to be released downstream.
ponded area	Area of inundation at full supply level of a storage.
priority group	A grouping of water allocations for taking supplemented water from a water supply scheme with the same Water Allocation Security Objective (WASO).
quarter or quarterly	Three monthly intervals commencing at the start of the water year.
release	Water from a dam or weir that passes downstream from the dam or weir through the dam or weir outlet works.
resource operations licence holder	A licence granted under the *Water Act 2000* to make provision for how infrastructure and water are managed under an approved resource operations licence.
resource operations plan	A plan approved under section 103 of the *Water Act 2000*. A resource operations plan, prepared by the chief executive implements a water resource plan for any water in the plan area in all or part of the plan area
simulated mean annual diversion	See schedule 13 of the Water Resource (Fitzroy Basin) Plan 2011.

Term	Definition
supplemented water	Water supplied under an interim resource operations licence, resource operations licence or other authority to operate water infrastructure
tailwater	The flow of water immediately downstream of a dam, weir or barrage. Tail water includes all water passing the infrastructure, for example controlled releases and uncontrolled overflows.
treated Coal Seam Gas water (treated CSG water)	Means water produced during the extraction of gas from coal seams, which is treated and delivered by the Woleebee Creek to Glebe Weir pipeline to the Dawson Valley Water Supply Scheme.
unsupplemented water	Water that is not supplemented water.
water allocation change rules	The rules included in the Resource Operations Plan that define how certain attributes of a water allocation may be changed, for example, a change to the location from which water can be taken or the subdivision or amalgamation of a water allocation.
waterharvesting	Taking of unsupplemented water during specified high flow events. Generally involves storing the water offstream for later use.
water user	The holder of a valid water entitlement.

Attachment 2 Fitzroy Basin Plan Area

section 5

Attachment 3 Water supply schemes

sections 7 and 81(2)(b)

Attachment 4 Water management areas

section 8

Attachment 5 Resource Operations Plan Zones

Part 1 Dawson Valley Water Supply Scheme (supplemented water) and Dawson Valley Water Management Area (unsupplemented water)

section 9 and chapters 4, 5, 9 and 10

Zones that apply to the Dawson Valley Water Supply Scheme and Dawson Valley Water Management Area

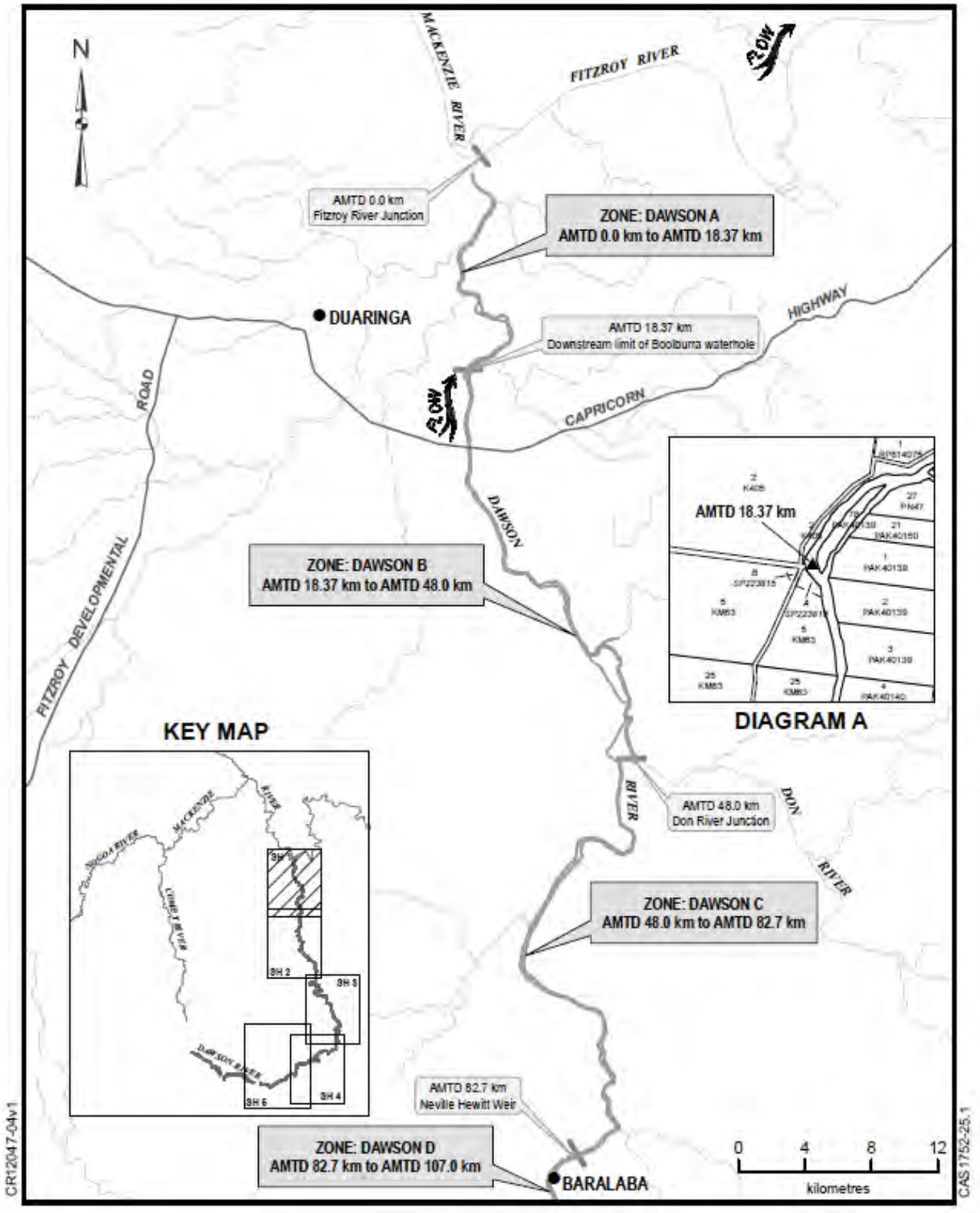
Zone	AMTD (KM)	Description
Dawson A	0–18.37	Fitzroy River junction to end of supplemented section (downstream end of Boolburra waterhole)
Dawson B	18.37–48	End of supplemented section to Don River junction
Dawson C	48–82.7	Don River junction to Neville Hewitt Weir
Dawson D	82.7–107	Neville Hewitt Weir to effective upstream limit of Neville Hewitt Weir
Dawson E	107–133	Effective upstream limit of Neville Hewitt Weir to Mimosa Creek junction
Dawson F	133–150.2	Mimosa Creek junction to Moura Weir
Dawson G	150.2–167	Moura Weir to effective upstream limit of Moura Weir
Dawson H	167–228.5	Effective upstream limit of Moura Weir to Theodore Weir
Dawson I	228.5–242	Theodore Weir to effective upstream limit of Theodore Weir
Dawson J	242–270.7	Effective upstream limit of Theodore Weir to Orange Creek Weir
Dawson K	270.7–311	Orange Creek Weir to effective upstream limit of Gyranda Weir
Dawson L	311–326.2	Effective upstream limit of Gyranda Weir to Glebe Weir
Dawson M	326.2–356.5	Glebe Weir to upstream limit of Glebe Weir
Dawson N	356.5–428.0	Upstream limit of Glebe Weir to Euromba Creek Junction
Dawson O	428.0–453.5	Euromba Creek Junction to Utopia Downs Gauging Station

(a) upstream limit–the upstream limit of an instream storage is the adopted upstream extend of the storage.

(b) effective upstream limit–the effective upstream limit of an instream storage is the upstream limit of where access to stored water is expected most of the time under typical operating conditions.

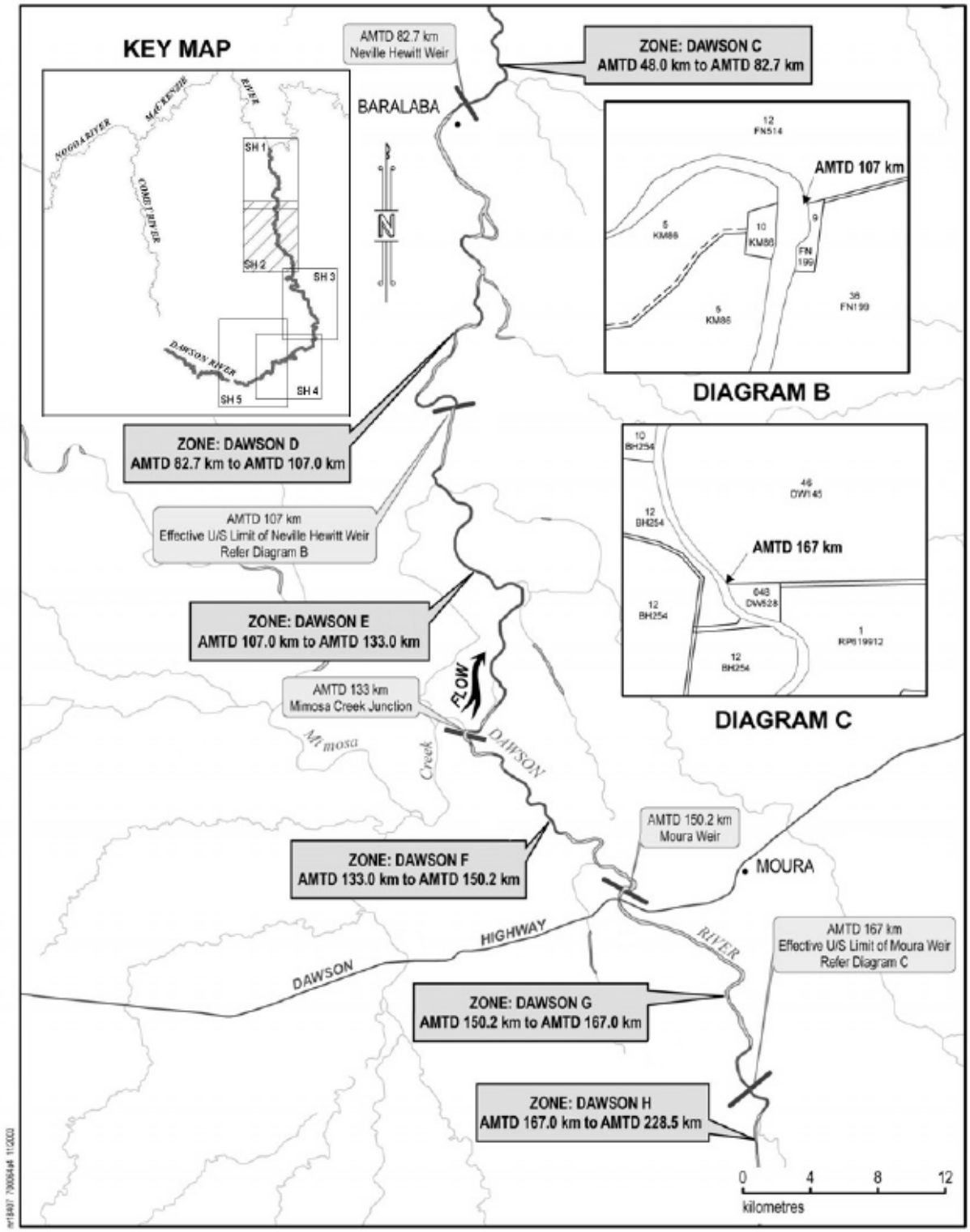
(c) each zone includes those sections of tributaries where there is access to flow or pondage from the Dawson River.

Sheet 1 Zones Dawson A, B and C



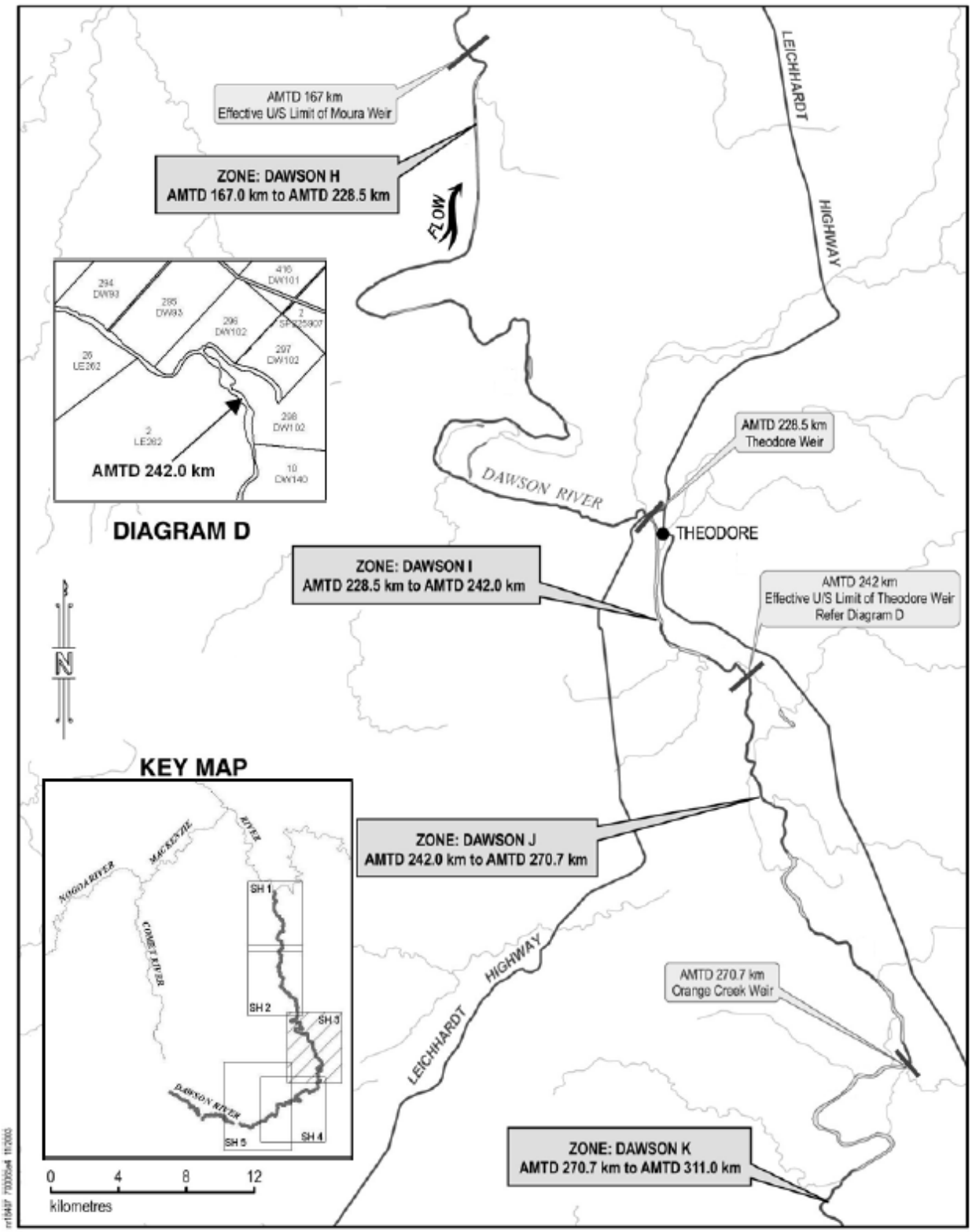
Sheet No 1

Sheet 2 Zones Dawson D, E, F and G



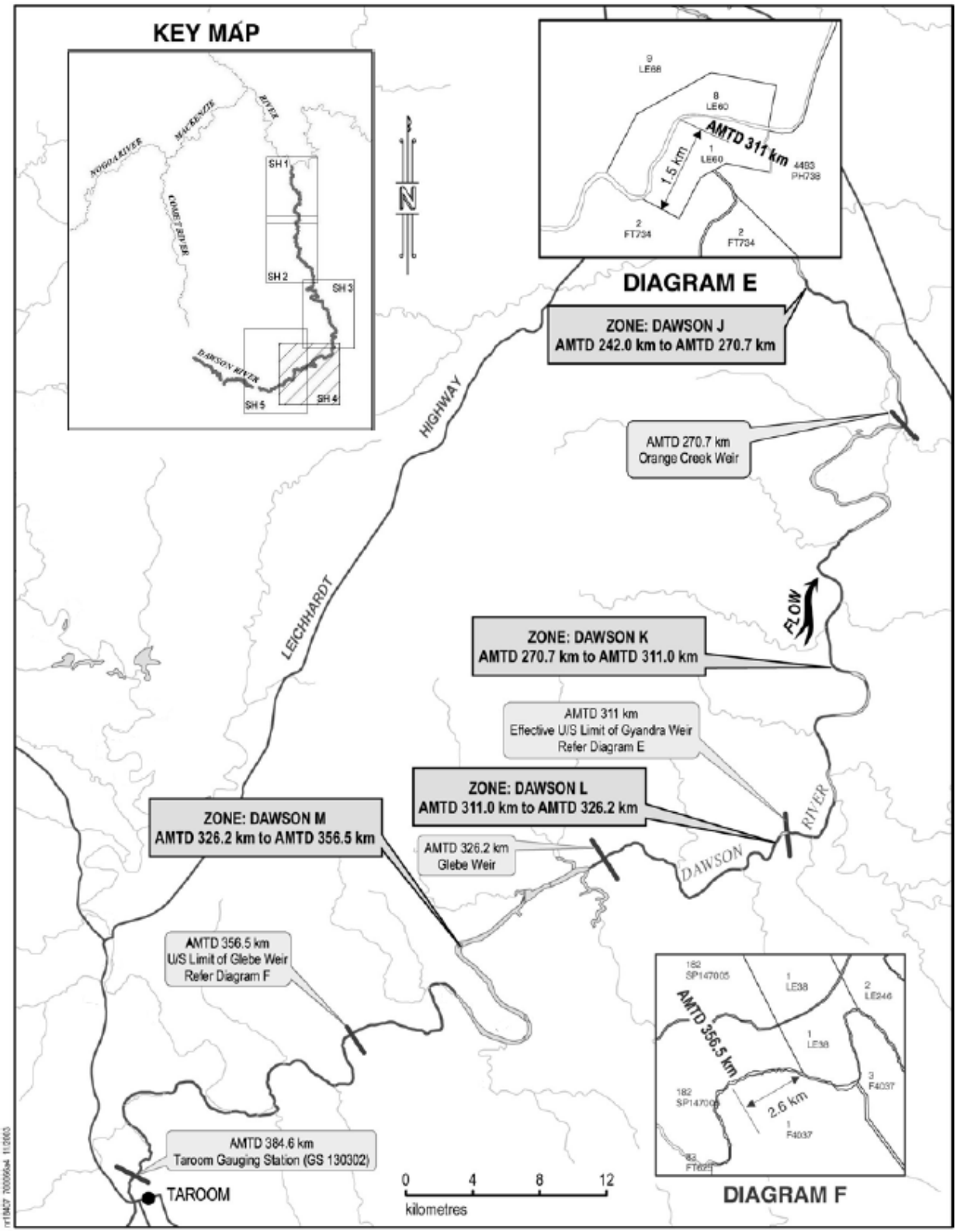
Sheet No 2

Sheet 3 Zones Dawson H, I and J



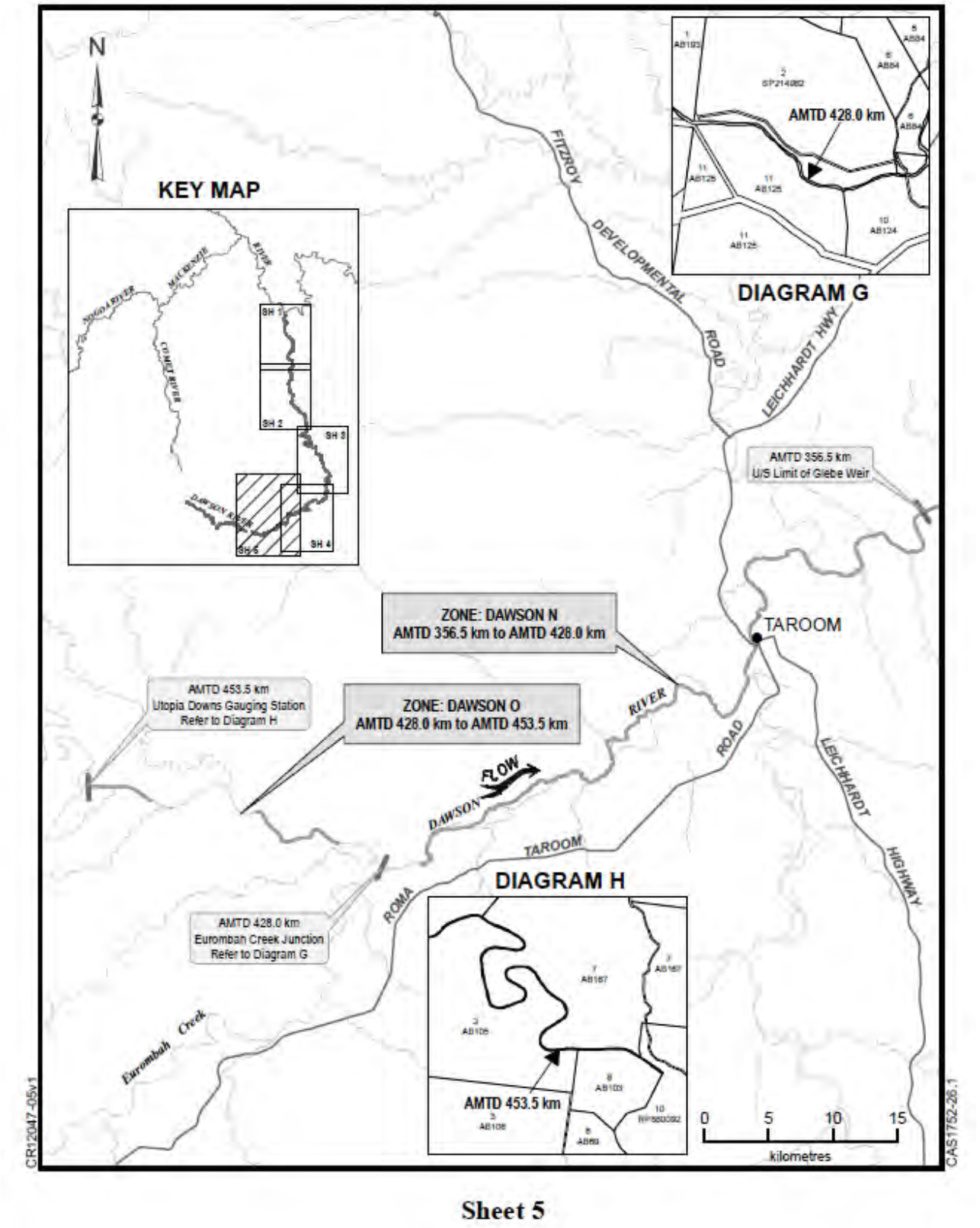
Sheet No 3

Sheet 4 Zones Dawson K, L and M



Sheet No 4

Sheet 5 Zones Dawson N and O



Sheet 5

Part 1 Nogoa Mackenzie Water Supply Scheme (supplemented water) and Nogoa Mackenzie Water Management Area (unsupplemented water)

section 9 and chapters 4, 6, 9 and 11

Zones that apply to Nogoa Mackenzie Water Supply Scheme and Nogoa Mackenzie Water Management Area

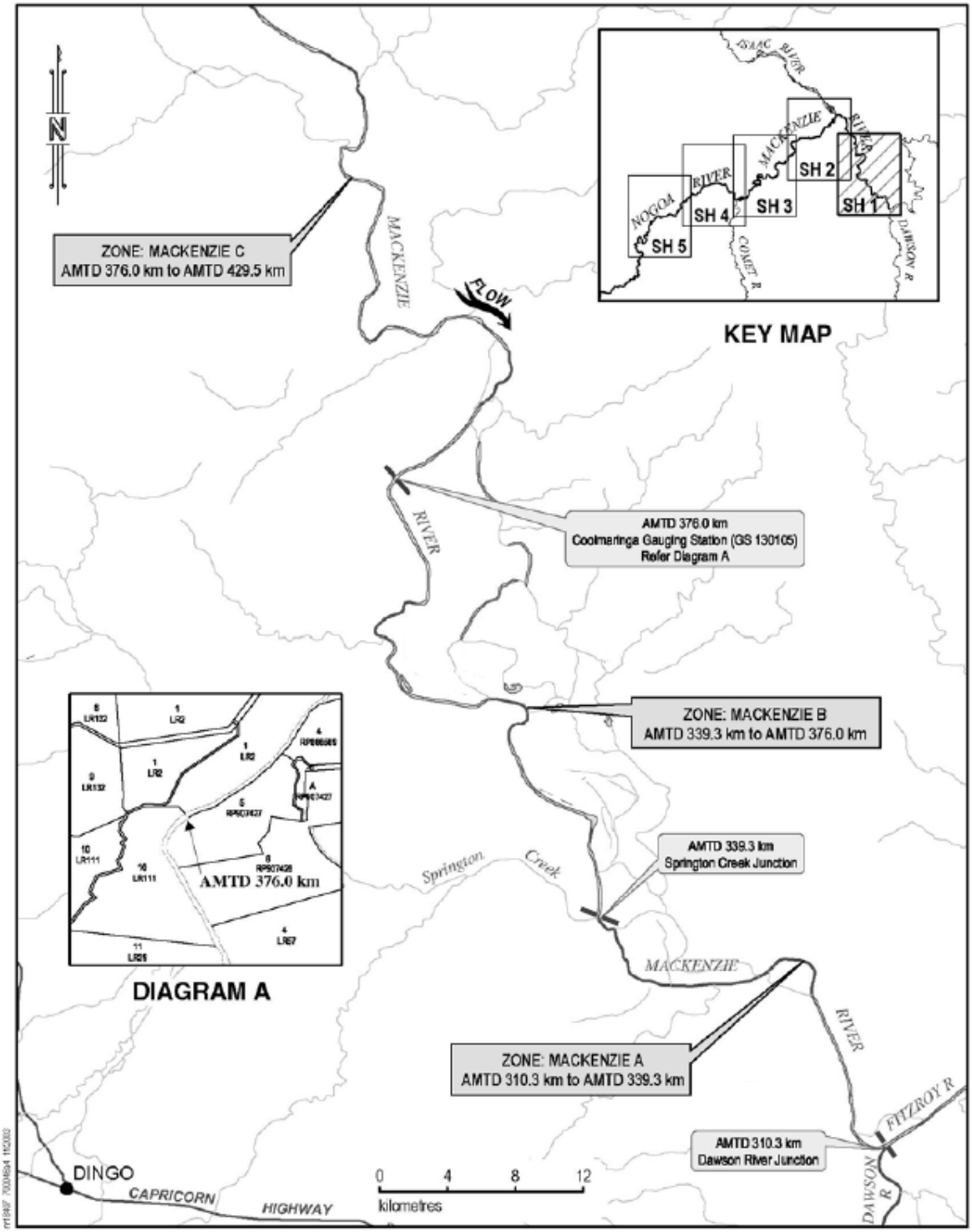
Zone	AMTD (KM)	Description
Mackenzie A	310.3–339.3	Dawson River junction to Springton Creek junction
Mackenzie B	339.3–376.0	Springton Creek junction to Coolmaringa Gauging Station (GS130105)
Mackenzie C	376.0–429.5	Coolmaringa Gauging Station (GS130105) to Tartrus Weir
Mackenzie D	429.5–460.5	Tartrus Weir to effective upstream limit of Tartrus Weir
Mackenzie E	460.5–465.5	Effective upstream limit of Tartrus Weir to Isaac Mackenzie waterharvesting upstream limit
Mackenzie F	465.5–489.2	Isaac Mackenzie waterharvesting upstream limit to Bingegang Weir
Mackenzie G	489.2–513.0	Bingegang Weir to effective upstream limit of Bingegang Weir
Mackenzie H	513.0–548.8	Effective upstream limit of Bingegang Weir to Bedford Weir
Mackenzie I	548.8–585.8	Bedford Weir to Effective upstream limit of Bedford Weir
Mackenzie J	585.8–611.5	Effective upstream limit of Bedford Weir to Comet River junction
Mackenzie K	611.5–615.1	Comet River junction to Comet Mackenzie waterharvesting upstream limit
Mackenzie L	615.1–649	Comet Mackenzie waterharvesting upstream limit to Theresa Creek junction
Mackenzie M	649–685.6	Theresa Creek junction to Fairbairn Dam
Mackenzie N	685.6–737.5	Fairbairn Dam to upstream limit of Fairbairn Dam

(a) upstream limit—the upstream limit of an instream storage is the adopted upstream extend of the storage.

(b) effective upstream limit—the effective upstream limit of an instream storage is the upstream limit of where access to stored water is expected most of the time under typical operating conditions.

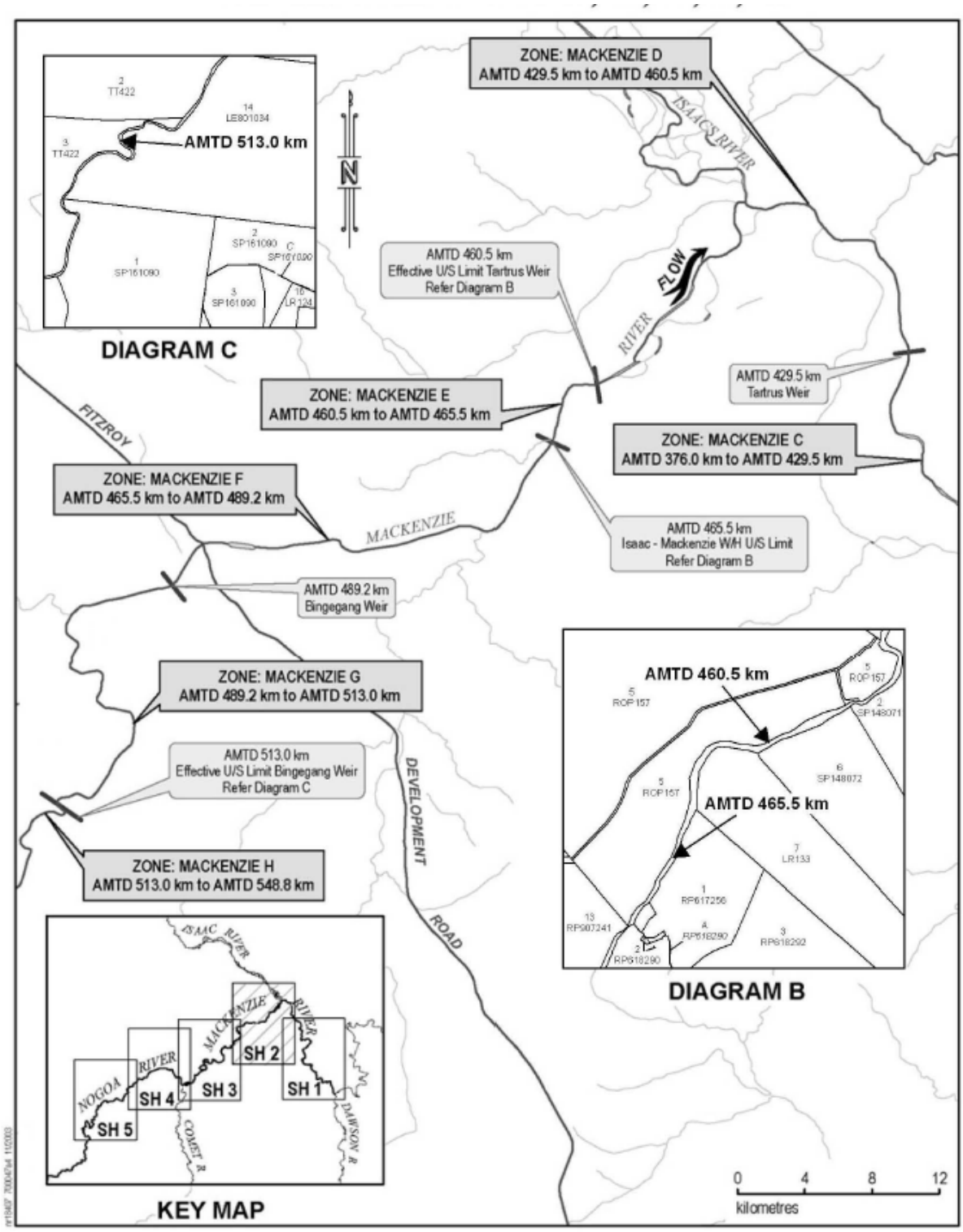
(c) each zone includes those sections of tributaries where there is access to flow or pondage from the Nogoa or Mackenzie rivers.

Sheet 1 Zones Mackenzie A, B and C



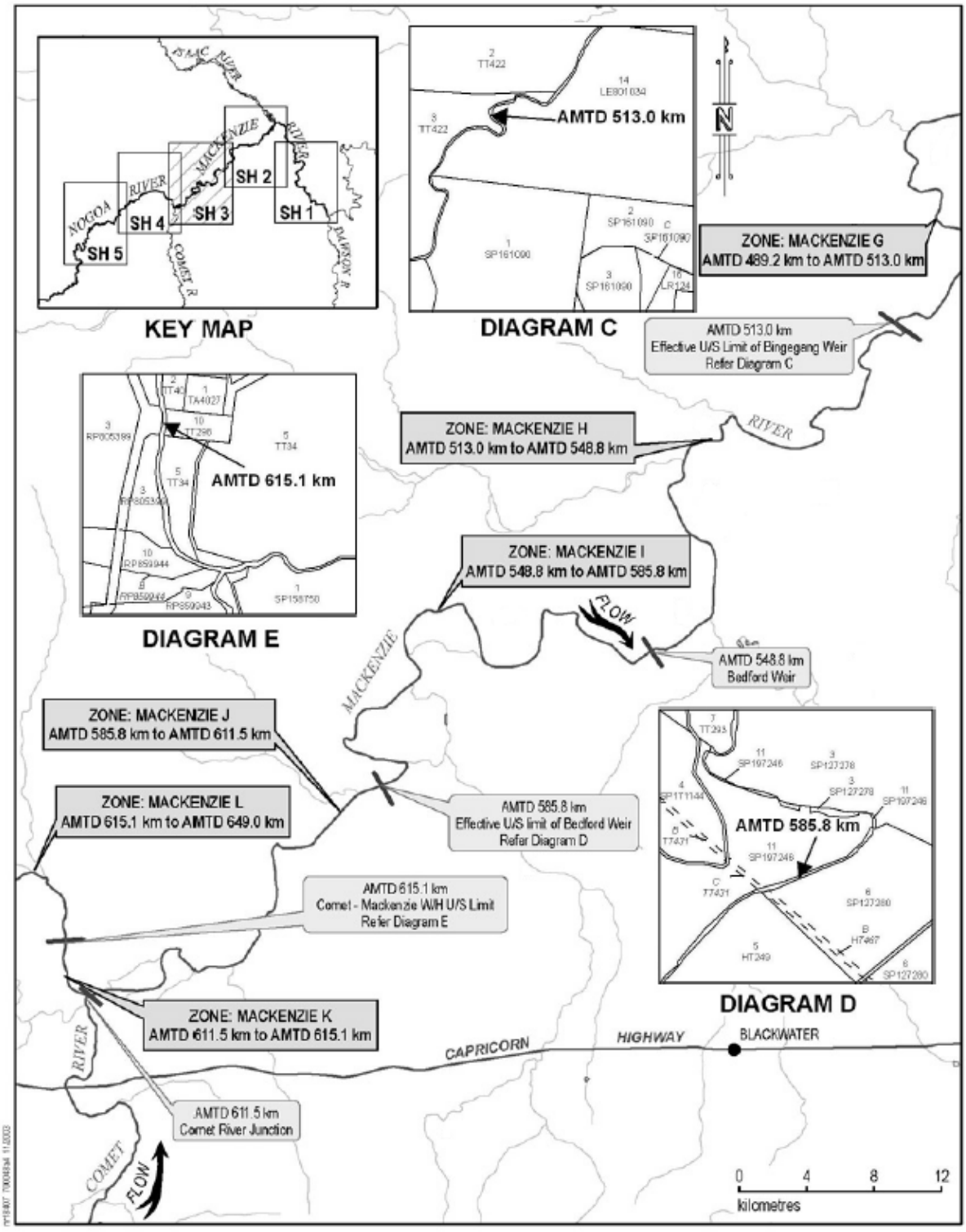
Sheet No 1

Sheet 2 Zones Mackenzie C, D, E, F and G



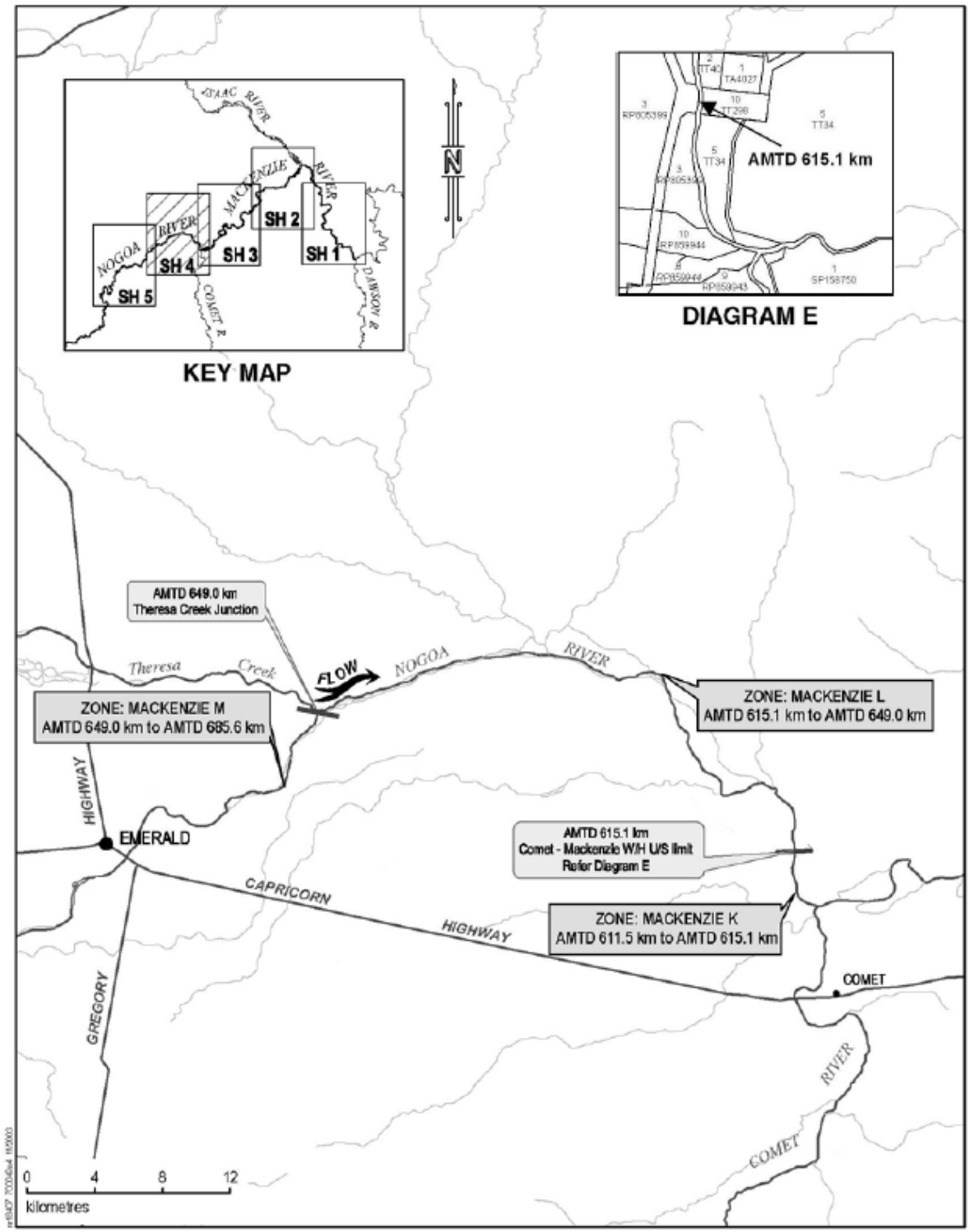
Sheet No 2

Sheet 3 Zones Mackenzie H, I, J and K



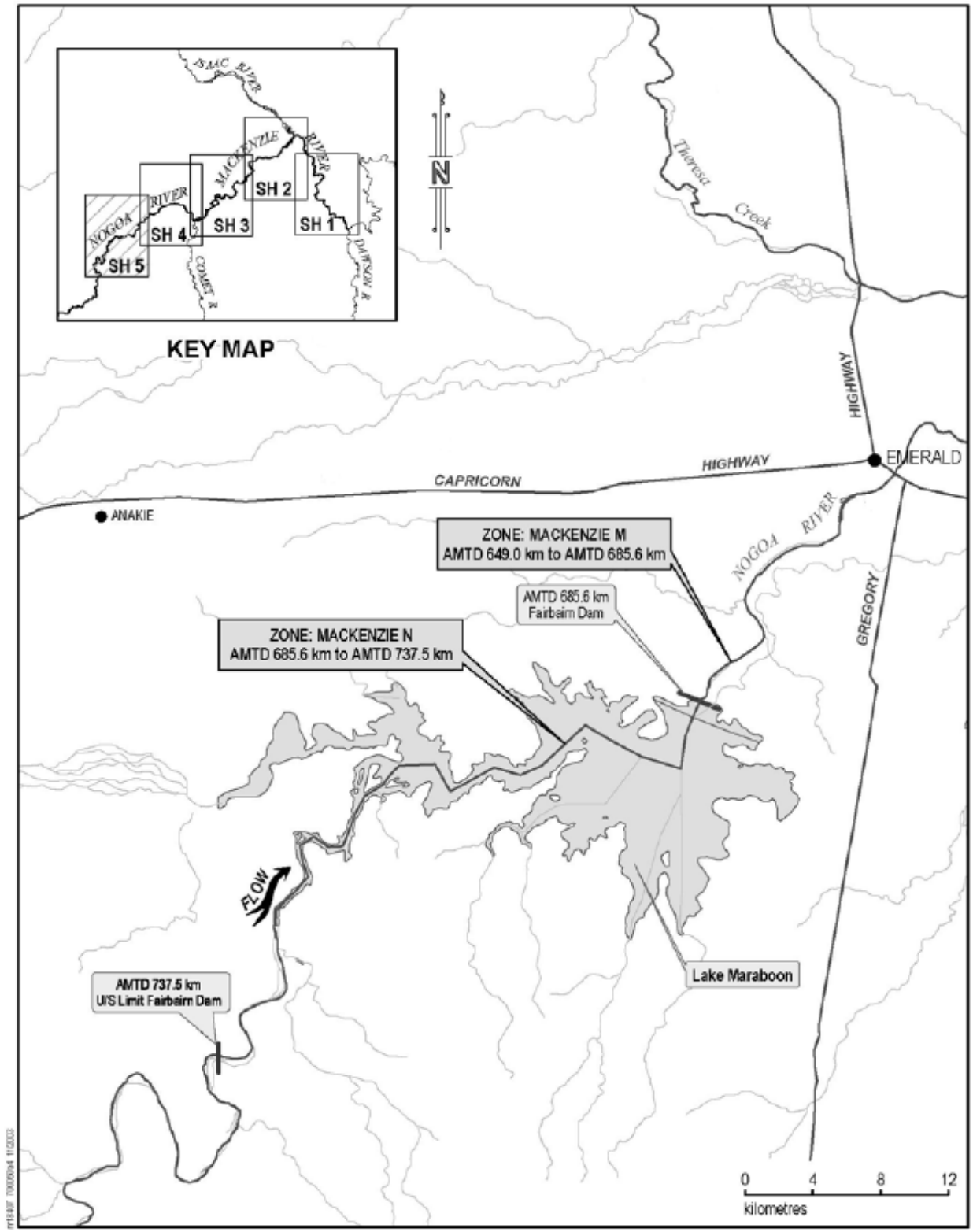
Sheet No 3

Sheet 4 Zones Mackenzie L and M



Sheet No 4

Sheet 5 Zones Mackenzie M and N



Sheet No 5

Part 2 Fitzroy Barrage and Lower Fitzroy Water Supply Schemes (supplemented water) and Fitzroy Water Management Area (unsupplemented water)

section 9 and chapters 4, 7, 9 and 14

Zones that apply to Fitzroy Barrage and Lower Fitzroy Water Supply Schemes and Fitzroy Water Management Area

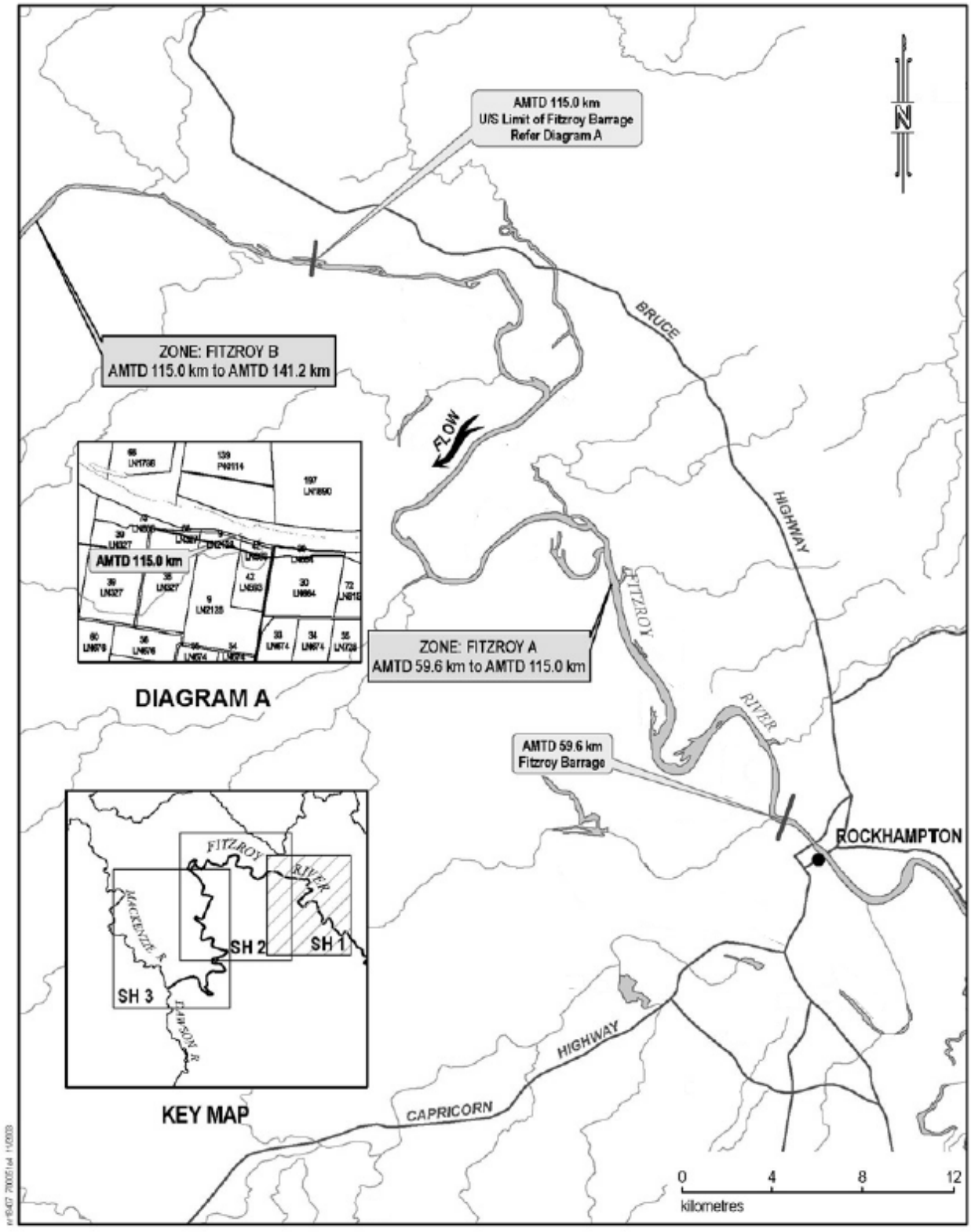
Zone	AMTD (KM)	Description
Fitzroy A	59.6–115.0	Fitzroy Barrage to Upstream limit of Fitzroy Barrage
Fitzroy B	115.0–141.2	Upstream limit of Fitzroy Barrage to Eden Bann Weir
Fitzroy C	141.2–183.4	Eden Bann Weir to Upstream Limit of Eden Bann Weir
Fitzroy D	183.4–276.0	Upstream Limit of Eden Bann Weir to Riverslea Gauging Station (GS 130003B)
Fitzroy E	276.0–310.3	Riverslea Gauging Station (GS 130003B) to Dawson River junction

(a) upstream limit—the upstream limit of an instream storage is the adopted upstream extend of the storage.

(b) effective upstream limit—the effective upstream limit of an instream storage is the upstream limit of where access to stored water is expected most of the time under typical operating conditions.

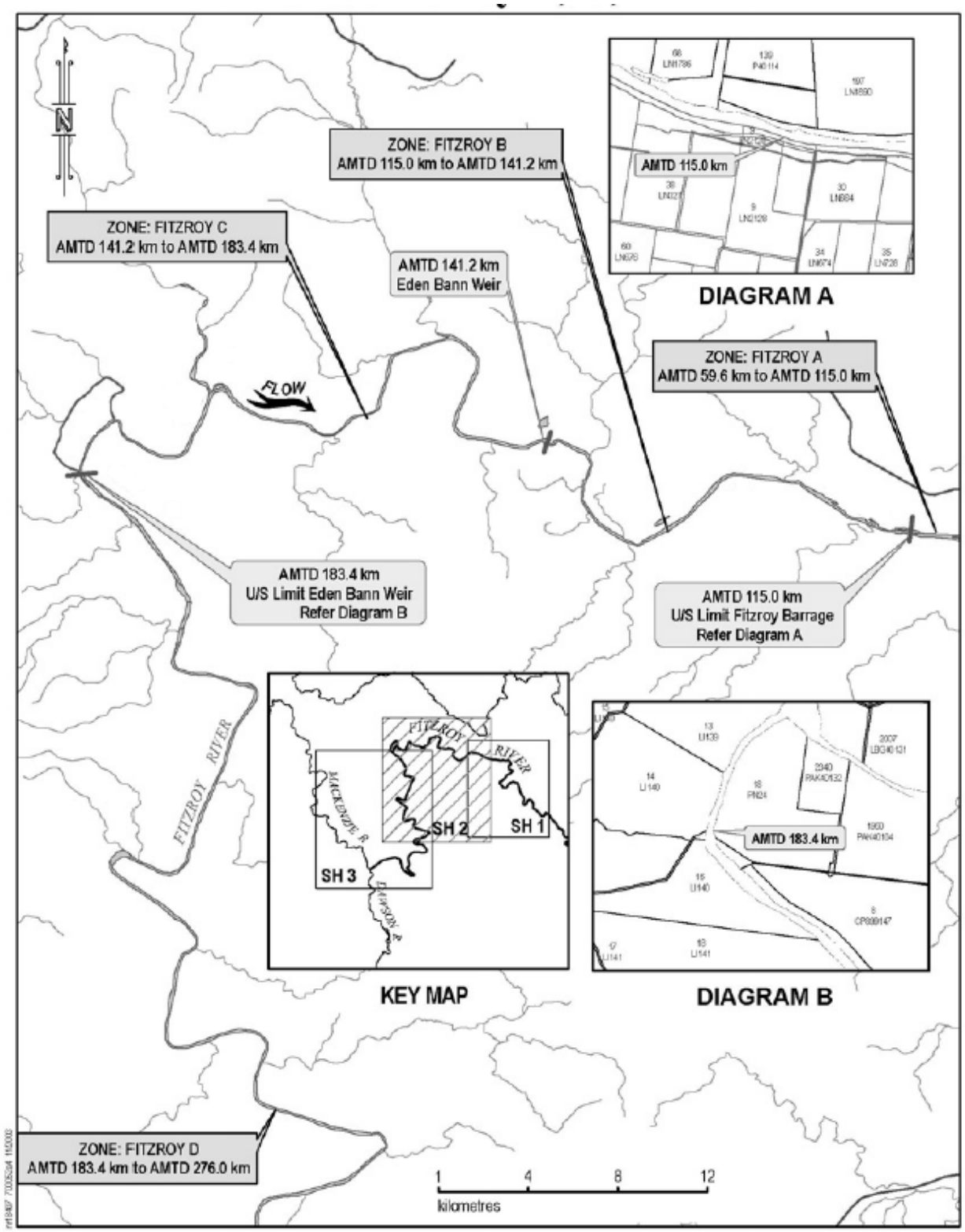
(c) each zone includes those sections of tributaries where there is access to flow or pondage from the Fitzroy River.

Sheet 1 Zones Fitzroy A and B



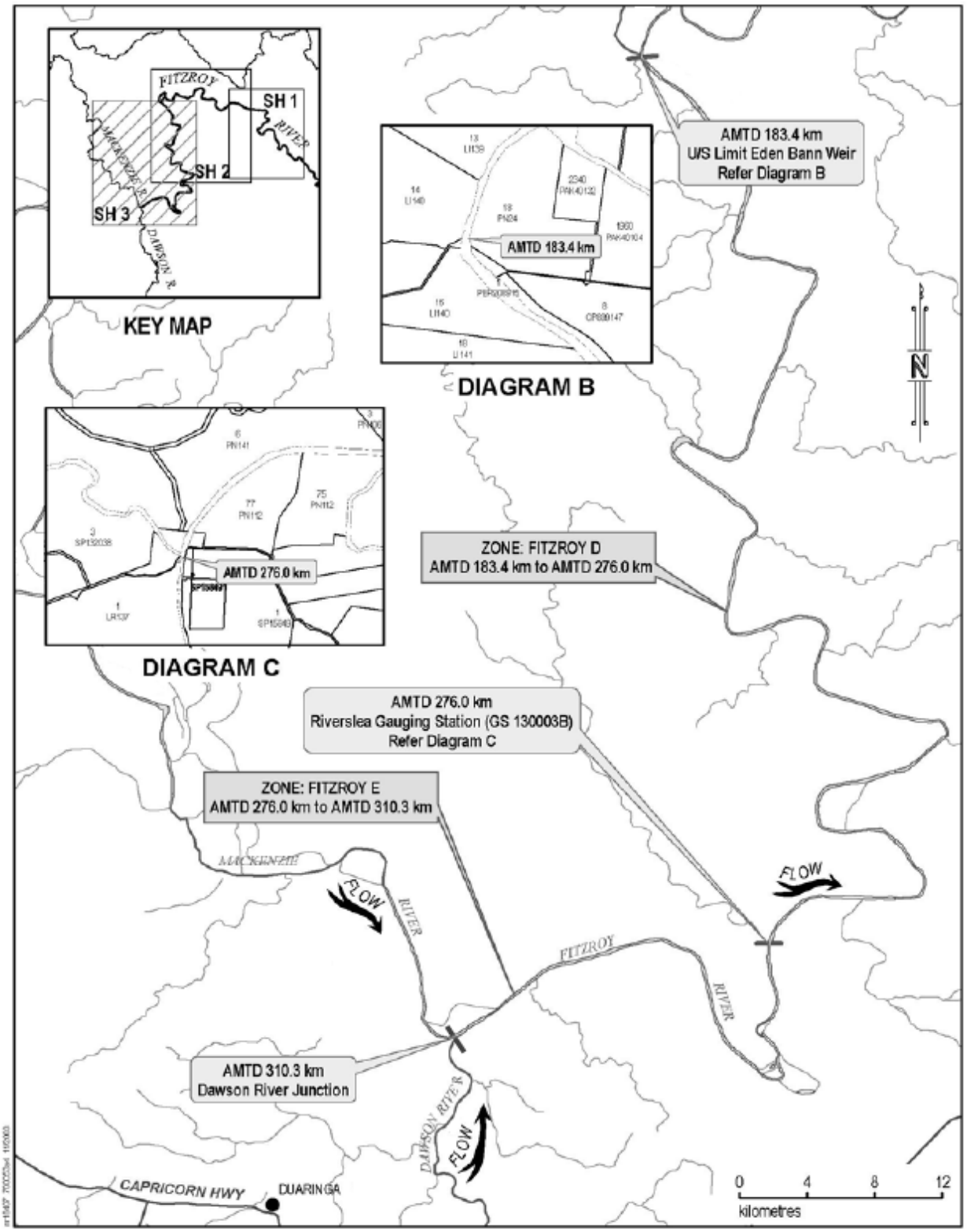
Sheet No 1

Sheet 2 Zones Fitzroy B, C, and D



Sheet No 2

Sheet 3 Zones Fitzroy D and E



Sheet No 3

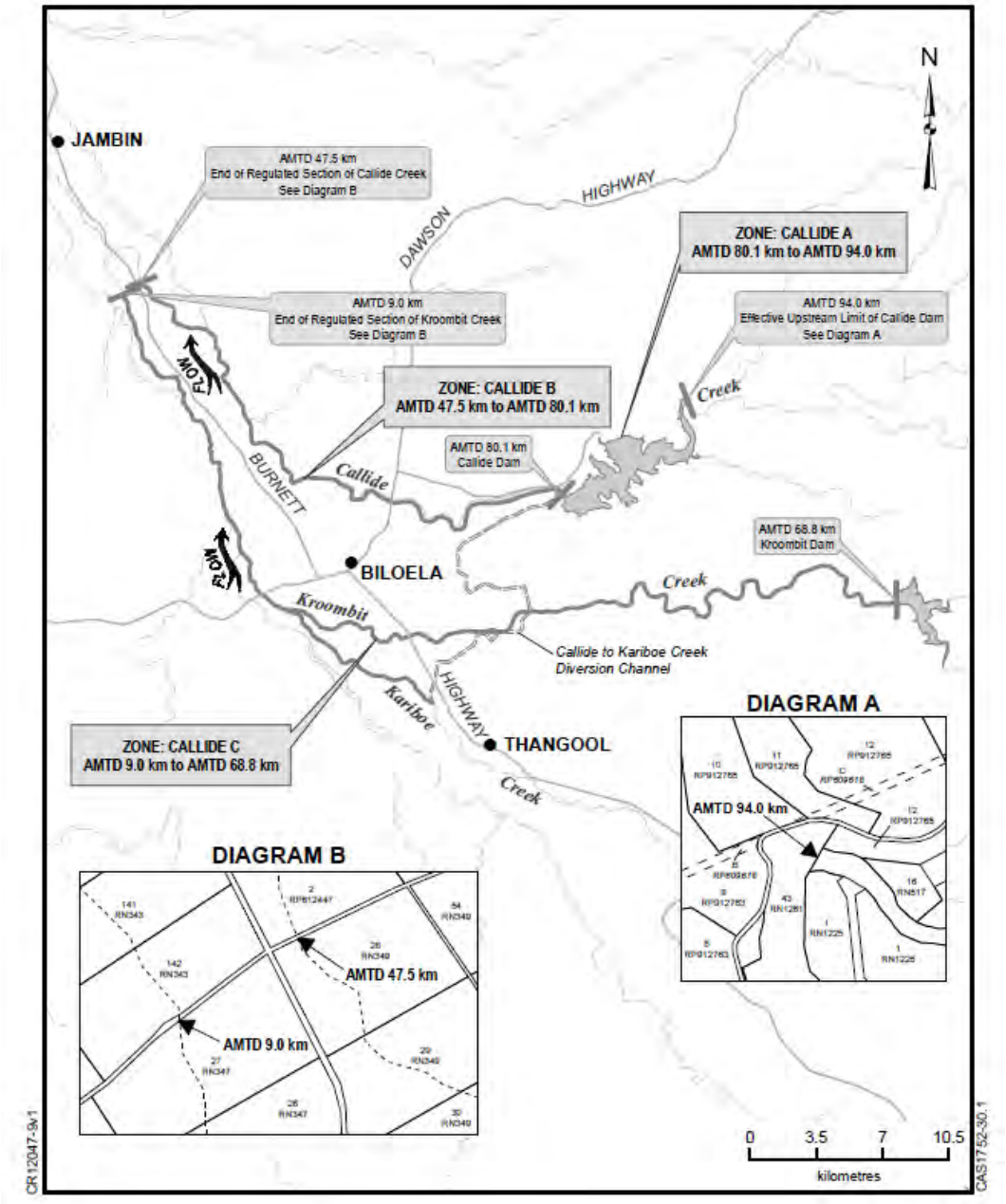
Part 3 Callide Valley Water Supply Scheme (supplemented surface water and groundwater)

section 9 and chapters 4 and 8

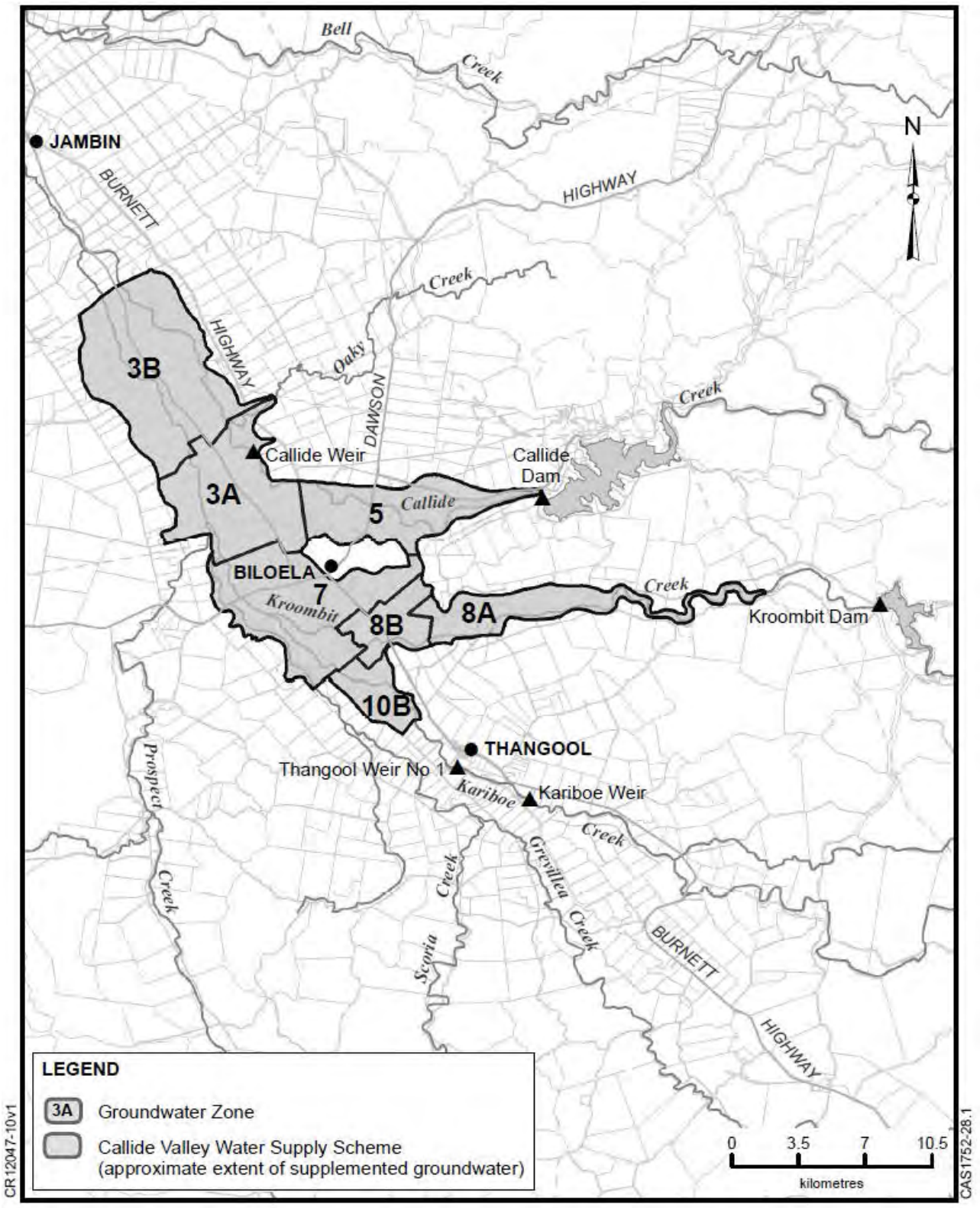
Surface water Zones that apply to Callide Valley Water Supply Scheme

Zone	AMTD (KM)	Description
Callide A	80.1–94.0	Callide Dam to the effective upstream limit of Callide Dam
Callide B	47.5–80.1	End of regulated section of Callide Creek to Callide Dam
Callide C	9.0–68.8	End of regulated section of Kroombit Creek to Kroombit Dam

Surface water Zones Callide A, B and C



Groundwater Zones Callide 3A, 3B, 5, 7 8A, 8B and 10B



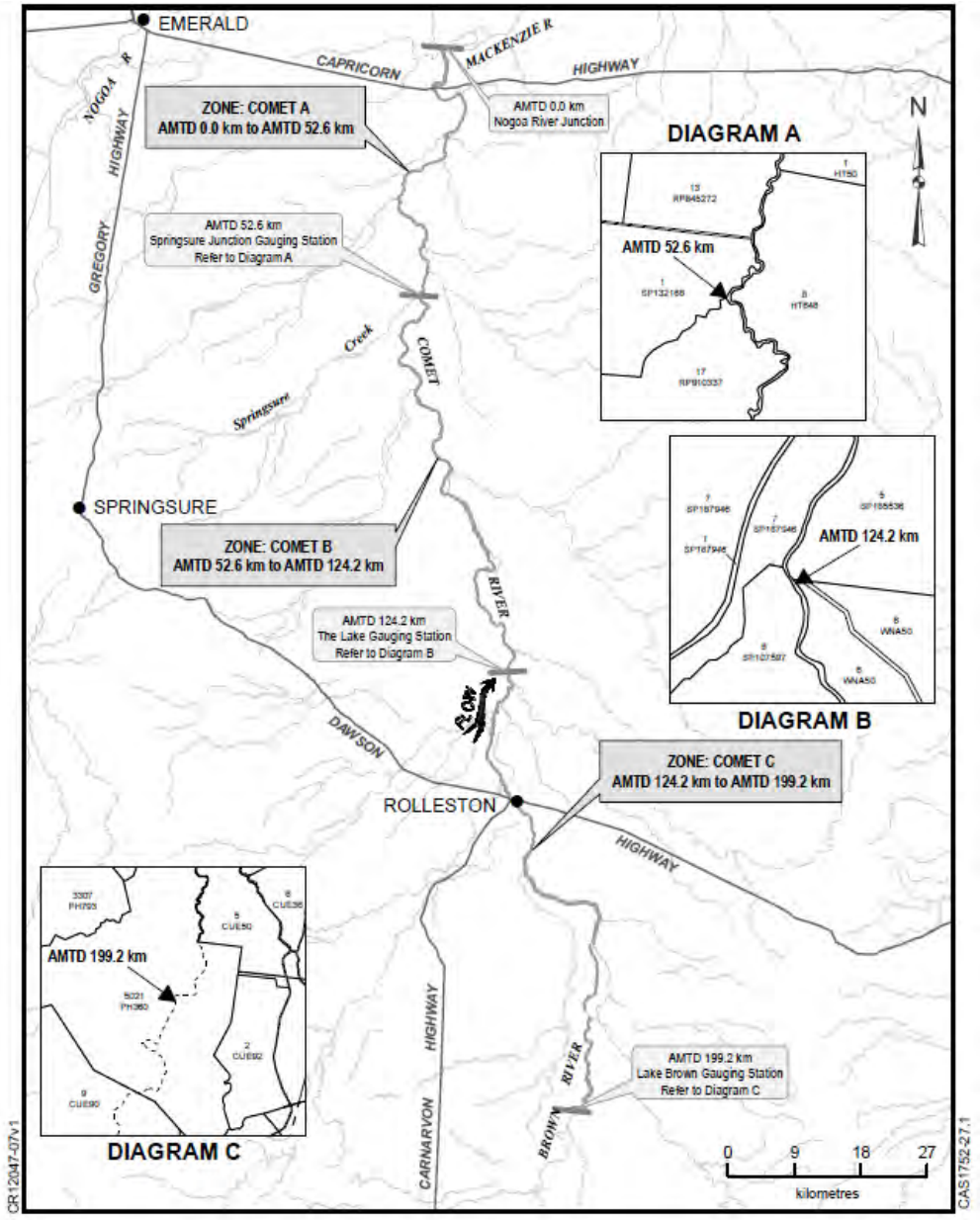
Part 4 Comet Water Management Area (unsupplemented water)

section 9 and chapters 9 and 12

Zones that apply to Comet Water Management Area

Zone	AMTD (KM)	Description
Comet A	0.0–52.6	Comet River from Mackenzie River junction to Gauging Station Springsure Creek junction (130510A)
Comet B	52.6–124.2	Comet River from Springsure Creek junction Gauging Station (130510A) to the Lake Gauging Station (130506A)
Comet C	124.2–199.2	The Lake Gauging Station (130506A) to Lake Brown Gauging Station (130402B)

Zones Comet A, B and C



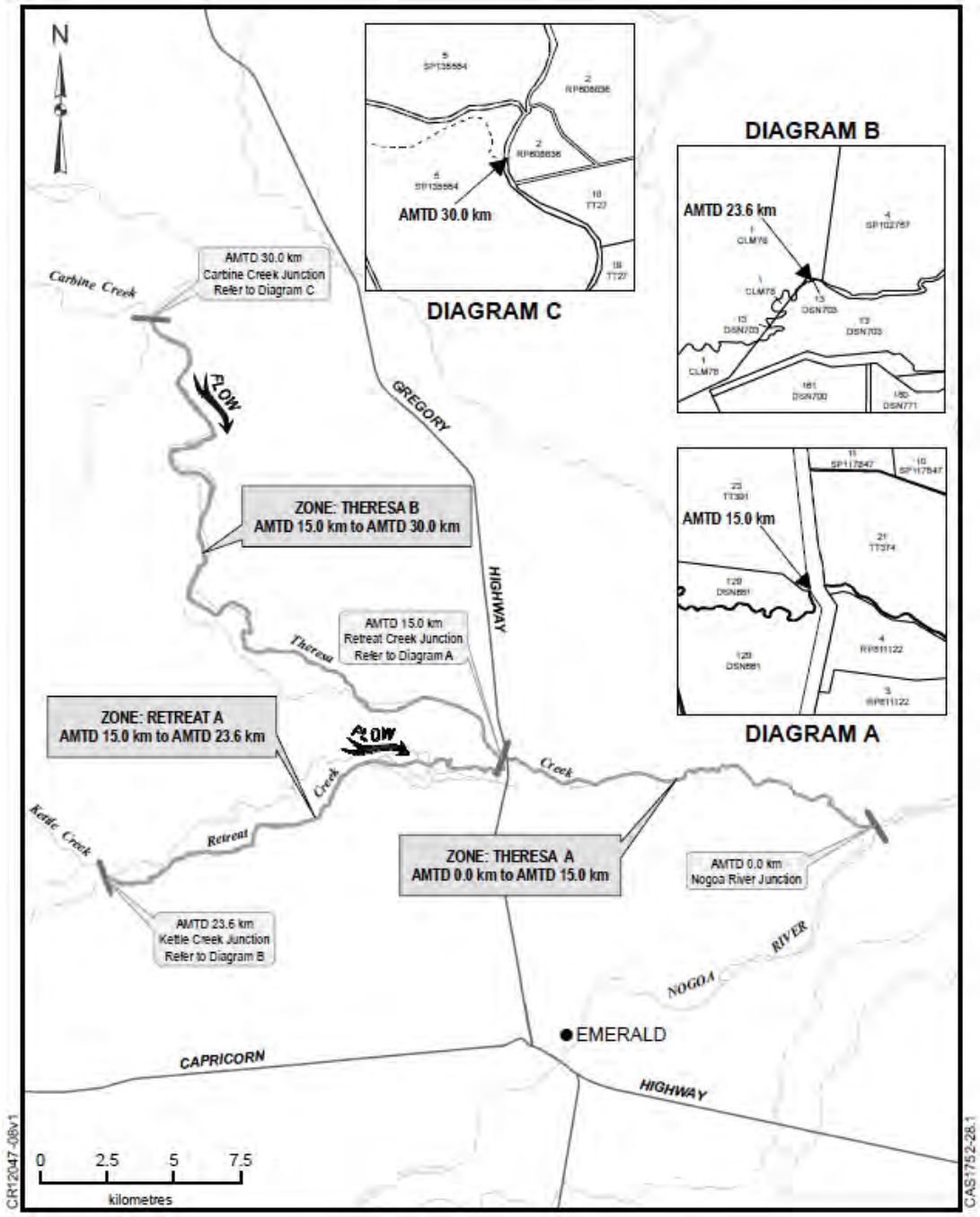
Part 5 Theresa Retreat Water Management Area (unsupplemented water)

section 9 and chapters 9 and 13

Zones that apply to Theresa Retreat Management Area

Zone	AMTD (KM)	Description
Theresa A	0.0–15.0	Theresa Creek from Theresa Creek junction to Retreat Creek junction
Theresa B	15.0–30.0	Theresa Creek from Retreat Creek junction to Carbine Creek junction
Retreat A	15.0–23.6	Retreat Creek from Retreat Creek junction to Kettle Creek junction

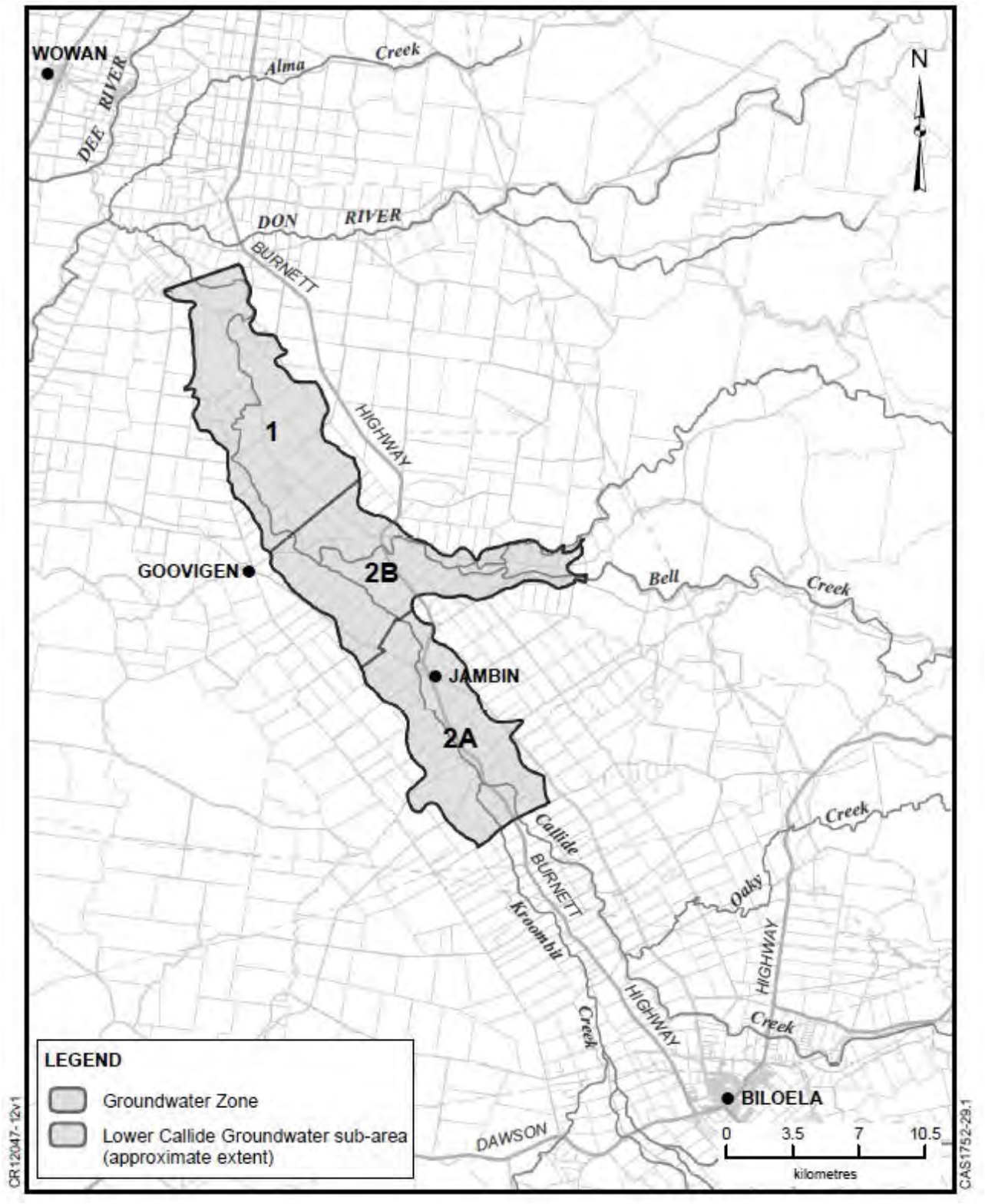
Zones Theresa A and B and Retreat A



Part 6 Lower Callide groundwater sub-area (unsupplemented water)

section 9 and chapters 9 and 15

Zones Lower Callide Section 1, 2A and 2B



Attachment 6 Links between this plan and the *Water Resource (Fitzroy Basin) Plan 2011*

section 15

General outcomes of the *Water Resource (Fitzroy Basin) Plan 2011* (section 12)	Resource operations plan rules
12(a) to provide for the use of water entitlements and other authorisations in the plan area.	▪ granting and amending authorisations ▪ operating and environmental management rules ▪ water sharing rules
12(b) to provide for the continued use of existing overland flow works	▪ granting and amending water licences to take overland flow water
12(c) to provide for the continued use of existing groundwater works	▪ granting of authorisations
12(d) to protect the probability of being able to take water under a water allocation.	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ water allocation change rules ▪ water sharing rules
12(e) to support water-related cultural values, including the values of the traditional owners in the plan area.	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ monitoring and reporting (chief executive)
12(f) to provide mechanisms that support water being made available for the following— (i) population growth in the towns and communities dependent on water resources in the plan area; and (ii) growth in industries dependent on water resources in the plan area; and (iii) stock or domestic purposes in the plan area; and (iv) indigenous communities dependent on water resources in the plan area to achieve their economic and social aspirations.	▪ dealing with unallocated water ▪ granting and amending authorisations ▪ water allocation change rules ▪ seasonal assignment rules ▪ dealing with water licence applications
12(g) to support flexible and diverse water supply arrangements for consumptive water users.	▪ water sharing rules, including providing for the use of treated coal seam gas water in the Upper Dawson sub-scheme ▪ water allocation change rules ▪ operating and environmental management rules
12(h) to maintain flows that support water-related aesthetic, economic and recreational values in the plan area, including, for example, tourism.	▪ operating and environmental management rules ▪ monitoring and reporting (chief executive) ▪ resource operations licence holder monitoring and reporting
12(i) to encourage continual improvement in the efficient use of water.	▪ water sharing rules ▪ water allocation change rules ▪ resource operations licence holder monitoring and reporting
12(j) to provide a flow regime that support the quality of water for human and ecological use.	▪ operating and environmental management rules ▪ monitoring and reporting (chief executive) ▪ resource operations licence holder monitoring and reporting
Specific surface and groundwater outcomes of the Water Resource (Fitzroy Basin) Plan 2011 (section 13)	**Resource operations plan rules**
Each of the following is a specific outcome for surface water in the plan area	
13(1)(a) to make water available in the Isaac Connors	▪ granting and amending authorisations

subcatchment to support— (i) water supplies for mining; and (ii) growth in population of towns and communities, industry and agriculture.	▪ dealing with unallocated water ▪ water allocation change rules
13(1)(b) to make water available in the Upper Dawson and Lower Dawson subcatchments to support— (i) water supplies for mining and industry; and (ii) growth in the population of towns and communities and agriculture.	▪ granting and amending authorisations ▪ dealing with unallocated water ▪ water sharing rules ▪ water allocation change rules ▪ resource operations licence holder monitoring and reporting
Each of the following is a specific outcome for groundwater in the Upper Callide, Lower Callide and Prospect creek groundwater sub-areas and the Callide Valley Water Supply Scheme	
13(2)(a) to provide for the use of groundwater that can be sustained in the long term	▪ granting and amending authorisations ▪ dealing with unallocated water ▪ operating and environmental management rules ▪ water sharing rules
13(2)(b) to provide for increased security for town water supplies and rural water supply boards that rely on groundwater	▪ granting and amending authorisations ▪ dealing with unallocated water ▪ water sharing rules
13(2)(b) to provide security of supply for existing enterprises that rely on groundwater	▪ granting and amending authorisations ▪ dealing with unallocated water ▪ operating and environmental management rules ▪ water sharing rules
General ecological outcomes of the Water Resource (Fitzroy Basin) Plan 2013 (section 14)	**Resource operations plan rules**
14(a) to minimise changes to the natural variability of flows that support aquatic ecosystems.	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ management of overland flow water
14(b) to provide for the continued capability of 1 part of the river system to be connected to another, including maintaining flows that— (i) allow for the movement of native aquatic fauna between riverine, wetland, estuarine and marine environments; and (ii) support water-related ecosystems; and (iii) support river-forming processes.	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ management of overland flow water ▪ dealing with water licence applications
14(c) to provide a flow regime that— (i) maintains the delivery of fresh water to the estuaries of watercourses and the Great Barrier Reef Lagoon; (ii) supports productivity in the receiving waters of the Great Barrier Reef and inshore reefs.	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ monitoring and reporting (chief executive)
14(d) to improve understanding of the matters affecting the flow-related health of ecosystems in the plan area.	▪ monitoring and reporting (chief executive) ▪ resource operations licence holder monitoring and reporting
14(f) to protect and maintain refugia associated with waterholes, lakes and wetlands.	▪ operating and environmental management rules ▪ dealing with water licence applications ▪ monitoring and reporting (chief executive) ▪ resource operations licence holder monitoring and reporting
14(h) to support ecosystems dependent on groundwater including, for example, riparian vegetation and wetlands.	▪ operating and environmental management rules ▪ resource operations licence holder monitoring and reporting ▪ monitoring and reporting (chief executive)
Specific ecological outcomes of the Water	**Resource operations plan rules**

Resource (Fitzroy Basin) Plan 2013 (section 15)	
15(a) to protect flows and water quality for flow-spawning fish and endemic species, including, for example, the Fitzroy golden perch (Macquaria ambigua oriens)	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ monitoring and reporting (chief executive)
15(b) to provide for flows necessary for estuarine ecosystem functions, including flows for— (i) barramundi (Lates calcarifer) and king threadfin salmon (Polydactylus macrochir) recruitment; and (ii) banana prawn (Penaeus merguiensis) growth.	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ monitoring and reporting (chief executive)
15(c) to provide for groundwater levels to support relevant groundwater-dependent ecosystems and wetlands that rely on groundwater— (i) the Upper Callide groundwater sub-area; and (ii) the Lower Callide groundwater sub-area; and (iii) the Prospect Creek groundwater sub-area; and (iv) the Callide Valley Water Supply Scheme.	▪ dealing with unallocated water ▪ operating and environmental management rules ▪ monitoring and reporting (chief executive) ▪ resource operations licence holder monitoring and reporting
15(d) to maintain groundwater discharge to watercourses in the Isaac Connors groundwater management area	▪ dealing with unallocated water ▪ monitoring and reporting (chief executive)

Attachment 7 Schedule of unsupplemented water allocations

Part 1 Lower Callide groundwater sub-area

section 40

Water Allocation Number	Family Name / Company	Given Names	Tenancy Type	Tenancy Comments	Share of Water Allocation	Location	Purpose	Other Condition	Nominal Volume (ML/water year)	Annual Volumetric Limit (ML/water year)	Water Allocation Group	Converting Authorisation
1414	ALLEY OPERATIONS PTY LTD AS TRUSTEE ACN 087177553		TTE	Trustee Under Instrument No. 709039592	1	Callide 1	Agriculture		200	200	GW1B	31250D
1415	BAKER BAKER BAKER	JACK THOMSON JOHN SAMUEL WILLIAM ROBERT	TC		1/3 1/3 1/3	Callide 1	Agriculture		80	80	GW1B	33542D
1416	CLEM CLEM	WARREN DAVID SANDRA MARY	TC		1/2 1/2	Callide 1	Agriculture		73	73	GW1B	62419D
1417	GEORGE GEORGE	NEVILLE IAN ELLEN MARGARET	TC		1/2 1/2	Callide 1	Agriculture		245	245	GW1B	34607D
1418	JORDISON JORDISON JORDISON JORDISON	CATHERINE DORIS GORDON ROBERT KELLI LORRAINE ROBERT CECIL	TC		1/4 1/4 1/4 1/4	Callide 1	Agriculture		165	165	GW1B	68859D
1419	JORDISON JORDISON JORDISON JORDISON	CATHERINE DORIS GORDON ROBERT KELLI LORRAINE ROBERT CECIL	TC		1/4 1/4 1/4 1/4	Callide 1	Agriculture		77	77	GW1B	57773D
1420	PITMAN	EDNA MAY	SP		1	Callide 1	Agriculture		63	63	GW1B	31450D

Water Allocation Number	Family Name / Company	Given Names	Tenancy Type	Tenancy Comments	Share of Water Allocation	Location	Purpose	Other Condition	Nominal Volume (ML/water year)	Annual Volumetric Limit (ML/water year)	Water Allocation Group	Converting Authorisation
1421	PITMAN PITMAN	ADRIAN JOHN JOY SUE-ANN	TC		1/2 1/2	Callide 1	Agriculture		170	170	GW1B	31281D
1422	SHANNON	JAMES ROBERT	SP		1	Callide 1	Agriculture		81	81	GW1B	68258D
1423	SPANN SPANN	JAMES DERRICK PAMELA WINNIFRED	TC		1/2 1/2	Callide 1	Agriculture		369	369	GW1B	68570D
1424	WALDRON	DONALD RAY	SP		1	Callide 1	Agriculture		18	18	GW1B	43545D
1425	BANANA SHIRE COUNCIL		SP		1	Callide 2A	Any		2	2	GW1A	68856D
1426	BONGERS BONGERS	ANTHONY HAROLD PETER JOHN	TC		1/2 1/2	Callide 2A	Agriculture		154	154	GW1B	31216D
1427	BOON BOON	DANIEL WAYNE JENNIFER ANN	JT		1/2 1/2	Callide 2A	Agriculture	Taking of water under the authority of this water allocation is permitted from Callide Creek through approved works at a maximum rate of 30 litres per second and a daily volumetric limit of 2 megalitres	78	78	GW1B	33703D
1428	D R HANSEN PTY LTD ACN 094587934		TTE	Trustee Under Instrument No. 711625618	1	Callide 2A	Agriculture		21	21	GW1B	404788

Water Allocation Number	Family Name / Company	Given Names	Tenancy Type	Tenancy Comments	Share of Water Allocation	Location	Purpose	Other Condition	Nominal Volume (ML/water year)	Annual Volumetric Limit (ML/water year)	Water Allocation Group	Converting Authorisation
1429	DENNIS	JONATHAN ERROL	SP		1	Callide 2A	Agriculture		5	5	GW1B	187274
1430	HANSEN HANSEN	DEAN RODNEY LUCINDA BROOKE	TTE	Trustee Under Instrument No. 711237219 Trustee Under Instrument No. 711237219	1/2 1/2	Callide 2A	Agriculture		19	19	GW1B	404787
1431	HARCH HARCH	NATHAN LEE TAMMY MAREE	TC		1/2 1/2	Callide 2A	Agriculture		144	144	GW1B	47170D
1432	JOYCE	RHETT MICHAEL THOMAS	SP		1	Callide 2A	Agriculture		5	5	GW1B	62063D
1433	MCINNES	DOUGLAS HECTOR ROSS	SP		1	Callide 2A	Agriculture		212	212	GW1B	187264
1434	MURGATROYD	NEVILLE JAMES	SP		1	Callide 2A	Agriculture		5	5	GW1B	187273
1435	SEMPLE SEMPLE	KEITH HENRY RACHEL MARGARET	TC		1/2 1/2	Callide 2A	Agriculture		87	87	GW1B	185361
1436	STELEY STELEY RAWLINSON	ROBERT WAYNE GAYE CHERIEE CHRISTINE MARGARET	TTE	Trustee Under Instrument No. 712146515 Trustee Under Instrument No. 712146515 Trustee Under Instrument No. 712146515	1/3 1/3 1/3	Callide 2A	Agriculture		55	55	GW1B	47191D

Water Allocation Number	Family Name / Company	Given Names	Tenancy Type	Tenancy Comments	Share of Water Allocation	Location	Purpose	Other Condition	Nominal Volume (ML/water year)	Annual Volumetric Limit (ML/water year)	Water Allocation Group	Converting Authorisation
1437	VAN ITALLIE MILNER MILNER	DANNY MARK HEATHER PHYLLIS ROSS KENNETH	TC		1/3 1/3 1/3	Callide 2A	Agriculture		140	140	GW1B	34904D
1438	ZISCHKE	LEON NEVILLE	SP		1	Callide 2A	Agriculture		5	5	GW1B	57848D
1439	ZISCHKE ENTERPRISES PTY LTD ACN 070288989		SP		1	Callide 2A	Agriculture		59	59	GW1B	68540D
1440	ALLENDEN	TRENT SYDNEY	SP		1	Callide 2B	Agriculture		49	49	GW1B	62860D
1441	ALLENDEN ALLENDEN	CHARMAINE FLORENCE SYDNEY GEORGE	TC		1/2 1/2	Callide 2B	Agriculture		141	141	GW1B	606436
1442	ALLEY OPERATIONS PTY LTD AS TRUSTEE ACN 087177553		TTE	Trustee Under Instrument No. 709039592	1	Callide 2B	Agriculture		952	952	GW1B	68817D
1443	BANANA SHIRE COUNCIL		SP		1	Callide 2B	Any		60	60	GW1A	43919D
1444	CAHILL CAHILL	DAPHNE MERLE WILLIAM ROBERT	JT		1	Callide 2B	Agriculture		41	41	GW1B	33641D
1445	CAVANAGH	JOHN	SP		1	Callide 2B	Agriculture		32	32	GW1B	33721D
1446	CAVANAGH CAVANAGH	MELINDA LORRAINE ROBERT JOHN	TC		1/2 1/2	Callide 2B	Agriculture		8	8	GW1B	68695D

Water Allocation Number	Family Name / Company	Given Names	Tenancy Type	Tenancy Comments	Share of Water Allocation	Location	Purpose	Other Condition	Nominal Volume (ML/water year)	Annual Volumetric Limit (ML/water year)	Water Allocation Group	Converting Authorisation
1447	CONWAY CONWAY	DARYL KATHERINE ANNE	TC		1/2 1/2	Callide 2B	Agriculture		44	44	GW1B	47198D
1448	CREED	JAMES DOUGLAS	SP		1	Callide 2B	Agriculture		39	39	GW1B	33779D
1449	DAY	PETER WILLIAM	SP		1	Callide 2B	Agriculture		254	254	GW1B	33371D
1450	DFRB PTY LTD AS TRUSTEE ACN 105755440		TTE	Trustee Under Instrument No. 709035563	1	Callide 2B	Agriculture		5	5	GW1B	33776D
1451	GREAVES GREAVES	BETTY KATHLEEN KEITH LEIGH	TC		1/2 1/2	Callide 2B	Agriculture		46	46	GW1B	62861D
1452	GREAVES GREAVES	KEITH LEIGH BETTY KATHLEEN	TC		1/2 1/2	Callide 2B	Agriculture		58	58	GW1B	33678D
1453	HATCH HATCH	BARBARA LYNN ROBERT HENRY ERNEST	TC		1/2 1/2	Callide 2B	Agriculture		97	97	GW1B	47961D
1454	HEIT HEIT	JOHN LESLIE SUSAN CAROLE	TC		1/2 1/2	Callide 2B	Agriculture		5	5	GW1B	62074D
1455	HODDA	JOHN FRANCIS	SP		1	Callide 2B	Agriculture		62	62	GW1B	68918D
1456	HOSKING HOSKING	GARY LESTER JANETTE MARGARET	TC		1/2 1/2	Callide 2B	Agriculture		86	86	GW1B	33496D

Water Allocation Number	Family Name / Company	Given Names	Tenancy Type	Tenancy Comments	Share of Water Allocation	Location	Purpose	Other Condition	Nominal Volume (ML/water year)	Annual Volumetric Limit (ML/water year)	Water Allocation Group	Converting Authorisation
1457	JONES JONES	NOEL ERNEST WENDY MAREE	TC		1/2 1/2	Callide 2B	Agriculture		13	13	GW1B	68499D
1458	JORDISON	GORDON	SP		1	Callide 2B	Agriculture		85	85	GW1B	32656D
1459	LANG LANG	KENNETH ROBERT MARY ELIZABETH	TC		1	Callide 2B	Agriculture		70	70	GW1B	33854D
1460	MCCAMLEY MCCAMLEY	JANELLE MAREE MATTHEW STUART	TC		1/2 1/2	Callide 2B	Agriculture		290	290	GW1B	33817D
1461	MCCAMLEY MCCAMLEY	JANELLE MAREE MATTHEW STUART	TC		1/2 1/2	Callide 2B	Agriculture		23	23	GW1B	31902D
1462	MCLENNAN MCLENNAN MCLENNAN MCLENNAN	ANDREW BRAMLEY BRAMLEY REGINALD CRAIG ANTHONY DELWYN MAREE	TC		1	Callide 2B	Agriculture		368	368	GW1B	68799D
1463	PEACOCK	JOHN VIVIAN	SP		1	Callide 2B	Agriculture		112	112	GW1B	33758D
1464	RAMSEY RAMSEY	JOHN CLIFFORD TRUDY BERNADETTE	TC		1/2 1/2	Callide 2B	Agriculture		106	106	GW1B	33753D
1465	R-BAR CUSTOM PTY LTD AS TRUSTEE ACN 152072136		TTE	Trustee Under Instrument No. 715334464	1	Callide 2B	Agriculture		184	184	GW1B	34197D
1466	STONE STONE	KATHLEEN ROSE RODERICK JAMES	TC		1/2 1/2	Callide 2B	Agriculture		181	181	GW1B	68979D

Water Allocation Number	Family Name / Company	Given Names	Tenancy Type	Tenancy Comments	Share of Water Allocation	Location	Purpose	Other Condition	Nominal Volume (ML/water year)	Annual Volumetric Limit (ML/water year)	Water Allocation Group	Converting Authorisation
	WRAGGE	JOHN THOMAS			1/3							
1467	WRAGGE	JENNIFER ANNE	TC		1/3	Callide 2B	Agriculture		57	57	GW1B	68679D
	WRAGGE	LINDSAY PAUL			1/3							

Note Details correct as at 17 August 2015.
Any changes to water entitlements that occur between this date and commencement of the plan will be recorded in the water allocation register.

Attachment 8 Schedule of amending supplemented water allocations

Part 1 Callide Valley Water Supply Scheme

section 41

Water Allocation Number	Family Name / Company	Given Names	Location	Purpose	OMIT Nominal Volume (ML/water year)	INSERT Nominal Volume (ML/water year)	Priority
1264	MOORE MOORE	ELLA FRANCES GARY JOSEPH	Callide 3B	Agriculture	5	35	Medium
1277	SAWYER	IVAN TREVOR	Callide 3A	Agriculture	31	36	Medium
1290	K & T HOLDINGS PTY LTD A.C.N. 119851106		Callide 5	Agriculture	94	104	Medium
1354	KENNEDY KENNEDY	GLORIA JUNE IAN JAMES	Callide 8B	Agriculture	208	287	Medium

Note Details correct as at 17 August 2015.
Any changes to water entitlements that occur between this date and commencement of the plan will be recorded in the water allocation register.

Attachment 9 Amending water licences

Part 1 Mackenzie River Anabranch (Lake Mary/Lake McDonald)– Relift Licences

section 43

Licence number	Licensee	Watercourse	Location	Purpose	Nominal Entitlement (ML/ water year)	Maximum Extraction Rate (L/s)	Conditions
41378F	FLO AUSTRALIA PTY LTD ACN 163375737	Mackenzie River Anabranch (Lake McDonald)	Lot 5 on LR123	Relift	Null	458	If required by the chief executive, a meter of a type approved by the chief executive to record the volume of water taken under this licence must be installed. Water taken under this authorisation must only be water that has been impounded under the authority of water licence 41376F and 41377F. The daily volumetric limit that may be taken under this licence is 33.7 megalitres. Water that is taken under this authorisation must only be water that is diverted into Lake McDonald from the Mackenzie River.
34431F	FLO AUSTRALIA PTY LTD ACN 163375737	Mackenzie River (Anabranch)	Lot 5 on LR123	Relift	Null	466	If required by the chief executive, a meter of a type approved by the chief executive to record the volume of water taken under this licence must be installed. Water taken under this authorisation must only be water that has been impounded under the authority of water licence 34433F and 34434F. The daily volumetric limit that may be taken under this licence is 34.4 megalitres. Water that is taken under this authorisation must only be water that is pumped into the Mackenzie River (Anabranch) from the Mackenzie River.
41362F	GEOFFREY JAMES BETHEL RUTH BETHEL	Mackenzie River (Anabranch)	Lot 4 on LR123	Relift	Null	466	If required by the chief executive, a meter of a type approved by the chief executive to record the volume of water taken under this licence must be installed. Water taken under this authorisation must only be water that has been impounded under the authority of water licence 34433F and 34434F. The daily volumetric limit that may be taken under this licence is 34.4 megalitres. Water that is taken under this authorisation must only be water that is pumped into the Mackenzie River (Anabranch) from the Mackenzie River.

Note Details correct as at 17 August 2015.

Part 2 Mackenzie River Anabranch (Lake Mary/Lake McDonald)– Volumetric Licences

section 43

Licence Number	Licensee	Watercourse	Location	Purpose	Nominal Entitlement (ML/ water year)	Maximum Extraction Rate (L/s)	Conditions
38875U	FLO AUSTRALIA PTY LTD ACN 163375737	Mackenzie River Anabranch (Lake Mary)	Lot 1 on RP620735	Agriculture	900	215	If required by the chief executive, a meter approved by the chief executive to record the volume of water taken under this licence must be installed. Pumping under the authority of this licence is prohibited when the water level falls below the 0.10 m mark on the gauge board. This mark is equivalent to AHD 80.400. The gauge board is to be installed and maintained by the licensee. The daily volumetric limit that may be taken under this licence is 16 megalitres. Pumping under the authority of this licence will be subject to the conditions and terms detailed in the "Lake Mary Irrigators" agreement dated 20th June 1997.
57451WF	FLO AUSTRALIA PTY LTD ACN 163375737	Mackenzie River Anabranch (Lake Mary)	Lot 5 on LR123	Agriculture	1200	500	If required by the chief executive, a meter approved by the chief executive to record the volume of water taken under this licence must be installed. Pumping under the authority of this licence is prohibited when the water level falls below the 0.10 m mark on the gauge board. This mark is equivalent to AHD 80.400. The gauge board is to be installed and maintained by the licensee. The daily volumetric limit that may be taken under this licence is 37.2 megalitres. Pumping under the authority of this licence will be subject to the conditions and terms detailed in the "Lake Mary Irrigators" agreement dated 20th June 1997.
40123F	GEOFFREY JAMES BETHEL RUTH BETHEL	Mackenzie River Anabranch (Lake Mary)	Lot 4 on LR123	Agriculture	1440	500	If required by the chief executive, a meter approved by the chief executive to record the volume of water taken under this licence must be installed. Pumping under the authority of this licence is prohibited when the water level falls below the 0.10 m mark on the gauge board. This mark is equivalent to AHD 80.400. The gauge board is to be installed and maintained by the licensee. The daily volumetric limit that may be taken under this licence is 37.2 megalitres. Pumping under the authority of this licence will be subject to the conditions and terms detailed in the "Lake Mary Irrigators" agreement dated 20th June 1997.
57534U	HAYLEY BARBARA MACNICOL	Mackenzie River Anabranch (Lake Mary)	Lot 2 on RP856803	Agriculture	1200	333	If required by the chief executive, a meter approved by the chief executive to record the volume of water taken under this licence must be installed. Pumping under the authority of this licence is prohibited when the water level falls below the 0.10 m mark on the gauge board. This mark is equivalent to AHD 80.400. The gauge board is to be installed and maintained by the licensee. The daily volumetric limit that may be taken under this licence is 21.6 megalitres. Pumping under the authority of this licence will be subject to the conditions and terms detailed in the "Lake Mary Irrigators" agreement dated 20th June 1997.

Note Details correct as at 17 August 2015.

Part 3 Don and Dee Rivers and Alma Creek

section 44

Authorisation Reference	Client Name	OMIT Nominal Entitlement (ML/ water year)	INSERT Nominal entitlement (ML/ water year)	OMIT Conditions	INSERT Schedule B Conditions
12301U	TW HINCHLIFFE	120	168		1. In a water year the maximum volume of water taken must not exceed – a. 168 ML in total; or b. 120 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 168 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
25368U	JP & JA RAMM	100	140		1. In a water year the maximum volume of water taken must not exceed – a. 140 ML in total; or b. 100 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 140 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
31582U	VJ, IR & DG SCOTT	80	112		1. In a water year the maximum volume of water taken must not exceed – a. 112 ML in total; or b. 80 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 112 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
32798U	SJ RAINE	100	140		1. In a water year the maximum volume of water taken must not exceed – a. 140 ML in total; or b. 100 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 140 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
40192U	RJ & SP GRANGE	80	112		1. In a water year the maximum volume of water taken must not exceed – a. 112 ML in total; or b. 80 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 112 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
40264U	4JL PTY LTD AS TRUSTEE	48	112		1. In a water year the maximum volume of water taken must not exceed – a. 112 ML in total; or b. 80 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 112 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.

Authorisation Reference	Client Name	OMIT Nominal Entitlement (ML/ water year)	INSERT Nominal entitlement (ML/ water year)	OMIT Conditions	INSERT Schedule B Conditions
41393U	KJ & JS LINES	48	112		1. In a water year the maximum volume of water taken must not exceed – a. 112 ML in total; or b. 80 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 112 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
46153U	JC & RJ LITSCHNER	70	140		1. In a water year the maximum volume of water taken must not exceed – a. 140 ML in total; or b. 70 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 140 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
602532	DJ & NP CHAPMAN	410	574	Schedule B: 1. The maximum volume that may be extracted from the Dee River between AMTD 22 and AMTD 24 (upstream waterhole) is to be no more than 200ML. The maximum volume that may be extracted from the Dee River between AMTD 20 and AMTD 22 (downstream waterhole) is to be no more than 210ML.	1. In a water year the maximum volume of water taken must not exceed – a. 574 ML in total; or b. 410 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 574 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days. 3. If water is taken under Schedule B condition 1(b), the maximum volume that may be extracted from the Dee River between AMTD 22 km and AMTD 24 km (upstream waterhole) is to be no more than 200 ML. The maximum volume that may be extracted from the Dee River between AMTD 20 km and AMTD 22 km (downstream waterhole) is to be no more than 210 ML.
33213U	M SALMON LC COAKER	66	154		1. In a water year the maximum volume of water taken must not exceed – a. 154 ML in total; or b. 110 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 154 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
16488U	CL & GJ LUCK	200	280		1. In a water year the maximum volume of water taken must not exceed – a. 280 ML in total; or b. 200 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 280 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
51567U	EN CHILDS TR GOODING	100	140		1. In a water year the maximum volume of water taken must not exceed – a. 140 ML in total; or b. 100 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 140 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.

Authorisation Reference	Client Name	OMIT Nominal Entitlement (ML/ water year)	INSERT Nominal entitlement (ML/ water year)	OMIT Conditions	INSERT Schedule B Conditions
48488U	AP & JM FENECH	220	308		1. In a water year the maximum volume of water taken must not exceed – a. 308 ML in total; or b. 220 ML when only the condition for taking water under Schedule A 2.39 is met; or c. 308 ML despite 1(b) and when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
51612U	AP & JM FENECH	180	252		1. In a water year the maximum volume of water taken must not exceed – a. 252 ML in total; or b. 180 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 252 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
38953U	TA, TD, JL & GWA YOUNG	400	560		1. In a water year the maximum volume of water taken must not exceed – a. 560 ML in total; or b. 400 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 560 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.
57409U	JL & TA YOUNG	400	560		1. In a water year the maximum volume of water taken must not exceed – a. 560 ML in total; or b. 400 ML subject to no minimum passing flow in the Don River at the Rannes Gauging Station (130306B); or c. 560 ML when the flow in the Don River at the Rannes Gauging Station (130306B) exceeds 1.25 cumecs. 2. If water is taken under Schedule B condition 1(c), the authorisation holder must record meter readings, time and date at the start of taking water and at the end of taking water. Following the end of taking water, the authorisation holder must transfer the records to the chief executive within 5 business days.

Note Details correct as at 17 August 2015.

Attachment 10 Infrastructure details for water supply schemes

section 62 and chapter 20

Part 1 Operated by the resource operations licence holder for the Dawson Valley Water Supply Scheme

chapter 5

Glebe Weir–Dawson River AMTD 326.2 km

Description of water infrastructure	
Main embankment	Mass concrete and steel sheet piling weir
Full supply level	EL 170.54m AHD
Fixed crest level	EL 170.54m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	17 700 ML
Dead storage volume	430 ML
Surface area/elevation and storage volume/elevation relationship	Irrigation and Water Supply Commission Drawing No. A3-55197 (15/03/79)
Spillway arrangement	
Description of works	An inlet tower equipped with dropboards discharging through a 1200 mm pipe bifurcating to two 675 mm diameter release valves.
Multi-level inlet	Dropboards
Cease to flow level	Invert EL 160.44 m AHD
Discharging characteristics	Estimated maximum outlet discharge at FSL is 625 ML/day Irrigation and Water Supply Commission Drawing No. A3-55197 (15/03/79
River Inlet/outlet works	
Description of works	An inlet tower equipped with dropboards discharging through a 1200 mm pipe bifuricating to two 675 mm diameter release valves.
Multi-level inlet	Dropboards
Cease to flow level	Invert EL 160.44 m AHD
Discharge characteristics	Estimated maximum outlet discharge at FSL is 625 ML/day
Fish transfer system	
Description of works	Nil
Local supply area/levels	
Local Supply Level	El 163.6 m AHD
Local Supply Area	Glebe Weir pond and downstream to, but excluding, Gyranda Weir pond

Gyranda Weir–Dawson River AMTD 284.5 km

Description of water infrastructure	
Main embankment	Steel sheet piling weir
Full supply level	EL 157.25m AHD
Fixed crest level	EL 157.25m AHD
Saddle dam(s)	Anabranch Weir
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	16 500 ML
Dead storage volume	2 120 ML
Surface area/elevation and storage volume/elevation relationship	Queensland Water Resources Commission Drawing No. A3-64635 (16/3/87)
Spillway arrangement	
Description of works	Water flows over full width of weir
Spillway level	EL 157.25 m AHD
Spillway width	148.3 m
Discharge characteristics	Queensland Water Resources Commission Drawing No. A4-64655
River inlet/outlet works	
Description of works	Main embankment: Multi level inlet discharging through 1600 mm by 1600 mm box culvert to a 'vee' notch weir approximately 50 metres downstream of embankment. Anabranch structure: 750 mm diameter pipe
Multi-level inlet	Multi level inlet equipped with: 900 mm by 900 mm sluice gate opening at EL 156.32 m AHD 1060 mm by 1060 mm sluice gate opening at EL 153.14 m AHD 1500 mm by 1500 mm sluice gate opening at EL 150.08 m AHD
Cease to flow level	Invert vee notch EL 149.75 m AHD Invert anabranch pipe approximately EL 153.64 m AHD
Discharge characteristics	Estimated maximum outlet discharge at FSL is 1000 ML/day
Fish transfer system	
Description of works	Nil
Local supply area/levels	
Local Supply Level	EL 151.80 m AHD
Local Supply Area	Gyranda Weir pond and downstream to, but excluding, Theodore Weir pond

Orange Creek Weir–Dawson River AMTD 270.7 km

Description of water infrastructure	
Main embankment	Timber piled weir, with concrete work following maintenance/flood repairs
Full supply level	EL 150.29 m AHD
Fixed crest level	EL 150.29 m AHD
Saddle dam(s)	Anabranch weir
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	6 140 ML
Dead storage volume	2 320 ML
Surface area/elevation and storage volume/elevation relationship	Water Resources Commission (DPI) Drawing No. A3-101017 and 101018 (14/10/92)
Spillway arrangement	
Description of works	No separate spillway. Flows overtop full weir.
Spillway level	EL 150.29 m AHD
Spillway width	48.82 metres
Discharge characteristics	Queensland Water Resources Commission Drawing No. A3-55199, submitted to NR&M 12/7/01
River inlet/outlet works	
Description of works	Main embankment: Outlet works consists of a high and low level outlet. Low level outlet is a 600 mm nominal diameter pipe controlled on the upstream end by a gate valve. The high level outlet is a 900 mm nominal diameter, two-barrel dropboard structure for crest releases. Anabranch structure: Outlet works consist of a 300 mm nominal diameter pipe controlled on the upstream end by a gate valve.
Multi-level inlet	High and low level outlets
Cease to flow level	Low level outlet invert EL 145.82 m AHD High level outlet invert EL 148.25 m AHD Anabranch outlet invert EL 147.42 m AHD
Discharge characteristics	Estimated maximum outlet discharge at FSL is 360 ML/day
Fish transfer system	
Description of works	Nil
Local supply area/levels	
Local Supply Level	Not applicable
Local Supply Area	Not applicable

Theodore Weir–Dawson River AMTD 228.5 km

Description of water infrastructure	
Main embankment	The main weir was originally of timber pile construction, with concrete abutment and apron slabs additions.
Full supply level	EL 133.63 m AHD
Fixed crest level	EL 133.63 m AHD
Saddle dam(s)	Timber piled anabranch weir
Fabridams	Nil
Gates	Nil, but note river inlet/outlet
Storage volume and surface area	
Full supply volume	4 760 ML
Dead storage volume	750 ML
Surface area/elevation and storage volume/elevation relationship	Queensland Water Resources Commission Drawing No. A3–36527B (10/1/84)
Spillway arrangement	
Description of works	Flows overtop full width of weir
Spillway level	EL 133.63 m AHD
Spillway width	60.63 metres
Discharge characteristics	Queensland Water Resources Commission Drawing No. A3–55200 (21/3/79)
River inlet/outlet works	
Description of works	Two 1000 mm by 750 mm gates
Multi-level inlet	Single level outlet with no inlet structure
Cease to flow level	Invert EL 131.75 m AHD
Discharge characteristics	Estimated maximum outlet discharge at FSL is 275 ML/day
Fish transfer system	
Description of works	Nil
Local supply area/levels	
Local Supply Level	EL 131.75 m AHD
Local Supply Area	Theodore Weir pond and downstream to, but excluding, Moura Weir pond

Moura Offstream Storage–Dawson River Diversion AMTD 156.9 km

Description of water infrastructure	
Main embankment	Compacted earth
Full supply level	EL 125.29 m AHD
Fixed crest level	EL 125.29 m AHD
Saddle dam(s)	Not applicable
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	2 820 ML
Dead storage volume	140 ML
Surface area/elevation and storage volume/elevation relationship	Natural Resources (State Water Projects) Drawing No. A3–213163 (10/3/00)
Diversion works	
Description of works	Extracts from the Dawson River at AMTD 156.9 km. Reinforced concrete pump station with two by one cumec submersible pumps. Rising main comprising two by 660 mm OD steel pipes joining to a 960 mm OD steel pipe.
River inlet/outlet works	
Description of works	Floating intake arrangement installed in the offstream storage. Concrete base slab EL 118.30 m AHD Steel pipe through embankment invert level EL 118.50 m AHD. River releases are made via: • rising main direct into the river; • rising main, then into the 200 mm diameter return line; or • combination of both the above.
Multi-level inlet	Floating inlet arrangement
Cease to flow level	EL 118.6 m AHD
Discharge characteristics	Maximum 18 ML/day at FSL through return line Maximum 120 ML/day with pumps removed
Local supply area/levels	
Local Supply Level	Not applicable
Local Supply Area	Not applicable

Moura Weir–Dawson River AMTD 150.2 km

Description of water infrastructure	
Main embankment	Timber piled weir, which has been renovated to include steel and concrete
Full supply level	EL 104.75 m AHD
Fixed crest level	EL 104.75 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	7 700 ML
Dead storage volume	600 ML
Surface area/elevation and storage volume/elevation relationship	Natural Resources (State Water Projects) Drawing No. A3–214477 (5/9/00)
Spillway arrangement	
Description of works	Flow overtops full width of weir
Spillway level	High level crest EL 105.05 m AHD Low level crest EL 104.75 m AHD
Spillway width	High level crest 135.67 metres Low level crest 55.70 metres
Discharge characteristics	Not available
River inlet/outlet works	
Description of works	River: 1440 mm diameter outlet pipe with a 1200 mm diameter butterfly valve. Back Creek: 900 mm diameter pipe
Multi-level inlet	Single level outlet only
Cease to flow level	River: invert EL 99.47 m AHD Back Creek: EL 101.25 m AHD
Discharge characteristics	Estimated outlet discharge at FSL is 850 ML/day
Fish transfer system	
Description of works	Vertical slot fishway
Local supply area/levels	
Local Supply Level	Not applicable
Local Supply Area	Moura Weir pond and downstream to, but excluding, Neville Weir pond

Storage infrastructure details for Neville Hewitt Weir–Dawson River AMTD 82.7 km

Description of water infrastructure	
Main embankment	Mass concrete weir
Full supply level	EL 80.30 m AHD
Fixed crest level	EL 80.30 m AHD
Saddle dam(s)	Anabranch weir
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	10 646 ML
Dead storage volume	72.53 m AHD
Surface area/elevation and storage volume/elevation relationship	SunWater Ltd Drawing No. S 43910 (Ver. B, March 2012)
Spillway arrangement	
Description of works	Central ogee crest with cribbed sheet piling on both sides
Spillway level	EL 80.30 m AHD
Spillway width	EL 76.20 m AHD
Discharge characteristics	Tabulated discharge relationship submitted to NR&M on 30/3/01
River inlet/outlet works	
Description of works	Main embankment: inlet structure with dropboards discharging through 750 mm nominal diameter pipe with 750 mm nominal diameter butterfly valve and a 300 mm nominal diameter gate valve. Anabranch structure: inlet structure with dropboards discharging through 600 mm nominal diameter outlet pipe with 375 mm gate valve.
Multi-level inlet	Dropboards
Cease to flow level	Main embankment: outlet pipe invert EL 72.53 m AHD Anabranch structure: outlet sill invert EL 74.80 m AHD Main embankment: inlet pipe invert EL 72.45 m AHD Anabranch structure: inlet sill invert EL 74.74 m AHD
Discharge characteristics	Outlet rating curve submitted to NR&M on 30/3/01 Estimated maximum outlet discharge at FSL is 300 ML/day
Fish transfer system	
Description of works	Fish lock
Local supply area/levels	
Local Supply Level	EL 77.0 m AHD
Local Supply Area	Neville Hewitt Weir pond and downstream to downstream limit of Dawson Valley Water Supply Scheme

Part 2 Operated by the resource operations licence holder for the Nogoa Mackenzie Water Supply Scheme

Fairbairn Dam—Nogoa River AMTD 685.6 km

Description of water infrastructure	
Main embankment	Earth fill dam
Full supply level	EL 204.23 m AHD
Fixed crest level	EL 204.23 m AHD
Saddle dam(s)	Six saddle dams. Saddle dam 3 has a concrete chute spillway
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	1 301 000 ML
Dead storage volume	12 300 ML
Surface area/elevation and storage volume/elevation relationship	Natural Resources Drawing No. A3-203831 & A3-203832 (19/09/96)
Spillway arrangement	
Description of works	Curved approach channel to a mass concrete ogee crest. Concrete lined chute with energy dissipaters.
Spillway level	EL 204.23 m AHD
Spillway width	167.64 metres
Discharge characteristics	Irrigation and Water Supply Commission spillway discharge curve No. L42944 1054-D1189 (Aug 1974)
River inlet/outlet works	
Description of works	An intake tower, equipped with two 1200 mm by 1800 mm regulating gates, diverting under gravity via a 6.1 metre diameter tunnel to headworks controlled by 1 vertical lift gate for releases to the Nogoa River Methods may be employed to enable a maximum discharge capacity of up to 400 ML/day when the level of water stored in Fairbairn Dam is between EL 190.71 m AHD and EL 185.85 m AHD.
Multi-level inlet	Works do not accommodate selective withdrawal.
Cease to flow level	EL 90.71 m AHD (river outlet)
Discharge characteristics	Right bank outlet (River & Weemah Channel) L42946 1054-D1191 (Aug 1974) The existing maximum discharge capacity of the river outlet is approximately 600 ML/day. There is an additional siphon outlet which has a capacity of approximately 1600 ML/day.
Fish transfer system	
Description of works	Nil
Local supply area and Upstream storage	
Local Supply Area	Fairbairn Dam pond and downstream to, but excluding, Bedford Weir pond
Upstream storage	Not applicable

Selma Weir–Nogoa River AMTD 668.7 km

Description of water infrastructure	
Main embankment	Mass concrete weir
Full supply level	EL 170.39 m AHD
Fixed crest level	EL 170.39 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	1180 ML
Dead storage volume	25 ML
Surface area/elevation and storage volume/elevation relationship	Drawing No. F35379 (27/6/73)
Spillway arrangement	
Description of works	Mass concrete ogee crest
Spillway level	EL 170.39 m AHD
Spillway width	From left to right along structure: EL 170.39 m AHD (der)–Length 23.77 metres EL 171.92 m AHD (der)–Length 54.86 metres EL 171.31 m AHD (der)–Length 34.75 metres EL 171.00 m AHD (der)–Length 34.75 metres
Discharge characteristics	Irrigation and Water Supply Commission Drawing No. F-12400 (5/3/54)
River inlet/outlet works	
Description of works	Outlet works: 300 mm RC pipe with a gate valve at the concrete outlet box
Multi-level inlet	Single-level offtake only
Cease to flow level	Outlet works: Invert EL 165.52 m AHD
Discharge characteristics	Maximum discharge capacity of approximately 35 ML/day
Fish transfer system	
Description of works	Nil
Local supply area and upstream storage	
Local Supply Area	Fairbairn Dam pond and downstream to, but excluding, Bedford Weir pond
Upstream storage	Not applicable
Local supply area and upstream storage	
Local Supply Area	Not applicable
Upstream storage	Fairbairn Dam

Bedford Weir–Mackenzie River AMTD 548.8 km

Description of water infrastructure	
Main embankment	Mass concrete weir with fabridam
Full supply level	EL 124.0 m AHD
Fixed crest level	EL 122.80 m AHD
Saddle dam(s)	Nil
Fabridams	1.2 m fabridam
Gates	Nil
Storage volume and surface area	
Full supply volume	22 900 ML
Dead storage volume	3 290 ML
Surface area/elevation and storage volume/elevation relationship	Department of Primary Industries (Water Resources) Storage Curve No. A3-110858A (22/3/96)
Spillway arrangement	
Description of works	Reinforced concrete crest (with deflated dam)
Spillway level	EL 122.80 m AHD
Spillway width	185.90 metres
Discharge characteristics	Ref: SWP ES, Bedford Weir Stage 2 Weir Operation, July 97
River inlet/outlet works	
Description of works	Original outlet works: Concrete outlet recess. 750 mm diameter RC pipe controlled by a gate valve in the downstream end. New outlet works: 1200 mm by 1200 mm square unlined conduit cut from the original mass concrete monolith, controlled by 1200 mm by 1200 mm roller gate.
Multi-level inlet	New inlet works have selective withdrawal capabilities.
Cease to flow level	Original outlet works: EL 112.88 m AHD New outlet works: EL 116.08 m AHD
Discharge characteristics	Maximum design discharge capacity of original outlet 160 ML/day Maximum design discharge capacity of new outlet 890 ML/day Ref: SWP ES, Bedford Weir Stage 2 Weir Operation, July 97
Fish transfer system	
Description of works	Nil
Local supply area and upstream storage	
Local Supply Area	Bedford Weir pond and downstream to, but excluding, Bingegang Weir pond
Upstream storage	Fairbairn Dam

Bingegang Weir–Mackenzie River AMTD 489.2 km

Description of water infrastructure	
Main embankment	Mass concrete weir
Full supply level	EL 102.90 m AHD
Fixed crest level	EL 102.90 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	8 060 ML
Dead storage volume	1 400 ML
Surface area/elevation and storage volume/elevation relationship	Natural Resources Storage Curve No. A3–110940 (22/5/96)
Spillway arrangement	
Description of works	Reinforced concrete crest
Spillway level	EL 102.90 m AHD
Spillway width	107.30 metres
Discharge characteristics	Ref: SWP ES, Bingegang Weir Stage 2 Weir Operation, June 97
River inlet/outlet works	
Description of works	Original outlet works: 600 mm diameter pipe controlled by a 450 mm diameter gate valve with a 150 mm diameter scour around gate valve. New outlet works: 1200 mm by 1200 mm square unlined conduit cut from the original mass concrete monolith, controlled by 1200 mm by 1200 mm roller gate.
Multi-level inlet	Single level offtake only
Cease to flow level	Original outlet works: EL 94.81 m AHD Invert lever of scour: EL 94.97 m AHD New outlet works: EL 98.74 m AHD
Discharge characteristics	Maximum design discharge capacity of original outlet 92 ML/day Maximum design discharge capacity of new outlet 690 ML/day Ref: SWP ES, Bingegang Weir Stage 2 Weir Operation, June 97
Fish transfer system	
Description of works	Nil
Local supply area and Upstream storage	
Local Supply Area	Bingegang Weir pond and downstream to, but excluding, Tartrus Weir pond
Upstream storage	Bedford Weir

Tartrus Weir–Mackenzie River AMTD 429.5 km

Description of water infrastructure	
Main embankment	Mass concrete weir
Full supply level	EL 81.75 m AHD
Fixed crest level	EL 81.75 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	12 000 ML
Dead storage volume	2 530 ML
Surface area/elevation and storage volume/elevation relationship	Queensland Water Resources Commission Storage Curve No. A3-72973 (27/1/87)
Spillway arrangement	
Description of works	Central reinforced concrete ogee crest
Spillway level	EL 81.75 m AHD
Spillway width	170.0 metres
Discharge characteristics	Drawing No. 158999 E-A4-1989 (18/12/89) as submitted to NR&M on 30/3/01
River inlet/outlet works	
Description of works	Outlet works: 1200 mm diameter RC pipe controlled by a circular opening penstock.
Multi-level inlet	Single level offtake
Cease to flow level	Outlet works: EL 76.85 m AHD Nib: EL 76.9 m AHD (cease to flow level)
Discharge characteristics	Queensland Water Resources Commission outlet rating curve No. CQ-A2-4903
Fish transfer system	
Description of works	Nil
Local supply area and upstream storage	
Local Supply Area	Tartrus Weir pond and downstream to Springton Creek junction
Upstream storage	Bingegang Weir

Part 3 Operated by the resource operations licence holder for the Lower Fitzroy Water Supply Scheme

Eden Bann Weir–Fitzroy River AMTD 141.2 km

Description of water infrastructure	
Main embankment	Mass concrete gravity weir
Full supply level	EL 14.5 m AHD
Fixed crest level	EL 14.5 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	35 900 ML
Dead storage volume	9 650 ML
Surface area/elevation and storage volume/elevation relationship	Department of Primary Industries (Water Resources) Drawing No's. A3-110383 and A3-110384
Spillway arrangement	
Description of works	Two level concrete spillway
Spillway level	High level crest EL 14.8 m AHD Low level crest EL 14.5 m AHD
Spillway width	High level crest: 180 metres on right abutment Low level crest: 90 metres on left abutment
Discharge characteristics	Not available
River inlet/outlet works	
Description of works	Inlet structure through 1200 mm by 1200 mm sluice gate to 1500 mm by 1500 mm box culvert.
Multi-level inlet	Works can accommodate selective withdrawal
Cease to flow level	EL 7.25 metres AHD
Discharge characteristics	Water Resources Drawing No. A3-101635
Fish transfer system	
Description of works	Fishlock located near the left bank adjacent to the outlet works
Local supply area/levels	
Local Supply Level	EL 9.55 m AHD
Local Supply Area	Eden Bann Weir pond and downstream, but excluding Fitzroy Barrage pond

Part 4 Operated by the resource operations licence holder for the Fitzroy Barrage Water Supply Scheme

chapter 7

Fitzroy Barrage–Fitzroy River AMTD 59.6 km

Description of water infrastructure	
Main embankment	Concrete embankment with vertical lift gates
Full supply level	EL 3.78 m AHD (plus or minus 0.05 metres)
Fixed crest level	EL 0.61 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Eighteen vertical lift gates, each 12.2 metres wide and 3.3 metres high
Storage volume and surface area	
Full supply volume	81 300 ML (at EL 3.78 m AHD)
Dead storage volume	21 900 ML (at EL-1.2 m AHD)
Surface area/elevation and storage volume/elevation relationship	Natural Resources Drawing No. A3-209321 (March 1998)
Spillway arrangement	
Description of works	Eighteen gated weir monoliths, 14 metres in length with 12.2 metre wide bays for vertical lift gates, with a concrete crest at EL 0.61 m AHD Four 12.2 metre wide bays with a concrete crest at EL 3.91 m AHD
Spillway level	EL 0.61 m AHD
Spillway width	As described above
Discharge characteristics	Not available
River inlet/outlet works	
Description of works	Eighteen gated weir monoliths, 14 metres in length with 12.2 metre wide bays for vertical lift gates, with a concrete crest at EL 0.61 m AHD
Multi-level inlet	Works do not accommodate selective withdrawal
Cease to flow level	EL 0.61 m AHD
Discharge characteristics	Not available
Fish transfer system	
Description of works	Vertical slot fish ladder, located on the right bank. Discharge capacity is approximately 18 ML/day at full supply level. Fish ladder operates above EL 3.2 m AHD and is permanently open.

Part 5 Operated by the resource operations licence holder Callide Valley Water Supply Scheme

section 40 and chapter 8

Callide Dam—Callide Creek AMTD 80.1 km

Description of water infrastructure	
Main embankment	Earth and rock fill dam, concrete spillway and radial gates
Full supply level	EL 216.10 m AHD
Fixed crest level	EL 207.57 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	3 pairs of radial gates
Storage volume and surface area	
Full supply volume	136 300 ML
Dead storage volume	85 ML
Surface area/elevation and storage volume/elevation relationship	Drawing No.A3-208868
Spillway arrangement	
Description of works	Mass concrete and steel radial gates with “ogee” type crest and reinforced concrete chute with dissipation pool. .
Spillway level	EL 207.57 m AHD
Spillway width	79.25 metres
Discharge characteristics	Irrigation and Water Supply Commission spillway discharge curve No. DB1782
River inlet/outlet works	
Description of works	An intake tower with two conduits that work independently of each other.
Multi-level inlet	The right conduit accommodates a degree of selective withdrawal.
Cease to flow level	EL 185.42 m AHD (river outlet)
Discharge characteristics	The maximum discharge capacity of the river outlet is approximately 445 ML/day.
Fish transfer system	
Description of works	Nil

Callide Weir—Callide Creek AMTD 61.1 km

Description of water infrastructure	
Main embankment	Steel sheet piled weir with three concreted rockfill steps
Full supply level	EL 157.58 m AHD
Fixed crest level	EL 157.58 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	506 ML
Dead storage volume	2.3 ML
Surface area/elevation and storage volume/elevation relationship	Drawing No. A3-85374
Spillway arrangement	
Description of works	The spillway is the crest of the weir.
Spillway level	EL 157.58 m AHD
Spillway width	74.8 m
Discharge characteristics	Not available
River inlet/outlet works	
Description of works	Outlet works: 900 mm butterfly value installed with the invert aligned with the conduit.
Multi-level inlet	Single-level offtake only
Cease to flow level	Outlet works: Invert EL 152.00 m AHD
Discharge characteristics	Maximum discharge capacity of approximately 450 ML/day
Fish transfer system	
Description of works	Nil

Kroombit Dam—Kroombit Creek AMTD 68.8 km

Description of water infrastructure	
Main embankment	Earth and rock filled with roller compacted concrete
Full supply level	EL 265.80 m AHD
Fixed crest level	EL 265.80 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	14 600 ML
Dead storage volume	63 ML
Surface area/elevation and storage volume/elevation relationship	Storage Curve No. A3-214455
Spillway arrangement	
Description of works	Roller compacted concrete with “ogee” crest
Spillway level	EL 265.80 m AHD
Spillway width	250.00 metres
Discharge characteristics	Ref: Drawing No. A1-98544
River inlet/outlet works	
Description of works	Outlet works: 1200 mm dia RC conduit reduced to 600 mm dia MSCL with a 450 mm dia MSCL branch in the reinforced concrete outlet structure at the downstream toe of the main wall and controlled by 450 mm dia and 200 mm dia cone valves.
Multi-level inlet	Single level offtake
Cease to flow level	Outlet works: 249.6 m AHD
Discharge characteristics	Maximum design discharge capacity of outlet 200 ML/day
Fish transfer system	
Description of works	Nil

Recharge works and Callide Diversion Channel

Item	Description
Recharge works	Recharge works are: i. Callide Creek–Callide Dam and Callide Weir. ii. Kroombit Creek–Kroombit Dam. iii. Recharge trenches—Distributed along the creeks of the benefited area. Recharge trenches—Are structures designed to aid groundwater recharge. There are many installed throughout the benefited area generally located in creek beds. (There is no plan showing their location.) It has been estimated that following the installation of a trench the recharge has been improved to as much as 14 ML/d. – Type A—strip 0.5 m of sediment from the creek bed where the alluvium is near the surface. Type B—strip up to 2.0 m of sediment from the creek bed where the alluvium is near the surface. Type C—excavate a major trench of up to 6.0 m deep over the design length and backfill with selected granular material.
Callide Diversion Channel	Callide Diversion Channel is a diversion channel (consisting of earth channel and pipeline sections) through which water can be diverted from Callide Dam to Kroombit Creek and to Kariboe Creek.

Attachment 11 Resource operations licence holder monitoring

Chapter 20

Locations where continuous time series height and volume data and daily flow data are required

Location	Water level and volume data	Daily flow data
Dawson Valley Water Supply Scheme		
Glebe Weir inflow		✓*
Glebe Weir headwater (AMTD 326.2)	✓	
Glebe Weir tailwater		✓
Gyranda Weir inflow		✓
Gyranda Weir headwater (AMTD 284.5)	✓	
Gyranda Weir tailwater		✓
Theodore Weir inflow		✓
Theodore weir headwater (AMTD 228.5)	✓	
Theodore weir tailwater		✓*
Moura Weir inflow		✓*
Moura Weir headwater (AMTD 150.2)	✓	
Moura Weir tailwater		✓*
Moura Offstream Storage	✓	
Neville Hewitt Weir inflow		✓*
Neville Hewitt Weir headwater (AMTD 82.7)	✓	
Neville Hewitt Weir tailwater		✓
Nogoa Mackenzie Water Supply Scheme		
Fairbairn Dam inflow		✓*
Fairbairn Dam headwater (AMTD 685.6)	✓	
Fairbairn Dam tailwater		✓*
Bedford Weir inflow		✓*
Bedford Weir headwater (AMTD 548.8)	✓	
Bedford Weir tailwater		✓
Bingegang Weir inflow		✓*
Bingegang Weir headwater (AMTD 489.2)	✓	
Bingegang Weir tailwater		✓*
Tartrus Weir inflow		✓*

Location	Water level and volume data	Daily flow data
Tartrus Weir headwater (AMTD 429.5)	✓	
Tartrus Weir tailwater		✓*
Lower Fitzroy Water Supply Scheme		
Eden Bann Weir inflow		✓*
Eden Bann Weir headwater (AMTD 141.2)	✓	
Eden Bann Weir tailwater		✓
Fitzroy Barrage Water Supply Scheme		
Fitzroy Barrage inflow		✓
Fitzroy Barrage storage	✓	
Fitzroy Barrage outflow data		✓
Callide Valley Water Supply Scheme		
Callide Dam inflow		✓
Callide Dam headwater (AMTD 80.1)	✓	
Callide Dam tailwater		✓
Kroombit Dam headwater (AMTD 68.8)	✓	
Kroombit dam tailwater		✓

*Methodology already approved under existing ROP.