



Queensland

Water Resource (Gulf) Plan 2007

Explanatory Notes for SL 2007 No. 268

made under the

Water Act 2000

General outline

The *Legislative Standards Act 1992* (s 22(2)) requires that significant subordinate legislation is accompanied by explanatory notes that are prepared under the authority of the responsible Minister. The explanatory notes form a “plain English” version of the *Water Resource (Gulf) Plan 2007* (‘the plan’).

The purpose of the explanatory notes is to assist the reader in interpreting the plan, particularly through outlining the intent of the plan clauses. Hence the plan should be read in conjunction with these notes. However, the reader should refer to the plan itself for detail of the provisions, including management outcomes, objectives and strategies for the different types of water. The explanatory notes are organised by clause, with the numbering corresponding to the numbering of the plan.

Title

Water Resource (Gulf) Plan 2007.

Authorising law

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

Policy objectives of the legislation

A purpose of the *Water Act 2000* ('the Act') is to advance the sustainable management and efficient use of water and other resources by establishing a system for the planning, allocation and use of water (s 10). The policy objectives of the plan operate within this overarching purpose and provide a framework for advancing the sustainable management of water (s 38) for consumptive, natural ecosystem and other non-consumptive water uses.

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

- defining the availability of water in the plan area;
- providing a framework for sustainably managing water and the taking of water;
- identifying priorities and mechanisms to deal with future demand for water;
- providing a framework for establishing water allocations;
- managing and licensing the take of groundwater water and overland flow water;
- outlining the strategies to achieve the plan outcomes; and
- providing a framework for reversing, where practicable, degradation that has occurred in natural ecosystems.

Section 10(2) of the Act defines sustainable management.

A water resource plan may be prepared for any part of Queensland. These policy objectives apply specifically to the Gulf plan area, including the following watercourses and their main tributaries—

- Staaten River
- Gilbert River
- Norman River
- Flinders River
- Cloncurry River
- Leichhardt River
- Gregory River
- Nicholson River

- Settlement Creek
- Morning Inlet

There are two supplemented systems within the plan area, both on the Leichhardt River. These are the Julius Dam Water Supply Scheme and Lake Moondarra.

Legislation consistent with policy objectives of authorising law

The Act (ss 10 and 38) provides for the Minister to prepare a water resource plan for any part of Queensland to advance the sustainable management of water. The plan is subordinate legislation and is consistent with the policy objectives of the Act.

Alternative means of achieving policy objectives

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

Estimated cost for government

Funding for the development and implementation of the water resource plan and the resource operations plan for the Gulf has been allocated to the Department of Natural Resources and Water ('the department'). Accordingly, costs of the plan have been budgeted for and will not change the present cost to government of administering the Act.

Consistency with fundamental legislative principles

The subordinate legislation is consistent with fundamental legislative principles.

Consultation

Government departments and agencies affected by the changes have been consulted in respect of the plan. In addition, cultural, economic and environmental interest groups have been consulted in accordance with the water resource planning process as outlined in the Act.

Outcomes of community consultation are outlined in the separate document *Gulf Water Resource Plan Consultation Report*.

Regulatory impact statement

Section 58 of the Act states that a regulatory impact statement is not required for the approval of a water resource plan.

Notes on Provisions**Chapter 1 Preliminary**

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

Short title

Clause 1 sets out the short title to the subordinate legislation ('the plan').

Purposes of the plan

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

Definitions

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

Chapter 2 Plan area and water to which the plan applies

Plan area

Clause 4 states that a map of the plan area is shown in schedule 1. The plan area includes the following rivers and their tributaries—

- Staaten River
- Gilbert River
- Norman River
- Flinders River
- Cloncurry River
- Leichhardt River
- Gregory River
- Nicholson River
- Settlement Creek

Clause 9 provides information for accessing further detail of the plan area boundaries.

Groundwater management areas

Clause 5 defines the groundwater management areas for the plan area as those shown on the map in schedule 2. Groundwater is water from an underground source, namely subartesian or artesian water. This groundwater occurs naturally in, or is introduced artificially into, an aquifer, which if tapped by a bore, would not flow naturally to the surface. The map in schedule 2 of the plan identifies three groundwater management areas – Great Artesian Basin Groundwater Management Area, Nicholson Groundwater Management Area and Einasleigh Groundwater Management Area. The Great Artesian Basin Groundwater Management Area is an area which includes groundwater not already managed under the *Water Resource (Great Artesian Basin) Plan 2006*.

Clause 11(2) of the plan states that the plan does **not** apply to groundwater, whether artesian or subartesian, already managed under the *Water Resource (Great Artesian Basin) Plan 2006*.

Catchment and Subcatchment areas

Clauses 6 and 7 define the catchment and subcatchment areas for the plan area, referring to the map in schedule 3. The plan aims to ensure that the different types of water (overland flow, surface and groundwater) are managed holistically. The plan area is divided into catchments and subcatchments to assist in this. This catchment-based perspective allows the development of detailed management strategies which acknowledge the ecological and consumptive needs specific to smaller areas within the plan area. This also allows for more effective monitoring of the impacts of local changes on the achievement of plan objectives.

Declaration about watercourse—Act s 1006(2)

Clause 8 states that groundwater under or within 1km of a declared watercourse is treated as water in a watercourse under the *Water Act 2000* (s 1006(2)).

This approach recognises the hydraulic connection between particular groundwater and surface water systems and is important in achieving holistic management of the water. This water is not longer groundwater and instead, will be treated as water in a watercourse. This means that any water user drawing from an aquifer that is declared under this provision will require a water licence.

Aquifers declared as part of the watercourse within the plan area include groundwater that is under or within 1km of either side of the following major streams—

- Staaten River
- Gilbert River
- Einasleigh River (downstream of node 5)
- Norman River
- Flinders River
- Cloncurry River
- Leichhardt River
- Nicholson River (downstream of node 2)
- Gregory River (downstream of node 4)
- Lawn Hill Creek (downstream of node 3)

A node is defined in clause 10 and shown on the map in schedule 1.

Where groundwater within the defined area of these streams is demonstrated, to the satisfaction of the chief executive, to not be hydraulically linked to water in the stream it is not to be regulated as surface water.

Information about areas

Clause 9 explains that a detailed representation of the plan area (including exact locations and boundaries) is held in electronic form by the department. Any person can visit the local departmental office to inspect the details and exact location of the plan area boundary, groundwater management area, catchment and subcatchment boundaries.

Nodes

Clause 10 defines the nodes in the plan area. Nodes are generally defined as specific locations on a watercourse within the plan area. They can be used within the water resource plan and the resource operations plan where a definitive location or reference point is necessary. For example, nodes are used in the specification of environmental flow objectives as described under Chapter 4 of the plan. They can also be used to specify flow management rules in the resource operations plan.

Nodes are numbered and their locations shown on the map in schedule 1 and they are described in schedule 4.

Water to which plan applies

Clause 11 states that the plan applies to surface water (that is, water in a watercourse, lake, or spring and overland flow water) and groundwater water that is not connected to subartesian or artesian water managed under the *Water Resource (Great Artesian Basin) Plan 2006*.

Chapter 3 Outcomes for Sustainable Management of Water

The specification of outcomes, objectives and strategies is an important part of water resource planning. Chapter 3 provides the outcomes, including ecological outcomes, which the plan seeks to achieve through implementing particular management strategies. Outcomes are broad goals for the plan area and may include specific values or natural assets. Inclusion of these outcomes meets the requirement of section 46(1)(e) of the Act.

There are three different types of outcomes specified under the plan—

- general;
- general ecological; and
- specific ecological.

Outcomes for water in the plan area

Clause 12 establishes that outcomes under clause 13 to 16 relating to management strategies for sustainable management and allocation of water, have been derived in consideration of the present environmental condition of the plan area. That is, recognising that while much of the plan area has not been developed the existing condition of the environment in some parts of the plan area has been altered due to development of water resources including flow supplementation and water use.

The clause also establishes that water is to be allocated and managed in a way that seeks to achieve a balance in the general, ecological and specific ecological outcomes of the plan. The term balance does not necessarily imply that each outcome will be given equal weighting or that any specific weighting is attached to particular outcomes. Instead, the outcomes should be seen as a complementary set of responses to the altered natural condition of watercourses, lakes and springs resulting from water resource development.

General outcomes

Clause 13 states the general outcomes for the plan area. The general outcomes encompass economic, social and cultural goals and give an

overview of what the plan aims to achieve through implementing the identified management strategies. The outcomes involve—

- providing existing water use, including supporting urban and mining needs in the Mt Isa area;
- providing for environmental needs and river health;
- ensuring compatibility with any relevant Wild River declarations;
- promoting water use efficiency and providing for future water requirements, including supporting growth in industries and population; and
- supporting cultural values.

General ecological outcomes for both surface water and groundwater

Clause 14 states the general ecological outcomes for the plan area. The plan seeks to achieve these outcomes, which include maintaining natural flow variability and connectivity, maintaining the freshwater and sediment delivery to the sea, and promoting improved understanding of how flows affect ecosystem health through implementation of management strategies.

The term *refugia* is defined for the purposes of this clause.

General ecological outcomes for groundwater only

Clause 15 only applies to groundwater in the plan area. The general ecological outcomes for groundwater involve—

- maintaining contributions to watercourses;
- supporting dependant ecosystems; and
- allocation and management of groundwater particularly within the Great Artesian Basin Management Area in a manner consistent with the outcomes for artesian water as defined by the *Water Resource (Great Artesian Basin) Plan 2006* where possible.

Specific ecological outcomes

Clause 16 states the specific ecological outcomes for water in particular places and ecological processes of the plan area. The areas and processes to which this section applies were identified as areas of ecological significance through community consultation and independent scientific assessment as requiring particular ecological management. It does not limit the ecological outcomes discussed in clauses 14 and 15, which continue to apply to the *entire* plan area.

The outcomes include the maintenance of—

- water in bed sands of the Gilbert River;
- permanent water flow in the Gregory River and Lawn Hill Creek;
- flood flows to the estuarine and marine environments of the Gulf of Carpentaria; and
- maintenance of natural variability of flood flows within the Southern Gulf Aggregation and the Southeast Karumba Plain Aggregation.

Chapter 4 Performance Indicators and Objectives for Surface Water in Upper Leichhardt River Subcatchment Area

The Act (section 46(4)) requires that the water resource plan provide a framework for establishing water allocations through stating performance indicators, environmental flow objectives (EFOs), water allocation security objectives (WASOs), and priorities for conversion or granting of water allocations. The objectives define the expected performance of entitlements and provide flows for the continued sustainability of the environment while the indicators allow for measurement of the performance of the plan in achieving those objectives. In the Gulf plan

area, water allocations will only be granted in the upper Leichhardt River from Julius Dam and Lake Moondarra.

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

There are two sets of plan objectives: environmental flow objectives and water allocation security objectives. An objective represents a statistic produced by the departmental Integrated Quantity and Quality Model (IQQM – see clause 40) that provides a performance indicator. This program simulates stream flows in parts of the plan area over the period 1890 to 2003. For example, an objective may be to ensure the number of dry spells experienced during the simulation period is in accordance with the plan scenario.

Water allocation security objectives and environmental flow objectives allow the broader goals of the water resource plan to be achieved, therefore protecting water resources within the plan area and the value of tradeable water allocations. Future activities that could potentially affect the allocation and management of water in the Julius Dam and Lake Moondarra (for example, water trades, proposed changes to operational rules, or strategies implemented in a resource operations plan) would only be approved if they are consistent with the objectives defined in chapter 4, schedule 5 and schedule 6 of the plan. This requirement is separate to any other approvals or assessments that may be required – for example, approvals for works under the *Integrated Planning Act 1997* or environmental impact assessments required by other legislation.

The impact on and consistency with the plan objectives are assessed using the departmental IQQM computer program or other approved method.

Part 1 Environmental flow objectives

Environmental flow objectives aim to protect the health of natural ecosystems both under current levels of water resource development and also when decisions are made under the plan. The objectives attempt to minimise change to natural flow conditions, while recognising that the natural condition has been changed, and are defined at node 1. No single objective achieved in isolation is likely to maintain natural stream

condition and several flow characteristics must be supported to achieve the plan's ecological goals.

Performance indicators for environmental flow objectives

Clause 17 states the performance indicators for the environmental flow objectives.

Natural flow characteristics are described through this combination of performance indicators and objectives. These indicators allow for environmental flow targets to be set to address the environmental impacts that may arise from changes to the flow regime.

The specified indicators are important key flow characteristics and are based on technical advice during plan development. The indicators relate to the variability of the flow regime of the upper Leichhardt River.

Environmental flow objectives

Clause 18 states that the environmental flow objectives are listed in schedule 5.

The objectives have been set at a level to address and achieve the general and particular ecological outcomes as set out in chapter 3. They accommodate future impacts that may occur in particular parts of the plan area and balance environmental and consumptive requirements. Rather than specifying an exact environmental 'allocation', environmental flow objectives indicate the amount of change from natural flows for different stream flow characteristics deemed acceptable.

Any future decisions about allocation and management in the plan area must comply with the environmental flow objectives. The objectives include a range of no flow, low flow, and medium to high flow objectives.

Part 2 Water allocation security objectives

Water allocation security objectives aim to ensure that future decisions about the allocation and management of water made under the plan will not

affect the probability of groups of water users being able to obtain water under their water allocations.

Performance indicators for water allocation security objectives

Clause 19 states the performance indicators that define the water allocation security objectives for supplemented water.

The specified performance indicators represent the annual, monthly and other probabilities that are important to water allocation holders obtaining water from supplemented water supply schemes and those taking unsupplemented water from variable stream flows. The objectives define the minimum long-term performance of a group of water allocations that will be maintained for the life of the plan.

Water allocation security objectives

Clause 20 states that the water allocation security objectives are listed in schedule 6.

Water allocation security objectives protect the probability of a water user being able to obtain water under their water allocation. They do not represent a prediction or guarantee of future performance of water allocations in any particular year. The objectives represent how an allocation would have been expected to perform using historical data, and assuming full use of the water entitlements in the upper Leichhardt River. Climate, water demand distribution patterns and water user choice in the use of their entitlements, all affect the actual performance of those entitlements. In other words, the way an entitlement might perform during the simulation period is not necessarily indicative of how it will perform in the future.

Water allocation security objectives will take effect when the water resource plan is implemented under a resource operations plan.

Chapter 5 Strategies for Achieving Outcomes

Chapter 5 provides the strategies for achieving the plan outcomes discussed in Chapter 3 as required by section 46(1)(f) of the Act.

Part 1 Strategies for both surface water and groundwater

Division 1 Preliminary

Application of pt 1

Clause 21 states this part applies to both surface water and groundwater.

Measuring devices

Clause 22 states that a measuring device must be used to measure the volume of water taken under interim water allocations, water allocations and water licences that state an annual volumetric limit. This requirement will only take effect from the day a water entitlement is declared to be a metered entitlement under the *Water Regulation 2002*, part 7.

Metering water use is fundamental to the responsible management of the State's water resources by ensuring that that accurate information on the amount of water taken from catchments is recorded. Metering provides information to ensure that water users comply with the conditions of their water entitlement. Measuring devices also provide accurate water use data to assist users in improving their water use management, including developing more efficient water use practices in order to maximise production.

Water use information will support improved understanding of how water resources support the rural economy, communities and the natural environment and therefore assist future planning and plan review processes.

The department, under a state-wide metering program, is installing meters in catchments where resource operation plans are in place, and in other situations.

Matters to be considered for environmental management rules

Clause 23 lists the matters the chief executive must consider when deciding the environmental management rules to be included in the resource operations plan. Matters for consideration are not limited to those listed, and may also include consideration of any matters relevant to ensuring consistency with the plan objectives and outcomes.

Matters to be considered for water sharing rules

Clause 24 lists the matters the chief executive must consider when deciding the water sharing rules to be included in the resource operations plan, for the taking of water under both supplemented and unsupplemented water entitlements. Matters for consideration are not limited to those considerations listed and may also include consideration of any matters relevant to ensuring consistency with the plan objectives and outcomes.

Division 2 Unallocated water

Subdivision 1 Continued moratorium and interim arrangements

A moratorium on applications was announced on 6 June 2003, under section 26 of the Act. The purpose of a moratorium is to maintain levels of water take and interference whilst a water resource plan is being developed. The moratorium for the Gulf has remained in effect until Governor in Council approval of the plan and subsequent gazettal.

Continued effect of moratorium notice—Act, s 46(3)

Clause 25 continues, in part, the effect of the moratorium notice. The clause applies to applications which have any of the effects listed in subclause 2. Until the resource operations plan is approved, existing

applications that would have any of these effects will not be decided and new applications that would have any of these effects will not be accepted.

A number of exemptions apply under this provision and those types of applications that are exempted will continue to be accepted and dealt with. These exemptions include applications to interfere with the flow of water in a watercourse or lake for stock or domestic purposes, to provide a pumping pool, or to store water not related to an entitlement, access to strategic unallocated water, or subdivision or amalgamation of existing water licence(s).

Once the resource operations plan is in place, it is intended new water entitlements will be made available only through the release of unallocated water under a market based approach. Water will also be available through the seasonal and permanent trading of water allocations in the water supply schemes and relocation of water licences in the bedsands of the Gilbert River.

Interim arrangements for application about unallocated water

Clause 26 allows for applications for water for projects of State or regional significance, water supply for urban use or for the promotion of eco-tourism, and for water from Lake Corella or Lake Mary Kathleen, to still be accepted and dealt with under the plan until the resource operations plan states a process for deciding these applications.

Where the chief executive has approved any applications made under this provision, the volume granted is sourced from the total volume of unallocated water identified as strategic reserve available under the plan. For example, for any applications that the chief executive accepts and grants for Lake Corella, the volume of entitlement granted, would be deducted from the total volume of unallocated water identified for Lake Corella in schedule 7.

Subdivision 2 Projects of regional significance

Projects that may be considered to be of regional significance

Clause 27 allows for the chief executive to consider a project to be of significance to the region, after having regard to the matters listed, therefore enabling an application for access to strategic unallocated water for the project.

Subdivision 3 Dealing with unallocated water under a resource operations plan generally

Particular unallocated water held as indigenous, strategic or general reserve

Clause 28 states that there are three types of unallocated water reserves that may be made available under the resource operations plan, and the locations within the plan area where those reserves may be made available.

The *Cape York Peninsula Heritage Act 2007* establishes the Cape York Peninsula Region and, under section 27, a requirement to provide a reserve of water for Indigenous purposes. Indigenous unallocated water may only be made available in the Cape York Peninsula Region.

Strategic reserve is held for state purposes such as projects of State and regional significance, town water supply, and ecotourism. Strategic unallocated water may be made available in all catchments and subcatchments of the plan area, except in the upper Leichhardt subcatchment.

General reserve is held for any purpose (for example, irrigation or aquaculture). This clause allows for general unallocated water to be made available in the Nicholson, Gregory and lower Leichhardt subcatchments and the Flinders, Norman and Gilbert River catchments.

Granting unallocated water

Clause 29 states that unallocated water held as Indigenous reserve, general reserve or strategic reserve may only be granted as a water licence under a process stated in the resource operations plan.

In the upper Leichhardt River unallocated water may be granted as any type of water entitlement. This could include for example, grant of a water allocation.

Preparing and implementing process in resource operations plan generally

Clause 30 states criteria that must be considered when preparing and implementing a process for the release of unallocated water under the resource operations plan. This does not limit potential considerations.

These criteria reflect the departmental policy principles that guide the release of unallocated water and seek to encourage sustainable and efficient use of water.

Matters that must be considered include environmental management rules established under the resource operations plan. The environmental management rules are complimentary to the outcomes, including ecological outcomes, of the plan. As the criteria listed under this clause includes consideration of the impact on other water users and environmental management rules, in effect every decision to grant unallocated water considers the cumulative impact of decisions in combination with all decisions made previously.

The clause also triggers section 77 of the Act which requires an approved land and water management plan for the take of water under a new water licence for the purpose of irrigation.

This approach provides flexibility in the plan, whilst also preventing dealings with unallocated water that would be contrary to achieving plan outcomes and objectives.

Additional requirements for dealing with unallocated water that is groundwater

Clause 31 applies only to the Nicholson and Einasleigh Groundwater Management Areas. Under the resource operations plan, any person wishing to obtain a water licence to take unallocated groundwater from these areas, may be required by the chief executive to provide a report detailing the impacts of the proposed take on both groundwater and surface water flows. Such a report will assist the chief executive in making a decision on the application.

Subdivision 4 Limitations on granting unallocated water from indigenous reserve

Purpose for which Indigenous unallocated water may be granted

Clause 32 reflects the requirement under the *Cape York Peninsula Heritage Act 2007* for the plan to provide a reserve of water for the purpose of helping Indigenous communities in the Cape York Peninsula Region

area achieve their economic and social aspirations. Indigenous unallocated water may only be granted for this purpose.

Volumetric limits for general unallocated water

Clause 33 states that a total annual volume of not more than 1000ML has been identified as Indigenous unallocated water and may be granted in the form of water licences for the purpose mentioned in clause 32 above.

Subdivision 5 Limitations on granting unallocated water from strategic reserve

When strategic unallocated water may be granted

Clause 34 states that strategic reserve unallocated water will only be made available if it is for State purposes (for example, a project of State significance or town water supplies), or for any purpose if it is taken from Lake Corella or Lake Mary Kathleen.

Volumetric limits for strategic unallocated water in Lake Corella or Lake Mary Kathleen

Clause 35 states that the maximum volumetric limit for take of strategic unallocated water per water year for all water licences combined from Lake Corella and Lake Mary Kathleen is indicated in schedule 7, part 1, column 2. In the schedule 7 table, the volume is listed in column 2 adjacent to its respective lake name.

Volumetric limits for strategic unallocated water is granted for particular State purpose

Clause 36 states that the maximum volumetric limit for take of strategic unallocated water per year for all water licences combined for State purposes is indicated in schedule 7, part 2, column 1. In the schedule 7 table, the volume is listed in column 2 adjacent to its respective catchment or subcatchment area.

Period for which strategic unallocated water is granted for particular State purpose

Clause 37 indicates that, for a project of State or regional significance, water granted from strategic unallocated water is only granted for the life of the project. The right to take this water returns to the State upon project completion. This allows for water to be continually available for new and future projects which only require water for a limited time.

Subdivision 6 Limitations on granting unallocated water from general reserve**Purpose for which general unallocated water may be granted**

Clause 38 states that general reserve water may be granted for any purpose.

Volumetric limits for general unallocated water

Clause 39 states that the total maximum volume of take of general unallocated water per year for all water licences combined, is as stated in schedule 8 for each catchment and subcatchment area. In the schedule 8 table, the volume is listed in column 2 adjacent its respective catchment or subcatchment area.

Part 2 Additional strategies for surface water**Division 1 Preliminary****Application of pt 2**

Clause 40 states that part 2 applies to surface water only. Part 2 strategies are in addition to part 1 strategies.

Decisions consistent with objectives

Clause 41 requires decisions concerning the allocation or management of surface water to be consistent with environmental flow objectives and water allocation security objectives detailed in schedules 5 and 6, respectively. This provides greater certainty and security to allocation holders, ensures environmental flows are maintained, and establishes consistent and transparent considerations for decision making.

Decisions about water permits are excluded from this requirement because water permits are temporary, the take occurs during short periods of time and is therefore deemed not to affect the objectives, which are derived from long-term historical data. However, separate consideration of the impacts on natural ecosystems and water authorisations is required in deciding whether to grant or refuse an application for a water permit under section 239 of the Act.

Assessing impact of decisions

Clause 42 states the Integrated Quantity and Quality Model (IQQM) is to be used to assess the consistency of decisions made about the allocation and management of water with the environmental flow objectives and water allocation security objectives.

The IQQM simulates all the major surface water processes that occur within a large catchment including water extractions, instream losses, and the climatic and seasonal variability in stream flows. The model was calibrated and validated using historical data from 1890 to 2003. As such, the testing of compliance with the objectives is done by using the simulation data for this period.

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

Accepting and deciding particular applications to interfere with water

Clause 43 Subclause (1) and (2) states that a water licence application for in stream works (e.g. dam or weir), other than for unallocated water, may be accepted and dealt with where the proposed interference, or increase in interference, is for—

- stock and domestic purposes;

- a pumping pool of less than 10ML capacity associated with an existing water entitlement; or
- to store less than 250ML of water for a non consumptive purpose such as flood mitigation.

This section does not cover applications for unallocated water.

Where the criteria under Subclause (3) are met, the chief executive may decide to approve the application. Meeting the criteria does not guarantee that the application will be approved.

Subclause (6) defines a *pumping pool* for the purpose of this section.

Division 2 Strategies for supplemented surface water only

Supplemented surface water is defined under the plan as surface water supplied under an interim resource operations licence, resource operations licence, distribution operations licence or other authority to operate water infrastructure in relation to the Julius Dam Water Supply Scheme or Lake Moondarra.

Subdivision 1 Resource operations licences and distributions operations licences

Water allocations to be managed under a resource operations licence

Clause 44 states those water allocations that will be managed under a resource operations licence. Both the Julius Dam Water Supply Scheme interim water allocation and the Lake Moondarra Authority are to be converted to water allocations managed under a resource operations licence. Water allocations granted to the Mount Isa Water Board for distribution losses will also be managed under a resource operations licence. Granting of the resource operations licence will occur through the resource operations plan.

Under Section 107(a) of the *Water Act 2000*, an interim resource operations licence ceases once a resource operations plan has effect. The chief executive must grant a resource operations licence on

commencement of the resource operations plan. A resource operations licence authorises the holder of the licence to interfere with the flow of water to the extent necessary to operate the water infrastructure to which the licence applies.

Water allocations to which water is to be distributed under a distributions operations licence

Clause 45 identifies the water allocations that will be distributed under a distribution operations licence by the Mount Isa Water Board. This concerns allocations for the Julius Dam Water Supply Scheme and Lake Moondarra. A distribution operations licence authorises the holder of the licence to interfere with the flow of water for the distribution of water to water allocation holders.

Matters to be considered for infrastructure operating rules

Clause 46 specifies, but does not limit, the matters that the chief executive must consider when determining the infrastructure operating rules for proposed or existing water infrastructure.

The infrastructure operating rules specified in the resource operations plan will ensure that infrastructure managed under a resource operations licence or distributions operations licence is operated in a way that seeks to minimise the impacts on associated environment, recreational, aesthetic and cultural values.

Critical water supply arrangements

Clause 47 states that if the resource operations plan includes infrastructure operating rules and water sharing rules it must state the critical water supply arrangements that are to be implemented by the resource operations licence or distribution operations licence holders for the Julius Dam Water Supply Scheme and Lake Moondarra.

The purpose of critical water supply arrangements is to set out rules for the sharing of water during times of critical water shortage. Critical water supply arrangements could lead to the prioritisation of water access across a range of demands such as town water supply, industry and mining, during times of critical water shortages.

Subdivision 2 Establishing water allocations

Purpose of sdiv 2

Clause 48 states the purpose of this subdivision as providing for the creation of water allocations for the Julius Dam Water Supply Scheme and Lake Moondarra. A water allocation, subject to rules established under a resource operations plan, may be traded by the holder to other user(s) within the defined area.

Converting interim water allocations for Julius Dam Water Supply Scheme

Clause 49 indicates that interim water allocations to take water for the Julius Dam Water Supply Scheme must be converted to a supplemented water allocation. This will be provided for through the resource operations plan.

Replacing authority to take water from Lake Moondarra

Clause 50 states that the existing Lake Moondarra authority (order-in-council) will be replaced by three tradable surface water allocations under the resource operations plan for the holder of mining lease 8058, Mount Isa City Council and the Mount Isa Water Board. This will be provided for through the resource operations plan.

Granting water allocations for distribution loss

Clause 51 states that water allocations for distribution loss purposes will be granted to the Mount Isa Water Board for the Julius Dam Water Supply Scheme and Lake Moondarra. This will be provided for through the resource operations plan.

Elements of a water allocation

Clause 52 outlines the elements that must be stated on a water allocation to take supplemented water. These elements are consistent with the requirements of section 127 of the *Water Act 2000*.

Location for taking water under particular water allocations

Clause 53 requires the location stated on a water allocation to include the place at which water could have been taken under a previous authority, such as the interim water allocation for the Julius Dam Water Supply Scheme or the Lake Moondarra Authority.

Traditionally, holders of entitlements were limited to taking water from a specified 'place' which was usually identified by a Lot and Plan and was the point where a bore or pump was situated. By changing this to a location, the Resource Operations Plan will allow holders of allocations to divert water from anywhere within their designated location, irrespective of where that water is to be used.

Purpose of water allocation

Clause 54 states that the purpose stated on a supplemented surface water allocation must be 'any' or 'distribution loss'.

The purpose of distribution loss applies only to those water allocations granted to the Mount Isa Water Board under the resource operations plan in accordance with section 49.

Nominal volume for water allocation

Clause 55 states the nominal volumes that must be stated on water allocations for supplemented water. The nominal volume of water allocations for the Julius Dam Water Supply Scheme must be the same as the volume stated on the interim water allocation. The nominal volume of the two water allocations for Lake Moondarra will be 12500ML each.

In addition, the nominal volume of water allocations granted to the Mount Isa Water Board for distribution losses from both the Julius Dam Water Supply Scheme and Lake Moondarra will be 1250ML each.

Priority group for water allocation

Clause 56 states the priority groups to be used for supplemented surface water.

Water allocations from the Julius Dam Water Supply Scheme are assigned high priority due to the high level of certainty of the stated nominal volume of water being able to be accessed and taken under these allocations. This

is reflected by the water allocation security objectives. Water allocations from Lake Moondarra are assigned a medium priority.

High priority water allocations generally have a greater long-term probability of obtaining water than medium priority water allocations.

Division 3 Strategies for unsupplemented surface water only

Subdivision 1 Preliminary

Restrictions on taking water from waterhole or lake

Clause 57 allows the chief executive to place restrictions on taking water from waterholes or lakes. Natural waterholes and lakes are recognised as important habitats and places of refuge for aquatic plants and animals and can have significant cultural value to traditional owners.

In making a decision about an authorisation to take water from a waterhole or lake, the chief executive may apply conditions to the authorisation to restrict the situations in which water can be taken, in order to safeguard the cultural and ecological values of natural waterholes and lakes.

In a case where conditions on a licence (e.g. pumping times) to take water from a waterhole or lake could allow protection of ecological or cultural values without imposing economic hardship this may allow protection of both interests.

The chief executive may choose not to place conditions on an authorisation if satisfied that the taking of water under the authorisation will not adversely affect the ecological or cultural values of the waterhole or lake. Further, if applying a condition to an existing authorisation that is in force prior to the commencement of the plan would cause the holder to suffer economic hardship, then the chief executive may choose not to impose a condition.

Subdivision 2 Unsupplemented surface water that was groundwater in aquifers

Application of sdiv 2

Clause 58 states that this subdivision applies to water which was declared to be water in a watercourse under section 8 (*declared water*).

Existing water licences for declared water

Clause 59 states that, upon commencement of the plan, an existing licence to take declared water will be treated as if it is a water licence to take unsupplemented surface water. As soon as practicable the chief executive must amend the licence to include the elements stated in section 70 and ensure they will be consistent with the requirements for water licences in the plan (Part 2, Division 3).

Taking declared water using existing water bores authorised

Clause 60 applies to the owner of an existing water bore that takes declared water and did not require a water licence before commencement of the plan.

The owner is authorised to continue to take water for 12 months after the plan commencement. If the owner notifies the chief executive of the bore within the 12 month period, the owner may continue to take water until the owner is granted a water licence. The owner may only take the relevant annual volumetric limit of declared water (that is, the amount the owner was taking before 17 October 2003 per water year). If these conditions are not complied with, the continued authorisation may be lost. For example if notification is given within the 12 months however, a volume larger than the relevant annual volumetric limit is taken, the additional take is not authorised. Similarly, if notification is not provided within 12 months of the plan commencing, the take of that water would no longer be authorised.

Granting water licences for authorities under s 60

Clause 61 states that if the bore owner notifies the chief executive of an existing bore in an approved form, the chief executive must grant a water licence to take unsupplemented surface water. The licence must be consistent with the requirements of Part 2, Division 3, Subdivision 4 of the

plan however, the annual volumetric limit must reflect historical annual take prior to 17 October 2003. Grant of a water licence under this provision may not occur immediately and may involve grant to those areas where the priority for granting is higher due to factors such as levels of water use.

Subdivision 3 Replacing authorities with water licences and granting or amending water licences

The plan recognises the variety of pre-existing entitlements that were granted under previous legislative regimes. This subdivision provides for those entitlements to be brought into the framework established under the *Water Act 2000*.

Water licences to replace local government authorities

Clause 62 refers to a local government authorities issued under the now repealed *Local Government Act 1936*. The *Water Act 2000*, section 1037, allows these types of authorities to be continued until replaced with a water entitlement. This section provides for the granting of water licences, within 30 business days of the commencement of the plan, to the Flinders Shire, Cloncurry Shire and Doomadgee Aboriginal Shire councils to replace existing authorisations which are described in Schedule 9 of the plan.

Water licence for holder of mining lease 8058

Clause 63 requires the granting of a water licence to the holder of mining lease 8058 within 30 business days of the commencement of the plan.

The current lease holder is Mount Isa Mines Limited, however if the lease is transferred to another person before the licence is granted, the water licence shall be granted to the other person. Schedule 10, part 1 defines the taking of water under this licence.

Water licence for Cloncurry Shire Council

Clause 64 requires the granting of a water licence to Cloncurry Shire Council within 30 business days of the commencement of the Plan. This water licence is described in schedule 10, part 2.

Water licence for owner of East Leichhardt Dam land

Clause 65 requires the granting of a water licence to the owner of the land on which the East Leichhardt Dam is situated within 30 business days of the commencement of the plan.

Currently the land is owned by Argylla Mountains Pastoral Pty Ltd CAN 059843999, however if the land is transferred to another person, or becomes unallocated State land before the licence is granted, the licence will fall to the other person or the State department, respectively. This licence is described in schedule 10, part 3.

Water licence for the State

Clause 66 requires the granting of a water licence to the State (as represented by the department) within 30 business days of the commencement of the plan. This licence can be used for any purpose and is detailed in schedule 10, part 4.

Amending water licence 43709J

Clause 67 requires the amending of a water licence held by the Cloncurry Shire Council within 30 business days of the commencement of the plan in order to make it consistent with the licence described in schedule 11.

Conditions for water licences granted or amended under sdiv 3

Clause 68 states that if any environmental management rules, infrastructure operating rules or water sharing rules are developed in the resource operations plan, then the chief executive must amend the licences granted under this subdivision to give effect to the rules.

Subdivision 4 Water licences to take or interfere with unsupplemented surface water

Application of sdiv 4

Clause 69 indicates that this subdivision applies to unsupplemented surface water licences in addition to those granted under subdivision 3.

Water licence to take unsupplemented surface water

Clause 70 states matters that must be stated on an unsupplemented surface water licence. The matters listed are consistent with requirements of the *Water Act 2000* (sections 213 and 214).

Purpose to be stated on water licence

Clause 71 states that a licence to take unsupplemented surface water must state its purpose, or intended use.

If the intended use for the water is irrigation, stock intensive, agriculture or similar, the purpose on the water licence must be 'rural'. For all other uses, the purpose stated on a water licence must be 'any'.

Maximum rates for taking unsupplemented surface water

Clause 72 specifies how the maximum rate at which water may be taken under an unsupplemented water licence is to be determined.

If a maximum rate of take is stated on the existing licence then that same rate will apply to the water licence. If a licence does not specify a maximum rate of take, a standard pump schedule, as provided in schedule 12 of the plan, will be used to determine the maximum rate of take.

There is also scope for the holder of a licence to apply for an alternative rate of take. The chief executive may approve a different maximum rate of take after considering the conditions under which the water may be taken, existing pumping capacity, the previous 10 years of irrigation use and water use efficiency.

Daily volumetric limit for taking unsupplemented surface water

Clause 73 specifies how the daily volumetric limit for take of unsupplemented surface water licences is to be determined. If the daily volumetric limit is already stated on the existing licence then that rate will be used. If a licence does not specify a daily volumetric limit a standard pump schedule (as provided in schedule 12 of the plan) will be used to determine the daily volumetric limit.

There is also scope for the holder of a licence to apply for an alternative daily volumetric limit. The chief executive may approve a different daily volumetric limit after considering the conditions under which the water

may be taken, existing pumping capacity, the previous 10 years of irrigation use and water use efficiency.

However the chief executive must not approve a daily volumetric limit that is greater than the volume of water that could be taken in a day at the maximum rate of take that is identified for the licence under clause 72.

Annual volumetric limit for taking unsupplemented surface water

Clause 74 specifies how the maximum volume of take for unsupplemented surface water licences is to be determined. The annual volumetric limit represents the maximum amount of water that can be taken under the water licence in a water year.

If the annual volumetric limit is already stated on the existing licence then that volume will be used. If the licence states an area that may be irrigated under the licence, then the chief executive may decide the by multiplying this area in hectares by 12 to determine the annual volumetric limit in megalitres. For any other licence the chief executive may decide the volume after having regard to the matters listed.

Conditions for taking unsupplemented surface water

Clause 75 states that the chief executive may determine and impose any condition on an unsupplemented water licence if it is necessary to ensure the purpose and outcomes of the plan are achieved. In deciding flow conditions under which water may be taken under a water licence, the chief executive must have regard to the conditions on an existing licence.

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

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

Storing unsupplemented water taken under a water licence

Clause 76 states that, without limiting the effect of clause 75(1), the chief executive may impose a condition on an unsupplemented water licence that

states the works that may be used to store water taken under the licence, for example a particular off stream storage.

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

Conditions giving effect to rules

Clause 77 states that if any environmental management rules, operating rules or water sharing rules are developed in the resource operations plan the chief executive must amend affected existing licences on the commencement of the resource operations plan to impose conditions to give effect to the new rules.

Any water licences granted after the commencement of the resource operations plan must also include conditions giving effect to the rules.

Subdivision 5 Regulation of overland flow water

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

Clause 78 specifies the situations in which a person may take overland flow water in accordance with section 20(6) of the Act. This means that the taking of overland flow water in the plan area is prohibited unless authorised under this clause. The plan allows for the take of overland flow water for stock and domestic purposes, small scale storages, under a water licence, to satisfy a requirement of the *Environmental Protection Act 1994* and existing works that are authorised under section 79.

Taking water using particular existing overland flow works authorised

Clause 79 authorises the owner of land on which existing overland flow works are situated to continue to take overland flow water using the works for a period of 12 months after the commencement of the plan. This clause does not apply to existing works for the taking of only the overland flow water that may be taken under clause 78.

Within this 1 year period the landholder must, in the approved form, give the chief executive notice of the existing overland flow works and any further information reasonably required by the chief executive about the works in order to be authorised to continue to take overland flow water using the works beyond the 1 year period and until granted a water licence.

This clause does not apply to existing works for the taking of only the overland flow water that may be taken under clause 78. As such, an owner of land on which these particular existing overland flow works are situated is authorised to continue to take overland flow water using the works and is not required to notify the chief executive of these existing works. For example, an owner of land with existing works for the taking of overland flow water only for stock or domestic purposes is not required to notify the department of these works.

Overland flow works are works that interfere with or take overland flow. They include pumps, storages, and drains which take or store water; works for ponding overland flow for purposes such as ponded pasture; and, redirection of overland flow water to increase take (e.g. levees, diversion banks into dams).

Granting or amending water licences under the resource operations plan

Clause 80 applies to the resource operations plan process for granting a water licence to replace an authority given under clause 79, which allowed the continued use of existing works to take overland flow water.

In following the process for granting or amending a water licence, the chief executive must have regard to the average annual volume of overland flow water that could have been taken using the existing works immediately before the commencement of the plan. The chief executive must also consider the estimated annual volumes of overland flow water taken using the existing works during the period of up to 10 years prior to the commencement of the plan.

Additionally, the chief executive may consider the extent to which the existing works allowed the taking or storage of water under another authorisation. For example, the existing overland flow works may also allow the storage of water taken from a watercourse under a water licence which may affect the amount of overland flow water captured by the existing overland flow works.

The chief executive may also consider other matters.

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

Relationship with Integrated Planning Act 1997

Clause 81 states that works for taking overland flow water are assessable under the *Integrated Planning Act 1999* (IPA). Prior to constructing works that allow the taking of overland flow water a development permit under the IPA is required. The clause does not apply to repairs or maintenance to existing works, or works constructed in accordance with a development permit that do not alter the design of the existing works.

Works for taking overland flow that are classed as self-assessable under IPA include—

- stock and domestic;
- small storages of less than 250ML capacity;
- to satisfy an environmental authority;
- to satisfy a development permit for carrying out an environmentally relevant activity.

Part 3 Additional strategies for groundwater water

Division 1 Preliminary

Application of pt 3

Clause 82 defines the scope of this part and states that this part applies to groundwater only.

Relationship with Integrated Planning Act 1997

Clause 83 states that all works for taking groundwater water within the plan area are assessable under the *Integrated Planning Act 1997* (IPA).

However, if the works are located outside the Great Artesian Basin groundwater management area and are for stock and domestic purposes the works are self-assessable development under the IPA.

This clause is included to ensure that works to take groundwater do not inadvertently affect artesian water.

Division 2 Strategies for Nicholson and Einasleigh Groundwater Management Areas

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

Clause 84 states that in the Nicholson and Einasleigh groundwater management areas groundwater may only be taken for stock or domestic purposes or under a water licence.

Water licence to take groundwater

Clause 85 states that in the Nicholson and Einasleigh groundwater management areas a water licence to take groundwater must state the purpose for which the water is intended and an annual volumetric limit. For licences to take for the purpose of dewatering, a annual volumetric limit may, but is not required to be, stated on the licence.

Purpose to be stated on water licence

Clause 86 states that in the Nicholson and Einasleigh groundwater management areas a water licence to take groundwater must state one of three purposes – ‘rural’, ‘dewatering’ or ‘any’.

Amendment of water licences to state annual volumetric limit

Clause 87 states that in the Nicholson and Einasleigh groundwater management areas an existing water licence to take groundwater water that does not state a maximum annual volume of take, may be amended to specify a volume. In determining the maximum annual volume of the licence regard will be paid to the existing conditions of the licence, water use efficiency practices, impact of the take of water on the water resources, estimated prior level of take and limits placed on other licences in the area,

alternative water supply options and the results of any bore testing undertaken by the licence holder.

Conditions for taking subartesian water

Clause 88 states that in the Nicholson and Einasleigh groundwater management areas the chief executive may impose conditions listed on a water licence to take groundwater granted after the commencement of the plan.

Conditions may include requirements to provide and maintain access to alternative water supplies to other water licence holders that would be affected by the granting of a new entitlement or to monitor and report on the impact of the taking of groundwater under the new licence.

The Einasleigh and Nicholson groundwater management areas are established in recognition of potential threat to groundwater resources of active management is not implemented. This provision provides active management of potential supply issues and information about impact of increased groundwater use.

Taking water using existing water bores authorised

Clause 89 authorises the owner of an existing water bore that takes water from the Einasleigh groundwater management area and did not require a water licence before the commencement of the plan to continue to take groundwater using the works for a period of 1 year after the commencement of the plan.

Within this 1 year period the bore owner must, in the approved form, give the chief executive notice of the existing bore and any further information reasonably required by the chief executive about the works in order to be authorised to continue to take groundwater using the works beyond the 1 year period, and until granted a water licence. The owner must only take the relevant annual volumetric limit of groundwater water.

Granting water licences for authorities under s 89

Clause 90 states that if the bore owner complies with section 89 (2) and notifies the chief executive of the bore in an approved form, the chief executive must grant a water licence to take unsupplemented surface water. The licence must be consistent with division 2.

Chapter 6 Monitoring and Reporting Requirements

Monitoring and reporting provide a basis for measuring the effectiveness of the plan in achieving its stated plan outcomes.

Monitoring and regular reporting on the plan will mean that any emerging issues can be addressed.

Monitoring

Clause 91 details the water and natural ecosystems monitoring requirements used to assist in gauging the effectiveness of proposed management strategies for achieving the outcomes of the plan. The monitoring requirements are to be achieved by programs undertaken by operators of infrastructure and programs administered by the chief executive and relevant State and Northern Territory agencies.

The catchments of the Gregory, Nicholson and Settlements Creek cross the Northern Territory border. Therefore any relevant monitoring or research undertaken by the Northern Territory Government may be used in assessment of the plan.

Monitoring programs undertaken by operators of infrastructure

Clause 92 states that operators of infrastructure for interfering with water (a resource operations licence holder or a distribution operations licence holder) must develop and implement the relevant monitoring arrangements listed in the resource operations plan. This enables the chief executive to assess the effectiveness of the strategies outlined in Chapter 5.

Operators of infrastructure to give reports

Clause 93 specifies that an operator of infrastructure for interfering with water must give a written report to the chief executive relating to the operation of infrastructure, detailing—

- the information obtained by the monitoring programs mentioned in clause 92;
- decisions made by the operator in managing water and infrastructure or distributing water;

- information about non-compliance by the operator with the requirements of the resource operations plan; and
- any remedial or emergency action taken by the operator.

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

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

Minister's report on plan—Act, s 53

Clause 94 specifies the requirements for the preparation of the Minister's report on the plan.

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

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

If the Minister is satisfied about any of the matters outlined in clause 97 of the plan, as triggers for considering amending or replacing the plan, the report must include a consideration of the matters.

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

Chapter 7 Implementing and amending this Plan

The water resource plan will be primarily implemented through a resource operations plan. The resource operations plan will set out how existing water entitlements will be amended to water licences and allocations. The resource operations plan will also define, for each part of the plan area, the water sharing and environmental flow rules that will be applied in the to

ensure the water resource plan outcomes are achieved. Water service providers will be required to show through monitoring and reporting that operating arrangements for their supply infrastructure comply with these rules.

Implementation schedule

Clause 95 provides schedule for the implementation of the plan through the resource operations plan. Within one year after the commencement of the plan, the matters detailed in subclause (2) are proposed to be implemented through the preparation of a resource operations plan. A resource operations plan will outline the rules in relation to the day-to-day management of stream flow and water infrastructure to achieve the objectives outlined in Part 4 of the plan.

Minor or stated amendment of plan—Act, s 57

Clause 96 states the types of amendments that may be made to the Plan under s 57(b) of the Act. A minor amendment is one to correct a minor effort or to make a change that is not a change of substance and a stated amendment is one that is listed in a water resource plan. These types of amendments to the plan allow for efficient and timely responses to changes occurring in the plan area. These changes do not require public notification, with the exception of an amendment to the continued effect of the moratorium notice.

Amending or replacing plan

Clause 97 outlines situations where the Minister must consider amending the plan or preparing a new plan.

The Minister must consider amending or replacing the plan if satisfied, in relation to the plan general outcomes, water entitlements in the plan area are not sufficient to meet water needs and that an ecologically sustainable use for additional water exists. In considering whether water entitlements are sufficient, the Minister must have regard to a number of matters including the extent to which water is being taken under existing entitlements, the efficiency of water use, emerging water demands, water savings that may be made from improvements in water use efficiency or the use of water from other sources and the likely timeframe for additional water requirements.

Additionally, the Minister must consider amending or replacing the plan if satisfied that the plan general ecological outcomes or specific ecological outcomes are not being achieved.

This clause ensures there is a mechanism for a possible amendment of the plan if a major change in circumstances related to water demand or environmental water needs arise.

Schedules

Plan area

Schedule 1 shows the area to which the plan applies and the location of nodes.

Groundwater management areas

Schedule 2 shows the boundaries of the Groundwater Management Areas used in the plan on a map.

Catchment areas and subcatchment areas

Schedule 3 shows the catchment and subcatchment area boundaries used in the plan on a map.

Nodes

Schedule 4 lists the nodes referred to in the plan and a description of their location. Their location is given as a measurement of Adopted Middle Thread Distance (AMTD), which gives the distance in kilometres, measured along the middle of the watercourse that a particular node is situated, from the mouth of that water system, or junction with the main watercourse.

Environmental flow objectives

Schedule 5 states the environmental flow objectives for the plan categorised as low flow and medium to high flow objectives. These

objectives have been set at a level to address and achieve the general and ecological outcomes as set out in Chapter 4 of the plan. They accommodate future impacts that may occur in various parts of the plan area and balance the environmental and consumptive requirements of the plan area.

Water allocation security objectives

Schedule 6 states the water allocation security objectives of the Plan. The water allocation security objectives performance indicators define the long term performance expectations for water allocations within a specified part of the Plan area and protect water allocation performance for the 10-year life of the Plan. Water allocation security objectives for supplemented water are specified according to priority groups as set out in clause 54 of the Plan.

Total volumes for strategic unallocated water

Schedule 7 tabulates the locations and available volumes of strategic unallocated water.

Total volumes for general unallocated water

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

Water licences to replace local government authorities

Schedule 9 states the details to be included on new licences which replace the pre-existing authorities to take of water held by Flinders, Cloncurry and Doomadgee Shire Councils.

Water licences to replace other existing rights

Schedule 10 formalises historical arrangements to take water, by way of granting water licences to the holder of mining lease 8058; Conclurry Shire Council; the owner of the East Leichhardt Dam land; and, the State. Details of the new licences are stated.

Amending water licence 43709J

Schedule 11 states the details for the amended water licence 43709J.

Rates, volumetric limits and pump sizes

Schedule 12 states the rates, volumetric limits and pump sizes for determining details to be stated on water licences, in accordance with sections 70 and 71 of the plan, as—

- maximum rate of take of water in litres per second; and
- the daily volumetric limit in megalitres according to pump sizes.

Dictionary

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

ENDNOTES

- 1 Laid before the Legislative Assembly on . . .
- 2 The administering agency is the Department of Natural Resources and Water.