



Queensland

# Water Resource (Burdekin Basin) Plan 2007

## Explanatory Notes for SL 2007 No. 189

made under the

*Water Act 2000*

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## General outline

The explanatory notes are a 'plain English' version of the *Water Resource (Burdekin Basin) Plan 2007* ('the plan'). They are intended to provide the reader with some explanation and background information on the sections in the plan.

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

### Title

*Water Resource (Burdekin Basin) Plan 2007.*

### Authorising law

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

## **Policy objectives of the legislation**

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

The objective of the plan is to provide a framework for the allocation and sustainable management of surface and overland flow water in the plan area to meet future water requirements, including the protection of natural ecosystems and security of supply to water users. The plan area includes the Burdekin and Haughton rivers and their tributaries.

The plan provides for the allocation and sustainable management of surface and overland flow 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 for dealing with future water requirements;
- providing a framework for establishing water allocations;
- providing a framework for reversing, where practicable, degradation that has occurred in natural ecosystems; and
- regulating the taking of overland flow water.

## **Legislation consistent with policy objectives of authorising law**

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

## **Estimated cost for Government**

Funding for the development and implementation of the water resource plan has been allocated to the Department of Natural Resources and Water under the Water Reform Continuity of Supply funds allocation. Accordingly, the plan should not alter 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 *Burdekin Basin 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**

## **Part 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 plan**

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

## **Definitions**

Clause 3 specifies that certain terms are defined in the dictionary in schedule 10.

## **Part 2                      Plan area and water to which plan applies**

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

### **Plan area**

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

### **Subcatchment areas**

Clause 5 states that a map of subcatchment areas in the plan area is shown in schedule 2. The use of subcatchment areas provides for more effective management and planning of water resources by focusing on the ecological and consumptive needs for smaller areas within the overall plan area. This approach also has the benefit of enabling more effective monitoring of the impacts that local changes have on achieving plan objectives.

### **Water management areas**

Clause 6 defines the water management areas for the management of unsupplemented water allocations. Each unsupplemented water allocation must state the water management area in which it is located.

**Declaration about watercourse—Act, s 1006(2)**

Clause 7 declares that water in an aquifer under a watercourse or land, in the Giru Benefited Groundwater Area is water in a watercourse. A map of the Giru Benefited Groundwater Area is shown in schedule 3.

This provision allows for the allocation and management of subartesian water within the Giru Benefited Groundwater Area that is hydraulically connected to the watercourse. This water will become part of the Burdekin Haughton Water Supply Scheme.

**Information about areas**

Clause 8 states that the exact location of the boundaries of the plan area, subcatchment areas, water management areas and the Giru Benefited Groundwater Area are held in electronic map form at departmental offices where they can be inspected in detail.

**Nodes**

Clause 9 defines nodes mentioned in the plan. Nodes are generally defined as specific locations on a watercourse 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 part 4 of this plan. They can also be used to specify flow management rules in the resource operations plan. Nodes are numbered and their locations are shown on a map in schedule 1 and described in schedule 4.

**Water to which plan applies**

Clause 10 states that the plan applies to surface water (water in watercourses, lakes or springs) and overland flow water. The clause clarifies that this plan does not deal with water in springs that is either artesian water or subartesian water connected to artesian water. This is to make the distinction between the water dealt with under this plan and the water dealt with in the *Water Resource (Great Artesian Basin) Plan 2006*.

## **Part 3**

# **Outcomes for sustainable management of water**

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

### **Outcomes for water in the plan area**

Clause 11 establishes that the outcomes in clauses 12 to 14 have been derived in consideration of the current state of water resources in the plan area, recognising that the natural state of watercourses, lakes and springs has changed because of water infrastructure, 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 12 states the general outcomes for the allocation and sustainable management of water in the plan area. These outcomes give an overview of what the plan is expected to achieve through implementing the identified management strategies. The outcomes involve protecting river health, protecting existing water user access, promoting water use efficiency and providing for future water requirements.

### **General ecological outcomes**

Clause 13 states the general ecological outcomes for the allocation and sustainable management of water in 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.

### **Specific ecological outcomes**

Clause 14 states the specific ecological outcomes for the allocation and management of water in particular parts of the plan area. These specific ecological outcomes do not limit the ecological outcomes in clause 12 and 13, which apply to the whole plan area.

Particular parts of the plan area were identified through community consultation and independent scientific assessments as areas requiring particular ecological outcomes. The plan seeks to achieve these outcomes in specified areas, which include improving low flows for fish passage, maintaining natural flow continuity and floodplain connectivity, and minimising adverse impacts on watercourse morphology.

## **Part 4                      Performance indicators and objectives**

Part 4 states the performance indicators, environmental flow objectives and water allocations security objectives for this plan.

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

The environmental flow objectives and water allocation security objectives (defined in schedule 4 of the Act) are stated in schedule 5 of the plan. They represent statistically derived values for performance indicators which are produced by the department's Integrated Quantity and Quality Model (IQQM—see clause 20).

Future activities that could potentially affect the allocation and management of water in the plan area (for example, new water resource development, water trades, proposed changes to operational rules, or strategies implemented in a resource operations plan) will only be approved if they are consistent with the objectives defined in schedule 5 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's objectives are assessed using the department's IQQM computer program or other approved method. This program simulates stream flows, water diversions and other attributes in the plan area over the period 1890 to 2004. Operational rules can be simulated through this period to ensure that objectives are met.

## **Division 1                      Environmental flow objectives**

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

### **Performance indicators for environmental flow objectives**

Clause 15 states the performance indicators for the environmental flow objectives. Natural flow characteristics are maintained through this combination of performance indicators and objectives. These indicators allow for environmental flow targets to be established and so limit the changes to important aspects of the flow regime that may arise from future allocation and management decisions.

The specified performance indicators represent important key flow characteristics and are based on technical advice received during plan development. The indicators relate to periods of no flow, low, medium and high flows and flow seasonality. The variability and seasonality of flow regimes within the plan area are unique to each river system and are often critical for many ecological processes.

### **Environmental flow objectives**

Clause 16 states that the environmental flow objectives are set out in schedule 5.

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

environmental and consumptive requirements. No single objective achieved in isolation is likely to maintain natural stream condition. Rather, several flow characteristics must be supported if the plan's ecological outcomes and objectives are to be achieved.

Any future decisions about allocation and management in the plan area must comply with the environmental flow objectives. These decisions will be tested by the IQQM or other approved method (see clause 20). The objectives include a range of no flow, low flow, medium to high flow and seasonal flow objectives.

## **Division 2                      Water allocation security objectives**

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

### **Performance indicators for water allocation security objectives**

Clause 17 states the performance indicators for the water allocation security objectives associated with supplemented and unsupplemented water allocations. These indicators allow for water allocation security objectives to be established and so protect the long-term probabilities of obtaining water under a water allocation.

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

### **Water allocation security objectives**

Clause 18 states that the water allocation security objectives are set out in schedule 6. The objectives associated with supplemented water allocations are specified according to priority groups (set out in clause 60) and are listed in part 1 of schedule 6. The objectives associated with unsupplemented water allocations are provided for each water allocation group (as described in clause 69) and are listed in part 2 of schedule 6.



## **Decisions consistent with objectives**

Clause 19 requires decisions made about the allocation or management of water in the plan area to be consistent with the environmental flow objectives and water allocation security objectives detailed in schedules 5 and 6. 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 the water taken during short permit periods is 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 20 states that the department's IQQM computer program is used to assess the consistency of decisions about the allocation and management of water in the plan area with the environmental flow 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 2004 (114 years). 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.

## **Measuring devices**

Clause 21 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 take effect from the day the water entitlements are declared to be metered entitlements under the *Water Regulation 2002*, part 7.

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

Metering will provide information to ensure that water users comply with the conditions of their water entitlement and will therefore encourage water users to take no more than their fair share. Measuring devices will also provide accurate water use data to assist users in improving their water use management including using water more efficiently to maximise production.

Metered water use information will also support improved future planning. This information will be integrated with other knowledge about the plan area to improve our understanding of how water resources support the rural economy, communities and the natural environment.

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

### **Restrictions on taking water from waterholes or lakes**

Clause 22 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, conditions may be applied to the authorisation to restrict the situations in which water can be taken to safeguard the cultural and ecological values of natural waterholes and lakes.

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.

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

Clause 23 lists matters that must be considered in deciding the environmental management rules to be included in the resource operations plan. Matters include—

- stream flows which provide for flow seasonality, connectivity within and between riverine environments, riffle habitats and other streambed features, and replenishment of refuge pools; and
- the impact of taking or interfering with water on environmental attributes, and aesthetic and cultural values.

The chief executive is not limited to these considerations and may consider other matters to ensure that the environmental management rules will not be contrary to achieving the plan outcomes.

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

Clause 24 states matters the chief executive must have regard to in determining water sharing rules to be included in the resource operations plan for the taking of water under both supplemented and unsupplemented water entitlements.

In deciding these rules for supplemented water, regard must be given to existing water sharing rules, the extent to which existing supply arrangements are linked to the natural occurrence of stream flows and the incidence of limited water availability.

For unsupplemented water, the rules are to be decided after considering existing water sharing arrangements, local availability of water, conditions of take, volumetric limits and the impact on authorisations to take water in the plan area.

The chief executive is not limited to these considerations. This clause is used to ensure that there are clear rules established to share water amongst water entitlement holders in times when water availability is low and competition for the water amongst users is high.

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

Clause 25 states matters the chief executive must consider in determining water allocation changes rules to be included in the resource operations plan. Water allocation change rules are conditions that must be met to allow

a permanent change to an attribute of a water allocation, such as a change to the location or purpose.

In deciding these rules, regard must be given to the ongoing management of the Lower Burdekin delta groundwater system. A precautionary approach needs to be taken to manage the potential effect on the groundwater system of trading water allocations outside of the water board areas.

Regard must also be given to the frequency, duration, magnitude and timing of any reduced availability of water that could be taken under a water allocation.

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

### **Accepting and deciding particular applications to interfere with water**

Clause 26 states that the chief executive may accept and decide an application to interfere with, or increase the interference with, water by constructing instream works (e.g. a dam or weir) if the purpose of the interference is—

- for stock and domestic purposes only; or
- to create a pumping pool, less than 10ML capacity, to enable the take of water under a water entitlement; or
- to store less than 250ML of water for a non-consumptive purpose such as community landscaping or flood mitigation.

This clause does not apply to an application about unallocated water.

In assessing whether to approve an application for a licence to interfere with water, the chief executive would consider—

- the proposed capacity of the storage in relation to its purpose;
- the impact that the proposed interference may have on water levels, sediment movement, riparian vegetation, fish passage and other ecological and cultural values; and
- existing alternative water supplies on the property where the storage is to provide water for stock and domestic purposes.

## **Division 2                      Unallocated water**

Division 2 deals with matters relating to unallocated water including the continued effect of the moratorium notice, interim arrangements for applications about unallocated water, the establishment of general, strategic and SunWater reserves and dealing with unallocated water under the resource operations plan.

### **Subdivision 1                      Continued moratorium and interim arrangements**

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

A moratorium on applications for water was announced on 17 January 2002, and amended on 25 July 2002, under section 26 of the Act. The purpose of the moratorium was to maintain the level of water being taken or interfered with while the plan was being developed, and it remained in effect until this plan was approved by the Governor in Council.

Clause 27 continues, in part, the effect of the moratorium notice. The clause applies to applications that would increase the amount of water taken or interfered with, change the location of take, increase the maximum rate of take or change the conditions including flow conditions under which water may be taken. 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.

This clause does not apply to an application—

- about interfering with the flow of water in a watercourse or lake mentioned in clause 26;
- for a significant project declared under the *State Development and Public Works Organisation Act 1971*;
- for town water supply, mining or stock and domestic purposes;
- for a water permit, reinstatement or replacement of an expired water licence or subdivision or amalgamation of an existing water licence(s); and
- about an interim water allocation.

Once the resource operations plan is in place, it is intended new water entitlements will be 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.

### **Interim arrangements for applications about unallocated water**

Clause 28 states that an application for water for a project of state significance, town water supply, mining activity or for stock and domestic purposes may be accepted and dealt with under the plan. This applies until the resource operations plan states a process for deciding these applications.

## **Subdivision 2      General, strategic and SunWater reserves**

### **Unallocated water held as general, strategic or SunWater reserve**

Clause 29 establishes that unallocated water for future use is to be held as a general, strategic or SunWater reserve.

Unallocated water held under the strategic reserve would be expected to become available for purposes considered by government to be of a state priority. Examples of such purposes would be a project of state or regional significance or to cater for town water supplies.

Unallocated water held under the general reserve is expected to be available for any purpose subject to a release process to be stated in the resource operations plan.

The SunWater reserve is unallocated water reserved for SunWater for use in the Bowen Broken Water Supply Scheme. Clause 61 states that the resource operations plan must include a reserve with a nominal volume of 8,744ML and clause 33 outlines the process for dealing with the reserve under the resource operations plan.

### **Establishing general and strategic reserves**

Clause 30 states that the resource operations plan must establish general and strategic reserves. The strategic reserve must include a volume of water

for a potential future minor (2 metre) raising of Burdekin Falls Dam and for water infrastructure for the Bowen and Broken subcatchments that is primarily intended for industrial use.

### **Subdivision 3      Dealing with unallocated water under the resource operations plan**

Subdivision 3 outlines how unallocated water is dealt with under the resource operations plan. Unallocated water that is to be reserved in the resource operations plan is expected to cater for additional and potential water demands from within and adjacent to the plan area. Releases are likely to occur in stages as industries and water demands mature and in a way that promotes efficiency and maximum benefit to the community.

The specific volumes, locations and other details including the process for release of unallocated water will be detailed in the resource operations plan. In establishing the general and strategic reserves in the resource operations plan, the chief executive will determine how much unallocated water can be made available under the plan.

#### **Granting unallocated water**

Clause 31 states that unallocated water may be granted from the general, strategic or SunWater reserve under a process specified in the resource operations plan.

#### **Preparing and implementing process under the resource operations plan generally**

Clause 32 states criteria that must be considered prior to the release of unallocated water under the resource operations plan. These criteria seek to encourage sustainable and efficient use of water when providing additional water for consumptive use.

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

The clause also establishes that the resource operations plan must state that unallocated water granted as a water licence for irrigation purposes requires that the holder of the licence prepare an approved land and water management plan prior to using the water.

## **Dealing with SunWater reserve under the resource operations plan**

Clause 33 states that following a submission made by SunWater, the chief executive, when satisfied, may make all or part of the SunWater reserve (see clause 61) available under a process specified in the resource operations plan. The release must be consistent with the water allocation security and environmental flow objectives of this plan and the general and strategic reserves mentioned in clause 30. In making a decision about the release, the chief executive must consider matters including those set out in clause 32(2) and other relevant matters.

## **Division 3                      Process for granting and amending interim resource operations licence**

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

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

The granting of interim water allocations at the time an interim resource operations licence is amended is also dealt with in this division.

## **Subdivision 1              Preliminary**

### **Process for Act, ss 176 and 184A**

Clause 34 states that this division provides a process for the granting or amendment of an interim resource operations licence to meet future water requirements. The process applies to an interim resource operations licence for new water infrastructure declared to be a significant project under section 26 of the *State Development and Public Works Act 1971*. Further the unallocated water must be granted from the strategic reserve under

clause 30. This clause ceases to have effect once it is replaced by a process stated in the resource operations plan.

## **Subdivision 2      Interim resource operations licence for particular infrastructure**

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

Clause 35 applies to a proposed owner of new water infrastructure who has been granted unallocated water from the strategic reserve under clause 30. The clause sets out the process for the owner to apply for, or to amend, an interim resource operations licence, including notice requirements. The clause also lists information to be provided by the applicant including infrastructure details, impact assessments on a range of water supply and entitlement issues, mitigation measures, proposed operating arrangements and details of the proposed total interim water allocation and water users. The chief executive may give a copy of an application made under this clause to any entity the chief executive considers appropriate.

### **Additional information may be required**

Clause 36 states the chief executive may give notice to an applicant, requesting additional information about an application, to assist the chief executive in properly deciding the application. The application lapses if the applicant fails to comply with the request for additional information within the reasonable time stated in the notice.

### **Matters chief executive must consider**

Clause 37 states that when deciding the application, the chief executive must consider all matters contained in the application and any additional information provided by the applicant, together with the public interest. Other matters deemed by the chief executive to be relevant may also be considered.

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

Clause 38 states what the chief executive must do if satisfied the application should be approved. If satisfied that the application should be

approved, or approved in part, the chief executive must approve all or part of the application, with or without conditions.

When granting or amending the interim resource operations licence, the chief executive must also reserve, from the strategic reserve, unallocated water required for any proposed interim water allocations to which the approval applies.

### **Subdivision 3      Amendment by chief executive**

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

Clause 39 enables the chief executive to amend an interim resource operations licence granted or amended under clause 38 at any time, in order to meet future water requirements. The clause also allows for an amendment of an interim resource operations licence that was in existence on commencement of the plan to allow for changes that may be required as a consequence of granting a new interim resource operations licence for proposed infrastructure.

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

#### **Matters chief executive must consider**

Clause 40 states matters the chief executive must consider when deciding whether to amend the interim resource operations licence. The chief executive must consider the original application and any other additional information given, any submissions made by the holder about the proposed amendment and the public interest. The chief executive may also consider other relevant matters.

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

Clause 41 states that following consideration of matters described under clause 40, the chief executive may amend the interim resource operations licence to the extent considered appropriate.

## **Subdivision 4      Amendment on application by holder**

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

Clause 42 enables the interim resource operations licence holder to apply for an amendment to an interim resource operations licence granted under clause 38. The clause outlines the details to be included in an application, and permits the chief executive to give a copy of an application to any entity the chief executive considers appropriate.

### **Additional information may be required**

Clause 43 states the chief executive may give notice to an applicant requesting additional information about an application, to assist the chief executive in properly deciding the application. If the applicant fails to comply with the request for additional information within the reasonable time stated in the notice the application lapses.

### **Matters chief executive must consider**

Clause 44 states that when deciding the application, the chief executive must consider all matters contained in the application and any additional information provided by the applicant, together with the public interest. Other matters may also be considered by the chief executive where relevant.

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

Clause 45 states what the chief executive must do if satisfied the application should be approved. If satisfied that the application should be approved, or approved in part, the chief executive must approve all or part of the application, with or without conditions.

## **Subdivision 5      Granting interim water allocations**

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

Clause 46 allows for the granting of interim water allocations to which an interim resource operations licence amended under clauses 38, 41 or 45 relates. This clause does not apply to the amendment of an interim resource operations licence in existence on commencement of the plan. The chief executive must be satisfied about a number of matters before deciding whether to grant the allocations. The chief executive may request additional information from the licence holder to assist in making a decision. This information relates to the number of interim water allocations and the volume, purpose and priority group for each allocation, and the water sharing rules that are to apply.

## **Division 4              Resource operations licences and distributions operations licences**

Division 4 states the water allocations that are to be managed under resource operations licences and water allocations to which water is to be distributed under a distribution operations licence. This division also outlines matters to be considered by the chief executive in deciding infrastructure operating rules and critical water supply arrangements.

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

Clause 47 states those water allocations that are to be managed under a resource operations licence. Supplemented water allocations will be established by both converting a range of authorisations which are in existence at the commencement of the plan and granting allocations to replace authorities given under clause 53(b).

The authorisations in existence at the commencement of the plan that are being converted to supplemented water allocations include—

- interim water allocations in the Burdekin Haughton and Bowen Broken water supply schemes;

- authorities held by the North Burdekin and South Burdekin water boards to take water supplied by the Burdekin Haughton Water Supply Scheme; and
- water licences to take unsupplemented water in the Burdekin Haughton Water Supply Scheme that do not state flow conditions under which water may be taken.

There are a number of existing water licences to take unsupplemented water throughout the reaches supplied by the Burdekin Haughton Water Supply Scheme. Within that part of the water supply scheme located within the water authority areas of the North Burdekin or South Burdekin water boards, there are a number of licences that do not state flow conditions which will be converted to supplemented water allocations. Holders of these licences are currently accessing water that is effectively supplied as part of the Burdekin Haughton Water Supply Scheme.

Many landholders own works within the water authority areas of the North Burdekin and South Burdekin water boards for the taking of water from the Burdekin River and anabranch. Most of these landholders hold a water licence authorising the take of water. However some of these landholders do not hold a contemporary water entitlement and the plan provides for those landholders whose works were installed prior to the construction of the Burdekin Falls Dam to be granted a water allocation subject to the provisions of clause 53.

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

Clause 48 provides that holders of supplemented water allocations that are supplied by the Burdekin Haughton Water Supply Scheme and are located within either the water authority area of the North or South Burdekin Water Board, will have water distributed under a distribution operations licence.

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. This distribution operations licence, to be granted jointly to the North Burdekin Water Board and South Burdekin Water Board under the resource operations plan, will formalise their role in operating water infrastructure, particularly earth dams, that assists in distributing water to water allocation holders in the Lower Burdekin River including the anabranch.

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

Clause 49 specifies matters that the chief executive must consider when determining the infrastructure operating rules for proposed or existing water infrastructure. The chief executive must consider the matters outlined in clause 49(1)(a) through (e) and may consider other matters as necessary.

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

### **Critical water supply arrangements**

Clause 50 states that the resource operations plan may require the holder of a resource operations licence to develop critical water supply arrangements.

The purpose of critical water supply arrangements is to set out rules for the sharing of water during times of critical water shortages for example, when conditions of a drought worse than any that may have occurred in the historical record. Critical water supply arrangements could lead to the prioritisation of water access across a range of demands such as town water supply, industrial and mining during times of critical supply shortages. The water allocation security objectives specified in the plan for both high and medium priority groups must still be achieved.

## **Division 5                      Granting water entitlements**

Division 5 provides for the granting of water entitlements to replace existing authorities to take water held by a number of local governments and the North Burdekin and South Burdekin water boards. This division also provides for the granting of water allocations to owners of certain works in the Burdekin River under clause 53.

### **Water licences to replace local government authorities**

Clause 51 states that within 30 business days after the commencement of the plan the chief executive must grant a water licence to replace each continued authority to take water mentioned in schedule 7. The continued

authorities, held by a number of local governments as Orders in Council which were issued under the now repealed *Local Government Act 1936* and continued under section 1037 of the Act, will be replaced with water licences.

There are three existing authorisations to take water that will be replaced with water licences—Bowen Shire Council's authority to take water from Pelican Creek, Charters Towers City Council's authority to take water from Burdekin River and Dalrymple Shire Council's authority to take water from Betts Creek. The details of the water licences to replace these authorities are listed in schedule 7, column 2 of the plan.

### **Interim water allocations to replace continued authorities**

Clause 52 applies to authorities to take water held by the North Burdekin Water Board and South Burdekin Water Board which were continued under section 1089 of the Act. This clause states that within 30 business days of the commencement of the plan, the chief executive must grant an interim water allocation to each water board to replace their existing authorities to take water. The attributes of these interim water allocations are specified in clause 52 (3) and (4).

For each water board, these existing authorities consist of an authority to take water under an Order in Council and an authority to take water under contractual arrangements with the operator of the Burdekin Haughton Water Supply Scheme.

### **Water allocations in the Burdekin River**

Clause 53 provides for the chief executive to grant a water allocation to owners of certain works in the Burdekin River within the water authority areas of the North Burdekin and South Burdekin water boards. In these reaches of the Burdekin River many landholders own works for the taking of water, and while most of these landholders hold a water licence authorising the take of water, some do not hold a contemporary water entitlement.

This clause provides for those landholders who do not hold a water entitlement and whose works were installed prior to the construction of Burdekin Falls Dam, to continue using the works to take water until the chief executive grants the owner a supplemented water allocation supplied by the Burdekin Haughton Water Supply Scheme. This provision is subject to the owner of the works notifying the chief executive of the works, and

the use of the water taken, within 60 days after the commencement of the plan.

Elements of the supplemented water allocation to be granted to the owner of the works include the location, purpose, nominal volume and priority group. The nominal volume will be based on 8ML for each hectare estimated to have been irrigated, using the works, during the period of not more than 10 years prior to the commencement of the plan. However, the chief executive may decide a different nominal volume for a particular water allocation after considering all properly made submissions about the draft resource operations plan and any recommendations of the referral panel.

Key criteria to be considered by the chief executive in deciding any different nominal volume for an allocation include the annual volumes of water estimated to have been taken and the efficiency of water use. However the nominal volume must not be more than 12ML for each hectare estimated to have been irrigated.

This clause does not apply to situations where the take of water is authorised without a water entitlement under section 20 of the Act, for example, where an owner of land adjoining the watercourse is using works to take water only for stock or domestic purposes.

## **Division 6                      Converting authorisations to water allocations**

Division 6 provides for certain authorisations to be converted to water allocations under the resource operations plan. This division specifies the authorisations to be converted to a water allocation to take supplemented water and a water allocation to take unsupplemented water.

Specific instructions for the conversion of a particular interim water allocation held by SunWater as part of the Bowen Broken Water Supply Scheme are included in this division.

## **Subdivision 1      Preliminary**

### **Application of div 6**

Clause 54 states that division 6 applies only to authorisations converted under the resource operations plan to water allocations and water allocations converted under the resource operations plan from authorisations.

Section 121(1)(a) of the Act establishes that on the day the resource operations plan commences, all authorisations to be converted under the plan expire and the chief executive must grant the holders of these expired authorisations the water entitlements stated in the plan.

### **Location for taking water**

Clause 55 states that the location for taking water stated on a water allocation must include the place at which water could have been taken under the authorisation. This is not to be confused with the physical siting of works. For example a location for a water allocation may effectively be specified as a particular reach or reaches of a watercourse from which water may be accessed.

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 to be stated on water allocation**

Clause 56 states that the purpose stated on a water allocation must be either 'rural', 'distribution loss', 'any', or for an authorisation to take water held by the North Burdekin Water Board or South Burdekin Water Board, a purpose related to supplementing a water supply scheme.

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

SunWater currently hold interim water allocations in the Burdekin Haughton and Bowen Broken water supply schemes for the purpose of

‘distribution loss’. These authorisations allow SunWater to deliver water throughout its channel and pipe networks to its customers. These authorisations will convert to water allocations with a purpose of ‘distribution loss’.

The plan provides for interim water allocations to be granted to the North Burdekin and South Burdekin water boards to replace their existing authorities to take water (see discussion on clause 52). Clause 52(4)(b) states that this water may be taken for a purpose related to supplementing a water supply scheme. Similarly, the purpose stated on a water allocation for an authorisation to take water held by either water board must state a purpose related to supplementing a water supply scheme.

For other authorisations, the purpose stated on a water allocation must be ‘any’. Typically, these existing authorisations would currently have a stated purpose of town water supply, mining or industrial. Additionally, authorisations with a stated purpose that is only for waterharvesting would be converted to a water allocation with a purpose of ‘any’. However if an authorisation had a stated purpose of ‘waterharvesting for irrigation’, then the converted water allocation would have a purpose of ‘rural’.

The resource operations plan will specify water allocation change rules defining the conditions that must be met to allow a permanent change to an attribute of a water allocation, such as the purpose.

## **Subdivision 2      Water allocations to take supplemented water**

### **Authorisations to be converted**

Clause 57 states that authorisations to take supplemented water in the Burdekin Haughton and Bowen Broken water supply schemes and water licences to take unsupplemented water in the Burdekin Haughton Water Supply Scheme, that do not state flow conditions under which water may be taken, will be converted to supplemented water allocations.

Authorisations to take supplemented water in the Burdekin Haughton and Bowen Broken water supply schemes to be converted to supplemented water allocations include interim water allocations currently managed under the schemes and authorities held by the North and South Burdekin water boards to take water supplied by the Burdekin Haughton Water Supply Scheme.

Existing water licences to take unsupplemented water in the Burdekin Haughton Water Supply Scheme that do not state flow conditions and are located within the water authority of the North Burdekin or South Burdekin water boards will also be converted to supplemented water allocations. As these water licences do not state flow conditions under which water may be taken, holders of these licences are currently accessing water that is effectively supplied as part of the Burdekin Haughton Water Supply Scheme.

### **Elements of a water allocation to take supplemented water**

Clause 58 outlines the elements that must be stated on a water allocation to take supplemented water. These elements include the location from which water may be taken, the purpose for which water may be taken, the nominal volume for the allocation and the priority group to which the allocation belongs. The following clauses in this subdivision describe how the nominal volume and priority group are to be determined.

### **Nominal volumes for water allocations to take supplemented water**

Clause 59 states that the nominal volume (defined in schedule 4 of the Act) for a water allocation converted from an authorisation to take supplemented water in the Burdekin Haughton and Bowen Broken water supply schemes is the annual volume stated on the existing authorisation.

For a water allocation converted from a water licence to take unsupplemented water in the Burdekin Haughton Water Supply Scheme that does not state flow conditions, the nominal volume is the annual volume stated on the existing authorisation.

If the authorisation does not state an annual volume but states the area, in hectares, that may be irrigated, the nominal volume will be based on 8ML for each hectare. However, the chief executive may decide a different nominal volume for a particular water allocation after considering all properly made submissions about the draft resource operations plan and any recommendations of the referral panel.

Key considerations for the chief executive in deciding any different nominal volume for an allocation include the water taking capacity of associated existing works, the annual volumes of water estimated to have been taken and the efficiency of water use. However the nominal volume must not be more than 12ML per hectare. Where the authorisation does not

state an area that may be irrigated, this calculation would be based on the area estimated to have been irrigated during the period of not more than 10 years prior to the commencement of the plan.

### **Priority groups for water allocations to take supplemented water**

Clause 60 establishes the priority group to which supplemented water allocations that are converted from existing authorisations in the Burdekin Haughton and Bowen Broken water supply schemes will belong.

In the Burdekin Haughton Water Supply Scheme water allocations to take supplemented water will belong to either the high priority group or the medium priority group. Those authorisations identified by the interim resource operations licence as high priority will belong to the high priority group. Interim water allocations identified as high priority in this scheme include those associated with town water supply and initial losses incurred by SunWater in delivering water to customers through channel networks. All other authorisations converted to water allocations will belong to the medium priority group.

The clause states that supplemented water allocations in the Bowen Broken Water Supply Scheme will belong to either the high A1 priority group, high A2 priority group or medium priority group. Existing high priority interim water allocations within this scheme are supplied directly from either the Bowen River Weir or Eungella Dam. Those high priority authorisations that are supplied from the Bowen River Weir will belong to the high A1 priority group. Those high priority authorisations supplied from Eungella Dam will belong to the high A2 priority group. Interim water allocations identified as high priority in this scheme include those associated with town water supply, mining, industrial and losses incurred in delivering water through pipelines. All other water allocations in the Bowen Broken Water Supply Scheme will belong to the medium priority group.

Holders of high priority water allocations generally have a greater long-term probability of obtaining water than holders of medium priority water allocations. The resource operations plan will specify water allocation change rules defining the conditions that must be met to allow a permanent change to an attribute of a water allocation, such as the priority group.



authorisations are located in the Burdekin River downstream of node 7 including the anabranche, the Haughton River downstream of node 3, and the Bowen River downstream of node 13.

### **Elements of a water allocation to take unsupplemented water**

Clause 63 outlines the elements that must be stated on a water allocation to take unsupplemented water. These elements include the location from which water may be taken, the purpose for which water may be taken, the nominal volume for the allocation, the maximum rate of take, the daily and annual volumetric limit, the flow conditions for the allocation, the water allocation group to which the allocation belongs and the water management area. The following clauses in this subdivision describe how the nominal volume, maximum rate of take, daily volumetric limit, annual volumetric limit, the flow conditions and the water allocation group are to be determined.

The location and purpose are to be determined according to clauses 55 and 56. See discussion on clause 6 for information about water management areas.

### **Nominal volumes for water allocations to take unsupplemented water**

Clause 64 states that the chief executive must have regard to a number of matters in deciding the nominal volume for an unsupplemented water allocation. These matters include the local availability of water, the conditions under which water may be taken under the authorisation (such as flow access conditions), any volumetric limits stated on the authorisation and the simulated mean annual diversion. The simulated mean annual diversion is calculated using the IQQM computer program (see discussion on clause 20) and represents the simulated average volume of water that could have been taken during a water year under an authorisation or a particular group of authorisations.

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

The nominal volume for an unsupplemented water allocation should not be confused with the annual volumetric limit which represents the maximum amount of water authorised to be taken in a water year. The amount of

water that could actually be taken in any particular year will be subject to a number of factors including the local availability of water. In dry years, the amount of water available to be taken may be less than the nominal volume, while in wetter years the amount of water available to be taken may exceed the nominal volume.

### **Maximum rates for taking unsupplemented water**

Clause 65 specifies how the maximum rate at which water may be taken under an unsupplemented water allocation is to be determined. The clause states that if a maximum rate of take is stated on the existing authorisation then that same rate will apply to the water allocation.

Clause 65(1)(b) states that where a maximum rate of take is not stated on the existing authorisation but the associated development permit specifies a pump size that is listed in schedule 8, column 1, then the rate stated in column 2 of the schedule will apply. If the development permit states a pump size that is not mentioned in schedule 8, column 1, then the chief executive must determine the maximum rate having regard to column 2 of the schedule.

However, for clause 65(1)(b), if the holder of the authorisation satisfies the chief executive that the maximum rate of take is different from the rate decided, a new maximum rate will be decided by the chief executive. In deciding the maximum rate, the chief executive will have regard to the conditions under which water may be taken under the authorisation, the water taking capacity of the existing pump, the irrigation or water distribution system associated with the authorisation during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

If the maximum rate of take is not stated on the existing authorisation and the associated development permit does not state a pump size for the works, the maximum rate will be determined by the chief executive having regard to the type of authorisation and an estimate or measurement of the rate at which water can be taken under the authorisation.

### **Daily volumetric limits for taking unsupplemented water**

Clause 66 specifies how the daily volumetric limit for an unsupplemented water allocation is to be determined. The clause states that if the daily volumetric limit is stated on the existing authorisation then that same daily limit will apply to the water allocation.

Clause 66(1)(b) states that where the daily volumetric limit is not stated on the existing authorisation but the associated development permit states a pump size that is listed in schedule 8, column 1, then the limit stated in schedule 8, column 3 applies. If the development permit states a pump size that is not mentioned in schedule 8, column 1, then the chief executive must determine the daily volumetric limit having regard to schedule 8, column 3.

However, for clause 66(1)(b), if the holder of the authorisation satisfies the chief executive that the daily volumetric limit is different from the limit listed in schedule 8, the chief executive will determine a new limit having regard to the conditions under which water may be taken under the authorisation, the water taking capacity of the existing pump, the irrigation or water distribution system associated with the authorisation during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

If the daily volumetric limit is not stated on the existing authorisation and the associated development permit does not state a pump size for the works, the daily volumetric limit will be determined by the chief executive having regard to the type of authorisation and an estimate or measurement of the rate at which water can be taken under the authorisation.

Importantly, the chief executive must ensure that the daily volumetric limit for a water allocation is not more than the total volume that could be taken in a day at the maximum rate decided under clause 65.

### **Annual volumetric limits for taking unsupplemented water**

Clause 67 specifies how the annual volumetric limit for an unsupplemented water allocation is to be determined. The annual volumetric limit represents the maximum amount of water that can be taken under the authorisation in a water year.

If the existing authorisation states the annual volume of water that may be taken under the authorisation, the stated volume will be the annual volumetric limit for the water allocation. Where the existing authorisation does not state the annual volume of water that may be taken, the annual volumetric limit will be decided by the chief executive. In making a decision the chief executive will have regard to the conditions under which water may be taken under the existing authorisation, the water taking capacity of the existing works, the annual volume of water required for the authorisation's intended purpose, the annual volumes of water estimated by the chief executive to have been taken under the authorisation during the

period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

### **Conditions for taking unsupplemented water**

Clause 68 states that the chief executive may determine and impose any condition on an unsupplemented water allocation if it is necessary to ensure the purpose and outcomes of the plan are achieved.

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

### **Water allocation groups for water allocations to take unsupplemented water**

Clause 69 outlines the water allocation groups to which unsupplemented water allocations belong. The water allocation group to which an unsupplemented water allocation belongs is based on the subcatchment area in which the water allocation is located. For example, an unsupplemented water allocation in the Lower Burdekin subcatchment that is converted from an existing authorisation would belong to the water allocation group A1.

## **Division 7                      Water licences for taking or interfering with unsupplemented water**

Division 7 deals with water licences to take or interfere with unsupplemented water. This division outlines the elements that must be stated on an unsupplemented water licence and how they are to be determined for an authorisation.

### **Application of div 7**

Clause 70 states that the scope of division 7 is limited to water licences to take or interfere with unsupplemented water in a watercourse, lake or spring (defined in schedule 4 of the Act).

## **Water licences to take unsupplemented water**

Clause 71 outlines the elements that must be stated on an unsupplemented water licence including the purpose for which water may be taken, the maximum rate at which water may be taken, the daily volumetric limit for the licence and the annual volumetric limit for the licence. The purpose for which water may be taken must be either ‘stock and domestic’, ‘rural’ or ‘any’. Water licences may also state conditions, including flow conditions and conditions for storing water taken under the licence.

### **Purpose to be stated on water licence for taking unsupplemented water**

Clause 72 states how the purpose stated on an unsupplemented water licence is to be determined.

If the purpose stated on the existing licence is stock or domestic, the purpose on the water licence must be ‘stock and domestic’.

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

For other existing licences, the purpose stated on a water licence must be ‘any’. Typically, the existing licence would have a stated purpose of town water supply, mining or industrial. Additionally, licences with a stated purpose that is only for waterharvesting would have a purpose of ‘any’. However if a licence had a stated purpose of ‘waterharvesting for irrigation’, then the newly specified licence would have a purpose of ‘rural’.

### **Maximum rates for taking unsupplemented water**

Clause 73 specifies how the maximum rate at which water may be taken under an unsupplemented water licence is to be determined. The clause states that if a maximum rate of take is stated on the existing licence then that same rate will apply to the water licence.

Clause 73(1)(b) states that where the maximum rate of take is not stated on the licence but the associated development permit states a pump size that is listed in schedule 8, column 1, then the rate stated in schedule 8, column 2 applies. If the development permit states a pump size that is not mentioned in schedule 8, column 1, then the chief executive must determine a rate having regard to schedule 8, column 2.

However, for clause 73(1)(b), if the holder of the licence satisfies the chief executive that the rate of take is different from the rate listed in schedule 8, column 2, the chief executive will determine a new rate having regard to the conditions under which water may be taken, the water taking capacity of the pump, the irrigation or water distribution system associated with the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

If the maximum rate of take is not stated on the existing licence and the associated development permit does not state a pump size for the works, the maximum rate will be determined by the chief executive having regard to the type of licence and an estimate or measurement of the rate at which water can be taken under the authorisation.

### **Daily volumetric limits for taking unsupplemented water**

Clause 74 specifies how the daily volumetric limit for an unsupplemented water licence is to be determined. The clause states that if the daily volumetric limit is stated on the existing licence then that same daily limit will apply to the water licence.

Clause 74(1)(b) states that where the daily volumetric limit is not stated on the existing licence but the associated development permit states a pump size that is listed in schedule 8, column 1, then the limit stated in schedule 8, column 3 applies. If the development permit states a pump size that is not mentioned in schedule 8, column 1, then the chief executive must determine the daily volumetric limit having regard to schedule 8, column 3. However, for clause 74(1)(b), if the holder of the licence satisfies the chief executive that the daily volumetric limit is different from the limit listed in schedule 8, column 3, the chief executive will determine a new limit having regard to the conditions under which water may be taken under the licence, the water taking capacity of the existing pump, the irrigation or water distribution system associated with the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

If the daily volumetric limit is not stated on the existing licence and the associated development permit does not state a pump size for the works, the daily volumetric limit will be determined by the chief executive having regard to the type of licence and an estimate or measurement of the rate at which water can be taken under the licence.

In addition, the chief executive must ensure that the daily volumetric limit for the water licence is not more than the total volume that could be taken in a day at the maximum rate decided under clause 73.

### **Annual volumetric limits for taking unsupplemented water**

Clause 75 specifies how the annual volumetric limit for an unsupplemented water licence 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 existing licence states the annual volume of water that may be taken under the licence, the stated volume will be the annual volumetric limit for the water licence.

Where the existing licence does not state the annual volume of water that may be taken but states an area that may be irrigated under the licence, the annual volumetric limit will be decided by the chief executive having regard to the volume of water required for the licence's intended purpose. This annual volumetric limit must not be more than the volume, in megalitres, calculated by multiplying the number of hectares by the relevant conversion factor for the subcatchment listed in clause 75(b).

If the existing licence does not state the annual volume of water that may be taken or the area that may be irrigated, the annual volumetric limit will be decided by the chief executive. In making a decision, the chief executive will have regard to the conditions under which water may be taken under the existing licence, the water taking capacity of the existing works, the annual volume of water required for the licence's purpose, the annual volumes of water estimated by the chief executive to have been taken under the licence during the period of not more than 10 years prior to the commencement of the plan and the efficiency of this water use.

### **Conditions for taking unsupplemented water**

Clause 76 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.

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.

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

### **Storing unsupplemented water taken under a water licence**

Clause 77 states that, without limiting the effect of clause 76(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 offstream storage.

In deciding whether to impose a condition the chief executive must have regard to the capacity of any existing overland flow works being used to store the water taken under the licence. This clause is to ensure plan outcomes are not compromised by actions that may increase the take of overland flow water beyond that provided for under Division 8 of the plan..

### **Conditions giving effect to rules**

Clause 78 states that if any environmental management rules, operating rules or water sharing rules are included in the resource operations plan, then the chief executive must amend water licences in existence 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.

## **Division 8                      Regulation of overland flow water**

Division 8 deals with the regulation of overland flow water in the plan area. This division outlines the limitation on taking overland flow water in the plan area, situations where the taking of water using particular existing overland flow works is authorised and the process for granting or amending water licences under the resource operations plan.

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

Clause 79 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.

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

- for stock or domestic purposes (see schedule 4 of the Act for the definition of ‘domestic purposes’ and ‘stock purposes’); or
- for any other purpose if the works for the taking of overland flow water have a capacity of not more than 250ML; or
- under a water licence that authorises the take of overland flow water; or
- the amount necessary to satisfy the requirements of an environmental authority under the *Environmental Protection Act 1994*; or
- the amount necessary to satisfy the requirements of a development permit for carrying out an environmentally relevant activity, other than for a mining or petroleum activity, under the *Environmental Protection Act 1994*; or
- for capturing contaminated agricultural runoff water as defined in the ‘Code for Assessable Development for Operational Works for Taking Overland Flow Water’; or
- under an authority under clause 80.

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

Clause 80 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 1 year after the commencement of this plan (see clause 80(4) and schedule 6 for more information on ‘existing overland flow works’). This clause does not apply to existing works for the taking of only the overland flow water that may be taken under clause 79(1)(a) to (e).

Within this 1 year period the landholder must, using 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.

As this clause does not apply to existing works for the taking of only the overland flow water that may be taken under clause 79(1)(a) to (e), 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 existing works.

### **Granting or amending water licences under the resource operations plan**

Clause 81 applies if the resource operations plan states a process for granting a water licence to replace an authority given under clause 80(3) which allowed for the continued use of existing works to take overland flow water or amending a water licence granted 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 not more than 10 years prior to the commencement of the plan.

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

The chief executive may also consider other matters as necessary.

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.

## **Division 9                      Relationship with Integrated Planning Act 1997**

Division 9 outlines the relationship of the plan with the *Integrated Planning Act 1997*.

### **Works for taking overland flow water**

Clause 82 states that works that allow the taking of overland flow water are assessable development for the *Integrated Planning Act 1997*. This means that development approval is required under the relevant code for assessable development prior to constructing works that allow the taking of overland flow water in the plan area. Works that are assessable development require a development permit under the *Integrated Planning Act 1997*.

Works that are self-assessable development do not require a development permit but must conform with the relevant self-assessable development code. Works for the taking of overland flow that are self-assessable for the *Integrated Planning Act 1997* are—

- works for the taking of overland flow water only for stock or domestic purposes (and for no other purpose);
- works that allow the taking of overland flow water for any purpose which have a storage capacity of not more than 250ML; and
- works for the taking of only the amount of overland flow water necessary to satisfy the requirements of an environmental authority, or a development permit for carrying out an environmentally relevant activity, other than for a mining or petroleum activity, under the *Environmental Protection Act 1994*.

The repair and maintenance of both existing overland flow works to which clause 80 applies and works constructed under a development permit, is neither assessable nor self-assessable development, if the repair or maintenance does not alter the design of the works.

## **Part 6                      Monitoring and reporting requirements**

Part 6 details the monitoring and reporting requirements for the plan. Monitoring and reporting are essential elements of a water resource plan's implementation because they provide a basis for measuring the effectiveness of the plan's strategies in achieving its outcomes.

### **Monitoring**

Clause 83 details the water and natural ecosystems monitoring requirements for the plan. Detailed monitoring and reporting requirements will be specified in the resource operations plan.

The monitoring requirements include water monitoring, natural ecosystem monitoring and other monitoring required by the chief executive. Specific water monitoring requirements include monitoring for stream flows, taking and diverting water, releases from water storages and water quantity for water storages including inflow, storage volume and outflow. Natural ecosystems monitoring requirements include the volume, frequency, duration and timing of stream flows and information on hydraulic habitat requirements of ecological assets in the plan area.

The monitoring requirements are to be achieved by programs undertaken by operators of infrastructure for interfering with water and through programs administered by the chief executive or other relevant State agencies. The plan does not direct other State agencies to perform specific monitoring. However, if current monitoring programs undertaken by State agencies are relevant, this data may be used, eliminating any unnecessary duplication of monitoring.

### **Monitoring programs undertaken by operators of infrastructure**

Clause 84 states that an operator of infrastructure for interfering with water must develop and undertake monitoring programs detailed for them in the resource operations plan.

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

**Operators of infrastructure to give reports**

Clause 85 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 84;
- 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 86 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 89 of this 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.

## **Part 7**                      **Implementing and amending this plan**

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

The water resource plan will be primarily implemented through a resource operations plan. The resource operations plan will grant, and convert authorisations to, water allocations in accordance with the water resource plan. The resource operations plan will also define the day-to-day rules for the management of water in the water supply schemes to ensure the plan's outcomes are achieved. Water service providers will be required to show through monitoring and reporting that operating arrangements for their supply infrastructure comply with these rules.

### **Implementation schedule**

Clause 87 states the proposed arrangements for implementing the plan. The clause states that within 1 year after the commencement of the plan it is proposed to prepare a resource operations plan in order to implement the plan. The key elements of the resource operations plan will be—

- to grant and convert existing authorisations in the Burdekin Haughton and Bowen Broken water supply schemes mentioned in clauses 57 and 62 to water allocations;
- to define the environmental management, infrastructure operating, water sharing, water allocation change and seasonal assignment rules for water in the Burdekin Haughton and Bowen Broken water supply schemes;
- to establish a process to deal with unallocated water that is available to meet future water needs in the plan area;
- to establish a process for granting or amending water licences to take overland flow water; and
- to implement the monitoring requirements consistent with part 6 of the plan.

It is proposed that the amendment of water licences to take or interfere with unsupplemented water to enable clearer definition of those entitlements,

including the specification of volumetric terms (see division 7), would be undertaken during a later planning cycle.

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

Clause 88 states the types of amendment that may be made to the plan under section 57(b) of the Act. A minor amendment is one to correct a minor error or to make a change that is not a change of substance and a stated amendment is one that is listed in a water resource plan.

Clause 88 provides for a number of amendments to be made to the plan including an amendment or addition of an environmental flow objective if this would achieve an equivalent or improved ecological outcome without adversely affecting the water allocation security objectives or the plan outcomes. Similarly, an amendment or addition of a water allocation security objective is provided for under this clause so long as it does not affect existing water allocations, the environment flow objectives or the plan outcomes.

This clause also provides for the following amendments to the plan—

- an amendment or addition of a node, priority group, a water management area, a water allocation group or a monitoring or reporting requirement;
- an amendment to subdivide a subcatchment area;
- an amendment of the capacity for 79(1)(b); and
- an amendment of clause 27 if notice of the amendment is published as if it were a moratorium notice under section 26 of the Act.

Clause 88(1)(i) provides for an amendment to the plan to state that works that are earth dams in the Burdekin Haughton Water Supply Scheme that interfere with, or increase the interference with, water in a watercourse, waterhole, lake or spring by impounding the flow of water are self-assessable development under the *Integrated Planning Act 1997*. This would only apply if section 46(2) of the Act allows a draft plan to include these works as works that are intended to be self-assessable development for the *Integrated Planning Act 1997* and these works are listed as self-assessable development under that act.

Within that part of the Burdekin Haughton Water Supply Scheme that is located within their water authority areas, the North Burdekin and South Burdekin water boards construct earth dams to create pumping pools that

allow water to be taken by the boards and other riparian water users from the Burdekin River and anabranch. These dams are constructed mainly from local river bed materials and are periodically breached by flood flows. The boards generally rebuild these dams once flows subside. SunWater also construct similar works in the Burdekin River when necessary to facilitate the operation of their pumping infrastructure.

Historically, the boards were authorised to construct these works under their respective Orders in Council. Under section 1088 of the Act, these authorities were replaced and each board was taken to hold a development permit for the works in their water authority area.

Clause 88(1)(i) provides for an amendment to the plan to state that earth dams within the Burdekin Haughton Water Supply Scheme, which are intended to establish a pumping pool to allow the take of water under a water entitlement, are self-assessable development for the *Integrated Planning Act 1997*. This will provide for the holder of an authority to interfere with, or increase the interference with, water by impounding flow the ability to construct earth dams according to the requirements of the self-assessable code.

### **Amending or replacing plan**

Clause 89 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's 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's 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 this plan applies and the location of nodes.

### **Subcatchment areas**

Schedule 2 shows the boundaries for the subcatchment areas referred to in the plan.

### **Giru Benefited Groundwater Area**

Schedule 3 shows the cadastral boundary of the Giru Benefited Groundwater Area (see clause 7).

### **Nodes**

Schedule 4 lists the nodes referred to in the plan and a description of their location. Some of the descriptions refer to a measurement of Adopted Middle Thread Distance (AMTD). This is the distance in kilometres, measured along the middle of the watercourse, that a particular node is situated, from the mouth of the watercourse, or junction with the main watercourse. See clause 9 for more information.

### **Environmental flow objectives**

Schedule 5 states the environmental flow objectives for the plan categorised as low flow and medium to high flow objectives (see part 4, division 1).

### **Water allocation security objectives**

Schedule 6 states the water allocation security objectives for supplemented water allocations and unsupplemented water allocations under the plan (see part 4, division 2).

Water allocation security objectives for supplemented water allocations are specified according to priority groups as set out in clause 60 of the plan and

those for unsupplemented water allocations are categorised based on water allocation groups as outlined in clause 69.

### **Water licences**

Schedule 7 states the continued authorities to take water held by local governments and the water licences which will replace those continued authorities (see clause 51).

### **Rates and pump sizes**

Schedule 8 states the rates of take of water for various pump sizes. For each pump size stated the maximum rate is expressed in litres per second and the daily volumetric limit in megalitres. See clauses 65, 66, 73 and 74 for more information.

### **Formula**

Schedule 9 states the formula used to determine the annual proportional flow deviation. This performance indicator is a statistical measure of changes to flow seasonality and volume at a node on a watercourse (see clause 15(b)(vi)). It is then used in the specification of an environmental flow objective (see clause 16 and schedule 5, part 2, table 5).

### **Dictionary**

Schedule 10 contains the dictionary of defined terms used in the plan.

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#### ENDNOTES

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