



*Water Act 2000*

# **Water Plan (Gulf) 2007**

**Current as at 2 September 2017**

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Queensland

# Water Plan (Gulf) 2007

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# Water Plan (Gulf) 2007

## Chapter 1 Preliminary

### 1 Short title

This water plan may be cited as the *Water Plan (Gulf) 2007*.

### 2 Purposes of plan

The following are the purposes of this plan—

- (a) to define the availability of water in the plan area;
- (b) to provide a framework for sustainably managing water and the taking of water;
- (c) to identify priorities and mechanisms for dealing with future water requirements;
- (d) to provide a framework for establishing water allocations to take supplemented surface water;
- (e) to provide a framework for reversing, where practicable, degradation that has occurred in natural ecosystems;
- (f) to regulate the taking of overland flow water;
- (g) to regulate the taking of groundwater.

### 3 Definitions

The dictionary in schedule 13 defines particular words used in this plan.

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

### **4      Plan area**

This plan applies to the area shown as the plan area on the map in schedule 1.

### **5      Groundwater management areas**

Each part of the plan area that is within a groundwater management area shown on the map in schedule 2 is a groundwater management area for this plan.

### **6      Catchment areas**

Each part of the plan area that is within a catchment area shown on the map in schedule 3 is a catchment area for this plan.

### **7      Subcatchment areas**

Each part of the plan area that is within a subcatchment area shown on the map in schedule 3 is a subcatchment area for this plan.

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

- (1) Groundwater in an aquifer under a prescribed watercourse, or under land within 1km of a prescribed watercourse, is declared to be water in the watercourse.
- (2) Subsection (1) does not apply to water the chief executive is satisfied is not hydraulically connected to the water in the watercourse.
- (3) The owner of land within 1km of a prescribed watercourse may take groundwater that is water in the watercourse for stock or domestic purposes.



(4) In this section—

*prescribed watercourse* means each of the following—

- (a) the Nicholson River to the extent it is downstream of node 2;
- (b) Lawn Hill Creek to the extent it is downstream of node 3;
- (c) the Gregory River to the extent it is downstream of node 4;
- (d) the Leichhardt River;
- (e) the Cloncurry River;
- (f) the Flinders River;
- (g) the Gilbert River;
- (h) the Einasleigh River to the extent it is downstream of node 5;
- (i) the Norman River;
- (j) the Staaten River.

## **9 Information about areas**

- (1) The exact location of the boundaries of the plan area, groundwater management areas, catchment areas and subcatchment areas is held in digital electronic form by the department.
- (2) The information held in digital electronic form can be reduced or enlarged to show the details of the boundaries.

## **10 Nodes**

- (1) A node mentioned in this plan is a place on a watercourse in the plan area.
- (2) The location of each node is shown on the map in schedule 1 and described in schedule 4.
- (3) Each node is identified on the map by a number.

## 11 Water to which plan applies

- (1) This plan applies to the following water (*surface water*) in the plan area—
  - (a) water in a watercourse or lake;
  - (b) water in springs not connected to GAB water;
  - (c) overland flow water, other than water in springs connected to GAB water.
- (2) This plan also applies to underground water that is not GAB water (*groundwater*) in the plan area.
- (3) In this section—

**GAB water** means underground water to which the *Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017* applies.

# Chapter 3 Outcomes for sustainable management of water

## 12 Outcomes for water in plan area

- (1) This chapter states the outcomes for the sustainable management of water to which this plan applies.
- (2) Without limiting subsection (1), the outcomes include the allocation and management of water in a way that—
  - (a) recognises that the natural state of watercourses, lakes, springs and aquifers has changed because of the taking of, and interfering with, water; and
  - (b) achieves a balance in the following outcomes—
    - (i) the economic outcomes mentioned in section 13;
    - (ii) the social outcomes mentioned in section 14;
    - (iii) the ecological outcomes mentioned in section 15.

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### **13 Economic outcomes**

Each of the following is an economic outcome for water in the plan area—

- (a) provision for the continued use of all water entitlements and other authorisations to take or interfere with water;
- (b) protection of the probability of being able to take water under a water allocation, including—
  - (i) water for the supply of urban water for Mount Isa City; and
  - (ii) water to support growth in the mining industry in north-west Queensland;
- (c) availability of water to support growth in industries dependent on water in the plan area;
- (d) provision for the taking of water in Lake Mary Kathleen;
- (e) availability of water in the following areas to support growth in irrigated agriculture—
  - (i) Gilbert River catchment area;
  - (ii) Flinders River catchment area;
  - (iii) Nicholson River catchment area;
  - (iv) Lower Leichhardt River subcatchment area;
- (f) availability of water in the following areas to help Indigenous communities in those areas achieve their economic aspirations—
  - (i) Cape York Peninsula Region area;
  - (ii) Flinders River catchment area;
  - (iii) Gilbert River catchment area;
  - (iv) Morning Inlet catchment area;
  - (v) Settlement Creek catchment area;
  - (vi) Staaten River catchment area;
  - (vii) Gregory River subcatchment area;

- (g) encouragement of continual improvement in the efficient use of water;
- (h) support of tourism in the plan area, including, for example, by protecting flows that support the natural aesthetics of watercourses and their surroundings;
- (i) support of commercial fishing in the Gulf of Carpentaria, including, for example, by protecting flood flows that may deliver nutrients and water to estuarine and marine environments to stimulate growth and movement of native aquatic animals, including fish, prawns and crabs.

## 14 Social outcomes

Each of the following is a social outcome for water in the plan area—

- (a) availability of water for the following purposes—
  - (i) support of population growth in towns and communities dependant on water in the plan area;
  - (ii) help of Indigenous communities in the following areas achieve their social aspirations—
    - (A) Cape York Peninsula Region area;
    - (B) Flinders River catchment area;
    - (C) Gilbert River catchment area;
    - (D) Morning Inlet catchment area;
    - (E) Settlement Creek catchment area;
    - (F) Staaten River catchment area;
    - (G) Gregory River subcatchment area;
- (b) support of water-related cultural values of Aboriginal and Torres Strait Islander communities in the plan area;

- (c) promotion of a cooperative approach between the State and relevant Northern Territory government agencies to water resource management;
- (d) maintenance of flows that support water-related aesthetic, cultural and recreational values in the plan area.

## 15 Ecological outcomes

- (1) Each of the following is an ecological outcome for water in the plan area—
  - (a) maintenance of the natural variability of flows that support the habitats of native plants and animals and migratory birds in watercourses, floodplains, wetlands, lakes and springs;
  - (b) provision for the continued capability of a part of a river system to be connected to another part, including by maintaining flood flows that—
    - (i) allow for the movement of native aquatic animals between riverine, floodplain, wetland, estuarine and marine environments; and
    - (ii) deliver nutrients and organic matter throughout the plan area to support natural processes such as breeding, growth and migration in riverine, floodplain, wetland, estuarine and marine environments; and
    - (iii) deliver water and sediment throughout the plan area to support river-forming processes;
  - (c) minimisation of changes to natural variability in water levels to support natural ecological processes, including the maintenance of refugia associated with waterholes and lakes;
  - (d) maintenance of the permanence of water in naturally perennially flowing watercourses and in river bed sands that provide water to support native plants and animals, particularly during dry seasons;

- (e) the promotion of improved understanding of the matters affecting flow-related health of ecosystems in the plan area;
  - (f) maintenance of water in the bed sands of the Gilbert River between AMTD 317km and AMTD 263km—
    - (i) to provide aquatic habitat for native aquatic plants and animals, particularly during dry seasons; and
    - (ii) to support riparian vegetation; and
    - (iii) to contribute to the flow of water in the Gilbert River;
  - (g) maintenance of the permanence of water flows in the Gregory River and Lawn Hill Creek to provide aquatic habitat for native aquatic plants and animals, particularly during dry seasons;
  - (h) maintenance of flood flows to the estuarine and marine environments of the Gulf of Carpentaria to stimulate breeding, growth and migration of native aquatic animals;
  - (i) maintenance of the natural variability of flood flows that inundate, and deliver nutrients, organic matter and sediment to, the wetlands of the areas known as the Southern Gulf Aggregation and the Southeast Karumba Plain Aggregation;
  - (j) maintenance of flows in the Gilbert River to provide brackish estuarine habitat suitable for juvenile banana prawn development.
- (2) Each of the following is an additional ecological outcome for groundwater in the plan area—
- (a) maintenance of groundwater contributions to the flow of water in watercourses, lakes and springs;
  - (b) the support of ecosystems dependent on groundwater, including, for example, riparian vegetation, wetlands and waterholes;

- (c) allocation and management of groundwater in a way that is compatible with the outcomes of the *Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017* to the greatest practicable extent.
- (3) In this section—  
*refugia* means the habitat required by a species during a time of stress, including, for example, drought.

## Chapter 4 Performance indicators and objectives for surface water

### Part 1 Environmental flow objectives

#### 17 Performance indicators for environmental flow objectives

The performance indicators for the environmental flow objectives are—

- (a) for assessing periods of low flow at a node—
- (i) the number of periods of no flow of more than 1 month but less than 6 months; and
  - (ii) the number of periods of no flow of 6 months or more; and
  - (iii) the proportion of no flow days; and
  - (iv) median non-zero daily flow; and
- (b) for assessing periods of medium to high flow at a node—
- (i) mean annual flow; and
  - (ii) median annual flow; and
  - (iii) 10% daily flow; and

- (iv) 1.5 year daily flow volume; and
- (v) 5 year daily flow volume; and
- (vi) 20 year daily flow volume; and
- (c) for assessing periods of wet season flow at a node—  
median wet season flow.

## **18 Environmental flow objectives**

The environmental flow objectives for surface water in the plan area are stated in schedule 5.

# **Part 2 Water allocation security objectives**

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

The performance indicators for the water allocation security objectives for taking supplemented surface water are—

- (a) annual supplemented water sharing index; and
- (b) monthly supplemented water sharing index.

## **20 Water allocation security objectives**

The water allocation security objectives for supplemented surface water in the Upper Leichhardt River subcatchment area are stated in schedule 6.



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## **Chapter 5            Strategies for achieving outcomes**

### **Part 1                Strategies for both surface water and groundwater**

#### **Division 1           Preliminary**

##### **21            Application of pt 1**

This part applies to both surface water and groundwater.

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

- (1) In deciding the environmental management rules to be included in the resource operations plan, the chief executive must consider—
  - (a) the streamflows required to maintain the following—
    - (i) the longitudinal connectivity of low flow habitats throughout river systems in the plan area;
    - (ii) the wetted habitats at riffles and other streambed features;
    - (iii) the natural seasonality of flows and zero flows;
    - (iv) the replenishment of refuge pools that enable movement of instream biota;
    - (v) groundwater flows;
    - (vi) the contributions from aquifers to the flow of water in watercourses;
    - (vii) the lateral connectivity between rivers in the plan area and their adjacent riverine environments, including floodplains; and

- (b) the impact the taking of, or proposed taking of, or interfering with, water may have on the following—
  - (i) water quality;
  - (ii) the natural movement of sediment;
  - (iii) the bed and banks of a watercourse or lake;
  - (iv) the inundation of habitats;
  - (v) the movement of fish and other aquatic animals;
  - (vi) the recreation and aesthetic values of the plan area;
  - (vii) cultural values including, for example, cultural values of local Aboriginal or Torres Strait Islander communities.
- (2) Subsection (1) does not limit the matters the chief executive may consider.

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

- (1) In deciding the water sharing rules to be included in the resource operations plan for authorisations to take water in a part of the plan area, the chief executive must consider—
  - (a) for rules relating to supplemented surface water—
    - (i) any existing water sharing rules; and
    - (ii) the extent to which any existing water supply arrangements are linked to the natural occurrence of streamflows; and
    - (iii) the frequency, duration, magnitude and timing of limited water availability; and
  - (b) for rules relating to unsupplemented surface water or groundwater—
    - (i) any existing water sharing arrangements; and
    - (ii) the local availability of water that may be taken from streamflows, waterholes, bed sands or aquifers; and

- (iii) the conditions for taking water decided under section 75; and
  - (iv) the daily volumetric limits decided under section 73; and
  - (v) the annual volumetric limits decided under section 74 or 87; and
  - (vi) the impact on authorisations to take water in the plan area; and
  - (vii) for rules relating to unsupplemented surface water in the bed sands of the Gilbert River between AMTD 317km and AMTD 263km—the water that is available for taking from the bed sands during periods when water ceases to flow over the bed sands.
- (2) Subsection (1) does not limit the matters the chief executive may consider.

## **Division 2            Unallocated water**

### **Subdivision 2        Project of regional significance**

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

The chief executive may consider a particular project to be a project of regional significance for the plan area only if the chief executive considers the project is significant for a region in the plan area, having regard to the following—

- (a) the outcomes under chapter 3;
- (b) the economic or social impact the project will have on the region;
- (c) the public interest and the welfare of people in the region;

- (d) any other relevant consideration.

### **Subdivision 3      Dealing with unallocated water generally**

#### **28      Particular unallocated water held as indigenous, strategic or general reserve**

Unallocated water in the plan area is held as—

- (a) for the Morning Inlet, Settlement Creek and Staaten River catchment areas—an indigenous reserve or a strategic reserve; or
- (b) for the Flinders River catchment, Gilbert River catchment and Gregory River subcatchment areas—an indigenous reserve, a strategic reserve or a general reserve; or
- (c) for any other area—a strategic reserve or a general reserve.

#### **29      Granting unallocated water**

The process for granting unallocated water is a process stated in the *Water Regulation 2016*, part 2, division 2, subdivision 2.

#### **30      Preparing and implementing process for granting unallocated water generally**

- (1) In preparing and implementing the process, the chief executive must consider the following—
  - (a) the purpose for which the water is required;
  - (b) the efficiency of existing and proposed water use practices;
  - (c) the extent to which water in the plan area is being taken under authorisations;

- 
- (d) the availability of an alternative water supply for the purpose for which the water is required;
  - (e) the impact the proposed taking of, or interfering with, the water may have on existing water users in the plan area;
  - (f) whether the proposed taking or interfering is likely to have a direct adverse effect on groundwater flows;
  - (g) the matters mentioned in section 23(1)(a) and (b).
- (2) Subsection (1) does not limit the matters the chief executive may consider.

## **Subdivision 4      Limitations on granting unallocated water from indigenous reserve**

### **32      Purpose for which indigenous unallocated water may be granted**

Unallocated water held as an indigenous reserve (*indigenous unallocated water*) may be granted only for helping indigenous communities in the Cape York Peninsula Region area, Flinders River catchment area, Gilbert River catchment area, Morning Inlet catchment area, Settlement Creek catchment area, Staaten River catchment area or the Gregory River subcatchment area to achieve their economic and social aspirations.

### **33      Volumetric limits for indigenous unallocated water**

The total of the annual volumetric limits for all water entitlements to take indigenous unallocated water from each area mentioned in schedule 6A, column 1, is stated opposite the area in column 2 of the schedule.

## **Subdivision 5      Limitations on granting unallocated water from strategic reserve**

### **34      When strategic unallocated water may be granted**

Unallocated water held as a strategic reserve (*strategic unallocated water*) may be granted only if it is to be taken—

- (a) from Lake Mary Kathleen, for any purpose; or
- (b) for a State purpose.

### **35      Volumetric limits for strategic unallocated water in Lake Mary Kathleen**

The total of the annual volumetric limits for all water entitlements to take strategic unallocated water from Lake Mary Kathleen is stated in schedule 7, part 1, column 2.

### **36      Volumetric limits for strategic unallocated water granted for State purpose**

The total of the annual volumetric limits for all water entitlements to take strategic unallocated water for a State purpose in a catchment area or subcatchment area mentioned in schedule 7, part 2, column 1, is stated opposite the area in schedule 7, part 2, column 2.

### **37      Period for which strategic unallocated water is granted for particular State purpose**

- (1) This section applies to water entitlements to take strategic unallocated water for either of the following State purposes—
  - (a) a coordinated project;
  - (b) a project of regional significance.
- (2) The volume of water is granted only for the life of the project and on conclusion of the project the volume of water returns to the strategic reserve.

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## **Subdivision 6      Limitations on granting unallocated water from general reserve**

### **38      Purpose for which general unallocated water may be granted**

Unallocated water held as a general reserve (*general unallocated water*) may be granted for any purpose.

### **39      Volumetric limits for general unallocated water**

The total of the annual volumetric limits for all water entitlements to take general unallocated water from a catchment area or subcatchment area mentioned in schedule 8, column 1, is stated opposite the area in schedule 8, column 2.

### **39A      Condition for general unallocated water in Flinders and Gilbert River catchments**

Water entitlements granted from the general reserve in the Flinders River and Gilbert River catchment areas must include—

- (a) at least 1 pass flow condition; and
- (b) a condition stating the transfer of water under the entitlement must be done in accordance with the group B water transfer rules.

## **Part 2                      Additional strategies for    surface water**

### **Division 1                Preliminary**

#### **40        Application of pt 2**

The strategies stated in this part apply to surface water in addition to the strategies stated in part 1.

#### **41        Decisions consistent with objectives**

Decisions about the allocation or management of surface water, other than a decision about a water permit, must be consistent with—

- (a) the environmental flow objectives; and
- (b) the water allocation security objectives.

#### **42        Assessing impact of decisions**

- (1) The prescribed assessment computer program's simulation for the simulation period is used to assess consistency with the environmental flow objectives and the water allocation security objectives.
- (2) If it is not practicable to use the prescribed assessment computer program, another assessment method approved by the chief executive may be used.
- (3) The chief executive may approve an assessment method for subsection (2) only if the chief executive is satisfied the method will assess consistency with the objectives at least as accurately as the prescribed assessment computer program.



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### 43 Limitations on interference with water

- (1) This section applies to an application, made under section 206 of the Act, for a water licence to interfere with, or increase the interference with, surface water in a watercourse, waterhole, lake or spring by impounding the flow of the water.
- (2) The application may be granted only if the purpose of the proposed interference or increase in interference is—
  - (a) to store water for stock or domestic purposes; or
  - (b) to provide a pumping pool to enable water to be taken under an authorisation; or
  - (c) to store water for a purpose not related to the taking of water under a water entitlement; or  
*Examples of a purpose for subsection (2)(c)—*
    - community landscaping or retaining water for flood mitigation purposes
  - (d) related to the granting of unallocated water under the process stated in the *Water Regulation 2016*, part 2, division 2, subdivision 2; or
  - (e) to provide improved security for town water supplies.
- (3) Also, the application may be granted only if—
  - (a) the chief executive is satisfied the proposed interference or increase in interference is necessary for a purpose mentioned in subsection (2); and
  - (b) the proposed storage capacity is no greater than is necessary for the purpose of the proposed interference or increase in interference having regard to—
    - (i) the impact the proposed interference or increase in interference may have on the following—
      - (A) instream water levels;
      - (B) the natural movement of sediment;
      - (C) the bed and banks of a watercourse or lake;
      - (D) riparian vegetation;

- (E) habitat for native plants and animals;
  - (F) movement of fish and other aquatic species;
  - (G) cultural and ecological values of the watercourse, waterhole, lake or spring; and
- (ii) for a purpose mentioned in subsection (2)(a)—
- (A) existing water supplies for the property to which the application relates, including existing weirs, groundwater and dams taking overland flow water; and
  - (B) the availability of water at the proposed storage site; and
- (c) for a purpose mentioned in subsection (2)(e)—
- (i) the chief executive is satisfied that approving the application would not adversely impact other water users or the outcomes of the plan; and
  - (ii) there is a demonstrated need for an increased reliability of the water supply.
- (4) However, the application must not be granted if the application is for a proposed interference or increase in interference for a purpose mentioned in subsection (2)(b) or (c) and the proposed storage capacity is greater than—
- (a) for a purpose mentioned in subsection (2)(b)—10ML; or
  - (b) for a purpose mentioned in subsection (2)(c)—250ML.
- (5) If the application is for a Flinders River or Gilbert River catchment area general reserve related water licence and the application is granted, the water licence must include at least 1 pass flow condition.
- (6) In this section—
- Flinders River or Gilbert River catchment area general reserve related water licence*** means a water licence to interfere with water that is related to a water entitlement to

take unallocated water from the general reserve in the Flinders River or Gilbert River catchment areas.

*pumping pool* means a pool of water near a pump in a watercourse, lake or spring that ensures the water level of the watercourse, lake or spring is appropriate to enable the pump to function properly.

## **Division 2                      Strategies for supplemented surface water only**

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

- (1) In deciding the infrastructure operating rules to be included in the resource operations plan for water infrastructure for supplemented surface water, the chief executive must consider—
  - (a) the impact of the infrastructure’s operation on the following—
    - (i) instream water levels;
    - (ii) bed and banks of watercourses;
    - (iii) riparian vegetation; and
  - (b) the extent to which artificial variations in instream water levels and flows may adversely affect natural ecosystems; and
  - (c) the impact of the transfer of water between watercourses; and
  - (d) the likelihood of fish deaths caused by the operation of the infrastructure; and
  - (e) the matters mentioned in section 23(1)(a) and (b).
- (2) Subsection (1) does not limit the matters the chief executive may consider.

## **Division 3                      Strategies for unsupplemented    surface water only**

### **Subdivision 1              Preliminary**

#### **56              Taking water for stock or domestic purposes**

- (1) For section 20A(5) of the Act, an owner of land may take water, in any way, from a watercourse (other than a part of a watercourse used for distribution of water by a scheme licence holder), lake or spring in the plan area for stock or domestic purposes.

*Editor's note—*

Maps of the parts of watercourses used for distribution of water by a scheme licence holder (supplemented zones) are included in the resource operations plan (attachment 3) which is available on the department's website.

- (2) In this section—

***scheme licence holder*** means—

- (a) the holder of a resource operations licence for the Julius Dam Water Supply Scheme; or
- (b) the holder of a resource operations licence for the Moondarra Dam Water Supply Scheme; or
- (c) the holder of a distribution operations licence for the Julius Dam and Moondarra Dam water supply schemes.

#### **57              Restrictions on taking water from waterhole or lake**

- (1) This section applies to the chief executive in making a decision about a water licence to take unsupplemented surface water from a waterhole or lake.
- (2) The chief executive must—
  - (a) consider the impact the taking may have on the cultural or ecological values of the waterhole or lake; and

- 
- (b) impose a condition on the licence about maintaining the cultural or ecological values of the waterhole or lake.

*Example for paragraph (b)—*

a condition that the water may be taken only if the water level in the waterhole or lake is above the level that is 0.5m below the level at which it naturally overflows

- (3) However, the chief executive need not impose a condition mentioned in subsection (2)(b) if the chief executive is satisfied—
  - (a) the taking of water from the waterhole or lake will not adversely affect its cultural or ecological values; or
  - (b) for an existing water licence—the holder of the licence would suffer economic hardship if the condition were imposed.

## **Subdivision 2      Unsupplemented surface water that was groundwater in aquifers**

### **58      Application of sdiv 2**

This subdivision applies to groundwater declared to be water in a watercourse under section 8 (*declared water*).

### **59      Existing water licences for declared water**

- (1) This section applies to an existing water licence to take declared water.
- (2) At the commencement of this plan, the licence is taken to be a water licence to take unsupplemented surface water.
- (3) The chief executive must amend the licence to ensure it is consistent with the requirements, under subdivision 4, applying to water licences to take unsupplemented surface water.

## **60 Taking declared water using existing water bores authorised**

- (1) This section applies to an owner of an existing water bore that takes declared water if the owner did not, before the commencement of this plan, require a water licence to take the water.
- (2) The owner may continue to use the bore to take the declared water for 1 year after the commencement of this plan.
- (3) Also, if the owner gives the chief executive notice, in the approved form, of the water bore and the taking of water using the bore, the owner may continue to use the bore to take the declared water—
  - (a) after the notice is given; and
  - (b) until the owner is granted a water licence under section 61.
- (4) Subsections (2) and (3) do not authorise the owner to take more than the relevant annual volumetric limit of declared water for the owner.
- (5) In this section—

*relevant annual volumetric limit*, of declared water for an owner of an existing water bore that takes declared water, means the annual volume of declared water the owner was taking before 17 October 2003.

## **61 Granting water licences for authorities under s 60**

- (1) The chief executive must, under section 212 of the Act, grant a water licence to take unsupplemented surface water to a person authorised under section 60(3) to continue to take declared water.
- (2) The licence must be consistent with subdivision 4.
- (3) However, despite section 74, the annual volumetric limit for the licence must be the relevant annual volumetric limit of declared water for the owner under section 60.

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

### **69      Application of sdiv 4**

This subdivision applies to a water licence to take, or interfere with, unsupplemented surface water in a watercourse, lake or spring.

### **70      Water licence to take unsupplemented surface water**

A water licence to take unsupplemented surface water must state the following—

- (a) the purpose for which water may be taken under the licence;
- (b) the maximum rate at which water may be taken under the licence;
- (c) the daily volumetric limit for the licence;
- (d) the annual volumetric limit for the licence;
- (e) if a condition, including, for example, a flow condition or a condition about storing water taken under the licence, applies to the licence—the condition.

### **71      Purpose to be stated on water licence**

The purpose stated on a water licence to take unsupplemented surface water must be—

- (a) if the intended use for the water is, or the licence is an existing water licence and the purpose stated on the licence is, stock, domestic, irrigation, stock intensive, agriculture or a similar purpose—‘rural’; or
- (b) otherwise—‘any’.

## 72 Maximum rates for taking unsupplemented surface water

- (1) The maximum rate at which unsupplemented surface water may be taken under a water licence is—
  - (a) for a licence that states a maximum rate—the stated rate; and
  - (b) for a licence, other than a licence mentioned in section 59 or granted under section 61, that does not state a maximum rate but for which a related development permit for the licence—
    - (i) states a pump size mentioned in schedule 12, column 1—the rate stated for the pump size in schedule 12, column 2; or
    - (ii) states a pump size other than a pump size mentioned in schedule 12, column 1—the rate decided by the chief executive having regard to the rates stated for similar pump sizes in schedule 12, column 2; and
  - (c) for a licence other than a licence to which paragraph (a) or (b) applies—the rate decided by the chief executive having regard to—
    - (i) the nature of the licence; and
    - (ii) an estimate or measurement of the rate at which water can be taken under the licence.
- (2) However, for subsection (1)(b), if the licence holder satisfies the chief executive that the maximum rate at which water can be taken is different from the rate decided under the subsection, the maximum rate at which unsupplemented surface water may be taken under the licence is the rate decided by the chief executive having regard to the following—
  - (a) the conditions under which the water may be taken;
  - (b) the water taking capacity of the pump to which the development permit relates (the *existing pump*);



- (c) the irrigation or water distribution system related to the existing pump during the period of not more than 10 years immediately before the commencement of this plan;
- (d) the efficiency of the water use mentioned in paragraph (c).

### **73 Daily volumetric limit for taking unsupplemented surface water**

- (1) The daily volumetric limit for a water licence to take unsupplemented surface water is—
  - (a) for a licence that states a daily volumetric limit—the stated volume; and
  - (b) for a licence, other than a licence mentioned in section 59 or granted under section 61, that does not state a daily volumetric limit but for which a related development permit for the licence—
    - (i) states a pump size mentioned in schedule 12, column 1—the daily volumetric limit stated in schedule 12, column 3, for the pump size; or
    - (ii) states a pump size other than a pump size mentioned in schedule 12, column 1—the daily volumetric limit decided by the chief executive having regard to the daily volumetric limits stated for similar pump sizes in schedule 12, column 3; and
  - (c) for a licence other than a licence to which paragraph (a) or (b) applies—the daily volumetric limit decided by the chief executive having regard to—
    - (i) the nature of the licence; and
    - (ii) an estimate or measurement of the rate at which water can be taken under the licence.
- (2) However, for subsection (1)(b), if the licence holder satisfies the chief executive that the water taking capacity of the pump

[s 74]

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is different from the daily volumetric limit decided under the subsection, the daily volumetric limit for the licence is the daily volumetric limit decided by the chief executive having regard to the following—

- (a) the conditions under which the water may be taken;
  - (b) the water taking capacity of the pump to which the development permit relates (the *existing pump*) under normal operating conditions;
  - (c) the irrigation or water distribution system related to the existing pump during the period of not more than 10 years immediately before the commencement of this plan;
  - (d) the efficiency of the water use mentioned in paragraph (c).
- (3) The chief executive must ensure the daily volumetric limit for a water licence to take unsupplemented surface water is not more than the total volume that could be taken in a day at the maximum rate decided, for the licence, under section 72.

## **74 Annual volumetric limit for taking unsupplemented surface water**

The annual volumetric limit for a water licence to take unsupplemented surface water is—

- (a) for a licence that states the volume of water that may be taken in a period of 12 months—the stated volume; and
- (b) for a licence that states the area that may be irrigated under the licence—the volume decided by the chief executive having regard to the volume of water required for the licence’s intended purpose but not more than the volume, expressed in megalitres, calculated by multiplying the area, in hectares, by 12; and
- (c) for a licence other than a licence to which paragraph (a) or (b) applies—the volume decided by the chief executive having regard to the following—

- (i) the conditions under which water may be taken under the licence;
- (ii) the water taking capacity of any works for taking water under the licence;
- (iii) the volume of water required for the licence's intended purpose;
- (iv) 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, immediately before the commencement of this plan;
- (v) the efficiency of the use of the water mentioned in subparagraph (iv).

## **75 Conditions for taking unsupplemented surface water**

- (1) The chief executive may impose on a water licence to take unsupplemented surface water any condition the chief executive is satisfied is necessary to ensure the purposes and outcomes of this plan are achieved.
- (2) In deciding the flow conditions under which water may be taken under an existing water licence to take unsupplemented surface water, the chief executive must have regard to the conditions already applying to the licence.

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

- (1) Without limiting section 75(1), the chief executive may impose, on a water licence to take unsupplemented water, a condition that states the works that may be used to store the water taken under the licence.
- (2) In deciding whether to impose the condition mentioned in subsection (1), the chief executive must have regard to the capacity of any existing overland flow works being used to store the water.

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

- (1) Subsection (2) applies to any environmental management rules, infrastructure operating rules or water sharing rules included in the resource operations plan.
- (2) The chief executive must—
  - (a) amend water licences in existence at the commencement of the resource operations plan to impose conditions giving effect to the rules; and
  - (b) impose conditions giving effect to the rules on water licences granted after the commencement.

## **Subdivision 5 Regulation of overland flow water**

### **78 Limitation on taking overland flow water—Act, s 20(2)**

- (1) A person may not take overland flow water other than—
  - (a) for stock or domestic purposes; or
  - (b) for any purpose using works that allow the taking of overland flow water and have a capacity of not more than 250ML; or
  - (c) under a water licence; or
  - (d) overland flow water of not more than the amount necessary to satisfy the requirements of—
    - (i) an environmental authority issued under the *Environmental Protection Act 1994*; or
    - (ii) a development permit for carrying out an environmentally relevant activity, other than a mining or petroleum activity, under the *Environmental Protection Act 1994*; or
  - (e) overland flow water that is contaminated agricultural run-off water; or
  - (f) under an authority under section 79.
- (2) In this section—

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*contaminated agricultural run-off water* has the meaning given by the ‘Code for Assessable Development for Operational Works for Taking Overland Flow Water’.

*Editor’s note—*

A copy of the code is available on the department’s website.

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

- (1) This section applies to the owner of land on which existing overland flow works are situated, other than works for taking only the overland flow water that may be taken under section 78(1)(a) to (e).
- (2) The owner may continue to use the existing overland flow works to take overland flow water for 1 year after the commencement of this plan.
- (3) Also, if the owner gives the chief executive notice of the existing overland flow works, in the approved form, and any further information reasonably required by the chief executive about the works, the owner may continue to use the works to take overland flow—
  - (a) after the notice and information are given; and
  - (b) until the owner is granted a water licence under the Act.
- (4) In this section—

*existing overland flow works* includes works that—

  - (a) are a reconfiguration of existing overland flow works (the *original works*); and
  - (b) do not increase the average annual volume of water taken above the average annual volume taken using the original works.

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

- (1) This section applies if the resource operations plan states a process for—
  - (a) granting, under section 212 of the Act, a water licence to replace an authority under section 79(3) for existing overland flow works; or
  - (b) amending a water licence mentioned in paragraph (a).
- (2) In following the process and granting or amending a water licence, the chief executive—
  - (a) must consider—
    - (i) the average annual volume of overland flow water that could have been taken, immediately before the commencement of this plan, using the existing overland flow works to which the authority relates; and
    - (ii) the annual volumes of overland flow water estimated by the chief executive to have been taken by the works during the period, of not more than 10 years, immediately before the commencement; and
  - (b) may consider the extent to which the works, immediately before the commencement, allowed—
    - (i) the taking of other water under another authorisation; or
    - (ii) the storage of other water taken under another authorisation.
- (3) Subsection (2) does not limit the matters the chief executive may consider.
- (4) The process must provide that the chief executive may require the authority or licence holder to give the chief executive a certificate, from a registered professional engineer, stating information about the works, including the capacity of the works and the rate at which the works may take water.

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## **Part 3                      Additional strategies for    groundwater**

### **Division 1                Preliminary**

#### **82            Application of pt 3**

The strategies stated in this part apply to groundwater in addition to the strategies stated in part 1.

### **Division 2                Strategies for Nicholson and    Einasleigh groundwater    management areas**

#### **84            Limitation on taking or interfering with water—Act,    s 20(2)**

In the Nicholson groundwater management area and the Einasleigh groundwater management area, a person may not take or interfere with groundwater other than—

- (a) for stock or domestic purposes; or
- (b) for monitoring the quality of the water or controlling the salinity of the water; or
- (c) under a water licence or water permit.

#### **85            Water licence to take groundwater**

- (1) A water licence to take groundwater in the Nicholson groundwater management area or the Einasleigh groundwater management area must state—
  - (a) the purpose for which the water may be taken under the licence; and
  - (b) the annual volumetric limit for the licence.

- (2) Despite subsection (1)(b), a water licence to take groundwater for dewatering may, but need not, state an annual volumetric limit.

## **86 Purpose to be stated on water licence**

The purpose stated on a water licence to take groundwater in the Nicholson groundwater management area or the Einasleigh groundwater management area must be—

- (a) if the intended use for the water is, or the licence is an existing water licence and the purpose stated on the licence is, stock, domestic, irrigation, stock intensive, agriculture or a similar purpose—‘rural’; or
- (b) if the intended use for the water is, or the licence is an existing water licence and the purpose stated on the licence is, dewatering or a similar purpose—‘dewatering’; or
- (c) otherwise—‘any’.

## **87 Amendment of water licences to state annual volumetric limit**

- (1) This section applies to an existing water licence to take groundwater in the Nicholson groundwater management area or the Einasleigh groundwater management area that does not state the maximum annual volume of water that may be taken under the licence.
- (2) The chief executive may, under section 217 of the Act, amend the licence to state an annual volumetric limit.
- (3) In deciding the annual volumetric limit, the chief executive must have regard to the following—
  - (a) the conditions of the licence;
  - (b) the efficiency of the current use of water having regard to industry best practice in efficient water use;
  - (c) the impact the taking is having on—



- (i) the flow of water to watercourses or springs; and
- (ii) groundwater levels;
- (d) the annual volume of water estimated by the chief executive to have been taken under the licence immediately before 17 October 2003;
- (e) the impact the taking is having on water entitlements and other authorities to take or interfere with water;
- (f) the availability of an alternative water supply for the purpose for which the water is being taken;
- (g) the total annual volumetric limits for water licences in the area;
- (h) if the holder of the licence has undertaken a pumping test for the existing bore or bores to which the licence relates—the results of the test.

## **88 Conditions for taking groundwater**

- (1) This section applies to a water licence to take groundwater in the Nicholson groundwater management area or the Einasleigh groundwater management area granted after the commencement of this plan.
- (2) The chief executive may impose conditions on the licence requiring the holder of the licence—
  - (a) to provide and maintain access to alternative water supplies for other persons, authorised under the Act to take water, who would be significantly adversely affected by the granting of the licence; and
  - (b) to carry out and report on a stated activity for monitoring the impact of taking groundwater under the licence.

## **89 Taking water using existing water bores authorised**

- (1) The owner of an existing water bore in the Einasleigh groundwater management area may continue to use the bore

to take groundwater for 1 year after the commencement of this plan.

- (2) Also, if the owner gives the chief executive notice, in the approved form, of the water bore and the taking of water using the bore, the owner may continue to use the bore to take groundwater—
  - (a) after the notice is given; and
  - (b) until the owner is granted a water licence under section 90.
- (3) Subsections (1) and (2) do not authorise the owner to take more than the relevant annual volumetric limit of groundwater for the owner.
- (4) In this section—

*relevant annual volumetric limit*, of groundwater for an owner of an existing water bore in the Einasleigh groundwater management area, means the annual volume of groundwater the owner was taking in the Einasleigh groundwater management area before 17 October 2003.

## **90 Granting water licences for authorities under s 89**

- (1) The chief executive must, under section 212 of the Act, grant a water licence to a person authorised under section 89(2) to continue taking groundwater.
- (2) The licence must be consistent with this division.

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## **Chapter 6      Monitoring and reporting requirements**

### **91      Monitoring and reporting requirements**

- (1) To help the Minister assess the effectiveness of the management strategies for achieving the outcomes mentioned in chapter 3, the resource operations plan must state—
  - (a) the monitoring requirements for water and natural ecosystems for this plan; and
  - (b) the reporting requirements for this plan for operators of infrastructure interfering with water in the plan area.
- (2) Also, a monitoring requirement for this plan is to monitor groundwater levels in the plan area.
- (3) Subsections (1) and (2) do not limit the monitoring requirements the chief executive may impose for this plan.

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

### **95      Implementation schedule**

- (1) This section states the proposed arrangements for implementing this plan.
- (2) Within 1 year after the commencement of this plan, it is proposed to prepare a resource operations plan—
  - (a) to convert interim water allocations for the Julius Dam Water Supply Scheme to water allocations; and
  - (b) to replace the Lake Moondarra authority with water allocations; and
  - (c) to grant water allocations for distribution loss; and

- (d) to amend existing water licences to be consistent with this plan; and
  - (e) for water for the Julius Dam Water Supply Scheme and water in Lake Moondarra—to make environmental management rules, infrastructure operating rules, water sharing rules, water allocation change rules and seasonal water assignment rules; and
  - (f) to establish a process to deal with unallocated water available for future water requirements in the plan area; and
  - (g) to establish a process for granting or amending water licences to take overland flow water; and
  - (h) to implement the monitoring requirements mentioned in chapter 6.
- (3) Within 3 years after the commencement of this subsection, it is proposed to commence a process to make unallocated water available for future water requirements in the plan area.

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

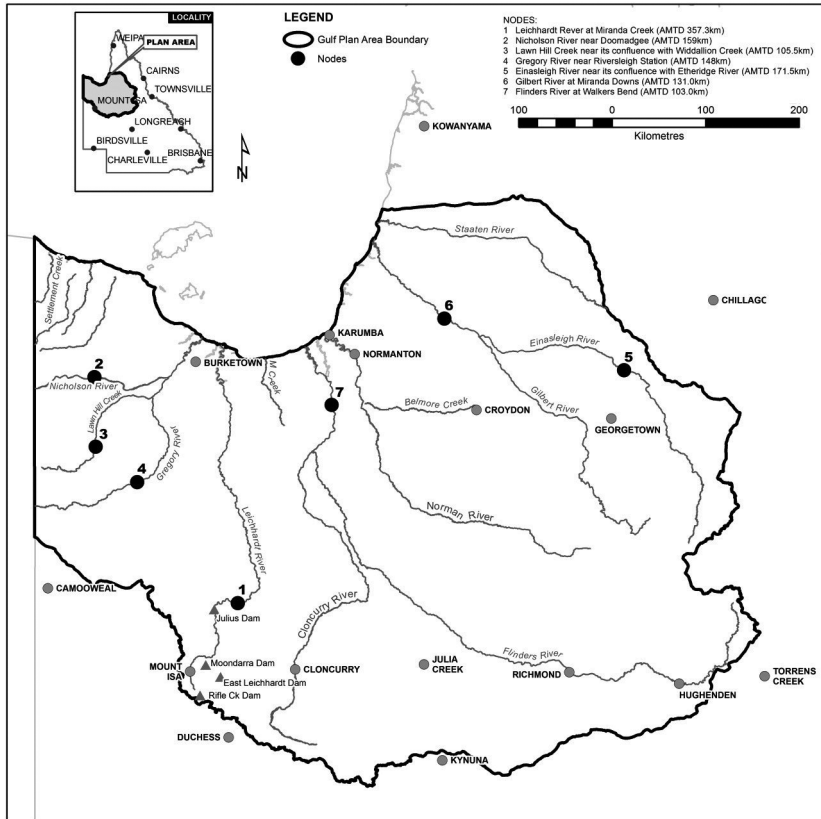
The following types of amendment may be made to this plan under section 57(b) of the Act—

- (a) an amendment or addition of an environmental flow objective if the amendment or addition achieves an equivalent or improved ecological outcome without adversely affecting the water allocation security objectives or the outcomes under chapter 3;
- (b) an amendment or addition of a water allocation security objective if the amendment or addition does not adversely affect water allocations, environmental flow objectives or the outcomes under chapter 3;
- (c) an amendment or addition of a node;
- (d) an amendment to subdivide a catchment area or subcatchment area;
- (e) an amendment or addition of a priority group;

- (f) an amendment or addition of a water allocation group;
- (g) an amendment of the capacity mentioned in section 78(1)(b);
- (h) an amendment or addition of a monitoring or reporting requirement under chapter 6.

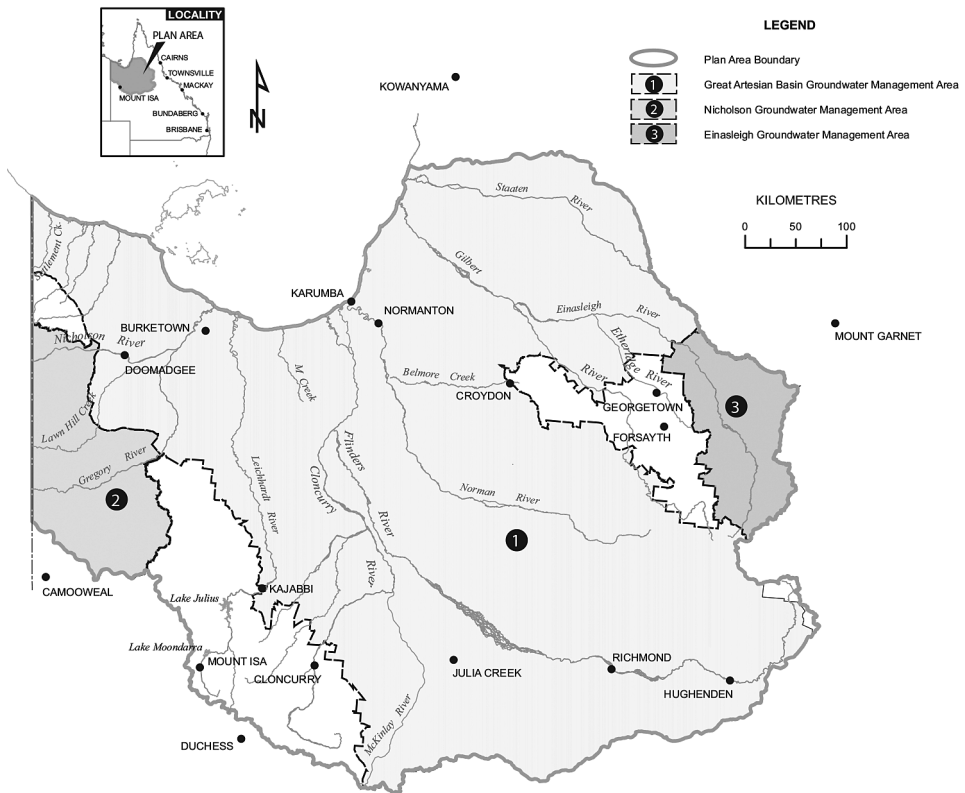
# Schedule 1 Plan area

sections 4 and 10



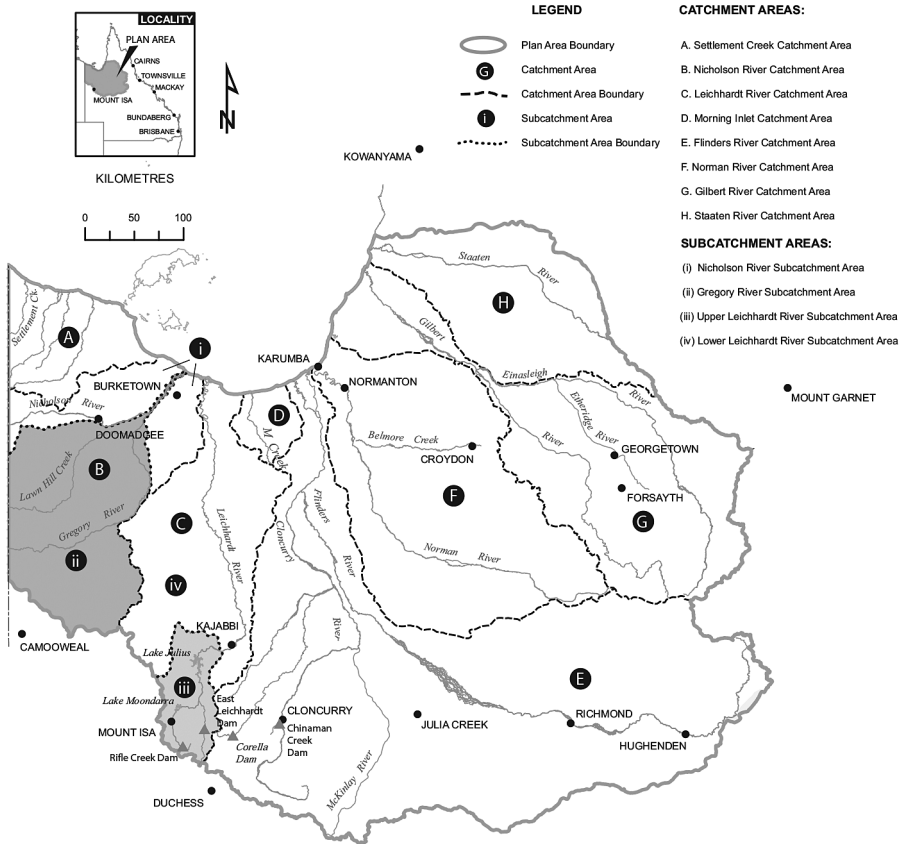
# Schedule 2 Groundwater management areas

## section 5



# Schedule 3 Catchment areas and subcatchment areas

sections 6 and 7





## Schedule 4      Nodes

section 10

<b>Column 1</b>	<b>Column 2</b>
<b>Node</b>	<b>Location</b>
1	Leichhardt River at Miranda Creek (at AMTD 357.3km)
2	Nicholson River near Doomadgee (at AMTD 159km)
3	Lawn Hill Creek near its confluence with Widdallion Creek (at AMTD 105.5km)
4	Gregory River near Riversleigh Station (at AMTD 148km)
5	Einasleigh River near its confluence with Etheridge River (at AMTD 171.5km)
6	Gilbert River at Miranda Downs (at AMTD 131.0km)
7	Flinders River at Walkers Bend (at AMTD 103.0km)

## **Schedule 5      Environmental flow objectives**

section 18

### **Part 1                      Low flow objectives**

- 1 At node 1—
  - (a) the number of periods of no flow of more than 1 month but less than 6 months in the simulation period be not more than 150; and
  - (b) the number of periods of no flow of 6 months or more in the simulation period be not more than 80; and
  - (c) the number of days on which the daily flow equals or exceeds the median non-zero daily flow, expressed as a percentage of the number of days on which the daily flow for the pre-development flow pattern equals or exceeds the median non-zero daily flow, in the simulation period be at least 50%.
- 2 At node 6, the proportion of no flow days in the simulation period be no more than 28%.
- 3 At node 7, the proportion of no flow days in the simulation period be no more than 70%.

### **Part 2                      Medium to high flow objectives**

- 1 At each node mentioned in table 2, column 1—
  - (a) the mean annual flow in the simulation period, expressed as a percentage of the mean annual flow for the pre-development flow pattern in the simulation period, be at least the percentage stated for the node in column 2 of the table; and

- (b) the median annual flow ratio in the simulation period, expressed as a percentage of the median annual flow for the pre-development flow pattern in the simulation period, be at least the percentage stated for the node in column 3 of the table; and
- (c) the 10% daily flow be equalled or exceeded on at least the number of days in the simulation period, expressed as a percentage, stated for the node in column 4 of the table; and
- (d) the 1.5 year daily flow volume in the simulation period, expressed as a percentage of the 1.5 year daily flow volume for the pre-development flow pattern in the simulation period, be at least the percentage stated for the node in column 5 of the table; and
- (e) the 5 year daily flow volume in the simulation period, expressed as a percentage of the 5 year daily flow volume for the pre-development flow pattern in the simulation period, be at least the percentage stated for the node in column 6 of the table; and
- (f) the 20 year daily flow volume in the simulation period, expressed as a percentage of the 20 year daily flow volume for the pre-development flow pattern in the simulation period, be at least the percentage stated for the node in column 7 of the table.

**Table 2**

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>	<b>Column 5</b>	<b>Column 6</b>	<b>Column 7</b>
<b>Node</b>	<b>Mean annual flow</b>	<b>Median annual flow</b>	<b>10% daily flow</b>	<b>1.5 year daily flow volume</b>	<b>5 year daily flow volume</b>	<b>20 year daily flow volume</b>
1	63%	37%	5%	37%	70%	72%
6	93%	89.5%	–	93%	97%	98%
7	90%	78%	–	90%	96.5%	98%

## Part 3 Wet season flow objectives

- 1 At each node mentioned in table 3, column 1, the median wet season flow in the simulation period, expressed as a percentage of the median wet season flow for the pre-development flow pattern in the simulation period, be at least the percentage stated for the node in column 2 of the table.

**Table 3**

<b>Column 1</b>	<b>Column 2</b>
<b>Node</b>	<b>Median wet season flow</b>
6	90%
7	75%

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## **Schedule 6      Water allocation security objectives**

section 20

### **1      Taking supplemented surface water for Julius Dam Water Supply Scheme**

For water allocations to take supplemented surface water for the Julius Dam Water Supply Scheme—

- (a) the annual supplemented water sharing index be at least 95%; and
- (b) the extent to which the annual supplemented water sharing index is less than 100% be minimised; and
- (c) the monthly supplemented water sharing index be at least 95%; and
- (d) the extent to which the monthly supplemented water sharing index is less than 100% be minimised.

### **2      Taking supplemented surface water from Lake Moondarra**

For water allocations to take supplemented surface water from Lake Moondarra—

- (a) the annual supplemented water sharing index be at least 58%; and
- (b) the extent to which the annual supplemented water sharing index is less than 65% be minimised; and
- (c) the monthly supplemented water sharing index be at least 78%; and
- (d) the extent to which the monthly supplemented water sharing index is less than 85% be minimised.

## Schedule 6A Total volumes for indigenous unallocated water

section 33

Column 1	Column 2
Area	Total volume (ML)
Cape York Peninsula Region area	1,000
Flinders River catchment area	8,500
Gilbert River catchment area	17,000
Morning Inlet catchment area	50
Settlement Creek catchment area	1,500
Gregory River subcatchment area	1,000
Staaten River catchment area other than the part of the area that is within the Cape York Peninsula Region area	1,500

## Schedule 7      Total volumes for strategic unallocated water

sections 35 and 36

### Part 1      Water from Lake Mary Kathleen

Column 1	Column 2
Lake	Total volume
Lake Mary Kathleen	1,100ML

### Part 2      Water for State purpose

Column 1	Column 2
Catchment area or subcatchment area	Total volume
Flinders River catchment area	17,850ML
Gilbert River catchment area	5,000ML
Gregory River subcatchment area	5,000ML
Lower Leichhardt River subcatchment area	15,000ML
Morning Inlet catchment area	1,000ML
Nicholson River subcatchment area	4,282ML
Norman River catchment area	1,000ML
Settlement Creek catchment area	1,000ML
Staaten River catchment area	1,000ML

## **Schedule 8      Total volumes for general unallocated water**

section 39

<b>Column 1</b>	<b>Column 2</b>
<b>Catchment area or subcatchment area</b>	<b>Total volume</b>
Flinders River catchment area	239,650ML
Gilbert River catchment area	467,000ML
Gregory River subcatchment area	2,500ML
Lower Leichhardt River subcatchment area	15,000ML
Nicholson River subcatchment area	4,400ML
Norman River catchment area	3,000ML



## Schedule 12 Rates, volumetric limits and pump sizes

sections 72 and 73

Column 1	Column 2	Column 3
Pump size (mm)	Maximum rate (litres/second)	Daily volumetric limit (ML)
32	8	0.6
40	16	1
50	25	1.5
65	46	3.5
80	65	3.9
100	95	6.9
125	120	7.8
150	150	12.1
200	220	15.6
250	300	21.6
300	350	25.9
350	400	30.2
375 to 400	500	37.2
500	660	47.5
600 to 610	1,200	86.4
650 to 660	1,700	120
700 to 720	2,100	150
750 to 770	2,500	180

Schedule 12

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<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
<b>Pump size (mm)</b>	<b>Maximum rate (litres/second)</b>	<b>Daily volumetric limit (ML)</b>
780 to 810	2,800	200

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## Schedule 13 Dictionary

### section 3

**1.5 year daily flow volume**, for a node, means the daily flow, at the node, that has a 67% probability of being reached at least once a year.

**5 year daily flow volume**, for a node, means the daily flow, at the node, that has a 20% probability of being reached at least once a year.

**10% daily flow**, for a node, means the daily flow, at the node, that is equalled or exceeded on 10% of the days in the simulation period for the pre-development flow pattern.

**20 year daily flow volume**, for a node, means the daily flow, at the node, that has a 5% probability of being reached at least once a year.

**adopted middle thread distance** means the distance in kilometres, measured along the middle of a watercourse, that a specific point in the watercourse is, at the commencement of this plan, from—

- (a) the watercourse's mouth; or
- (b) if the watercourse is not a main watercourse—the watercourse's confluence with its main watercourse.

**AMTD** means adopted middle thread distance.

**annual flow volume**, for a node, means the total volume of flow, at the node, in a period of 12 months starting on 1 July.

**annual supplemented water sharing index**, for water allocations to take supplemented surface water in a particular priority group, means the percentage of years in the simulation period in which the allocations are fully supplied.

**annual volumetric limit**, for a water licence, means the maximum volume of water that may be taken under the licence in the water year for the licence.

**authorisation** means a licence, permit, interim water allocation or other authority to take water given under the Act or the repealed Act, other than a permit for stock or domestic purposes.

**average volume of water allowed to be taken under authorisations** means the total volume of water simulated to have been taken under the authorisations during the simulation period if the authorisations were in existence for the whole of the simulation period, divided by the number of years in the simulation period.

**bed sand** means the sediment below the bed of a watercourse through which water percolates.

**Cape York Peninsula Region area** means the part of the plan area that is within the Cape York Peninsula Region as defined under the *Cape York Peninsula Heritage Act 2007*.

**catchment area** see section 6.

**coordinated project** means a coordinated project under the *State Development and Public Works Organisation Act 1971*.

**daily flow**, for a node, means the volume of water that flows past the node in a day.

**daily volumetric limit**, for a water licence, means the maximum volume of water that may be taken under the licence in a day.

**declared water** see section 58.

**dewatering** means lowering water levels to prevent water entering a mine.

**distribution loss** means water lost in relation to the distribution of water for a water allocation through water infrastructure, including, for example—

- (a) water lost by evaporation, leakage or temporary damage of water infrastructure; and
- (b) water lost by scouring carried out to clear a blockage in water infrastructure or for the regular maintenance or cleaning of water infrastructure; and
- (c) water lost through a pressure relief system.

***East Leichhardt Dam*** means the dam that impounds the eastern branch of the Leichhardt River at AMTD 33.0km.

***environmental flow objectives*** means the environmental flow objectives stated in schedule 5 for surface water in the Upper Leichhardt subcatchment area.

***existing overland flow works*** means works that allow the taking of overland flow water and either—

- (a) were in existence on 6 June 2003; or
- (b) were started, but not completed by 6 June 2003 and—
  - (i) if a variation to a moratorium notice was granted for the works under section 27 of the Act—have been, or are being, completed in accordance with the moratorium notice, as varied; or
  - (ii) if subparagraph (i) does not apply—were completed by 17 October 2003; or
- (c) for works to which the moratorium notice published on 6 June 2003 did not apply, were started before the commencement of this plan.

***existing water bore*** means a water bore that—

- (a) is able to take groundwater; and
- (b) was in existence on 17 October 2003.

***existing water licence*** means a water licence in force at the commencement of this plan.

***flow day***, for a node, means a day in the simulation period in which there is a flow of water in the watercourse at the node.

***general unallocated water*** see section 38.

***groundwater*** see section 11(2).

***groundwater management area*** see section 5.

***indigenous unallocated water*** see section 32.

***IQQM computer program*** means the department's Integrated Quantity and Quality Modelling computer program, and associated statistical analysis and reporting programs, that simulate daily stream flows, flow management, storages,

releases, instream infrastructure, water diversions, water demands and other hydrologic events in the plan area.

**Julius Dam** means the dam that impounds the Leichhardt River at AMTD 390.9km.

**Julius Dam Water Supply Scheme** means the scheme for supplying water in the Julius Dam under an interim resource operations licence or resource operations licence.

**Lake Mary Kathleen** means the part of the eastern branch of the Leichhardt River that is impounded by the East Leichhardt Dam.

**Lake Moondarra** means the part of the Leichhardt River that is impounded by the Moondarra Dam at AMTD 465.1km.

**Lake Moondarra authority** means the authority for taking water from Lake Moondarra—

- (a) granted under the Order in Council published in the gazette on 14 August 1976 at page 1987; and
- (b) continued under section 1089 of the Act.

**mean annual flow**, for a node, means the total volume of flow, at the node, in the simulation period divided by the number of years in the simulation period.

**median annual flow**, for a node, means the annual flow volume, at the node, that is equalled or exceeded in 50% of years in the simulation period.

**median non-zero daily flow**, for a node, means the daily flow, at the node, that is equalled or exceeded on 50% of the flow days for the node in the pre-development flow pattern.

**median wet season flow**, for a node, means the total volume of flow during the months of January, February and March that is equalled or exceeded in 50% of years in the simulation period.

**monthly supplemented water sharing index**, for water allocations to take supplemented surface water in a particular priority group, means the percentage of months in the simulation period in which the allocations are fully supplied.

**node** see section 10.

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***operator of infrastructure for interfering with water*** means—

- (a) the holder of a resource operations licence or a distributions operations licence; or
- (b) an operator of infrastructure for interfering with water, mentioned in the resource operations plan.

***pass flow condition*** means a condition on a water entitlement that provides for flows consistent with the environmental flow objectives.

***period of no flow***, for a node, means a period in which the watercourse has ceased to flow at the node.

***plan area*** means the area shown as the plan area on the map in schedule 1.

***pre-development flow pattern*** means the pattern of water flows, during the simulation period, decided by the chief executive using the prescribed assessment computer program as if—

- (a) there were no dams or other water infrastructure in the plan area; and
- (b) no water was taken under authorisations in the plan area.

***prescribed assessment computer program*** means—

- (a) for the Flinders and Gilbert River catchments—the Source computer program; or
- (b) for the Leichhardt River catchment—the IQQM computer program.

***project of regional significance*** means a project the chief executive considers, under section 27, to be a project of regional significance for this plan.

***proportion of no flow days***, for a node, means the total number days on which the flow at the node is less than 5ML/day, expressed as a percentage of the total number of days, in the simulation period.

***related development permit***, for a water licence, means the development permit for the works for taking water under the licence.

***resource operations plan*** means the resource operations plan to implement this plan.

*Note—*

See the Act, section 1266.

***Rifle Creek Dam*** means the dam that impounds Rifle Creek at AMTD 3.2km.

***simulation period*** means the period from 1 January 1890 to 20 November 2003.

***Source computer program*** means the computer program known as Source, and associated statistical analysis and reporting programs, that simulate daily stream flows, flow management, storages, releases, instream infrastructure, water diversions, water demands and other hydrologic events in the plan area.

***started***, for existing overland flow works, means—

- (a) construction of the works had physically begun or, if construction had not physically begun, a contract had been entered into to begin construction; and
- (b) an independently verifiable construction program existed for progressive construction towards completion of the works; and
- (c) detailed design plans existed showing, among other things, the extent of the works; and
- (d) if a permit under the *Local Government Act 1993*, section 940 was required for the works—the permit had been issued; and
- (e) if a development permit was required for the works—the permit had been given.

***State purpose*** means—

- (a) a coordinated project; or
- (b) a project of regional significance; or



- (c) town water supply; or
- (d) ecotourism in the Cape York Peninsula region area, Morning Inlet catchment area, Settlement Creek catchment area, Staaten River catchment area or the Gregory River subcatchment area.

***strategic unallocated water*** see section 34.

***subcatchment area*** see section 7.

***supplemented surface water*** means surface water supplied under an interim resource operations licence, resource operations licence or other authority to operate water infrastructure in relation to—

- (a) the Julius Dam Water Supply Scheme; or
- (b) Lake Moondarra.

***surface water*** see section 11(1).

***this plan*** means this water resource plan.

***unsupplemented surface water*** means surface water that is not supplemented surface water.

***water allocation security objectives*** means the water allocation security objectives stated in schedule 6 for supplemented surface water in the Upper Leichhardt subcatchment area.

***waterhole*** means a part of a watercourse that contains water after the watercourse ceases to flow, other than a part of a watercourse that is within the storage area of a dam on the watercourse.

***works that allow the taking of overland flow water*** include—

- (a) storages, sumps, drains, embankments, channels and pumps for taking, or that can be used for taking, overland flow water; and
- (b) storages that are connected to the works mentioned in paragraph (a); and
- (c) works that make, or that can be used to make, the original connection between the storages mentioned in paragraph (b) and the works mentioned in paragraph (a).