



*Water Act 2000*

# **Water Plan (Boyne River Basin) 2013**

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Queensland

# Water Plan (Boyne River Basin) 2013

## Contents

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		Page
<b>Chapter 1</b>	<b>Preliminary</b>	
1	Short title .....	5
2	Purposes of plan .....	5
3	Definitions .....	5
<b>Chapter 2</b>	<b>Plan area and water to which plan applies</b>	
4	Plan area .....	6
5	Subcatchment areas .....	6
6	Information about areas .....	6
7	Nodes .....	6
8	Water to which plan applies .....	7
<b>Chapter 3</b>	<b>Outcomes for sustainable management of water</b>	
9	Outcomes for water in plan area .....	7
10	Economic outcomes .....	7
11	Social outcomes .....	8
12	Ecological outcomes .....	9
<b>Chapter 4</b>	<b>Performance indicators and objectives</b>	
13	Performance indicators for environmental flow objectives .....	10
14	Environmental flow objectives .....	10
15	Performance indicator for water allocation security objective .....	10
16	Water allocation security objective .....	11
<b>Chapter 5</b>	<b>Strategies for achieving outcomes</b>	
<b>Part 1</b>	<b>Preliminary</b>	
17	Decisions to be consistent with objectives .....	11
18	Assessing impact of decisions .....	11
<b>Part 2</b>	<b>Unallocated water</b>	
<b>Division 1</b>	<b>Strategic water infrastructure reserve, strategic reserve and general reserve</b>	

Contents

---

19	Unallocated water held as strategic water infrastructure reserve, strategic reserve and general reserve . . . . .	12
20	Purpose for which unallocated water may be granted . . . . .	12
21	Reserve volumes . . . . .	12
22	Period for which water is granted for particular State purpose . .	13
23	Projects that may be considered to be of regional significance .	13
<b>Division 2</b>	<b>Process for granting unallocated water</b>	
24	Process for granting unallocated water . . . . .	14
<b>Division 3</b>	<b>Limitation on granting unallocated water</b>	
25	Pass flow conditions for taking unallocated water . . . . .	14
<b>Part 3</b>	<b>Authorised taking or interfering with water without water entitlement</b>	
26	Taking water for stock or domestic purposes . . . . .	15
27	Limitation on taking or interfering with water . . . . .	15
<b>Part 4</b>	<b>Interference with water in a watercourse, lake or spring</b>	
28	Application of pt 4 . . . . .	15
29	Limitations on interference with water . . . . .	15
30	Interference with water to enable taking of water for stock or domestic purposes . . . . .	16
31	Interference with water for provision of pumping pool . . . . .	16
32	Interference with water to improve security for town water supply	17
33	Interference with water related to the granting of unallocated water	17
<b>Part 6</b>	<b>Water licences to take water from watercourse, lake or spring</b>	
<b>Division 1</b>	<b>Form of water licences to take water from a watercourse, lake or spring</b>	
35	Elements of water allocation to take unsupplemented water . . .	18
<b>Division 2</b>	<b>Criteria for amending water licences to achieve plan outcomes</b>	
36	Definition for div 2 . . . . .	18
37	Daily volumetric limit for a water licence . . . . .	18
38	Conditions for amended water licences . . . . .	20
<b>Chapter 6</b>	<b>Monitoring and reporting requirements</b>	
39	Monitoring and reporting requirements . . . . .	20
<b>Chapter 7</b>	<b>Implementing and amending this plan</b>	
41	Implementation schedule . . . . .	20
42	Minor or stated amendment of plan—Act, s 57 . . . . .	21
<b>Chapter 8</b>	<b>Repeal</b>	
43	Repeal . . . . .	22

Contents

---

<b>Schedule 1</b>	<b>Plan area</b> .....	23
<b>Schedule 2</b>	<b>Pump sizes and rates</b> .....	24
<b>Schedule 3</b>	<b>Dictionary</b> .....	25



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# Water Plan (Boyne River Basin) 2013

## Chapter 1 Preliminary

### 1 Short title

This water plan (*this plan*) may be cited as the *Water Plan (Boyne River Basin) 2013*.

### 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;
- (e) to provide a framework for reversing, where practicable, degradation in natural ecosystems.

### 3 Definitions

The dictionary in schedule 3 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      Subcatchment areas**

- (1) Each part of the plan area that is shown as a subcatchment area on the map in schedule 1 is a *subcatchment area*.
- (2) A reference in this plan to a subcatchment area by name is a reference to the subcatchment area in schedule 1 with that name.

### **6      Information about areas**

The exact location of the boundaries of the plan area and subcatchment areas is held in digital electronic form by the department and may be accessed, free of charge, at each office of the department.

*Editor's note—*

The location of each office of the department is available at <[www.dnrm.qld.gov.au](http://www.dnrm.qld.gov.au)>.

### **7      Nodes**

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



## **8 Water to which plan applies**

This plan applies to water in a watercourse, lake or spring in the plan area.

# **Chapter 3 Outcomes for sustainable management of water**

## **9 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) or sections 10 to 12, the outcomes include the allocation and management of water in a way that—
  - (a) recognises the natural state of watercourses, lakes and springs 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 10;
    - (ii) the social outcomes mentioned in section 11;
    - (iii) the ecological outcomes mentioned in section 12.

## **10 Economic outcomes**

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

- (a) provision for the use of water entitlements and other authorisations in the plan area;
- (b) protection of the probability of being able to take water under a water allocation;
- (c) availability of water for the following—

[s 11]

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- (i) growth in industries dependent on water resources in the plan area;  
*Examples of growth in industries dependent on water resources in the plan area—*
  - industries located in the Gladstone region that are dependent on water in the plan area
  - irrigated agriculture industries dependent on water from the Boyne River
- (ii) stock purposes in the plan area;
- (d) the support of flexible and diverse water supply arrangements for water users;
- (e) the support of activities stated in the *Water Regulation 2016*, schedule 3;
- (f) maintenance of flows that support water-related economic activities in the plan area, including, for example, tourism;
- (g) encouragement of continual improvement in the efficient use of water.

## 11 Social outcomes

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

- (a) increased security for town water supplies that rely on water in the plan area;
- (b) availability of water for the following—
  - (i) population growth in towns and communities dependent on water resources in the plan area;
  - (ii) domestic purposes in the plan area;
- (c) maintenance of flows that support water-related aesthetic, cultural and recreational values in the plan area, including the cultural values of the traditional owners in the plan area;

- (d) maintenance, to the extent practicable, of the quality of water for human use.

## 12 Ecological outcomes

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

- (a) the continued capability of a part of the river system to be connected to another, including by maintaining flows that—
  - (i) allow for the movement of native aquatic fauna between riverine, floodplain, wetland, estuarine and marine environments; and
  - (ii) support water-related ecosystems; and
  - (iii) support river-forming processes;
- (b) provision of a flow regime that ensures—
  - (i) maintenance of fresh water to the Boyne River estuary; and
  - (ii) maintenance of waterholes, including the Nagoorin waterhole; and
  - (iii) riffle habitats; and
  - (iv) maintenance of estuarine ecosystem functions, including, for example, flows for the movement and recruitment of barramundi (*Lates calcarifer*), sea mullet (*Mugil cephalus*) and banana prawn (*Fenneropenaeus merguensis*) growth;
- (c) minimisation of the impacts of taking water on water-related ecosystems;
- (d) protection and maintenance of refugia associated with waterholes, lakes and wetlands.

## **Chapter 4      Performance indicators and objectives**

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

The performance indicators for the environmental flow objectives are—

- (a) for assessing periods of low flow—the 90% daily flow; and
- (b) for assessing periods of medium to high flow, the following—
  - (i) mean annual flow;
  - (ii) mean wet season flow.

### **14      Environmental flow objectives**

The environmental flow objectives for this plan at node 1 are the following—

- (a) that the percentage of the number of days in the simulation period that the 90% daily flow is equalled or exceeded is to be at least 75%;
- (b) that the mean annual flow in the simulation period, expressed as a percentage of the mean annual flow for the pre-development flow pattern, is to be at least 45%;
- (c) that the mean wet season flow in the simulation period, expressed as a percentage of the mean wet season flow for the pre-development flow pattern, is to be at least 48%.

### **15      Performance indicator for water allocation security objective**

The performance indicator for the water allocation security objective for taking supplemented water is the annual supplemented water sharing index.

## **16 Water allocation security objective**

The water allocation security objective is that the annual supplemented water sharing index is 100% for water allocations to take supplemented water in the plan area.

# **Chapter 5 Strategies for achieving outcomes**

## **Part 1 Preliminary**

### **17 Decisions to be consistent with objectives**

Decisions made by the chief executive about the allocation or management of water in the plan area, other than a decision about a water permit not mentioned in the resource operations plan, must be consistent with—

- (a) the environmental flow objectives stated in section 14; and
- (b) the water allocation security objective stated in section 16.

### **18 Assessing impact of decisions**

- (1) The IQQM computer program's simulation for the simulation period is used to assess consistency with the environmental flow objectives and the water allocation security objective.
- (2) If it is not practicable to use the IQQM 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 IQQM computer program.

## **Part 2 Unallocated water**

### **Division 1 Strategic water infrastructure reserve, strategic reserve and general reserve**

#### **19 Unallocated water held as strategic water infrastructure reserve, strategic reserve and general reserve**

Unallocated water in the plan area is held as a strategic water infrastructure reserve, strategic reserve or a general reserve.

#### **20 Purpose for which unallocated water may be granted**

Unallocated water in the plan area may only be granted for the following purposes—

- (a) for unallocated water held as a strategic water infrastructure reserve—a raising of Awoonga Dam;
- (b) for unallocated water held as a strategic reserve—a State purpose;
- (c) for unallocated water held as a general reserve—any purpose.

#### **21 Reserve volumes**

- (1) The total of the nominal volumes for all supplemented water allocations to take unallocated water granted from the strategic water infrastructure reserve for a future raising of Awoonga Dam is 19000ML.

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- (2) The total of the nominal entitlements for water licences to take unallocated water granted from the strategic reserve or general reserve are—
- (a) for all water licences to take unallocated water from the strategic reserve in subcatchment area B—500ML; and
  - (b) for all water licences to take unallocated water from the general reserve—
    - (i) in subcatchment area A—338ML; and
    - (ii) in subcatchment area B—1000ML.

## **22 Period for which water is granted for particular State purpose**

- (1) This section applies to the volume of water granted from the strategic reserve 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.

## **23 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 stated in 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.

## **Division 2                      Process for granting unallocated water**

### **24                      Process for granting unallocated water**

- (1) The process for granting unallocated water from the strategic water infrastructure reserve is the process stated in the resource operations plan.
- (2) The process for granting unallocated water from the strategic reserve or general reserve is a process stated in the *Water Regulation 2016*, part 2, division 2, subdivision 2.

## **Division 3                      Limitation on granting unallocated water**

### **25                      Pass flow conditions for taking unallocated water**

- (1) Water licences to take water from a watercourse located in subcatchment area B granted from the strategic reserve or general reserve must include a pass flow condition.
- (2) This section does not apply to a water licence to take water from an impoundment.
- (3) In this section—

*pass flow condition* means a condition on a water licence to take water that states the rate of flow in a watercourse that must, while the water is being taken under the licence, be passing immediately downstream of the point on the watercourse at which water is taken under the licence.



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## **Part 3                      Authorised taking or interfering with water without water entitlement**

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

For section 20A(5) of the Act, an owner of land may take water, in any way, from a watercourse, lake or spring in the plan area for stock or domestic purposes.

### **27      Limitation on taking or interfering with water**

For section 20(2) of the Act, the total volume of water that may be taken or interfered with for activities prescribed under a regulation for section 20(2)(a) of the Act is limited to 5ML.

## **Part 4                      Interference with water in a watercourse, lake or spring**

### **28      Application of pt 4**

This part applies to an application, made under section 206 of the Act, for a water licence to interfere with water in a watercourse, lake or spring by impounding the flow of water.

### **29      Limitations on interference with water**

The water licence may be granted only if—

- (a) the purpose of the proposed interference is a purpose provided for in this part; or
- (b) the interference was in existence immediately before 14 December 2000.

### **30 Interference with water to enable taking of water for stock or domestic purposes**

- (1) This section applies if the purpose of the proposed interference with water is to store water to be taken under an authorisation for stock or domestic purposes.
- (2) In deciding the application the chief executive must consider existing water supplies on the property to which the application relates, including existing weirs, groundwater and storages taking overland flow water and the availability of water at the proposed site.
- (3) The storage capacity for water to be taken under subsection (1) must not be greater than is necessary for the storage of water to be taken.
- (4) In this section—  
*groundwater* means underground water.

### **31 Interference with water for provision of pumping pool**

- (1) This section applies if the purpose of the proposed interference with water is to provide a pumping pool to enable water to be taken under an authorisation.
- (2) The storage capacity of the pumping pool must not be greater than the following—
  - (a) for locations upstream of Awoonga Dam—the capacity required to enable the pump to function properly;
  - (b) for locations downstream of Awoonga Dam—the capacity required to ensure access to fresh water for irrigation or other purposes.
- (3) In this section—  
*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.

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**32 Interference with water to improve security for town water supply**

- (1) This section applies if the purpose of the proposed interference with water is to provide improved security for town water supplies taken under an authorisation.
- (2) The chief executive must not grant the application unless the chief executive is satisfied—
  - (a) the town has appropriate water supply security strategies, such as demand and drought management strategies, in place; and
  - (b) there is a demonstrated need for an increased reliability of the water supply.

**33 Interference with water related to the granting of unallocated water**

- (1) This section applies if the purpose of the proposed interference with water is a purpose related to the granting of unallocated water under the process stated in section 24.
- (2) The interference must not be greater than is necessary for the purpose of taking the unallocated water.
- (3) A water licence to interfere with water, granted in association with a water entitlement to take water granted from the release of unallocated water in subcatchment area B, must include flow conditions.

## **Part 6**                      **Water licences to take water from watercourse, lake or spring**

### **Division 1**                      **Form of water licences to take water from a watercourse, lake or spring**

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

A water licence to take water from a watercourse, lake or spring in the plan area must state the following—

- (a) 1 of the following purposes for which the water may be taken under the licence—
  - (i) ‘agriculture’;
  - (ii) ‘any’;
- (b) the daily volumetric limit;
- (c) the nominal entitlement;
- (d) the conditions, if any, including flow conditions.

### **Division 2**                      **Criteria for amending water licences to achieve plan outcomes**

#### **36**                      **Definition for div 2**

In this division—

*amended water licence* means a water licence to take unsupplemented water from a watercourse, lake or spring amended under section 217 of the Act.

#### **37**                      **Daily volumetric limit for a water licence**

- (1) The daily volumetric limit for an amended water licence is—

- (a) for an amended water licence that, before the amendment, had a related development permit that stated a pump size mentioned in schedule 2, column 1—the volume stated in schedule 2, column 2 for the pump size; or
  - (b) for an amended water licence that, before the amendment, had a related development permit that stated a pump size other than a pump size mentioned in schedule 2, column 1—the volume decided by the chief executive having regard to the volumes stated in schedule 2, column 2 for pump sizes of a similar size to the pump size stated on the development permit; or
  - (c) otherwise—the volume decided by the chief executive having regard to—
    - (i) the type of licence; and
    - (ii) a measurement, or estimate, of the daily rate at which water is being taken, or is capable of being taken, under the licence before the amendment.
- (2) However, for subsection (1)(a) and (b), if the licence holder satisfies the chief executive that the water-taking capacity of the pump is different from the daily volumetric limit under the subsection, the daily volumetric limit is the volume 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 (the *existing pump*) to which the development permit relates 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 associated with the existing pump or the system mentioned in paragraph (c).

### **38 Conditions for amended water licences**

In deciding the conditions under which water may be taken under an amended water licence, the chief executive must consider the conditions stated on the water licence being amended.

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

### **39 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) Subsection (1) does not limit the monitoring requirements the chief executive may impose for this plan.

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

### **41 Implementation schedule**

Proposed arrangements for implementing this plan are included in the resource operations plan.

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## **42 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—
  - (i) the outcomes mentioned in chapter 3; or
  - (ii) the water allocation security objective mentioned in section 16;
- (b) an amendment or addition of a water allocation security objective if the amendment or addition does not adversely affect—
  - (i) the outcomes mentioned in chapter 3; or
  - (ii) the environmental flow objectives mentioned in section 14;
- (c) an amendment or addition of a node;
- (d) an amendment to subdivide a subcatchment area;
- (e) an amendment or addition of a priority group;
- (f) an amendment or addition of a monitoring or reporting requirement under chapter 6;
- (g) an amendment of, or to remove, a redundant provision of this plan;
- (h) an amendment to omit a provision relating to an amendment of an authorisation if the amendment under the provision has been completed.

## **Chapter 8      Repeal**

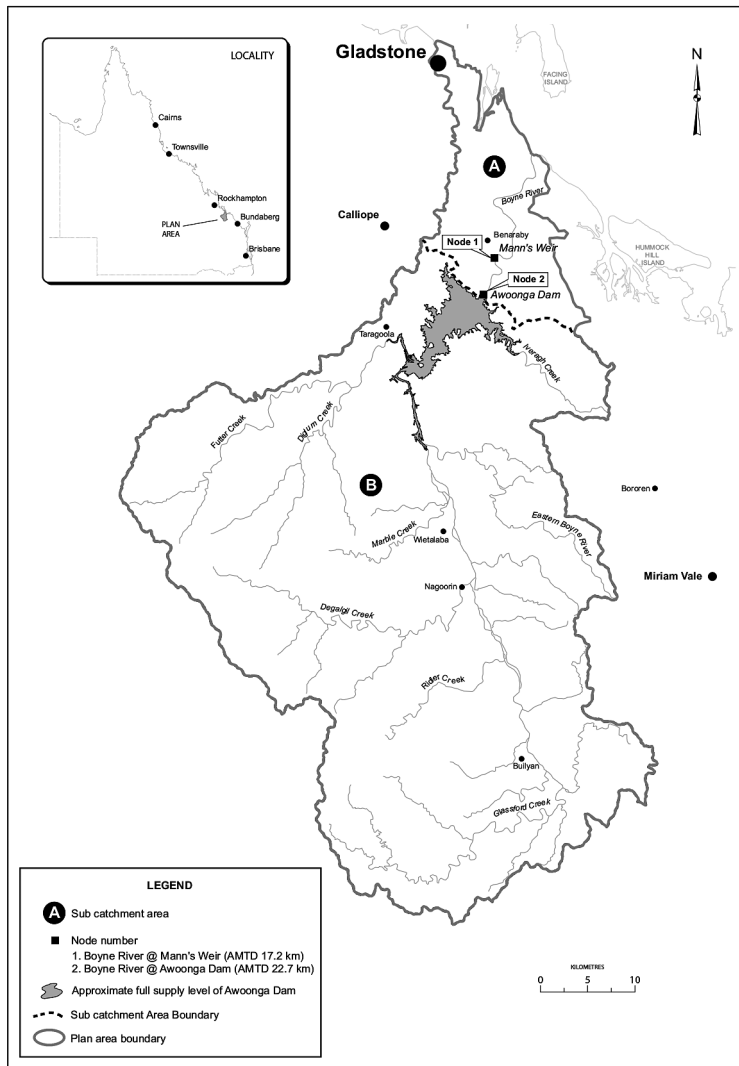
### **43      Repeal**

The Water Resource (Boyne River Basin) Plan 2000, SL No. 358 is repealed.



# Schedule 1 Plan area

sections 4, 5 and 7(2)



A4-508574 - 18 September 2012 CAS1283-1

## **Schedule 2      Pump sizes and rates**

section 37

<b>Column 1</b>	<b>Column 2</b>
<b>Nominal pump size (mm)</b>	<b>Daily volumetric limit (ML/day)</b>
32	0.6
40	1
50	1.5
65	2.6
80	3.9
100	5.6
125	7.8
150	9.9
200	16
250	21.6
300	25.9

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## Schedule 3      Dictionary

### section 3

**90% daily flow**, for a node, means the daily flow, at the node, that is equalled or exceeded on 90% of the days on which there is a flow under the pre-development flow pattern.

**amended water licence**, for chapter 5, part 6, division 2, see section 36.

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

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

**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, expressed in megalitres, 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.

**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, in-stream infrastructure, water diversions, water demands and other hydrologic events in the plan area.

**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.

***mean wet season flow***, for a node, means the total volume of flow, at the node, during the months of December, January, February, March and April in the simulation period divided by the number of years in the simulation period.

***node*** see section 7.

***nominal entitlement*** see the *Water Regulation 2016*, section 28.

***pre-development flow pattern*** means the pattern of water flows, during the simulation period, decided by the chief executive using the IQQM 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.

***project of regional significance*** means a project the chief executive considers to be a project of regional significance under section 23.

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

*Note—*

See the Act, section 1266.

***simulation period*** means the period from 1 January 1890 to 30 June 2011.

***State purpose*** means—

- (a) a coordinated project; or
- (b) a project of regional significance; or
- (c) town water supply purposes; or
- (d) use by Indigenous peoples for non-commercial purposes, including cultural and traditional purposes.

***subcatchment area*** see section 5.

***supplemented water*** means water supplied under an interim resource operations licence, resource operations licence or other authority to operate water infrastructure.

***this plan*** see section 1.

***traditional owners***, in the plan area, means the Aboriginal people who identify as descendants of the original inhabitants of the area.

***unallocated water*** means water available for allocation in the plan area.

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

***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.