Queensland

Subordinate Legislation 2002 No. 379

Water Act 2000

WATER RESOURCE (PIONEER VALLEY) PLAN 2002

TABLE OF PROVISIONS

PART 1—PRELIMINARY

1 Short title

This water resource plan may be cited as the *Water Resource (Pioneer Valley) Plan 2002*.

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 that has occurred in natural ecosystems.

3 Definitions

The dictionary in schedule 10 defines particular words used in this plan.

PART 2—AREAS 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

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

6 Information about areas

(1) The exact location of the plan area and subcatchment area boundaries 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.[1]

7 Nodes

(1) A node mentioned in this plan is a place—

(a) on a watercourse in the plan area; and

(b) for which environmental flow objectives are set for performance indicators.

(2) The location of each node is shown on the map in schedule 1 and described in schedule 3.

(3) Each node is identified on the map by a letter of the alphabet.

8 Water to which plan applies

This plan applies to the following water in the plan area—

(a) water in a watercourse, lake or spring;

(b) water collected in a weir or dam constructed across a watercourse, lake or spring.

1 The boundary locations in digital electronic form may be inspected at the department's office at 32-34 Wood Street, Mackay.

PART 3—OUTCOMES FOR SUSTAINABLE MANAGEMENT OF WATER

Division 1—Outcomes for plan area

9 General outcomes

Water is to be allocated and managed in a way that seeks to achieve a balance in the following outcomes—

(a) to ensure a reliable and secure supply of water from the plan area during the time this plan is in force;

(b) to protect the probability of being able to obtain water under a water allocation;

(c) to provide for the opportunity for additional water to be taken from the Sandy Creek catchment area to reduce reliance on subartesian water in areas affected, or likely to be affected, by saltwater intrusion;

(d) to provide the opportunity for additional water to be taken from the Pioneer River for future water requirements;

(e) to allow water to be used for the following—

(i) agriculture;

(ii) aquaculture;

(iii) industrial needs;

(iv) small scale uses;

(v) stock and domestic purposes;

(vi) tourism and recreational uses;

(vii) urban needs;

(f) to provide for the continued use of all water entitlements and other authorisations to take or interfere with water;

(g) to encourage the efficient use of water;

(h) to allow cultural use by Aboriginal or Torres Strait Islander communities;

(i) to provide water to support natural ecosystems.

10 General ecological outcomes

Water is to be allocated and managed in a way that seeks to achieve a balance in the following outcomes while recognising the natural state of watercourses, lakes and springs has changed because of water infrastructure, flow supplementation and the taking of water—

(a) to maintain habitats of native plants and animals in watercourses, lakes and springs;

(b) to maintain riparian systems and their functions influencing the riverine ecosystems;

(c) to maintain and favour native plants and animals associated with watercourses, lakes and springs and riparian zones;

(d) to provide wet season flow to benefit native plants and animals in estuaries;

(e) to maintain long term water quality suitable for riverine and estuarine ecosystems;

(f) to maintain existing geomorphic features and processes;

(g) to maintain the capability of one part of the river system to be connected to another through the flow of water—

(i) throughout the watercourse network; and

(ii) within the riparian zone, floodplain and watercourses, lakes and springs;

(h) to maintain ecosystem food chains, their balance and the movement of carbon energy.

Division 2—Ecological outcomes for particular parts of the plan area

11 Application of div 2

Without limiting section 10, the ecological outcomes mentioned in this division apply to the parts of the plan area mentioned.

12 Estuaries

(1) Water is to be allocated and managed to provide a flow regime—

(a) to maintain delivery of freshwater, sediment, nutrients and organic matter to the estuaries of watercourses; and

(b) to maintain the brackish water habitat in the estuaries.

(2) Also, water is to be allocated and managed to protect and improve the ecology of the Pioneer River estuary by reducing the frequency and duration of periods of no flow to the estuary.

13 Blacks Creek and Pioneer River

(1) This section applies to water in—

(a) Blacks Creek downstream of Teemburra Creek; and

(b) the Pioneer River upstream of Mirani Weir.

(2) The water is to be allocated and managed to minimise adverse impacts on environmental conditions and geomorphic processes in Blacks Creek and the river while recognising the likelihood of changes to the conditions and processes resulting from the existence and operation of Teemburra Dam.

14 Subcatchment areas 2, 3 and 4

Water in subcatchment area 2, 3 or 4 is to be allocated and managed to maintain areas and species of significant conservation value in the creeks in the subcatchment areas.

15 Subcatchment area 12

Water in subcatchment area 12 is to be allocated and managed to reduce saltwater intrusion in the coastal section of the Pioneer Valley groundwater system associated with the area.

16 Palm Tree Creek

Water in Palm Tree Creek downstream of the diversion pipeline outlet from Teemburra Dam is to be allocated and managed to minimise adverse impacts on environmental conditions and geomorphic processes in the creek while recognising the likelihood of—

(a) erosion of the creek's bed and banks, and loss of riparian vegetation, because of flow supplementation; and

(b) changes to the creek's instream and riparian habitats resulting from a more perennial flow regime.

17 Silver Creek

Water in Silver Creek downstream of the outlet for the diversion channel for water from Cattle Creek is to be allocated and managed to minimise adverse impacts on environmental conditions and geomorphic processes in Silver Creek while recognising the likelihood of changes to the creek's instream and riparian habitats resulting from a more perennial flow regime.

18 Teemburra Creek

Water in Teemburra Creek downstream of Teemburra Dam is to be allocated and managed to minimise adverse impacts on environmental conditions and geomorphic processes in the creek while recognising the likelihood of the following resulting from the existence and operation of the dam—

(a) reduction of sediment, and changed geomorphic processes, in the creek;

(b) spread of riparian vegetation into the creek;

(c) increased opportunity for weed growth in the creek's riparian zones;

(d) depletion of flood-spawning species, including, for example, spangled perch and neosilurid catfishes.

PART 4—PERFORMANCE INDICATORS AND OBJECTIVES

Division 1—Environmental flow objectives

19 Performance indicators for environmental flow objectives

The performance indicators for the environmental flow objectives are—

(a) for assessing periods of low flow—

(i) 50% daily flow; and

(ii) 90% daily flow; and

(iii) daily flow less than 1 ML; and

(iv) number of periods of no flow of at least 1 month but less than 3 months; and

(v) number of periods of no flow of at least 3 months; and

(b) for assessing periods of medium to high flow—

(i) mean annual flow; and

(ii) 1.5 year daily flow volume; and

(iii) 5 year daily flow volume; and

(iv) 20 year daily flow volume; and

(c) for assessing seasonal flow patterns—

(i) flow regime class; and

(ii) annual proportional flow deviation; and

(iii) mean wet season flow.

20 Environmental flow objectives

The environmental flow objectives for this plan are stated in schedule 4.

Division 2—Water allocation security objectives

21 Performance indicators for water allocation security objectives

The performance indicators for the water allocation security objectives are—

(a) for taking supplemented water—the monthly supplemented water sharing index; and

(b) for taking unsupplemented water—

(i) 30% unsupplemented water sharing index; and

(ii) 50% unsupplemented water sharing index; and

(iii) 70% unsupplemented water sharing index.

22 Water allocation security objectives

The water allocation security objectives for this plan are stated in—

(a) for water allocations to take supplemented water—schedule 5, part 1; and

(b) for water allocations to take unsupplemented water—schedule 5, part 2.

PART 5—STRATEGIES FOR ACHIEVING OUTCOMES

Division 1—Preliminary

23 Decisions consistent with objectives

Decisions about the allocation or management of water in the plan area, other than a decision in relation to a water permit, must be consistent with—

(a) the environmental flow objectives stated in schedule 4; and

(b) the water allocation security objectives stated in schedule 5.

24 Assessing impact of decisions

(1) The IQQM computer program's simulation for the simulation period is used to assess consistency with the objectives.

(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.

25 Taking or interfering with water from waterholes or lakes

(1) This section applies to the chief executive in making a decision about—

(a) a licence for taking unsupplemented water; or

(b) converting an authorisation for taking unsupplemented water into a water allocation; or

(c) the management of water under a resource operations licence.

(2) If the licence, water allocation or resource operations licence allows taking or interfering with water from a waterhole or lake, 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, water allocation or resource operation 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 0.5 m 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 a licence or water allocation that replaces an authorisation in force immediately before the commencement of this plan—the holder of the authorisation would suffer economic hardship if the condition were imposed.

Division 2—Dealing with unallocated water under a resource operations plan

26 Matters chief executive must consider

(1) In preparing and implementing a process for dealing with unallocated water under a resource operations plan, the chief executive must consider—

(a) the efficiency of existing and proposed water use practices; and

(b) the availability of an alternative water supply for the purpose for which the water is required; and

(c) the impact the proposed taking of, or interfering with, the water may have on the following—

(i) water quality;

(ii) inundation of habitats;

(iii) the movement of fish and other aquatic species;

(iv) the natural movement of sediment;

(v) recreation and aesthetic values;

(vi) cultural values, including, for example, cultural values of local Aboriginal or Torres Strait Islander communities; and

(d) whether the proposed taking or interfering is likely to have a direct adverse effect on groundwater flows.

(2) Subsection (1) does not limit the matters the chief executive may consider.

27 Licences for unallocated water in subcatchment area 12

(1) The chief executive may grant a licence for taking water from subcatchment area 12 only if the annual volumetric limit for the licence does not result in the total annual volumetric limits for licences granted after the commencement being more than 4 000 ML.

(2) The chief executive must impose conditions on the licence that—

(a) water may be taken only if—

(i) the taking does not stop water from flowing immediately downstream of the place where the water is taken; and

(ii) there is surface flow greater than 1 400 ML a day at gauging station 126001 situated on Sandy Creek at Homebush; and

(b) the licensee must start taking water under the licence within 2 years after the day the licence is granted.

(3) The licence must state the annual volumetric limit and the maximum rate at which water may be taken under the licence.

Division 3—Resource operations licences

28 Water allocations to be managed under a resource operations licence

Water allocations converted from the following authorisations are to be managed under a resource operations licence—

(a) an interim water allocation;

(b) other authorisations for the taking of water managed by the Pioneer Valley Water Board.

29 Matters chief executive must consider

(1) In deciding the operating arrangements and supply requirements for water infrastructure and proposed infrastructure, the chief executive must consider—

(a) the impact of the infrastructure's operation on the following—

(i) water quality;

(ii) instream water levels;

(iii) erosion of the bed and banks of watercourses;

(iv) riparian vegetation;

(v) the extent to which artificial variations in instream water levels and flows may adversely affect natural ecosystems;

(vi) recreation and aesthetic values;

(vii) cultural values, including, for example, cultural values of local Aboriginal or Torres Strait Islander communities; and

(b) the impact of the infrastructure or proposed infrastructure on the movement of fish and other aquatic species; 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.

(2) Subsection (1) does not limit the matters the chief executive may consider.

Division 4—Granting water entitlements

30 Water entitlements to replace local government authorities

(1) This section applies to authorities, continued under section 1037 of the Act, for the Mirani Shire Council to take or interfere with water from Cattle Creek.

(2) Within 30 business days after the resource operations plan commences, the chief executive must replace the authorities with water entitlements for the continued taking or interfering with the water.

(3) The chief executive must impose conditions on the entitlements giving effect to any environmental management rules or water sharing rules included in the resource operations plan.

Division 5—Converting authorisations to water allocations

Subdivision 1—General provisions

31 Definition for div 5

In this division—

"authorisation" means an authorisation or authority mentioned in section 32.

32 Application of div 5

This division applies only to—

(a) authorisations converted, under the resource operations plan, to water allocations; and

(b) water allocations converted, under the resource operations plan, from authorisations; and

(c) local government authorities replaced with water entitlements under section 30.

33 Conditions of authorisations

(1) The chief executive must not include on an allocation, a condition of the authorisation that allowed the holder of the authorisation to take water in addition to the volume stated on the authorisation.

Example of a condition for subsection (1)—

A condition allowing the taking of water as an 'out of allocation supply'.

(2) Subsection (1) does not apply to a condition stating flow conditions under which water may be taken for the purpose of water harvesting.

34 Location for taking water

The location for taking water stated on a water allocation must include the place at which water could have been taken under the authorisation.

35 Purpose to be stated on water allocation

(1) If the purpose stated on an authorisation is one of the following, or a similar purpose, the purpose stated on the water allocation must be 'rural'—

(a) stock;

(b) domestic;

(c) irrigation;

(d) stock intensive;

(e) agriculture.

(2) If the purpose stated on an authorisation is 'distribution loss', the purpose stated on the water allocation must be 'distribution loss'.

Subdivision 2—Supplemented water

36 Volume of supplemented water

A water allocation to take supplemented water must state a nominal volume.

37 Nominal volume for supplemented water

The nominal volume for a water allocation for an authorisation that states an annual volume of water is—

(a) if the authorisation is for a distribution loss—the volume decided by the chief executive having regard to—

(i) the stated volume; and

(ii) the annual volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and

(iii) the efficiency of the use of the water mentioned in subparagraph (ii); and

(b) otherwise—the stated volume.

38 Priority groups for supplemented water allocations

A water allocation to take supplemented water belongs to—

(a) for an authorisation identified by an interim resource operations licence as high priority—the high class A priority group; and

(b) for an authorisation identified by an interim resource operations licence as risk priority—the risk priority group; and

(c) for other authorisations—the high class B priority group.

Subdivision 3—Unsupplemented water

39 Volume of unsupplemented water

A water allocation to take unsupplemented water—

(a) must state a nominal volume and an annual volumetric limit; and

(b) may state monthly volumetric limits.

40 Nominal volume for unsupplemented water

In deciding the nominal volume for a water allocation in a water allocation group mentioned in schedule 6, column 1, the chief executive—

(a) must have regard to—

(i) the local availability of water; and

(ii) the conditions under which the water may be taken under the authorisation; and

(iii) the annual volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and

(iv) the simulated mean annual diversion; and

(v) the efficiency of the use of the water mentioned in subparagraph (iii); and

(b) must ensure the total of the nominal volumes for the water allocation group is not more than the volume stated in schedule 6, column 2, for the group.

41 Annual volumetric limit for unsupplemented water

(1) The annual volumetric limit for a water allocation to take unsupplemented water is—

(a) for an authorisation that states an annual volume of water—the stated volume; and

(b) for an authorisation that states the area that may be irrigated—the volume decided by the chief executive having regard to the volume of water required to efficiently irrigate the area, but not more than the volume, expressed in megalitres, calculated by multiplying the area, in hectares, by—

(i) for conditional licences—3.3; and

(ii) for other licences—4.4; and

(c) for another authorisation—the volume decided by the chief executive having regard to—

(i) the conditions under which water may be taken under the authorisation; and

(ii) the water taking capacity of any existing works for taking water under the authorisation; and

(iii) the annual volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and

(iv) the efficiency of the use of the water mentioned in subparagraph (iii).

42 Monthly volumetric limits

In deciding monthly volumetric limits for a water allocation to take unsupplemented water, the chief executive must have regard to—

(a) the local availability of water in each month; and

(b) the conditions under which the water may be taken under the authorisation; and

(c) the volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and

(d) the simulated mean annual diversion; and

(e) the efficiency of the use of the water mentioned in paragraph (c).

43 Maximum rates for taking unsupplemented water

The maximum rate at which unsupplemented water may be taken under an allocation is—

(a) for an authorisation that states a maximum rate—the stated rate; and

(b) for an authorisation that does not state a maximum rate but for which a related development permit states a pump size mentioned in schedule 7, column 1—

(i) if the authorisation holder demonstrates that the actual rate at which water can be taken is different from the rate stated in schedule 7, column 2, for the pump size—the rate decided by the chief executive having regard to—

(A) the conditions under which the water may be taken; and

(B) the water taking capacity of the pump to which the development permit relates (the **"existing pump"**) under normal operating conditions; and

(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; and

(D) the efficiency of the water use mentioned in subsubparagraph (C); or

(ii) otherwise—the rate stated in schedule 7, column 2, for the pump size; and

(c) for an authorisation that does not state a maximum rate but for which a related development permit states a pump size other than a pump size mentioned in schedule 7, column 1—the rate decided by the chief executive having regard to the matters mentioned in paragraph (b)(i)(A) to (D); and

(d) for another authorisation—the rate decided by the chief executive having regard to—

(i) the nature of the authorisation; and

(ii) an estimate or measurement of the rate at which water is taken under the authorisation.

44 Conditions for unsupplemented water allocations

In deciding the conditions under which water may be taken under a water allocation to take unsupplemented water, the chief executive must have regard to the conditions stated on the relevant authorisation.

45 Water allocation groups for unsupplemented water allocations

A water allocation to take unsupplemented water in a subcatchment area mentioned in schedule 8, column 1, belongs to—

(a) for an authorisation that states the area that may be irrigated or for town water supply purposes—the water allocation group mentioned in column 2 for the subcatchment area; and

(b) for other authorisations—the water allocation group mentioned in column 3 for the subcatchment area.

Division 6—Licences for taking unsupplemented water

46 Volume of unsupplemented water

A water licence to take unsupplemented water must state an annual volumetric limit and the maximum rate at which water may be taken under the licence.

47 Annual volumetric limit for unsupplemented water

(1) Subsection (2) states the annual volumetric limit for—

(a) a licence to take unsupplemented water in force on the commencement of this plan; or

(b) a water licence that, under section 30, replaces an authority continued under section 1037 of the Act.

(2) The annual volumetric limit is—

(a) for a licence or authority that states a volume of water that may be taken—the stated volume; and

(b) for a licence that states the area that may be irrigated—the volume decided by the chief executive having regard to the volume of water required to efficiently irrigate the area, but not more than the volume, expressed in megalitres, calculated by multiplying the area, in hectares, by—

(i) for conditional licences—3.3; and

(ii) for other licences—4.4; and

(c) for another licence or authority—the volume decided by the chief executive having regard to—

(i) the conditions under which water may be taken under the licence; and

(ii) the water taking capacity of any existing works for taking water under the licence; and

(iii) 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; and

(iv) the efficiency of the use of the water mentioned in subparagraph (iii).

48 Maximum rates for taking unsupplemented water

The maximum rate at which unsupplemented water may be taken under a licence in force on the commencement of this plan is—

(a) for a licence that states a maximum rate—the stated rate; and

(b) for a licence that does not state a maximum rate but for which a related development permit states a pump size mentioned in schedule 7, column 1—

(i) if the licence holder demonstrates that the actual rate at which water can be taken is different from the rate stated in schedule 7, column 2, for the pump size—the rate decided by the chief executive having regard to—

(A) the water taking capacity of the pump to which the development permit relates (the **"existing pump"**) under normal operating conditions; and

(B) the irrigation or water distribution system related to the existing pump during the period of not more than 10 years immediately before the commencement; and

(C) the efficiency of the water use mentioned in subsubparagraph (B); and

(D) the conditions under which the water may be taken; or

(ii) otherwise—the rate stated in schedule 7, column 2, for the pump size; and

(c) for a licence that does not state a maximum rate but for which a related development permit states a pump size other than a pump size mentioned in schedule 7, column 1—the rate decided by the chief executive having regard to the matters mentioned in paragraph (b)(i)(A) to (D); and

(d) for another licence—the rate decided by the chief executive having regard to—

(i) the nature of the licence; and

(ii) an estimate or measurement of the actual rate at which water is taken under the licence.

Division 7—Moratorium notice

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

(1) This section continues, in part, the effect of the moratorium notice, published on 20 September 2000.

(2) This section applies to an application under the Act or the repealed Act if granting the application would have 1 or more of the following effects on water to which this plan relates—

(a) increase the amount of water taken or interfered with;

(b) change the location from which the water may be taken or interfered with;

(c) increase the maximum rate for taking or interfering with the water;

(d) change the conditions under which the water may be taken;

(e) change the purpose for which water may be taken.

(3) The application will be accepted but not dealt with until the resource operations plan deals with the allocation of unallocated water in the area to which the application relates.

(4) However, subsection (3) does not apply to an application—

(a) for a water permit; or

(b) by an interim resource operations licence holder to transfer an interim water allocation; or

(c) for a licence, or amendment of a licence, to take water managed by the Pioneer Valley Water Board; or

(d) to reinstate or replace an expired licence.

(5) The chief executive's acceptance of an application does not give the applicant priority in having the application decided.

PART 6—MONITORING AND REPORTING REQUIREMENTS

50 Monitoring

(1) The monitoring requirements for the plan are—

(a) water monitoring, for—

(i) river flow; and

(ii) taking water; and

(iii) water quality; and

(iv) water requirements for future consumption; and

(v) efficiency of water use; and

(b) natural ecosystems monitoring, for—

(i) volume, frequency, duration and season of streamflows; and

(ii) health and distribution of animal, plant and micro-organism species and communities; and

(iii) condition of riverine and estuarine habitats including the following—

(A) waterholes and lake ecosystems;

(B) stream–bed habitats;

(C) upper and in–channel riparian zones;

(D) floodplains;

(E) wetlands; and

(iv) river forming flows.

(2) The monitoring requirements are to be achieved by—

(a) monitoring programs undertaken by holders of resource operations licences; and

(b) monitoring programs administered by the chief executive and relevant State agencies.

51 Monitoring programs undertaken by holders of a resource operations licence

(1) The monitoring programs mentioned in subsections (2) and (3) must assist in enabling the chief executive to assess the effectiveness of the strategies under part 5.

(2) Each resource operations licence holder must develop and undertake monitoring programs, satisfactory to the chief executive, that include monitoring the matters mentioned in section 50(1) in the water supply scheme in which the holder manages water.

(3) For subsection (2), the programs must include monitoring—

(a) water quantity including—

(i) the flow of water at gauging stations; and

(ii) the supply and taking of water; and

(iii) inflows of water to the dams and weirs mentioned in the holder's resource operations licence; and

(iv) the quantity of water released from the dams and weirs; and

(v) the level of water in the dams and weirs; and

(b) water quality including chemical, physical and biological measurements; and

(c) the operation of outlet works relating to the dams and weirs including, for example, multi-level offtakes; and

(d) the operation of fish ways; and

(e) the operation of devices to minimise the impact on natural ecosystems of the transfer of water between watercourses.

52 Resource operations licence holders to give reports

(1) Each resource operations licence holder must give the chief executive a written report containing the following information—

(a) details of the information obtained by monitoring the matters mentioned in section 51;

(b) details of decisions made by the holder in managing water and water infrastructure, including, for example, decisions about the following—

(i) making water available to water users under the holder's usual procedures for managing water in a water supply scheme;

(ii) managing the flow of water;

(iii) restrictions on the taking or supply of water;

(iv) infrastructure modifications or installations;

(c) information about any non-compliance by the holder with the resource operations plan;

(d) details about remedial action taken by the holder—

(i) in relation to a requirement under the resource operations plan; or

(ii) in response to an event or thing affecting water quality;

(e) details of any emergency action taken by the holder that may affect the achievement of the outcomes under part 3.

(2) A report about a matter mentioned in subsection (1)(a), (1)(b)(i) or (1)(b)(ii) must be given—

(a) for each financial year in which the holder manages water under this plan; and

(b) within 3 months after the end of the financial year to which the report relates.

(3) A report about a matter mentioned in subsection (1)(b)(iii), (1)(b)(iv), (1)(c) or (1)(d) must be given within 1 month after the matter happens.

(4) A report about a matter mentioned in subsection (1)(e) must be given the next business day after the action is taken.

PART 7—IMPLEMENTING THE PLAN

53 Priorities for converting to, or granting, water allocations

Each area described in schedule 9 is a priority area for this plan for the conversion to or granting of water allocations to take water in the plan area.

54 Implementation schedule

(1) This section states—

(a) the proposed arrangements for implementing this plan; and

(b) the priorities for the conversion to or granting of water allocations.

(2) Within 1 year after the commencement of this plan, it is proposed to prepare a resource operations plan—

(a) to convert authorisations in a priority area to water allocations; and

(b) to deal with unallocated water available for future water requirements in the plan area; and

(c) for water in a priority area—to make environmental management rules, water sharing rules, water allocation change rules and seasonal water assignment rules; and

(d) to implement the monitoring requirements in part 6.

(3) Within 3 years after the commencement of this plan, it is proposed to prepare a new resource operations plan or amend the plan mentioned in subsection (2) to amend licences to be consistent with this plan.

(4) Subsections (2) and (3) do not limit the matters that may be included in the resource operations plan.

PART 8—MINISTER'S REPORT AND AMENDING PLAN

55 Minister's report on plan—Act, s 53

(1) The Minister's report[2] on this plan must be prepared—

(a) for the first report—after the commencement of the resource operations plan; and

(b) for subsequent reports—for each financial year this plan is in force; and

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2 See section 54 (Matters the reports must include) of the Act.

(c) within 6 months after the end of the financial year to which the report relates.

(2) If the Minister is satisfied about any of the matters mentioned in section 57, the report, in its assessment of the effectiveness of the implementation of the plan in achieving the plan's outcomes, must include a consideration of the matters.

56 Minor 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 part 3;

(b) an amendment or addition of a water allocation security objective if the amendment or addition does not adversely affect existing water allocations, environmental flow objectives or the outcomes under part 3;

(c) an amendment or addition of a priority area;

(d) an amendment or addition of a node;

(e) an amendment or addition of a priority group;

(f) an amendment or addition of a water allocation group;

(g) an amendment to subdivide a subcatchment area;

(h) an amendment to subdivide a volume stated in schedule 6;

(i) an amendment or addition of a monitoring or reporting requirement under part 6;

(j) an amendment to section 49[3] if notice of the amendment is published as if it were a moratorium notice under section 42 of the Act.

3 Section 49 (Continued effect of moratorium notice—Act, s 46(3))

57 Amending or replacing plan

The Minister must consider amending this plan or preparing a new plan to replace this plan if the Minister is satisfied—

(a) in relation to general outcomes—

(i) water entitlements in the plan area are not sufficient to meet water needs sourced from the plan area having regard to—

(A) the extent to which water is being taken under the water entitlements; and

(B) the efficiency of present, and expected future, water use; and

(C) emerging requirements for additional water; and

(D) alternative water sources including, for example, recycled water and water savings from improvements in the efficiency of water use; and

(E) the likely timeframe in which additional water will be required; and

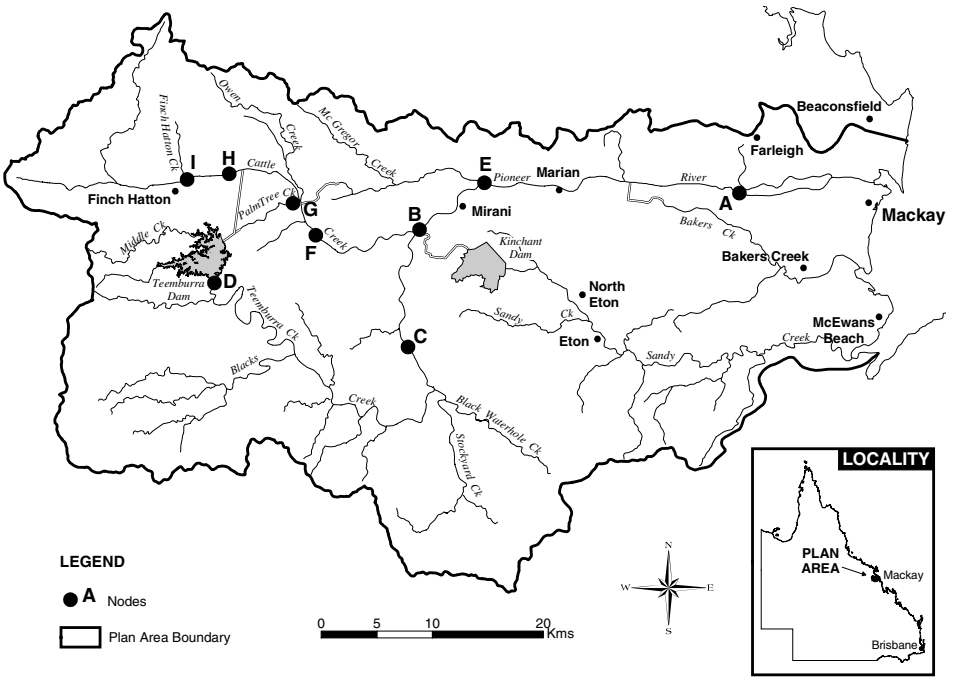
(ii) there are economically viable and ecologically sustainable uses for additional water; or

(b) the plan's ecological outcomes are not being achieved.

SCHEDULE 1

PLAN AREA

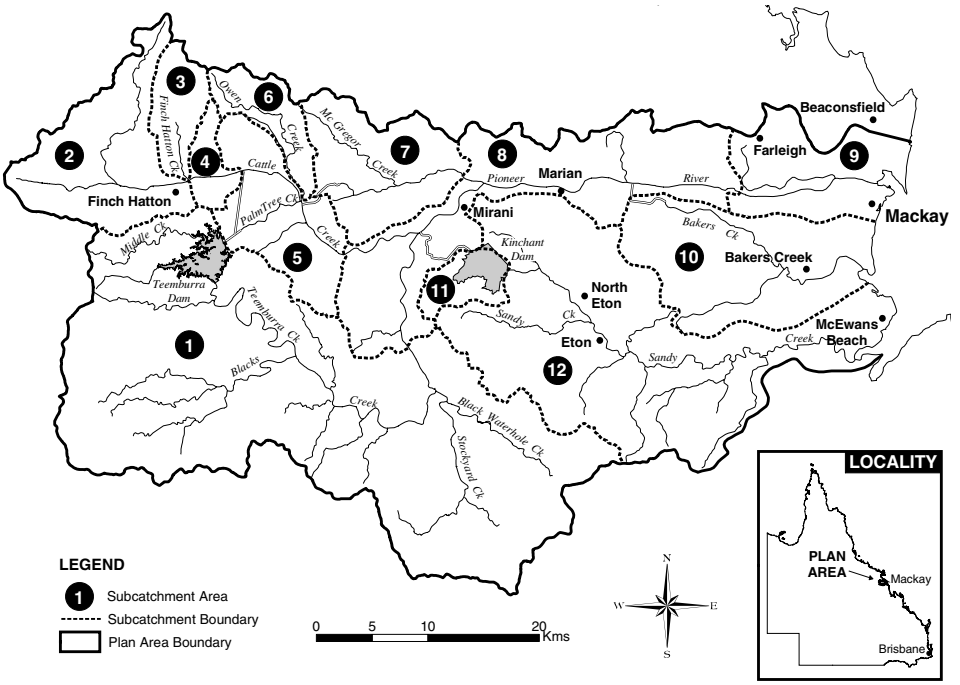
sections 4 and 7



SCHEDULE 2

SUBCATCHMENT AREAS

section 5



SCHEDULE 3

NODES

section 7

Node	Location
A	Pioneer River at tidal limit (AMTD 15.5 km)
B	Pioneer River at Mirani Weir tailwater gauging station (AMTD 45.7 km)
C	Pioneer River at Sarich's gauging station (AMTD 58.1 km)
D	Teemburra Creek at Teemburra Dam tailwater gauging station (AMTD 103.7 km)
E	McGregor Creek at the regulating weir on the creek (AMTD 0.7 km)
F	Cattle Creek at Gargett gauging station (AMTD 11.0 km)
G	Palm Tree Creek at the confluence of the creek and Cattle Creek (AMTD 0.0 km)
H	Cattle Creek upstream of the outlet of the Tannallo pipeline (AMTD 21.2 km)
I	Finch Hatton Creek at the confluence of the creek and Cattle Creek (AMTD 0.0 km)

SCHEDULE 4

ENVIRONMENTAL FLOW OBJECTIVES

section 20

PART 1—LOW FLOW OBJECTIVES

1. At each node mentioned in table 1, column 1, minimise the extent to which the 50% daily flow stated in columns 2 to 4 for each water flow season for the node—

(a) is equalled or exceeded in less than 35% of the days in each water flow season for the simulation period; and

(b) is equalled or exceeded in more than 65% of the days in each water flow season for the simulation period.

TABLE 1

Column 1 Node	Column 2 August–November 50% daily flow	Column 3 December–March 50% daily flow	Column 4 April–July 50% daily flow
A	114	739	494
B	92	671	404
C	9	146	100
D	2	20	10
E	4	11	18
F	62	407	229
G	5	25	16
H	36	241	133
I	6	86	41

2. At each node mentioned in table 2, column 1, the percentage of the total number of days in the water flow season in the simulation period that

SCHEDULE 4 (continued)

the 50% daily flow stated for the water flow season for the node in table 1 is equalled or exceeded be at least the percentage stated in table 2.

TABLE 2

Column 1 Node	Column 2 August–November	Column 3 December–March	Column 4 April–July
A	16%	33%	29%
H	35%	35%	35%

3. At each node mentioned in table 3, column 1, minimise the extent to which the 90% daily flow stated in columns 2 to 4 for each water flow season for the node is equalled or exceeded in less than 75% of the days in each water flow season for the simulation period.

TABLE 3

Column 1 Node	Column 2 August–November 90% daily flow	Column 3 December–March 90% daily flow	Column 4 April–July 90% daily flow
A	20	56	139
B	18	45	118
C	0	0	8
D	1	1	3
E	0	0	0
F	14	32	73
G	1	2	6
H	8	21	41
I	0	6	4

4. At each node mentioned in table 4, column 1, the percentage of the total number of days in the water flow season in the simulation period that the 90% daily flow stated for the water flow season for the node in table 3 is equalled or exceeded be at least the percentage stated in table 4.

SCHEDULE 4 (continued)

TABLE 4

Column 1 Node	Column 2 August–November	Column 3 December–March	Column 4 April–July
A	64%	63%	49%
H	75%	75%	75%

5. At each node mentioned in table 5, column 1, the percentage of the total number of days in the simulation period on which the daily flow is less than 1 ML be between the minimum and maximum percentages stated for the node in column 2.

TABLE 5

Column 1 Node	Column 2 Minimum–Maximum percentage
A	0–15
B	0–15
C	0–33
D	1–32
E	3–48
F	0–16
G	0–24
H	0–16
I	13–28

6. At each node mentioned in table 6, column 1—

(a) minimise the extent to which the number of periods of no flow of at least 1 month but less than 3 months in the simulation period are less than the minimum or more than the maximum number stated for the node in column 2; and

(b) minimise the extent to which the number of periods of no flow of at least 3 months in the simulation period are less than the

SCHEDULE 4 (continued)

minimum or more than the maximum number stated for the node in column 3.

TABLE 6

Column 1 Node	Column 2 Minimum–maximum number	Column 3 Minimum–maximum number
A	0–15	0–1
B	0–5	0–0
C	0–55	0–2
D	0–4	0–2
E	0–89	0–11
F	0–0	0–0
G	0–15	0–2
H	0–3	0–0
I	24–32	0–0

PART 2—MEDIUM TO HIGH FLOW OBJECTIVES

7. At each node mentioned in table 7, 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, be at least the percentage stated for the node in column 2; and

(b) the 1.5 year daily flow volume (the **"1.5 year DFV"**), expressed as a percentage of the 1.5 year DFV for the pre-development flow pattern, be at least the percentage stated for the node in column 3; and

(c) the 5 year daily flow volume (the **"5 year DFV"**), expressed as a percentage of the 5 year DFV for the pre-development flow

SCHEDULE 4 (continued)

pattern, be at least the percentage stated for the node in column 4; and

(d) the 20 year daily flow volume (the **"20 year DFV"**), expressed as a percentage of the 20 year DFV for the pre-development flow pattern, be at least the percentage stated for the node in column 5.

TABLE 7

Column 1 Node	Column 2 Mean annual flow %	Column 3 1.5 year DFV %	Column 4 5 year DFV %	Column 5 20 year DFV %
A	83	93	97	97
B	86	95	93	93
C	92	97	96	98
F	95	98	99	99
H	95	98	99	99
I	98	98	99	99

PART 3—SEASONAL FLOW OBJECTIVES

8. At each node mentioned in table 8, column 1, the flow regime class be maintained as late summer flow regime class.

9. At each node mentioned in table 8, column 1, the annual proportional flow deviation be not more than the annual proportional flow deviation stated for the node in column 2.

SCHEDULE 4 (continued)

TABLE 8

Column 1	**Column 2**
Node	**Annual proportional flow deviation**
A	1.8
B	1.7
C	1.6
F	1.6
H	0.4
I	0.3

10. At node A, the mean wet season flow expressed as a percentage of the mean wet season flow for the pre-development flow pattern, be at least 86%.

SCHEDULE 5

WATER ALLOCATION SECURITY OBJECTIVES

section 22

PART 1—SUPPLEMENTED WATER

1. For water allocations in a high class A priority group—

(a) the monthly supplemented water sharing index be at least 95%; and

(b) the extent to which the monthly supplemented water sharing index is less than 100% be minimised.

2. For water allocations in a high class B priority group—

(a) the monthly supplemented water sharing index be at least 95%; and

(b) the extent to which the monthly supplemented water sharing index is less than 97% be minimised.

3. For water allocations in a medium priority group—

(a) the monthly supplemented water sharing index be at least 85%; and

(b) the extent to which the monthly supplemented water sharing index is less than 90% be minimised.

4. For water allocations in a risk priority group, the monthly supplemented water sharing index may be 0%.

SCHEDULE 5 (continued)

PART 2—UNSUPPLEMENTED WATER

3. For a water allocation group mentioned in the table, column 1, the 30%, 50% and 70% unsupplemented water sharing indices be at least the percentage stated for the water allocation group in columns 2 to 4.

TABLE

Column 1	**Column 2**	**Column 3**	**Column 4**
Water allocation group	**30%**	**50%**	**70%**
Class 2A	110	96	82
Class 3A	110	96	82
Class 4A	110	96	82
Class 5A	106	98	92
Class 6A	106	98	92
Class 7A	118	101	73
Class 1B	109	108	84
Class 4B	99	98	96
Class 5B	99	98	96
Class 6B	99	98	96
Class 7B	131	99	76
Class 8B	110	109	106

SCHEDULE 6

TOTAL VOLUMES FOR WATER ALLOCATION GROUPS

section 40

Column 1 Water allocation group	Column 2 ML
Class 2A	1783
Class 3A	588
Class 4A	954
Class 5A	1185
Class 6A	867
Class 7A	414
Class 1B	1601
Class 4B	131
Class 5B	1070
Class 6B	282
Class 7B	1186
Class 8B	2286

SCHEDULE 7

RATES AND PUMP SIZES

section 43

Column 1 Pump size (mm)	Column 2 Rate (litres/second)
32	3
40	7
50	15
65	27
80	39
100	50
150	84
200	110

SCHEDULE 8

WATER ALLOCATION GROUPS

section 45

Column 1 Subcatchment area	Column 2 Water allocation group	Column 3 Water allocation group
1	—	Class 1B
2	Class 2A	—
3	Class 3A	—
4	Class 4A	Class 4B
5	Class 5A	Class 5B
6	Class 6A	Class 6B
7	Class 7A	Class 7B
8	—	Class 8B

SCHEDULE 9

PRIORITY AREAS

section 53

1 Eton priority area

The Eton priority area consists of the area for which water is supplied from Kinchant Dam, or works associated with the dam, under a resource operations licence or interim resource operations licence.

2 Pioneer River priority area

The Pioneer River priority area consists of the following—

(a) the part of the Pioneer River between the downstream extent of the river and the confluence of the river and Blacks Creek, including the impounded areas of Dumbleton Rocks Weir, Marian Weir and Mirani Weir (AMTD 15.5 km to AMTD 66.0 km);

(b) the part of Blacks Creek between the confluence of the creek and the Pioneer River and the confluence of the creek and Teemburra Creek (AMTD 66.0 km to AMTD 104.0 km);

(c) the part of Teemburra Creek between the confluence of the creek and Blacks Creek, including the impounded area of Teemburra Dam (AMTD 83.5 km to AMTD 20.5 km);

(d) the part of Bakers Creek between the downstream extent of the creek and the Palmyra diversion channel outlet (AMTD 17.0 km to AMTD 29.5 km);

(e) the part of McGregor Creek between the confluence of the creek and Pioneer River and the confluence of the creek and Silver Creek (AMTD 0.0 km to AMTD 7.0 km);

(f) the part of Silver Creek between the confluence of the creek and McGregor Creek and the Silver Creek diversion channel outlet (AMTD 0.0 km to AMTD 14.0 km);

SCHEDULE 9 (continued)

(g) the part of Cattle Creek between the confluence of the creek and the Pioneer River and the Tannallo pipeline outlet (AMTD 0.0 km to AMTD 21.1 km);

(h) the part of Palm Tree Creek between the confluence of the creek and Cattle Creek and the Palm Tree Creek diversion pipeline outlet (AMTD 0.0 km to AMTD 7.5 km).

3 Upper Cattle Creek priority area

The Upper Cattle Creek priority area consists of subcatchment areas 2, 3 and 4.

SCHEDULE 10

DICTIONARY

section 3

"AMTD" means the adopted middle thread distance which is the distance in kilometres, measured along the middle of a watercourse, that a specific point in the watercourse is from the watercourse's mouth or junction with the main watercourse.

"annual proportional flow deviation" means the statistical measure of changes to flow season and volume in the simulation period calculated using the formula for annual proportional flow deviation described in Technical Report 5 of 'Fitzroy Basin Water Allocation and Management Planning Technical Reports'[4] published by the department.

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

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

"conditional licence" means a water licence—

(a) to take water from unsupplemented stream flows for irrigation purposes; and

(b) that includes a condition allowing the taking only if the daily flow at a place in the Pioneer River, Cattle Creek or Owens Creek, stated in the licence, is at least the volume stated in the licence.

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

4 A copy of the reports is available for inspection on the department's website.

SCHEDULE 10 (continued)

"50% daily flow", for a water flow season, means the flow in megalitres that is equalled or exceeded on 50% of the days in the season in the simulation period for the pre-development flow pattern.

"90% daily flow", for a water flow season, means the flow in megalitres that is equalled or exceeded on 90% of the days in the season in the simulation period for the pre-development flow pattern.

"existing works" means works that—

(a) allow the taking of water; and

(b) either—

(i) were in existence on 20 September 2000; or

(ii) were started, but not completed by 20 September 2000 and—

(A) if a variation to a moratorium notice was granted for the works under section 42A of the Act—have been, or are being, completed in accordance with the moratorium notice, as varied; or

(B) otherwise—were completed by 30 November 2001.

"flow regime class" means the measure of flow regime seasonality worked out using the method stated in Haines, A.T., Finlayson, B.L. and McMahon, T.A., 'A global classification of river regimes. Applied Geography, 1988'.

"food chain" means a series of organisms each of which is the food of the next member of the chain.

"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.

"late summer flow regime class" see the Pioneer Valley Water Resource Plan Environmental Flow Report, December 2001.[5]

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5 A copy of the report may be inspected at the department's head office, Brisbane or on the department's website.

SCHEDULE 10 (continued)

"mean annual flow" means the total volume of flow in the simulation period divided by the number of years in the simulation period.

"mean wet season flow" means the total volume of flow during the months of January to March in the simulation period divided by the number of years in the simulation period.

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

"monthly volumetric limit" means the maximum volume of water that may be taken under a water entitlement in a month.

"node" see section 7.

"nominal volume" means the volume of water, in megalitres, that represents the share of the water available to be taken by holders of water allocations in a priority group or a water allocation group.

"period of no flow", for a node, means a period in which the flow of water in the watercourse at the node is less than 1 ML a day.

"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.

"priority area" see section 53.

"related development permit", for an authorisation, means the development permit for the works for taking water under the authorisation.

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

"simulated mean annual diversion", for an authorisation or a group of authorisations, means the total volume of water simulated to have been taken under the authorisation or authorisations, if the authorisation or authorisations were in existence for the whole of the simulation period, divided by the number of years in the simulation period.

SCHEDULE 10 (continued)

"simulation period" means the period from 1 July 1900 to 30 June 1996.

"started", for existing works, means—

(a) construction of the works had physically started or, if construction had not physically started, a contract had been entered into to start construction, and construction had started, by 20 September 2000; 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[6] 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.

"stock purposes", in relation to taking water, means watering stock of a number that would normally be depastured on the land.

"subcatchment area" see section 5(1).

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

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

"30% unsupplemented water sharing index", for a group of authorisations, means the total volume of water simulated to have been taken annually under the authorisations in at least 30% of years in the simulation period, if the authorisations were in existence for the whole of the simulation period, expressed as a percentage of the simulated mean annual diversion for the authorisations.

"50% unsupplemented water sharing index", for a group of authorisations, means the total volume of water simulated to have been taken annually under the authorisations in at least 50% of years in the simulation period, if the authorisations were in existence for the

6 *Local Government Act 1993*, section 940 (Issue of permit)

SCHEDULE 10 (continued)

whole of the simulation period, expressed as a percentage of the simulated mean annual diversion for the authorisations.

"70% unsupplemented water sharing index", for a group of authorisations, means the total volume of water simulated to have been taken annually under the authorisations in at least 70% of years in the simulation period, if the authorisations were in existence for the whole of the simulation period, expressed as a percentage of the simulated mean annual diversion for the authorisations.

"water allocation group" means a water allocation group mentioned in schedule 8.

"water flow season" means any of the following periods—

(a) the period in a year from 1 August to 30 November (**"August–November"**);

(b) the period from 1 December in a year to 31 March in the following year (**"December–March"**);

(c) the period in a year from 1 April to 31 July (**"April–July"**).

"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.

"water supply scheme" means a scheme for the supply of water under an interim resource operations licence, a resource operations licence or another authority to manage water entitlements.

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

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

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

ENDNOTES

1. Approved by the Governor in Council on 19 December 2002.
2. Notified in the gazette on 20 December 2002.
3. Laid before the Legislative Assembly on . . .
4. The administering agency is the Department of Natural Resources and Mines.