Water Sharing Plan for the Central Coast Unregulated Water Sources 2009

[2009-346]



Status Information

Currency of version

Historical version for 8 January 2010 to 7 March 2013 (accessed 12 July 2024 at 0:47)

Legislation on this site is usually updated within 3 working days after a change to the legislation.

Provisions in force

The provisions displayed in this version of the legislation have all commenced.

Notes-

• Note

This Plan ceases to have effect on 1.7.2020 — see clause 3.

Authorisation

This version of the legislation is compiled and maintained in a database of legislation by the Parliamentary Counsel's Office and published on the NSW legislation website, and is certified as the form of that legislation that is correct under section 45C of the Interpretation Act 1987.

File last modified 8 January 2010

Water Sharing Plan for the Central Coast Unregulated Water Sources 2009



Contents

Part 1 Introduction
1 Name of this Plan7
2 Nature and Status of this Plan7
3 Date of commencement
4 Water sources to which this Plan applies7
5 Management Zones
6 Amendment of this Part9
7 Interpretation9
Part 2 Vision, objectives, strategies and performance indicators
8 Vision, objectives, strategies and performance indicators10
9 Vision10
10 Objectives
11 Strategies
12 Performance indicators11
Part 3 Basis for water sharing12
13 Basis for water sharing
14 Climatic variability12
15 Extraction management units for these water sources12
16 Flow reference points
17 Flow classes for these water sources13

Part 4 Environmental water provisions
18 Environmental water provisions
19 Planned environmental water
20 Adaptive environmental water
Part 5 Basic landholder rights
21 Basic landholder rights
22 Domestic and stock rights
23 Native title rights
24 Harvestable rights
Part 6 Bulk access regime 21
25 Bulk access regime
Part 7 Requirements for water under access licences
26 Requirements for water under access licences
27 Share component of domestic and stock access licences
28 Share component of local water utility access licences
29 Share component of major utility access licences
30 Share component of unregulated river access licences
31 Changes to share components
Part 8 Rules for granting access licences
32 Rules for granting access licences
Part 9 Limits to the availability of water
Division 1 Long-term average annual extraction limit
33 Limits to the availability of water
34 Extraction management unit for these water sources
35 Long-term average annual extraction limit
36 Variation of the long-term average annual extraction limit
37 Assessment of the long-term average annual extraction limit
38 Compliance with the long-term average annual extraction limit
Division 2 Available water determinations 32

Part 12 Mandatory conditions	45
61 Rules for water allocation assignments between water sources4	44
60 Rules for interstate access licence transfer and assignment of water allocation4	44
59 Rules for conversion of access licence category4	44
58 Rules for change of water source4	44
57 Rules relating to constraints within these water sources	43
56 Access licence dealing rules	42
Part 11 Access licence dealing rules	42
55 Access to the Very Low Flow Class in these Water Sources4	42
54 Amendments to this Plan for the purpose of sharing of surface water flows on a daily basis4	42
53 Administrative arrangements for managing access to daily flows (approved groups)4	40
52 Adjustment to TDELS and IDELs4	40
51 Individual daily extraction limits for access licences	39
50 Granting of unassigned TDEL	39
49 Unassigned TDEL	
48 Assignment of the TDEL to categories of access licence	39
47 Total daily extraction limits	
46 Sharing surface water flows on a daily basis	35
Division 3 Sharing surface water flows on a daily basis	35
45 Individual access licence account management rules	34
Division 2 Water allocation account management	34
44 Rules for managing access licences	
Division 1 General	
Part 10 Rules for managing access licences	
43 Available water determinations for unregulated river access licences	
42 Available water determinations for major utility access licences	
41 Available water determinations for local water utility access licences	
40 Available water determinations for domestic and stock access licences	
39 Available water determinations	32

Division 1 Mandatory conditions on access licences
62 Mandatory conditions on all access licences45
63 Mandatory conditions relating to the taking of water
64 Mandatory conditions for access to the Very Low Flow Class
65 Mandatory conditions on domestic and stock access licences
66 Mandatory conditions on Aboriginal cultural access licences
67 New access licences granted in these water sources
Division 2 Mandatory conditions on water supply work approvals 49
68 Mandatory conditions on all water supply work approvals
Part 13 Rules for granting or amending water supply work approvals50
69 Granting or amending water supply work approvals
70 Runoff harvesting dams
71 In river dams
Part 14 System operation rules
72 Release rules from local water utility storages
Part 15 Amendment of this Plan
73 Amendment of this Plan53
74 Review of ongoing monitoring and investigations outcomes53
75 Amendment of flow classes, planned environmental water, share components and daily extraction limit provisions
76 Amendments due to floodplain harvesting55
77 Amendments for stormwater harvesting
78 Amendments in relation to Schedule 2 (Very Low Flow) and mandatory conditions
Dictionary
Schedule 2 Licences with access to very low flows
Schedule 3 Local water utilities water supply infrastructure
Appendix 1 Area covered by this plan

Water Sharing Plan for the Central Coast Unregulated Water Sources 2009



Part 1 Introduction

1 Name of this Plan

This Plan is the *Water Sharing Plan for the Central Coast Unregulated Water Sources 2009* (hereafter **this Plan**).

2 Nature and Status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* (hereafter **the Act**).
- (2) This Plan is a plan for water sharing, and generally deals with the matters set out in sections 20 and 21 of the Act.

3 Date of commencement

This Plan commences on 1 August 2009.

4 Water sources to which this Plan applies

- (1) The water sources in respect of which this Plan applies are:
 - (a) the Brisbane Water Water Source,
 - (b) the Mooney Mooney Creek Water Source,
 - (c) the Mangrove Creek Water Source,
 - (d) the Wyong River Water Source, and
 - (e) the Tuggerah Lakes Water Source,

and shall be known as the Central Coast Unregulated Water Sources (hereafter **these water sources**).

Note-

An overview of these water sources is shown in Appendix 1.

(2) These water sources are shown on the registered plan called Central Coast Unregulated Water Sources (WSP005) held by the Department (hereafter the **registered plan for these water sources**).

Note-

Copies of the registered plans for these water sources may be inspected at offices of the Department listed in Appendix 2.

- (3) Subject to subclause (4), these water sources include:
 - (a) all water occurring naturally on the surface of the ground shown on the registered plan for these water sources, and
 - (b) all water in rivers, lakes and wetlands in these water sources.
- (4) These water sources do not include:
 - (a) any water contained in alluvial sediments,
 - (b) any water contained in the coastal sands in these water sources,
 - (c) any water contained in fractured rock aquifers and basement rocks in these water sources,
 - (d) the area of the Jilliby Jilliby Creek Water Source, as defined in the *Water Sharing Plan for the Jilliby Jilliby Creek Water Source 2003*,
 - (e) the area of the Ourimbah Creek Water Source as defined in the *Water Sharing Plan for the Ourimbah Creek Water Source 2003*, and
 - (f) the area of land below the mangrove limit, except for the Wamberal Lagoon, Avoca Lake and Cockrone Lake in the Brisbane Water Water Source.

Note-

The mangrove limit is defined in the dictionary.

(5) These water sources are within part of the Central Coast Water Management Area.

5 Management Zones

For the purpose of this Plan, the following water sources are divided into the following management zones and are shown on the registered plan for these water sources:

- (a) the Brisbane Water Water Source is divided into the:
 - (i) Brisbane Water Management Zone, and
 - (ii) Brisbane Water Plateau Management Zone,
- (b) the Mooney Mooney Creek Water Source is divided into the:

- (i) Mooney Mooney Plateau Management Zone, and
- (ii) Mooney Mooney Creek Management Zone,
- (c) the Mangrove Creek Water Source is divided into the:
 - (i) Mangrove Plateau Management Zone, and
 - (ii) Mangrove Creek Management Zone, and
- (d) the Wyong River Water Source is divided into the:
 - (i) Wyong Plateau Management Zone, and
 - (ii) Wyong River Management Zone.

Note—

An overview of these management zones is shown in Appendix 1.

6 Amendment of this Part

The Minister may amend this Part to:

- (a) amend (including to amend the boundaries of) an existing water source or management zone in these water sources, and
- (b) establish new or additional water sources or management zones in these water sources.

Note-

In instances where in-stream structure such as weirs are removed, this is likely to result in a change to the tidal limit of the water source, and a resultant change in the boundary of the water source and management zones, where applicable.

Note-

The tidal pool is that area between the lower tidal limit and the upper mangrove limit. The tidal limit and mangrove limit are defined by the NSW Government's Manly Hydraulics Laboratory. Rules for a new management zone for an estuarine tidal pool may require an adjustment to the Plan rules for the remainder of the water source.

Note-

The registered plan for these water sources may be amended or updated from time to time including as a result of any amendment made by this Plan.

7 Interpretation

- (1) Words and expressions that are defined in the Act have the same meanings in this Plan.
- (2) Words and expressions that are defined in Schedule 1 of this Plan have the meanings

set out in that Schedule.

- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

Part 2 Vision, objectives, strategies and performance indicators

8 Vision, objectives, strategies and performance indicators

This Part is made in accordance with section 35 (1) of the Act.

9 Vision

- (1) The vision of this Plan is to provide sustainable and integrated management of these water sources for the benefit of both present and future generations.
- (2) This Plan also recognises the following respect statements for Aboriginal values in these water sources:
 - (a) life-giving water is of extreme significance to Aboriginal culture for its domestic, traditional and spiritual values, and
 - (b) whilst water supplied for the environment will provide protection for native flora and fauna, water for fishing, food gathering and recreational activities, it is important that the community respects the spiritual significance of water to the Aboriginal people.

10 Objectives

The objectives of this Plan are to:

- (a) protect, preserve, maintain or enhance the important river flow dependent ecosystems of these water sources,
- (b) protect, preserve, maintain or enhance the Aboriginal, cultural and heritage values of these water sources,
- (c) manage these water sources to ensure equitable sharing between users,
- (d) protect basic landholder rights,
- (e) manage local water utility/major utility water supply security for the benefit of the community whilst recognising the environmental needs of the water source,
- (f) provide opportunities for market based trading of access licences and water allocations within sustainability and system constraints,

- (g) provide sufficient flexibility in water account management to encourage responsible use of available water, and
- (h) adaptively manage these water sources.

Note—

For the purposes of the *Inter-governmental Agreement on the National Water Initiative* (2004) the environmental and other public benefit outcomes provided under this Plan include:

- 1. the important river flow dependent environmental, Aboriginal, cultural and heritage values of these water sources are protected, preserved, maintained or enhanced,
- 2. these water sources are managed to ensure equitable sharing between users, and
- 3. basic landholder rights of owners, or occupiers, of land are protected.

11 Strategies

The strategies of this Plan are to:

- (a) establish environmental water rules,
- (b) identify water requirements for basic landholder rights,
- (c) identify water requirements for access licences,
- (d) establish rules for granting of access licences and approvals,
- (e) establish rules that place limits on the availability of water for extraction,
- (f) establish rules for making available water determinations,
- (g) establish rules for the operation of water accounts,
- (h) establish rules which specify the circumstances under which water may be extracted,
- (i) establish access licence dealing rules,
- (j) establish performance indicators and
- (k) identify triggers for and limit to changes to the rules.

12 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flow regime,
- (b) change in moderate to high flow regime,
- (c) change in local water utilities access,

- (d) change in, or maintenance of, ecological value of key water sources and their dependent ecosystems,
- (e) extent to which basic landholder rights requirements have been met,
- (f) extent to which major and local water utility requirements have been met,
- (g) extent to which native title rights requirements have been met,
- (h) change in economic benefits derived from water extraction and use, and
- (i) extent of recognition of spiritual, social, economic and customary values of water to Aboriginal people.

This Plan is to be audited pursuant to section 44 of the Act for the purpose of ascertaining whether its provisions are being given effect to.

Part 3 Basis for water sharing

13 Basis for water sharing

This Part is made in accordance with sections 20 (2) (a) and 20 (2) (c) of the Act.

14 Climatic variability

This Plan recognises the effects of climatic variability on river flow variability in these water sources by having provisions that manage:

- (a) the sharing of water in these water sources within the limits of water availability on a long-term average annual basis, and
- (b) the sharing of flows that occur in specified water sources on a daily basis.

15 Extraction management units for these water sources

- The availability of water for extraction from these water sources on a long-term average annual basis will be determined at the level of an extraction management unit.
- (2) The extraction management units for these water sources are the Tuggerah Lakes Extraction Management Unit and the Gosford Extraction Management Unit, and are shown on the registered plan for these water sources.
- (3) The Tuggerah Lakes Extraction Management Unit consists of the following water sources:
 - (a) Wyong River Water Source,
 - (b) Tuggerah Lakes Water Source,

- (c) Ourimbah Creek Water Source as defined within the *Water Sharing Plan for the Ourimbah Creek Water Source 2003*, and
- (d) Jilliby Jilliby Creek River Water Source as defined within the *Water Sharing Plan for the Jilliby Jilliby Creek Water Source 2003.*
- (4) The Gosford Extraction Management Unit consists of the following water sources:
 - (a) Brisbane Water Water Source,
 - (b) Mooney Mooney Creek Water Source, and
 - (c) Mangrove Creek Water Source.

The extraction management units identified in clause 15 are shown in Appendix 1.

16 Flow reference points

- (1) For the purposes of this Plan all flows referred to in clause 17 (1) are estimated flows at the flow reference point(s) for each water source or management zone, and are shown on the registered plan for these water sources, or are as otherwise stated in this Plan.
- (2) The Minister may amend this Plan to add or remove flow reference points, including if there are any changes to flow classes under subclauses 17 (2), 17 (3) 17 (5) and 17 (6) of this Plan.

Note—

The registered plan for these water sources may be amended as a result of the establishment of, or changes to, flow reference points under this Part.

Note-

In the event of any failure of a flow reference point in these water sources, flow classes in the water source may be imposed pursuant to an order made under section 324 of the Act.

17 Flow classes for these water sources

- (1) This Plan establishes the following flow classes as the basis for sharing of daily flows from these water sources:
 - (a) for the Wyong River Water Source:
 - (i) for all access licences, excluding local water utility access licences:
 - for the first three years of this Plan the Very Low Flow Class is when there is no visible flow at gauging stations 211009 and 211010, thereafter the Very Low Flow Class is when the combined flows at gauging stations 211009 and 211010 are equal to or less than 4 ML/day (hereafter *ML/day*),

4 ML/day corresponds to the estimated 95th percentile of all days with flow.

(2) for the first three years of this Plan A Class is when there is a visible flow at gauging stations 211009 and 211010, for year 4 and 5 of this Plan A Class is when the combined flows at gauging stations 211009 and 211010 are greater than 4 ML/day, unless the upgrade works to the infrastructure specified in Schedule 3 are completed then A Class is when the combined flows at gauging stations 211009 and 211010 are greater than 4 ML/day and less than 13.5 ML/day, thereafter A Class is when the combined flows at gauging stations 211009 and 211010 are greater than 4 ML/day and less than 13.5 ML/day, thereafter A Class is when the combined flows at gauging stations 211009 and 211010 are greater than 4 ML/day and less than 13.5 ML/day,

Note-

13.5 ML/day corresponds to the estimated 80th percentile of all days with flow.

Note-

The specified cease to pump levels may be amended under clause 17 (7) of this Plan. The cease to pump level for the bottom of A Class and the top of the Very Low Flow Class may be amended to a level no less than the 98th percentile (which corresponds to 2 ML/day) and no more than the 95th percentile (which corresponds to 4ML/day).

(3) for the first five years of this Plan, or until the upgrade works to the infrastructure specified in Schedule 3 are completed, whichever occurs sooner, no B Class is established, thereafter B Class is when the combined flows at gauging stations 211009 and 211010 are equal to or greater than 13.5 ML/day and less than 26 ML/day, and

Note-

26 ML/day corresponds to the estimated 50th percentile of all days with flow.

(4) for the first five years of this Plan, or until the upgrade works to the infrastructure specified in Schedule 3 are completed, whichever is the sooner, no C Class is established, thereafter C Class is when the combined flows at gauging stations 211009 and 211010 are equal to or greater than 26 ML/day,

Note—

When temporary water restrictions under a drought management plan are implemented by the local water utilities the Department in consultation with Gosford Wyong Councils Water Authority will assess water availability in the Wyong River Water Source and the level of risk to the ability of the local water utility to supply water. This will inform whether action is required to declare a severe water shortage and relax access rules for the local water utility and other access licences accordingly.

- (ii) for all local water utility access licences:
 - (1) for the first three years of this Plan, or until the upgraded fishway for the

Wyong River Weir and new Wyong River pump station is completed, whichever is the sooner, there is no Very Low Flow Class thereafter the Very Low Flow Class is when the combined flows at gauging stations 211009 and 211010 are equal to or less than 4 ML/day (hereafter **ML/day**),

Note-

4 ML/day corresponds to the estimated 95th percentile of all days with flow.

Note-

While there is no Very Low Flow Class specified, the taking of water under local water utility access licences is limited in accordance with clause 19 (3) (e) for the first three years of the plan or until the upgraded fishway for the Wyong River Weir and new Wyong River pump station is completed, whichever is the sooner.

(2) for the first three years of this Plan, or until the upgraded fishway for the Wyong River Weir and new Wyong River pump station is completed, whichever is the sooner, there is no A Class, thereafter A Class is when the combined flows at gauging stations 211009 and 211010 are greater than 4 ML/day and less than 13.5 ML/day,

Note-

13.5 ML/day corresponds to the estimated 80th percentile of all days with flow.

Note-

It is intended that the Wyong Weir will be upgraded during the life of this Plan. This will include an improved fishway and possible amendment to the control point proposed to replace existing flow reference points for access rules. The flow class rules developed for this Plan are based on fish passage requirements associated with the improved fishway. Once the fishway is upgraded, the new pump station commissioned and a new gauging station is established at the weir, local water utility extractions will be managed such that flows through the fishway will be within the operating range of the fishway. However, extreme river flow conditions such as flows less than 2 ML/day and very high flows may be outside the operating range of the proposed fishway.

Note-

The specified cease to pump levels may be amended under clause 17 (3) of this Plan, through studies as specified in clause 75 (1) (a). The cease to pump level may be amended to a level no less than the 95th percentile (which corresponds to 4 ML/day) and no more than the 70th percentile (which corresponds to 22 ML/day).

(3) for the first five years of this Plan, or until the upgrade works to the infrastructure specified in Schedule 3 are completed, whichever occurs sooner, no B Class is established, thereafter B Class is when the combined flows at gauging stations 211009 and 211010 are equal to or greater than 13.5 ML/day and less than 26 ML/day, and

Note-

26 ML/day corresponds to the estimated 50th percentile of all days with flow.

(4) for the first five years of this Plan, or until the upgrade works to the infrastructure specified in Schedule 3 are completed, whichever is the sooner, no C Class is established, thereafter C Class is when the combined flows at gauging stations 211009 and 211010 are equal to or greater than 26 ML/day,

Note-

When temporary water restrictions under a drought management plan are implemented by the local water utilities the Department in consultation with Gosford Wyong Councils Water Authority will assess water availability in the Wyong River Water Source and the level of risk to the ability of the local water utility to supply water. This will inform whether action is required to declare a severe water shortage and relax access rules for the local water utility and other access licences accordingly.

- (b) for the Tuggerah Lakes Water Source, no flow classes are established by this Plan,
- (c) for the Brisbane Water Water Source, no flow classes are established by this Plan,
- (d) for the Mooney Mooney Creek Water Source, no flow classes are established by this Plan, and

Note-

At year six of this Plan flow classes will be established based on further investigations as set out under clause 17 (2) of this Plan.

Note-

Access rules for Mooney Mooney Creek may be established under clause 19 (4) of this Plan, such that extraction from the river is only permitted after a specified flow has occurred for a specified number of hours based on the review of the study and ongoing monitoring and investigations referred to in clause 75 of this Plan.

(e) for the Mangrove Creek Water Source, no flow classes are established by this Plan. **Note**—

At year six of this Plan flow classes will be established based on further investigations as set out under clause 17 (2) of this Plan.

Note-

Access rules for Mangrove Creek may be established under clause 19 (4) of this Plan, such that the taking of water from the river is only permitted after a specified flow has occurred for a specified number of hours based on the review of the study and ongoing monitoring and investigations referred to in clause 75 of this Plan.

(2) The Minister will amend subclauses 1 (d) and 1 (e), at year six of this Plan, to establish flow classes in the Mooney Mooney Creek and Mangrove Creek Water Sources, based on further investigations to determine appropriate surface water levels and flow reference points to allow rule development.

Note-

Flow class rules may be based on, but not limited to, a cease to pump at a specified flow reference point

(gauge(s) may need to be installed) in either Mangrove Creek and/or Mooney Mooney Creek Water Sources or cease to pumps at specified flow reference points throughout the water sources in specified reaches. A visible inflow/outflow rule on pools may also be introduced in accordance with clause 19 (4) of this Plan. Consideration of the requirement for a bypass option for access licences holders taking water from in-river dams will also be undertaken. In developing these rules consultation will be undertaken with key stakeholders.

- (3) The Minister may amend subclauses 1 (a), (1) (d) and/or (1) (e), to vary or establish a new or additional flow class or flow classes based on the outcomes of monitoring and investigations carried out under clause 75 of this Plan.
- (4) Any variation in the Wyong River Water Source under subclause (3) should not result in the Very Low Flow Class being less than the 95th percentile flow or the bottom of B Class being greater than the 70th percentile flow for local water utility access licences.

Note-

The 95th percentile (which corresponds to around 4 ML/day) was chosen as the lower limit of the bounds of change, as this is the State Policy position in regard to environmental flows, and is within the levels at which the upgraded fishway on the Wyong River Weir would operate most effectively (2–5ML/day). The 70th percentile (which corresponds to 22 ML/day) was chosen as the upper limit of the bounds of change for B Class as this would provide greater protection to low flows and increase access to high flows for the local water utility.

- (5) The Minister may amend subclause (1) to establish new or additional flow class or flow classes in any water source where management zones or water sources are added or amended during the term in accordance with clause 6 of this Plan.
- (6) The Minister may amend subclauses (1) (a) (i) and (1) (a) (ii), to specify equivalent flows at the Wyong River Weir in the Wyong River Water Source.
- (7) If the flow reference point in the Wyong River Water Source is amended to the Wyong River Weir as specified in subclause (6) the Very Low Flow Class for access licences, excluding local water utility access licences, may be amended to a level between 2 to 4 ML/day if evidence of economic hardship can be provided to the Minister by access licence holders in the water source based on the implementation of these rules.

Note-

2 ML/day equates to the 98th percentile flow.

Part 4 Environmental water provisions

18 Environmental water provisions

This Part is made in accordance with sections 8, 8A, 8B, 8C, 8D, 8E and 20 (1) (a) of the Act.

19 Planned environmental water

(1) Planned environmental water is identified and established in these water sources as follows:

- (a) water volume in excess of the respective long-term average annual extraction limit established in clause 35 of this Plan may not be taken and used for any purpose in these water sources, thereby protecting a proportion of river flows for fundamental ecosystem needs from increases in long-term water extraction, and
- (b) for all water sources, the water remaining in the water source after taking water to meet basic landholder rights and for access licences in accordance with the rules identified in subclause (3).
- (2) The planned environmental water established in subclause (1) (a) for these water sources is maintained by the rules in clause 38 that limit the availability of water for extraction under access licences, thereby protecting a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction.
- (3) The planned environmental water established in subclause (1) (b) is maintained as follows:
 - (a) in water sources or management zones with a Very Low Flow Class, the holders of access licences, excluding access licences listed in Schedule 2, domestic and stock access licence or a domestic and stock (subcategory "domestic") access licence under clause 64 (7) and access licences that nominate a runoff harvesting work, are not permitted to take water when flows are within the Very Low Flow Class,
 - (b) in the Wyong River, Tuggerah Lakes and Brisbane Water Water Sources, excluding access licences listed in Schedule 2, domestic and stock access licence or a domestic and stock (subcategory "domestic") access licence under clause 64 (7) and access licences that nominate a runoff harvesting dam, notwithstanding all other rights and conditions, the taking of water from a river by a nominated water supply work is permitted only where it complies with the flow conditions of the authorised water supply works or in the absence of such condition:
 - (i) if there is a visible flow in the river in the downstream vicinity of the water supply work, or
 - (ii) where water is being taken from a pool, a visible inflow and outflow to and from that pool,
 - (c) pending the outcomes of investigations specified in clause 17 (2) in the Mangrove Creek and Mooney Mooney Creek Water Sources, the Minister may amend this subclause from year six of this Plan, excluding access licences listed in Schedule 2, domestic and stock access licence or a domestic and stock (subcategory "domestic") access licence under clause 64 (7) and access licences that nominate a runoff harvesting dam, notwithstanding all other rights and conditions, to require that the taking of water from a river by a nominated water supply work be permitted only where it complies with the flow conditions of the authorised water supply works or in the absence of such condition:

- (i) if there is a visible flow in the river in the downstream vicinity of the water supply work, or
- (ii) where water is being taken from a pool, a visible inflow and outflow to and from that pool,
- (d) in Wyong River Water Sources the holders of access licences are only permitted to take water in accordance with the rules specified in clause 47 of this Plan for A Class, B Class and C Class, and
- (e) until year three of this Plan, or the upgraded fishway for the Wyong River Weir and new Wyong River pump station is completed, whichever is the sooner, in the Wyong River Water Source, notwithstanding all other rights and conditions, the following access conditions shall apply to local water utility access licences for any two weeks in both October and December:
 - (i) a cease to pump equal to a visible flow over the Wyong Weir Flow Reference Point, and
 - (ii) pumping may commence 24 hours after the spilling of the Wyong River Weir.
- (4) The Minister may amend this Plan to amend subclause (3) during the term of this Plan in the Wyong River, Mangrove Creek, or Mooney Mooney Creek Water Sources to establish a first flush rule in accordance with monitoring and investigations undertaken under clause 75 of this Plan.

It is anticipated that development of first flush rules, if appropriate, will be done within the first two years of this Plan.

(5) Following the establishment or amendment of a flow class or flow classes within any management zone or water source under clauses 17 (4) and 17 (5) of this Plan, the Minister may amend this Plan to amend subclauses (1), (2) and (3) to identify, establish and maintain planned environmental water in the relevant water source such that the amendments made under this clause reflect the amendments made under clauses 17 (4) and 17 (5).

Note-

The effect of clause 17 (4) is that the flow classes can be amended as a result of monitoring and investigations subject to the Very Low Flow Class not being less than the 95th percentile flow or the bottom of B Class not being greater than the 70th percentile flow. Clause 17 (5) allows the amendment of flow classes if a new management zone is added.

(6) The Minister may amend this Plan to amend subclause (3) to specify equivalent flows at the Wyong River Weir.

Note—

The rules in clause 19 protect the water for the environment by limiting both water extracted over the long-term and the taking of water in accordance with the objectives of this Plan.

Note—

This Plan recognises that the environmental water provisions provide non-extractive benefits, including traditional Aboriginal spiritual, social, customary, economic, cultural and recreational benefits, and contributes to improved water quality.

20 Adaptive environmental water

- The holder of an access licence in these water sources may request that the Minister impose an adaptive environmental water condition in respect of the access licence, pursuant to section 8B of the Act.
- An access licence may be granted in these water sources, pursuant to sections 8C or 8D of the Act.
- (3) If an adaptive environmental water condition on an access licence in these water sources requires water to be left in the water source for environmental purposes, the Minister may establish Total Daily Extraction Limits under clause 47 (10) of this Plan in the relevant water source or management zone.

Note-

TDELs referred to in subclause (3) will not be established unless enabling management systems are in place. This includes monitoring and measurement systems which allow for accurate measurement of flows and extraction.

Part 5 Basic landholder rights

21 Basic landholder rights

This Part is made in accordance with section 20 (1) (b) of the Act.

22 Domestic and stock rights

- At the commencement of this Plan the water requirements of holders of domestic and stock rights within these water sources are estimated to total 0.544 megalitres per day (hereafter *ML/day*) and are distributed as follows:
 - (a) 0.24 ML/day in the Wyong River Water Source,
 - (b) 0.2 ML/day in the Tuggerah Lakes Water Source,
 - (c) 0.07 ML/day in the Brisbane Water Water Source,
 - (d) 0.004 ML/day in the Mooney Mooney Creek Water Source, and
 - (e) 0.03 ML/day in the Mangrove Creek Water Source.
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note-

Domestic and stock rights must be exercised in accordance with any mandatory guidelines established under section 336B of the Act with respect to the taking and use of water for domestic consumption or stock watering. An increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in these water sources and/or as a result of the increase in the exercise of basic landholder rights by existing landholders.

Inherent water quality and land use activities may make the water in some areas unsuitable for human consumption. Water from these water sources should not be consumed without it first being tested and appropriately treated.

23 Native title rights

- (1) At the commencement of this Plan there are no native title rights in these water sources and therefore the water requirements for native title rights total 0 ML/year.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note—

A change in native title rights may occur pursuant to the provisions of the Native Title Act 1993 (Cth).

24 Harvestable rights

The requirement for water under harvestable rights is the amount of water that owners of land are entitled to capture pursuant to a harvestable rights order made under section 54 of the Act and published from time to time in the NSW Government Gazette.

Part 6 Bulk access regime

25 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in these water sources having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climate variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,

- (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
- (d) establishes rules according to which available water determinations are to be made as provided for in Part 9, Division 2 of this Plan,
- (e) establishes rules according to which access licences are managed as provided for in Parts 9 and 10 of this Plan, and
- (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Part 9 of this Plan.

Part 7 Requirements for water under access licences

26 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act. **Note**—

The amount of water specified in this Part represents the total volumes or unit shares specified in the share components on access licences in these water sources. The actual volumes of water available at any time will depend on climate, access licence priority and the rules in this Plan.

27 Share component of domestic and stock access licences

It is estimated that at the time of commencement of this Plan, the share components of domestic and stock access licences authorised to extract water from these water sources will total 181.5 megalitres per year (hereafter *ML*/**year**), distributed as follows:

- (a) 31.0 ML/year in the Wyong River Water Source,
- (b) 0 ML/year in the Tuggerah Lakes Water Source,
- (c) 0 ML/year in the Brisbane Water Water Source,
- (d) 63.5 ML/year in the Mooney Mooney Creek Water Source, and
- (e) 87.0 ML/year in the Mangrove Creek Water Source.

28 Share component of local water utility access licences

It is estimated that at the time of commencement of this Plan, the share components of local water utility access licences authorised to extract water from these water sources will total 100,400 ML/year, distributed as follows:

(a) 34,600 ML/year in the Wyong River Water Source,

Note-

The share component for Wyong River Water Source may be amended based on the review of the study and ongoing monitoring and investigations referred to in clause 64 of this Plan.

- (b) 0 ML/year in the Tuggerah Lakes Water Source,
- (c) 0 ML/year in the Brisbane Water Water Source,
- (d) 17,900 ML/year in the Mooney Mooney Creek Water Source, and
- (e) 47,900 ML/year in the Mangrove Creek Water Source.

Note—

The total share component shown in the above water sources and the share component in the Ourimbah Creek Water Source (to be amended to 8,400 ML/year) totals 108,800 ML/year. These annual limits were derived by running the system model with environmental flows for the full historic stream flow sequence (since 1885) with estimated 2050 demands and selecting the highest annual extraction on each water source from the model extraction results.

However, while the total share component is 100,400 ML/year, the long-term average annual extraction limits from the Mangrove Creek, Mooney Mooney Creek, Ourimbah Creek and Wyong River Water Sources, groundwater sources and bulk water transfers to Hunter Water Corporation will be limited to a maximum of 36,750 ML/year (based on 2013 drought demand). This figure will be reviewed in line with clause 35 (5). The basis for reflecting the amounts this way is to provide flexibility to the Local Water Utility to extract varying amounts from the four water sources to suit the climatic and operational conditions, while still being limited by a long-term average annual extraction limit for the water supply scheme.

The total share components for the Wyong River, Mangrove Creek and Mooney Mooney Creek (and Ourimbah Creek) Water Sources may be amended following the review of the study and ongoing monitoring and investigations referred to in clause 75 of this Plan.

29 Share component of major utility access licences

It is estimated that at the time of commencement of this Plan, the share components of major utility access licences authorised to extract water from these water sources will total 0 ML/year.

30 Share component of unregulated river access licences

It is estimated that at the time of commencement of this Plan, the share components of unregulated river access licences authorised to extract water from these water sources will total 10,484 unit shares, distributed as follows:

- (a) 3,984 unit shares in the Wyong River Water Source,
- (b) 20 unit shares in the Tuggerah Lakes Water Source,
- (c) 5 unit shares in the Brisbane Water Water Source,
- (d) 2,215 unit shares in the Mooney Mooney Creek Water Source, and
- (e) 4,260 unit shares in the Mangrove Creek Water Source.

31 Changes to share components

(1) This Plan recognises that the total requirements for water for extraction within these

water sources may change during the term of this Plan as a result of:

- (a) the granting, surrender or cancellation of access licences,
- (b) the granting, surrender or cancellation of access licences through a dealing under Part 11 of this Plan,
- (c) the variation of local water utility licences under section 66 of the Act, and
- (d) any changes due to the volumetric conversion of *Water Act 1912* entitlements that are currently non-volumetric.
- (2) The share component and extraction components of local water utility access licences held by the Gosford City Council Water Supply Authority or the Wyong Council Water Supply Authority in the Wyong River, Mooney Mooney Creek or Mangrove Creek Water Sources may be amended under section 68A of the Act where studies have been undertaken by the Authorities, relating to water supply system analysis and supply security, that recommend a change in the volume of the local water utility access licence share components assigned to either or both Authorities within these water sources.

Note-

Any amendment to share components for local water utility access licences should consider the overall impacts of the change on GWCWA water security prior to any amendment taking place.

- (3) When considering an increase to local water utility access licence under sections 66(3) or 66 (4) of the Act, consideration should be given to the following matters:
 - (a) whether the local water utility is actively taking all reasonable measures to implement any guidelines for the best practise management of water supply and sewerage services,
 - (b) whether the local water utility has investigated and is implementing all reasonable alternative options for meeting increased water demand, including stormwater use and water re-use,
 - (c) whether the current water entitlements would still be insufficient if the local water utility was complying with paragraphs (a) and (b),
 - (d) whether an increase in water entitlements is the best option for meeting increased water demand having regard to environmental impacts and costs, and
 - (e) such other matters as the Minister considers relevant.

Part 8 Rules for granting access licences

32 Rules for granting access licences

(1) This clause is made in accordance with sections 20 (2) (b), 61 and 63 of the Act,

having regard to the limits to water availability in these water sources, and the need to protect dependent ecosystems.

- (2) In addition to those applications for specific purpose access licences permitted under clause 19 of the *Water Management (General) Regulation 2004* (hereafter *the Regulation*) applications may also be made in these water sources for access licences, as follows:
 - (a) a major utility access licence which replaces a local water utility access licence in the event that the Gosford City Council Water Supply Authority or the Wyong Council Water Supply Authority are declared to be major utilities under the Act, and
 - (b) an access licence that may be granted in accordance with an access licence dealing.

Note-

Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is rapid growth in population.

Section 61 (b) of the Act also allows a person to apply for an access licence with a zero share component and section 61 (c) of the Act allows for a person to apply for an access licence where the right to apply for that access licence has been acquired under section 65 of the Act.

- (3) Access licences applied for under clause 5 of the Regulation shall only be granted in the Tuggerah Lakes, Wyong River, Brisbane Water, Mangrove Creek or Mooney Mooney Water Sources if the applicant can demonstrate a history of extraction in the area from the defined tidal limit to the mangrove limit.
- (4) An access licence granted under subclause (3) will have the share component determined by a process in consultation with local water users.
- (5) The determination of the share component under subclause (4) will consider the historical maximum annual extraction of water on the property.
- (6) An access licence of the subcategory "Aboriginal cultural" shall only be granted if the application does not exceed 10 ML/year.
- (7) A specific purpose access licence shall only be granted if the share or extraction component of the access licence is the minimum required to meet the circumstances in which the access licence is proposed to be used.

Note-

Any new access licence granted in these water sources may be subject to specific mandatory conditions as set out in Part 12 of this Plan.

Part 9 Limits to the availability of water

Division 1 Long-term average annual extraction limit

33 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

34 Extraction management unit for these water sources

The availability of water to be taken from these water sources and the management of the long-term average annual extraction of water limit in these water sources will be undertaken in the Tuggerah Lakes Extraction Management Unit and the Gosford Extraction Management Unit (*these Units*).

35 Long-term average annual extraction limit

- (1) For each of these Units separate long-term average annual extraction limits will apply to the taking of water under:
 - (a) basic landholder rights and access licences, other than those local water utility or major utility access licences held by Gosford and Wyong Councils, and
 - (b) local water utility or any future major utility access licences held by Gosford and Wyong Councils (hereafter *the local water utility long-term average annual extraction limit*).
- (2) The long-term average annual extraction limit established under subclause (1) (a) in:
 - (a) the Tuggerah Lakes Extraction Management Unit is equal to the total of:
 - (i) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in the Wyong River Water Source and the Tuggerah Lakes Water Source, immediately prior to the commencement of this Plan for the Wyong River Water Source and the Tuggerah Lakes Water Source, excluding local water utility or any future major utility entitlements held by Gosford and/or Wyong Councils,
 - (ii) an estimate of annual extraction of water under domestic and stock rights and native title rights in the Wyong River Water Source and the Tuggerah Lakes Water Source at the commencement of this Plan,
 - (iii) the sum of share components of access licences in the Ourimbah Creek Water Source at the commencement of the Water Sharing Plan for the Ourimbah Creek Water Source 2003 and in the Jilliby Jilliby Creek Water Source at the commencement of the Water Sharing Plan for the Jilliby Jilliby Creek Water Source 2003, excluding share components of local water utility or any future major utility access licences held by Gosford and/or Wyong Councils,

- (iv) an estimate of annual extraction of water under domestic and stock rights and native title rights in the Ourimbah Creek Water Source at the commencement of the Water Sharing Plan for the Ourimbah Creek Water Source 2003 and in the Jilliby Jilliby Creek Water Source at the commencement of the Water Sharing Plan for the Jilliby Jilliby Creek Water Source 2003,
- (v) the sum of share components of access licences not held by Gosford and Wyong Councils, that have been issued for the purposes of stormwater harvesting in the Tuggerah Lakes Extraction Management Unit, and
- (vi) the sum of share components of access licences granted in the Tuggerah Lakes Extraction Management Unit under the Regulation and Part 8 of this Plan, excluding local water utility or any future major utility access licences granted to Gosford and/or Wyong Councils,
- (b) the Gosford Extraction Management Unit is equal to the total of:
 - (i) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in the Brisbane Water Water Source, the Mooney Mooney Creek Water Source and the Mangrove Creek Water Source, immediately prior to the commencement of this Plan, excluding entitlements held by Gosford and Wyong Councils,
 - (ii) an estimate of annual extraction of water under domestic and stock rights and native title rights in the Brisbane Water Water Source, the Mooney Mooney Creek Water Source and the Mangrove Creek Water Source at the commencement of this Plan,
 - (iii) the sum of share components of access licences not held by Gosford and Wyong Councils, that have been issued for the purposes of stormwater harvesting in the Gosford Extraction Management Unit, and
 - (iv) the sum of share components of access licences granted in the Gosford Extraction Management Unit under the Regulation and Part 8 of this Plan, excluding local water utility or any future major utility access licences granted to Gosford and/or Wyong Councils.
- (3) The local water utility long-term average annual extraction limit established under subclause (1) (b) for the Tuggerah Lakes Extraction Management Unit will be equal to 36,750 ML/year minus:
 - (a) the long-term average annual extraction under local water utility or any future major utility access licences held by Gosford City Council and/or Wyong Shire Council in the Gosford Extraction Management Unit, and
 - (b) the long-term average annual extraction under local water utility or any future major utility access licences held by Gosford City Council and/or Wyong Shire

Council in any groundwater source, where the water taken is not being passed through Mardi Water Treatment Plant.

Note-

Water flowing from Hunter Water Corp to Gosford Wyong Councils will be accounted against the local water utility long-term average annual extraction limit in the Tuggerah Lakes Extraction Management Unit. Water transferred from Gosford Wyong Councils to Hunter Water Corporation will be accounted against the major utility long-term average annual extraction limit in the Hunter Extraction Management Unit.

Note-

The 36,750 ML/year figure is based on demand projections to 2013. This is the expected date that releases will commence from Tillegra Dam and upgrade works will be finalised for Grahamstown Dam. At this time operation of the water supply system will vary and a number of relevant plan provisions within the *Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009* and this Plan will need to be reviewed to determine their appropriateness in line with the new operations.

Note-

Any groundwater extraction that is being passed through Mardi Water Treatment Plant will effectively be counted as surface water extraction against the long-term average annual extraction limit.

- (4) The local water utility long-term average annual extraction limit established under subclause (1) (b) for the Gosford Extraction Management Unit will be equal to 36,750 ML/year minus:
 - (a) the long-term average annual extraction under local water utility or any future major utility access licences held by Gosford City Council and/or Wyong Shire Council in the Tuggerah Lakes Extraction Management Unit, and
 - (b) the long-term average annual extraction under local water utility or any future major utility access licences held by Gosford City Council and/or Wyong Shire Council in any groundwater source, where the water taken is not being passed through Somersby Water Treatment Plant.

Note-

The 36,750 ML/year figure is based on demand projections to 2013. This is the expected date that releases will commence from Tillegra Dam and upgrade works will be finalised for Grahamstown Dam. At this time operation of the water supply system will vary and a number of relevant plan provisions within the *Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009* and this Plan will need to be reviewed to determine their appropriateness in line with the new operations.

Note-

Any groundwater extraction that is being passed through Somersby Water Treatment Plant will effectively be counted as surface water extraction against the long-term average annual extraction limit.

(5) After commencement of releases from Tillegra Dam or after 1 July 2013, whichever occurs sooner, the local water utility long-term average annual extraction limits established under subclauses (3) and (4) for the Tuggerah Lakes and Gosford Extraction Management Units will be reviewed, taking into consideration:

- (a) instream habitat and estuary requirements, and
- (b) local water utility long-term demand requirements.
- (6) The Minister may amend this Plan, to vary the local water utility long-term average annual extraction limit specified in subclauses (3) and (4) in accordance with the outcomes of the review specified in subclause (5).
- (7) The Minister may amend this Plan to amend subclause (1) (b) and the local water utility long-term average annual extraction limit specified in subclauses (3) and (4) following the granting of access licences to Gosford or Wyong Councils for the purpose of stormwater harvesting.
- (8) The Minister may amend this Plan to amend the local water utility long-term average annual extraction limit specified in subclauses (3) and (4) in accordance with the outcomes of the review specified in clause 38 (11) of this Plan.

36 Variation of the long-term average annual extraction limit

- The long-term average annual extraction limit for one or more of these Units may vary following the granting, cancellation or modification of access licences under the Act or through a dealing under Part 11 of this Plan.
- (2) The long-term average annual extraction limit for an extraction management unit may vary following the purchase and cancellation of an access licence in the extraction management unit.

37 Assessment of the long-term average annual extraction limit

- (1) This clause applies from the third year of this Plan.
- (2) The total water extracted pursuant to basic landholder rights and access licences in these Units, other than local water utility or any future major utility access licences held by Gosford City Council and Wyong Shire Council, will be assessed each water year to determine if the long-term average annual extraction limit established by clause 35 (2) for each extraction management unit has been exceeded.
- (3) The assessment referred to in subclause (2) is to be based on a comparison of the water extracted in the current water year in these Units, against the average extraction within these Units over the preceding 2 water years.

38 Compliance with the long-term average annual extraction limit

Note-

Compliance with the long-term average annual extraction limit is managed through the making of available water determinations, under section 59 of the Act, for access licences in these water sources. The rules for

making the available water determinations contained in Division 2 of this Part, are subject to this clause.

- (1) If the assessment in clause 37 determines that the long-term average annual extraction limit for any extraction management unit in these water sources established under clause 35 (2) has been exceeded by 5% or greater, then the available water determination made under Division 2 of this Part for unregulated river access licences for the water sources in the respective extraction management unit for the following water year shall be reduced as necessary to return total water extraction under basic landholder rights and access licences in the respective extraction limit.
- (2) If the assessment in clause 37 determines that the long-term average annual extraction limit for any extraction management unit in these water sources is less than 95% of the respective long-term average annual extraction limit established for any extraction management unit in these water sources under clauses 35 (2), then the available water determination made under Division 2 of this Part for unregulated river access licences for the water sources in the respective extraction management unit for the following water year shall be increased as necessary to allow total water extraction under basic landholder rights and access licences in the respective extraction limit.
- (3) Any reduction or increase to the available water determinations made under Division 2 of this Part for unregulated river access licences in the Gosford Extraction Management Unit under this clause may be repeated for the subsequent two water years, if necessary, to allow total water extraction under basic landholder rights and access licences in the extraction management unit to return to the long-term average annual extraction limit.
- (4) Any reduction or increase to the available water determinations made under Division 2 of this Part for unregulated river access licences in the Wyong River Water Source or the Tuggerah Lakes Water Source under this clause shall be equivalent to the corresponding reduction or increase made to available water determinations for unregulated river access licences in the Ourimbah Creek Water Source and the Jilliby Jilliby Creek Water Source and may be repeated for the subsequent two water years, if necessary, to allow total water extraction under basic landholder rights and access licences in the extraction management unit to return to the long-term average annual extraction limit.
- (5) For the purposes of auditing compliance against the long-term average annual extraction limit established under clause 35 (2), the taking of water pursuant to an access licence that has been committed as adaptive environmental water where the access licence has been granted under section 8C of the Act shall not be accounted for as extraction under subclause (1).

- (6) The average annual volume of water taken under all local water utility or any future major utility access licences, held by Gosford City Council Water Supply Authority and Wyong Council Water Supply Authority, in any 10 consecutive water years in these Units may not exceed a volume equal to the respective long-term average annual extraction limit specified in clauses 35 (3) and 35 (4) of this Plan.
- (7) In each of these Units the total water taken under local water utility or any future major utility access licences held by Gosford City Council and Wyong Shire Councils will be monitored each water year to determine if there is any growth above the respective local water utility long-term average annual extraction limit established under clauses 35 (3) and 35 (4), based on a comparison of the long-term average annual extraction limit against the average annual amount of water taken within these Units over a rolling ten year period commencing from the start of this Plan, except where subclause (8) applies.
- (8) If the long-term average annual extraction limit specified in clause 35 (3) and 35 (4) is amended under clause 35 (6) then growth in the 'water taken' above the respective local water utility long-term average annual extraction limit specified in clauses 35 (3) and 35 (4) shall be determined based on a comparison of the extraction limit against the average water taken under local water utility or any future major utility access licences held by Gosford City Council and Wyong Shire Council within the Tuggerah Lakes and Gosford Extraction Management Units over a rolling ten year period commencing from the water year in which the amendment was made.

Note—

The effect of subclause (8) is if a new long-term average annual extraction limit for the local water utility is required after Tillegra Dam is built within the term of this Plan then a new ten year rolling accounting period will commence.

- (9) For the purpose of assessing growth above the respective local water utility long-term average annual extraction limit the water taken in the Tuggerah Lakes Extraction Management Unit under local water utility or any future major utility licences within these water sources will be determined as:
 - (a) the water passing the outlet of Mardi Water Treatment Plant minus any water passing the boundary meter from Gosford/Wyong Councils to Hunter Water Corporation, plus
 - (b) any water passing the boundary meter from Hunter Water Corporation to Gosford/ Wyong Councils, plus
 - (c) water taken by any other local water utility infrastructure nominated by Gosford and Wyong Water Supply Authority and agreed to by the Minister.
- (10) For the purpose of assessing growth above the respective local water utility longterm average annual extraction limit the water taken in the Gosford Extraction Management Unit under local water utility or any future major utility licences within

these water sources will be determined as:

- (a) the water passing the outlet of Somersby Water Treatment Plant, plus
- (b) water taken by any other local water utility infrastructure nominated by Gosford and Wyong Water Supply Authority and agreed to by the Minister.

Note-

Any groundwater extractions passed through the Woy Woy Water Treatment Plant will be accounted against the long-term average annual extraction limit established by the respective groundwater macro plan covering that groundwater source.

- (11) If monitoring of the water taken under local water utility or any future major utility access licences held by Gosford City Council and Wyong Shire Council indicates growth above the respective local water utility long-term average annual extraction limit as specified in clause 35 (3) or (4), then a review shall be undertaken which considers:
 - (a) the Gosford City Council and Wyong Shire Councils' urban water supply requirements, and
 - (b) the impacts associated with an increase to the respective local water utility longterm average annual extraction limit.
- (12) The Minister may amend this clause to take account of access licences issued for the purpose of stormwater harvesting.

Division 2 Available water determinations

39 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) All available water determinations in these water sources shall be expressed as either:
 - (a) a percentage of the share component for all access licences where share components are specified as ML/year, or
 - (b) megalitres per unit share for all access licences where share components are specified as a number of unit shares.
- (3) An available water determination for each category of access licence in these water sources should be made at the commencement of each water year.
- (4) No available water determination made after the first year of this Plan is to exceed 100% of access licence share component, or 1 megalitre per unit share of access licence share component.

Note-

Section 59 (1A) of the Act provides that an available water determination that is made in relation to a particular category of access licence applies to all subcategories of that category, except to the extent to which it otherwise provides.

Where the long-term average annual extraction limit in these water sources has been exceeded, or not reached, by 5% or more, then available water determinations for certain access licence in these water sources will be increased or reduced in accordance with Division 1 of this Part, to allow extraction to return to the long-term average annual extraction limit.

40 Available water determinations for domestic and stock access licences

- The available water determination made at the commencement of the first year of this Plan, for domestic and stock access licences in these water sources, should be for 200% of access licence share component.
- (2) The available water determination made at the commencement of each subsequent water year for domestic and stock access licences in these water sources should be for 100% of access licence share component.

41 Available water determinations for local water utility access licences

The available water determination made at the commencement of each water year for local water utility access licences in these water sources should be for 100% of access licence share component.

42 Available water determinations for major utility access licences

If major utility access licences are established in these water sources the available water determination made at the commencement of each water year for major utility access licences in these water sources should be for 100% of access licence share component.

43 Available water determinations for unregulated river access licences

- The available water determination made at the commencement of the first year of this Plan, for unregulated river access licences in these water sources, should be equal to 2 megalitres per unit share of access licence share component.
- (2) The available water determination made at the commencement of each subsequent water year for unregulated river access licences in these water sources and should, where possible, be equal to 1 megalitre per unit share of access licence share component, or such lower amount resulting from clause 38.

Part 10 Rules for managing access licences

Division 1 General

44 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 21 (a) and 21 (c) of the Act, having regard to:

- (a) environmental water rules provisions in this Plan,
- (b) requirements for water to satisfy basic landholder rights, and
- (c) requirements for water for extraction under access licences.

Division 2 Water allocation account management

45 Individual access licence account management rules

(1) Water taken by a nominated water supply work under an access licence will be debited against the water allocation account for the access licence.

Note-

The volume of water extracted by a nominated water supply work is used to account for the extractions against an individual access licence water allocation account. In the case of the local water utility access licences the amount of water extracted by nominated water supply works will not be used to account against the local water utility long-term average annual extraction limit. Accounting against the local water utility long-term average annual extraction limits will be undertaken in accordance with clause 38 (9) of this Plan.

Note-

It is an offence under the Act to take water when there is no, or insufficient water allocations credited to a water allocation account for an access licence.

- (2) Where a water supply work is being used both to take water for basic landholder rights and an access licence(s), the water is to be accounted on the basis that an annual volume equal to the basic landholder right for the water year will be the first volume regarded as being taken and all other water taken in that year will be accounted as extraction pursuant to the respective access licence(s).
- (3) The maximum volume that may be taken under a domestic and stock access licence and unregulated river access licence in these water sources in any 3 consecutive water years may not exceed a volume equal to:
 - (a) the sum of water allocations accrued under the access licence from available water determinations in those years,
 - (b) plus any water allocations assigned from another access licence under section 71T of the Act, in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act, in those years, and
 - (d) minus any water allocations assigned to another access licence under section 71T of the Act, in those years.
- (4) Notwithstanding subclause (3), the maximum volume that may be taken under a domestic and stock access licence and unregulated river access licence in these water

sources in the first 3 water years of this Plan may not exceed a volume equal to:

- (a) 3 times the access licence share component (for access licences with share components expressed as megalitres per year), or 3 megalitres per unit share of access licence share component (for access licences with share components expressed as a number of unit shares),
- (b) plus any water allocations assigned from another access licence under section 71T of the Act, in those years,
- (c) plus any water allocations recredited in accordance with section 76 of the Act, in those years, and
- (d) minus any water allocations assigned to another access licence under section 71T of the Act, in those years.
- (5) The maximum water allocation that can be carried over in the accounts of domestic and stock access licence and unregulated river access licence from one water year to the next shall be equal to:
 - (a) 100% of access licence share component, for access licences with share components expressed as megalitres per year, or
 - (b) 1 megalitre per unit share of access licence share component, for access licences with share components expressed as a number of unit shares.
- (6) Water allocations in the accounts of local water utility or major utility access licences shall not be permitted to be carried over from one water year to the next in the Tuggerah Lakes, Brisbane Water, Mangrove Creek and Mooney Mooney Creek Water Sources.
- (7) The maximum water allocation that can be carried over in the accounts of local water utility or major utility access licence in the Wyong River Water Source from one water year to the next shall be equal to 30% of the access licence share component.

Division 3 Sharing surface water flows on a daily basis

46 Sharing surface water flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act.

47 Total daily extraction limits

- At the commencement of this Plan, total daily extraction limits (hereafter **TDELs**) have not been established in the Brisbane Water, Tuggerah Lakes, Mooney Mooney Creek or Mangrove Creek Water Sources.
- (2) In the Wyong River Water Source, from year six of this Plan, total daily extraction

limits for each flow class shall apply for all access licences, excluding local water utility or major utility access licences as follows:

- (a) 8.7 ML/day in A Class,
- (b) 15.6 ML/day in B Class, and
- (c) 24.5 ML/day in C Class.
- (3) In the Wyong River Water Source, from year six of this Plan or following the completion of works referred to at Schedule 3, whichever is the sooner, and until the combined storage level in the local water utility's storage dams is equal to 60% for the first time within the term of this Plan, total daily extraction limits for each flow class shall apply for local water utility or major utility access licences as follows:
 - (a) when the combined storage level in the local water utility's storage dams is less than 50% of full capacity for:
 - (i) A Class it is 100 % of remaining flow in the river,
 - (ii) B Class it is 100 % of remaining flow in the river, and
 - (iii) C Class it is 100 % of remaining flow in the river, and
 - (b) when the combined storage level in the local water utility's storage dams is between 50 and 60% of full capacity for:
 - (i) A Class it is 80 % of remaining flow in the river,
 - (ii) B Class it is 80 % of remaining flow in the river, and
 - (iii) C Class it is 80 % of remaining flow in the river.

Note-

Fifty percent storage capacity was chosen as a trigger level for the commencement of total daily extraction limits as under current Council policy this is when restrictions on water use is lifted. By delaying the introduction of rules until this point it allows for the local water utility to maintain an acceptable level of security of supply during dry periods. A staged approach to the introduction of the total daily extraction limits is proposed to balance the risk of environment outcomes against water supply security.

Note-

The total daily extraction limits represented in subclause (3) apply to the total flow when the respective flow class has been declared. For example under subclause (b) above, whenever the combined flow at the flow reference points exceed 13.5ML/day (i.e. the bottom of B Class flow) then 80% of the total flow may be extracted.

(4) In the Wyong River Water Source, from year six of this Plan or following the completion of works referred to at Schedule 3, whichever is the sooner, and following the combined storage level in the local water utility's storage dams equalling 60% for the first time within the term of this Plan, total daily extraction limits for each flow class shall apply for local water utility or major utility access licences as follows:

- (a) when the combined storage level in the local water utility's storage dams is less than 40% of full capacity for:
 - (i) A Class it is 80 % of remaining flow in the river,
 - (ii) B Class it is 80 % of remaining flow in the river, and
 - (iii) C Class it is 80 % of remaining flow in the river,
- (b) when the combined storage level in the local water utility's storage dams is between 40 and 60% of full capacity for:
 - (i) A Class it is 80 % of remaining flow in the river,
 - (ii) B Class it is 80 % of remaining flow in the river, and
 - (iii) C Class it is 80 % of remaining flow in the river, and
- (c) when the combined storage level in the local water utility's storage dams is equal to or greater than 60% of full capacity for:
 - (i) A Class it is 0 % of remaining flow in the river,
 - (ii) B Class it is 60 % of remaining flow in the river, and
 - (iii) C Class it is 60 % of remaining flow in the river.

Note-

The total daily extraction limits represented in subclause (3) apply to the total flow when the respective flow class has been declared. For example 80% of the flow in B Class means 80% of the remaining flows when flows exceed 13.5ML/day (the bottom of B Class flow) at the flow reference points.

- (5) The Minister may amend this Plan to amend subclauses (3) and (4) taking into consideration the existing infrastructure limitations and system security if the infrastructure listed in Schedule 3 is not completed by year six of this Plan.
- (6) The Minister may amend this Plan to amend subclause (4) to change the specified percentage of the daily flow that may be extracted when the combined storage levels in the local water utility's storage dams is equal to or greater than 60% of full capacity, from a minimum of 60% of flow up to a maximum of 80% of flow.

Note—

It is likely that amendments permitted under subclauses (5) and (6) will occur from year two of this Plan in line with any amendment to flow classes or environmental water provisions.

(7) The Minister will amend this Plan to amend subclauses (3) and (4) prior to year six of this Plan, or following completion of works referred to in Schedule 3, whichever is the

sooner, to either:

(i) amend the "percentage of remaining flow in the river" to the "percentage of flow remaining in the river in excess of the lower limit of the flow class", or

Note-

The modelling undertaken by GWCWA used to determine percentage take, determines the percentages based on the flows above the lower limit of any flow class, rather than the total flow at the time. This provision provides the option of amending the access conditions to reflect the modelling.

 (ii) amend the percentages for the flow classes to an equivalent volume of access as simulated in the modelling undertaken as part of the *Wyong River Environmental Flow Study* (3rd March 2008) by the Gosford and Wyong Councils Water Authority.

Note-

This provision provides an alternative option to amending the volume of flow that the percentage take pertains to subclause (1) by allowing the percentage take to be amended to provide a similar level of access to that used in the modelling used to determine percentage take.

(8) The Minister may amend this Plan to amend subclauses (3) and (4) if the flow reference point moves from those specified in clause 17 (1) to the Wyong River Weir, provided that any amendment will not reduce the percentages specified in subclauses (3) and (4) by more than 7.6% of that percentage.

Note-

Current modelling undertaken to inform the TDEL volumes specified in subclauses (3) and (4) is based on a percentage of a volume at a flow reference point which is upstream of the utilities pumping point and above the end of system. If the flow reference point is amended to a downstream location which coincides with the utilities extraction point and the end of system then the percentages will need to be recalculated to provide the same volume of daily extraction. It is not anticipated that this will change the total volume available for extraction by the local water utility access licences from that currently modelled.

- (9) The TDEL for each flow class if specified in subclauses (2), (3) and (4) applies to all rivers within the specified water source or management zone apart from those rivers identified as minor streams in a harvestable rights order made under section 54 of the Act.
- (10) Following the imposition of an adaptive environmental water condition on an access licence that requires the water to be left in the water source or management zone for environmental purposes, then the Minister may establish TDELs in the relevant water source or management zone.

Note-

TDELs referred to in subclause (10) will not be established unless enabling management systems are in place. This includes monitoring and measurement systems which allow for accurate measurement of flows and extraction.

(11) After major augmentation of the local water utility's water supply infrastructure, as specified in Schedule 3, the Minister may amend this Plan to permit the taking of water by the holders of local water utility access licences in any flow class following the establishment of works to discharge urban stormwater, reused water, recycled water or other return flows approved by the Minister from time to time.

(12) The volume of water which may be extracted during very low flows under subclause(11) is to be equal to the volume of the substitution flows.

Note—

Approval of any substitution flows is at the discretion of the Minister and is subject to consideration of the likely impact of the flows on water quality, aquatic biology etc.

48 Assignment of the TDEL to categories of access licence

- (1) No TDEL will be initially assigned to any category of access licence in the Brisbane Water, Tuggerah Lakes, Mooney Mooney Creek or Mangrove Creek Water Sources.
- (2) The TDEL specified in clause 47 (2) for each flow class in the Wyong River Water Source will be initially assigned according to the following:
 - (a) to domestic and stock access licences:
 - (i) 0.07 ML/day in A Class,
 - (ii) 0.12 ML/day in B Class, and
 - (iii) 0.18 ML/day in C Class, and
 - (b) to unregulated river access licences:
 - (i) 8.63 ML/day in A Class,
 - (ii) 15.48 ML/day in B Class, and
 - (iii) 24.32 ML/day in C Class.

49 Unassigned TDEL

At the commencement of this Plan, there is no unassigned TDEL in these water sources.

50 Granting of unassigned TDEL

At the commencement of this Plan, there is no unassigned TDEL in these water sources, therefore rules to grant unassigned TDELs are not specified.

51 Individual daily extraction limits for access licences

- (1) At the commencement of this Plan, there are no individual daily extraction limits (hereafter *IDELs*) established or assigned to access licences in these water sources.
- (2) During the term of this Plan, the Minister may amend this Plan to establish and assign IDELs for access licences in these water sources for which TDELs are established and assigned.

- (3) Where IDELs are established under subclause (2), the IDEL is to be assigned in the same proportion as the TDEL for the access licence bears to the sum of all share components of access licences of that category, in the respective water source.
- (4) Notwithstanding subclause (3), where an access licence contains more restrictive conditions than other access licences of the same category in the water source, then any IDEL resulting from subclause (3) shall be adjusted to reflect as far as possible the more restrictive conditions.

52 Adjustment to TDELS and IDELs

- (1) If total taking of water under domestic and stock rights or native title rights exceeds the levels specified in Part 5 of this Plan, then the respective TDEL for unregulated river access licences in clause 48 shall be diminished to allow these additional basic landholder rights to be met.
- (2) Following an adjustment to the TDEL for unregulated river access licences under subclause (1) the IDELs of each unregulated river access licence will then be reduced to comply with this diminished TDEL.
- (3) Any adjustment to unregulated river access licence IDELs arising from this clause will be done at intervals of no greater than 5 years.
- (4) The TDELs established in this Plan may be adjusted accordingly, following:
 - (a) the imposition of new adaptive environmental water conditions that require water to be left in a water source, or
 - (b) the removal of adaptive environmental water conditions that required water to be left in a water source.
- (5) Where an IDEL is assigned under clause 51 and an adaptive environmental water condition requiring water to be left in the water source is:
 - (a) imposed on an access licence, then the TDEL established under clause 47 may be decreased by the IDEL on the access licence so committed and clauses 47 and 51 adjusted accordingly, or
 - (b) removed from an access licence, then the TDEL established under clause 47 will be increased by the IDEL on the access licence so uncommitted and clause 47 and 51 adjusted accordingly.

53 Administrative arrangements for managing access to daily flows (approved groups)

This Plan allows for the group management of access licences in these water sources which have been assigned an IDEL, subject to the following rules:

(a) all access licences (except local water utility access licences) in these water sources

which are assigned an IDEL shall be included in a group (hereafter *approved group*),

- (b) an approved group shall have a group combined IDEL, being the sum of the IDELs assigned to all access licences in the approved group. The daily extraction of water by all access licences in an approved group must not exceed the group combined IDEL. The daily extraction of water under all access licences within an approved group will be assessed as a whole against the group combined IDEL,
- (c) the Minister may, by notice in writing, remove one or more access licences from an approved group, if:
 - (i) the daily extraction of water by an approved group exceeds the group combined IDEL, or
 - (ii) the Minister is of the opinion that a holder of an access licence within an approved group has caused the combined group IDEL to be exceeded,
- (d) the daily extraction of water pursuant to an access licence which is not in an approved group must not exceed the IDEL assigned to the access licence,
- (e) the group combined IDEL shall be reduced by the amount of the IDEL assigned to any access licence which is removed from the approved group,
- (f) an access licence holder may, by request made in writing to the Minister, apply to have their access licence removed from an approved group. If the Minister consents to the removal of an access licence from an approved group, the access licence will be removed from the approved group,
- (g) the holder of an access licence which has been assigned an IDEL and which is not in an approved group, may make a written request to the Minister to:
 - (i) form a new approved group, or
 - (ii) be included in an approved group,
- (h) the Minister may:
 - (i) consent or refuse a request to form a new approved group,
 - (ii) consent or refuse to allow an access licence to be included in an approved group,
 - (iii) consent or refuse a request for an access licence to be removed from one approved group and included in a new approved group,
- (i) where the Minister consents to a new approved group, a new approved group will be formed and will be subject to the rules contained in this clause,
- (j) where an access licence is added to an approved group, the group combined IDEL shall be increased by the amount of IDEL assigned to the access licence,

- (k) an access licence may not be in more than one approved group at any time,
- (I) any part of the IDEL of an access licence which is committed to the environment pursuant to an adaptive environmental water condition:
 - (i) shall not be included in an approved group, or
 - (ii) where the IDEL is already included in an approved group, shall be removed from the approved group.

54 Amendments to this Plan for the purpose of sharing of surface water flows on a daily basis

- (1) This Part may be amended for the purpose of enabling the sharing of surface water flows on a daily basis.
- (2) Any such amendment may include, but need not be limited to:
 - (a) the establishment or modification of TDELs in these water sources,
 - (b) the establishment or modification of IDELs for access licences in these water sources,
 - (c) the establishment or modification of approved groups and rules to govern the operation of those groups, with respect to TDELs or IDELs in these water sources,
 - (d) the imposition, removal or modification of mandatory conditions, or
 - (e) to provide for the amendment of the share component or the extraction component of one or more access licences in these water sources pursuant to section 68A of the Act.

55 Access to the Very Low Flow Class in these Water Sources

Access to the Very Low Flow Class in these water sources is limited to access licences, as specified in clause 64 of this Plan.

Note—

Clause 78 provides for amendments to Schedule 2.

Part 11 Access licence dealing rules

56 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act.
- (2) An access licence dealing may only be made in accordance with the water management principles, the access licence dealing rules established by this Plan and any access licence dealing principles order which is in force under section 71Z of the Act.

- (3) If permitted pursuant to the principles and rules referred to in subclause (2), an access licence with an adaptive environmental water condition in these water sources may be the subject of an assignment dealing under section 71T of the Act, but only to the extent that any part of the water allocation of an access licence which is subject to an adaptive environmental water condition is not required to meet the adaptive environmental water condition.
- (4) If permitted pursuant to the principles and rules referred to in subclause (2), an access licence with an adaptive environmental water condition in these water sources may be the subject of a dealing, provided that the benefit to the environment provided for in the adaptive environmental condition remains the same.

Note—

There are a number of mechanisms within the Act, called access licence dealings, to change either the holder of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised.

Note-

Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71Z of the Act provides for the Minister's access licence dealing principles to prevail.

57 Rules relating to constraints within these water sources

- (1) This clause applies to any relevant dealings under sections 71Q, 71S, 71T and 71W of the Act, within these water sources.
- (2) The dealings specified in subclause (1) are prohibited if:
 - (a) the access licence dealing involves an assignment of water allocation under section 71T of the Act from a major utility access licence to another category of access licence within these water sources,
 - (b) the access licence dealing involves an assignment of access rights under section 71Q of the Act or an allocation assignment under section 71T of the Act from an access licence not located on the main creek between Mangrove Creek Weir and Mangrove Creek Dam onto an access licence located on the main creek between Mangrove Creek Weir and Mangrove Creek Dam in the Mangrove Creek Water Source,
 - (c) the access licence dealing involves an assignment of access rights under section 71Q of the Act or an allocation assignment under section 71T of the Act from an access licence not located in the plateau management zones in the Wyong River Water Source, Mangrove Creek Water Source, Mooney Mooney Creek Water Source or Brisbane Water Water Source to an access licence located in the plateau management zones in the Wyong River Water Source, Mangrove Creek Water Source, Mooney Mooney Creek Water Source or Brisbane Water Source,

- (d) the access licence dealing involves an access licence, that currently nominates a water supply works not located on the main creek between Mangrove Creek Weir and Mangrove Creek Dam, being amended under section 71W of the Act to nominate a water supply works located on the main creek between Mangrove Creek Weir and Mangrove Creek Dam in the Mangrove Creek Water Source, and
- (e) the access licence dealing involves an access licence, that currently nominates a water supply works located in a management zone other than the plateau management zone in the Wyong River Water Source, Mangrove Creek Water Source, Mooney Mooney Creek Water Source or Brisbane Water Water Source, being amended under section 71W of the Act to nominate water supply works located in the plateau management zone.

58 Rules for change of water source

(1) This clause relates to access licence dealings under section 71R and 71W of the Act. **Note**—

Section 71R dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new access licence will have to nominate specified works (by a dealing under section 71W of the Act) in the receiving water source before extraction can commence.

(2) Dealings under section 71R and 71W of the Act to change the water source to which an access licence applies are prohibited in the Wyong River Water Source, the Tuggerah Lakes Water Source, the Brisbane Water Water Source, the Mooney Mooney Creek Water Source and the Mangrove Creek Water Source.

59 Rules for conversion of access licence category

- (1) This clause relates to access licence dealings under section 710 of the Act.
- (2) Dealings to convert an access licence to another category or subcategory are prohibited.

60 Rules for interstate access licence transfer and assignment of water allocation

- (1) This clause relates to access licence dealings under section 71U and 71V of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of these water sources or the interstate assignment of water allocations to or from these water sources are prohibited.

61 Rules for water allocation assignments between water sources

- (1) This clause relates to access licence dealings under section 71T of the Act.
- (2) Access licence dealings under section 71T of the Act that result in water allocation assignments to or from an access licence in one of these water sources to or from an

access licence in another of these water sources are not permitted if the access licence dealing involves:

- (i) a change of water source between the Tuggerah Lakes and Gosford Extraction Management Units, or
- (ii) into the plateau management zones of the respective water sources.

Part 12 Mandatory conditions

Division 1 Mandatory conditions on access licences

62 Mandatory conditions on all access licences

- (1) This Division is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
- (2) All access licences in these water sources must have mandatory conditions to give effect to the following:
 - (a) water must not be taken pursuant to an access licence otherwise than:
 - (i) by means of a water supply work nominated on the access licence, as a work by means of which water credited to the water allocation account for the access licence may be taken from the water source specified on the access licence, unless otherwise allowed pursuant to the Act,
 - (ii) in accordance with the conditions specified on the water supply work approval for the nominated water supply work,
 - (iii) in accordance with the IDEL (if any) assigned to the access licence under Part 10 Division 3 of this Plan, or, if the access licence is in an approved group at any time, in accordance with the group combined IDEL for the approved group at that time,

Note-

IDELs are covered in Part 10 Division 3 of this Plan.

Note-

Approved groups are established in Part 10 Division 3 of this Plan.

- (b) water must not be taken pursuant to an access licence in excess of the volume of water allocated to, or assigned to, or recredited to the water allocation account for that access licence,
- (c) the water allocation account management rules in Division 2 of Part 10 of this Plan,
- (d) any other conditions required to implement the provisions of this Plan.

63 Mandatory conditions relating to the taking of water

- (1) Subject to subclause (2), in these water sources, water must not be taken pursuant to an access licence, if any of the following apply:
 - (a) if flow classes are established in the water source specified on the access licence under clause 17 (1) of this Plan, when the Very Low Flow Class applies in the water source specified on the access licence, subject to clause 64 of this Plan,
 - (b) if the access licence replaces a *Water Act 1912* entitlement which contained a cease to pump limit, when flows in the water source specified on the access licence are equal to or less than the cease to pump limit (if any) specified on that *Water Act 1912* entitlement,
 - (c) when there is no visible flow in the water source in the immediate downstream vicinity of the nominated water supply work taking water pursuant to the access licence, or, where the nominated water supply work is taking water from a pool, when there is no visible inflow and outflow to and from that pool.
- (2) Subclause (1) does not apply to:

(a) local water utility or major utility access licences in Wyong River Water Source, **Note**—

See subclause (3) below.

- (b) access licences which nominate a water supply work which is a runoff harvesting dam, but only in relation to water taken using the runoff harvesting dam,
- (c) access licences which nominate a water supply work which is an in-river dam, but only if the in-river dam is passing or releasing the amount of all inflows into the inriver dam.
- (3) All local water utility or major utility access licences in the Wyong River Water Source must have a mandatory condition specifying that water must not be taken, if any of the following apply:
 - (a) when the Very Low Flow Class specified in clause 17 (1) (a) (ii) applies, subject to clause 77 of this Plan,
 - (b) if the access licence replaces a *Water Act 1912* entitlement which contained a cease to pump limit, when flows in the water source specified on the access licence are equal to or less than the cease to pump limit (if any) specified on that *Water Act 1912* entitlement,
 - (c) when there is no visible flow in the immediate downstream vicinity of the nominated water supply work taking water pursuant to the access licence, or, where the nominated water supply work is taking water from a pool, when there is

no visible inflow and outflow to and from that pool,

- (d) the taking of water would not comply with clause 19 (3) (e).
- (4) All local water utility access or any future major utility access licences in these water sources must have a mandatory condition specifying that water must not be taken if it were to cause the respective local water utility long term average annual extraction limit as specified in clauses 35 (2) and (3), to be exceeded.

64 Mandatory conditions for access to the Very Low Flow Class

- (1) This clause only applies to:
 - (a) an access licence which replaces a *Water Act 1912* entitlement listed in Schedule
 2 of this Plan, if the access licence specifies a water source in which flow classes are established under clause 17 (1) of this Plan,
 - (b) a domestic and stock access licence or a domestic and stock (subcategory "domestic") access licence which replaces a *Water Act 1912* entitlement that allowed water to be taken in the Very Low Flow Class, if the access licence specifies a water source in which flow classes are established under clause 17 (1) of this Plan.
- (2) A local water utility access licence to which this clause applies must have a mandatory condition specifying that water may be taken when the Very Low Flow Class applies in the water source specified on the access licence:
 - (a) for the purposes of town water supply only, and
 - (b) for the first three years of this Plan, or until the fishway is completed for the Wyong River Weir and the new Wyong River pump station is completed, whichever occurs sooner.
- (3) For the purposes of subclause (2), major augmentation includes anything which enhances or increases the local water utility's capacity to take water to meet town water supply requirements as a result of demand for water exceeding the sustainable yield of the utility's existing infrastructure, for example, a larger pump, a larger storage facility, a larger pipe, or a secondary or additional water source.
- (4) An access licence to which this clause applies, other than a local water utility access licence, a domestic and stock access licence or a domestic and stock (subcategory "domestic") access licence, must have a mandatory condition specifying that water may be taken when the Very Low Flow Class applies in the water source specified on the access licence, for any of the following purposes only:
 - (a) fruit washing,
 - (b) cleaning of dairy plant and equipment for the purpose of hygiene,

- (c) poultry watering and misting, or
- (d) cleaning of enclosures used for intensive animal production for the purpose of hygiene.
- (5) The maximum daily volume that may be taken under subclause (4) must:
 - (a) be the minimum required to satisfy the purpose,
 - (b) be specified on each access licence, and
 - (c) not exceed 20 kilolitres per day.
- (6) Once specified under subclause (5) (b), the maximum daily volume must not be increased.
- (7) For the first three years of this Plan only, a domestic and stock access licence or a domestic and stock (subcategory "domestic") access licence to which this clause applies, must have a mandatory condition specifying that water may be taken when the Very Low Flow Class applies in the water source specified on the access licence, for domestic consumption only.

Note-

Domestic consumption is defined in section 52 of the Act.

65 Mandatory conditions on domestic and stock access licences

In addition, all domestic and stock access licences in these water sources must have a mandatory condition which specifies that water must only be taken pursuant to the access licence for the purposes of domestic consumption or stock watering. **Note**—

Domestic consumption and stock watering are defined in section 52 of the Act.

66 Mandatory conditions on Aboriginal cultural access licences

In addition, all access licences of the subcategory "Aboriginal cultural" in these water sources must have a mandatory condition which specifies that water must only be taken pursuant to the access licence by Aboriginal persons or Aboriginal communities for personal, domestic or communal purposes, including drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, gathering and for recreational, cultural and ceremonial purposes.

67 New access licences granted in these water sources

- In addition, the following new access licences granted in these water sources must have a mandatory condition specifying that water must not be taken unless flows exceed a level or flow class which is specified on the access licence:
 - (a) a new local water utility access licence granted pursuant to section 66 (3) or (4) of

the Act, or

- (b) a major utility (subcategory "Urban water") access licence not replacing a local water utility access licence granted pursuant to Part 8 of this Plan, which specifies a water source in which B Class is not established under clause 17 (1) of this Plan.
- (2) In addition, the following new access licences granted in these water sources, pursuant to Part 8 of this Plan, must have a mandatory condition which specifies that water must not be taken when flows in the water source specified on the access licence are below B Class:
 - (a) a new local water utility access licence, which specifies a water source in which B Class is established under clause 17 (1) of this Plan,
 - (b) a new major utility access licence not replacing an existing local water utility access licence, which specifies a water source in which B Class is established under clause 17 (1) of this Plan, or
 - (c) an access licence with a zero share component, which specifies a water source in which B Class is established under clause 17 (1) of this Plan.

Division 2 Mandatory conditions on water supply work approvals

68 Mandatory conditions on all water supply work approvals

- (1) All water supply work approvals which authorise the construction or use of a water supply work in these water sources, other than a water supply work approval which authorises the construction or use of a water supply works to take water from the alluvial sediments in these water sources, must have mandatory conditions to give effect to the following:
 - (a) the water supply work must not be used to take water otherwise than pursuant to the conditions of an access licence which nominates the water supply work as a work by means of which water credited to the water allocation account for the access licence may be taken from the water source specified on the access licence, unless otherwise allowed pursuant to the Act,
 - (b) when required by the Minister by notice in writing:
 - (i) metering equipment must be installed and maintained for use in connection with the water supply work,
 - (ii) metering equipment must be operated and maintained in a proper and efficient manner,
 - (iii) if the Minister has specified that metering equipment must be of a type or standard or has specified other criteria, any metering equipment installed, operated or maintained must comply with that type, standard or other criteria

(if any) specified by the Minister,

- (c) when required by the Minister by notice in writing, the approval holder must provide details of water extraction, property water management infrastructure and cropping to the Minister, within the time period specified and to the standard specified in the notice,
- (d) the water supply work must not be used to take water, if any of the following apply:
 - (i) if the water supply work approval replaces a Water Act 1912 entitlement which contained a cease to pump limit, when flows in the water source are equal to or less than the cease to pump limit (if any) specified on that Water Act 1912 entitlement,
 - (ii) when there is no visible flow in the water source in the immediate downstream vicinity of the water supply work or, where the water supply work is taking water from a pool, when there is no visible inflow and outflow to and from that pool, and
- (e) any other conditions required to implement the provisions of this Plan.
- (2) A water supply work approval which authorises the construction or use of a water supply work which is an in-river dam in these water sources must include a mandatory condition requiring the in-river dam to pass or release such flows as the Minister determines to be appropriate.
- (3) A water supply work approval which authorises the construction or use of a water supply work which is nominated on a major utility access licence in these water sources, including all subcategories of major utility access licences, must have mandatory conditions to give effect to the release rules for major utility storages specified in Part 14 of this Plan.
- (4) A water supply work approval which authorises the construction or use of a water supply work which is a runoff harvesting dam in these water sources must, if the share component of the access licence that nominates the water supply work is reduced, be amended to impose a mandatory condition to give effect to clause 70 (2) of this Plan.

Part 13 Rules for granting or amending water supply work approvals

69 Granting or amending water supply work approvals

This Part is made in accordance with sections 21 (b) and 21 (e) of the Act.

70 Runoff harvesting dams

(1) A water supply work approval for a runoff harvesting dam in these water sources shall not be granted if the dam capacity exceeds the volume equivalent to the share

component for the access licence proposing to nominate the work.

(2) If the share component of an access licence which nominates a water supply work which is a runoff harvesting dam is reduced either by the Minister, or on application of the access licence holder, or by a dealing under Part 11 of this Plan, the Minister shall amend the water supply work approval for the runoff harvesting dam to impose a condition requiring the dam to be modified so as to reduce its capacity, consistent with the reduction in share component of the access licence.

Note—

The taking of water from a runoff harvesting dam requires an access licence and a water supply works approval, except to the extent that the runoff harvesting dam is an owner or an occupier's harvestable right entitlement under section 53 of the Act, in which case it will not require an access licence or water supply work.

Note—

Following the assignment of water allocations from a water allocation account of an access that nominates an approval for a runoff harvesting dam, the Minister may impose conditions requiring that runoff harvesting dam to by-pass flows.

71 In river dams

A water supply work approval for a new in-river dam in these water sources on a 3rd or higher order stream shall not be granted in the Wyong River Water Source, the Tuggerah Lakes Water Source, the Brisbane Water Water Source, the Mooney Mooney Creek Water Source or the Mangrove Creek Water Source, except for the purpose of taking water for town or urban water supply under a nominated unregulated river (subcategory "town water supply") access licence, local water utility access licence or major utility access licence.

Note-

Stream order is defined in the Dictionary.

Note-

The taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). The construction and the use of an in-river dam requires a water supply work approval, unless it is exempted under the Act or the regulations, or it is being used for stock and domestic rights in which case a water supply work approval is required only for the construction of the in-river dam. All new or modified in-river dams require assessment under the *Fisheries Management Act 1994*.

Part 14 System operation rules

72 Release rules from local water utility storages

- Releases/bulk water movement from Mangrove Creek Dam by a local water utility or major utility may be made, within operational constraints, subject to the releases/bulk water movement providing river flows which reflect the following:
 - (a) more natural rates of rise and fall,

- (b) increased natural seasonal variability where possible, and
- (c) more natural duration periods.

Note-

The intention of providing releases which more closely reflect natural flow conditions helps to ensure natural ecological processes can operate when releases are being made by the local water utilities. For example, macroinvertebrates have time to move back into permanently wet areas of the stream if rates of fall are similar to those that occur naturally.

- (2) Release rules from Mangrove Creek Dam require that the flows to be released, if and when required, shall be the lesser of:
 - (a) inflow, or
 - (b) an average flow of 2.7 ML/day during the months of September to July inclusive, or
 - (c) an average flow of 2.0 ML/day during the months of May to August inclusive, or
 - (d) a sufficient release so as to maintain a visible flow in Mangrove Creek immediately above its junction with Warren Warren Creek and at the bridge over Mangrove Creek immediately above its junction with Dubbo Creek.

Note-

Measured seepage may be taken into account as part of the releases required.

- (3) Release rules from Mangrove Creek Weir require that releases shall be made from Mangrove Creek Weir, such that when inflows minus the releases from Mangrove Creek Dam down Mangrove Creek are equal to or less than 3 ML/day then the release must be equal to or greater than the inflow minus the releases from Mangrove Creek Dam down Mangrove Creek.
- (4) Release rules from Upper Mooney Mooney Creek Dam require that releases shall be made from Upper Mooney Mooney Creek Dam, such that when inflows are equal to or less than the 0.6 ML/day then the release must be equal to or greater than the inflow.
- (5) Release rules from Lower Mooney Mooney Creek Dam require that releases shall be made from Lower Mooney Mooney Creek Dam, such that when inflows are equal to or less than the 95th percentile flow then the release must be equal to or greater than the inflow.
- (6) Release rules specified in subclause (5) may be amended in this Plan based on further investigation of seepage at the Lower Mooney Mooney Creek Dam by the local water utilities to allow determination by the Minister as to whether seepage from this Dam meets the requirements of the release provisions.

Note-

The intent of the subclause (5) may be met by seepage which is occurring at this Dam. Photo verification and water quality monitoring to look at the volume and water quality of the seepage water should be undertaken with a report submitted to the Minister for consideration of review of this Plan provisions. If required a bypass requirement may be introduced.

- (7) Release rules specified in subclauses (2) to (5) may be amended in this Plan based on further studies which the Minister may direct relevant local water utilities to undertake when combined storage levels in local water utility's storage dams is equal to or greater than 60% capacity.
- (8) The studies in subclause (7) are to be undertaken in line with recommendation 8.3.1 of the *Final Report—Independent Inquiry into the Hawkesbury Nepean System* (HRC 1998).

Note—

These studies are proposed to determine the probable flow range of ecological responses for various levels of flow protection. To date they have not been undertaken due to dry weather conditions. Further detail on the studies is also provided in *Environmental Flows Expert Panel Report (Quality Environmental Management P/L 2001)*.

Part 15 Amendment of this Plan

73 Amendment of this Plan

- (1) This Plan may be amended as specified in this Plan, pursuant to section 45 of the Act.
- (2) Any amendment to this Plan, that is authorised by a provision of this Plan, which results in a variation to the bulk access regime, is an amendment authorised by this Plan for the purposes of section 87 (2) (c) of the Act.

74 Review of ongoing monitoring and investigations outcomes

- Before varying this Plan as a result of ongoing monitoring and investigations undertaken in clause 75, advice should be sought from an interagency committee with representatives of the Department of Water and Energy, the Department of Primary Industries and the Department of Environment and Climate Change.
- (2) The interagency committee should provide advice to the Minister on the ongoing monitoring and investigations report, and advise on any changes to the recommendations contained in the report in relation to any variation of this Plan provisions.
- (3) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date, at the latest.

75 Amendment of flow classes, planned environmental water, share components and daily extraction limit provisions

(1) The Minister may amend this Plan, based on the verified outcomes of any monitoring

and investigations associated with the Wyong River Environmental Flows Study to: **Note**-

The monitoring and investigations will help inform the setting and/or amendment of flow classes, daily extraction limits, environmental water requirements, and share components for the local water utility access licences. Mandatory conditions will be updated to reflect any change in access as a result of monitoring and investigations.

- (a) amend the flow classes established in clauses 17 (1) (a), 17 (1) (d) and 17 (1) (e) of this Plan, including additional flow classes as appropriate,
- (b) establish and/or amend the very low flow access conditions for local water utility access licences specified in clause 64 of this Plan,
- (c) amend the planned environmental water rules specified in clause 19 (3) of this Plan,

Note-

The amendment of planned environmental water rules may include the introduction of antecedent conditioned protection of freshes through the system.

(d) amend the system operation rules specified in clause 72 of this Plan,

Note-

The monitoring and investigations should identify any operational conditions on Gosford Wyong Councils Water Authority (GWCWA) in regard to the supply of water to the estuary to meet environmental requirements at low flows associated with draw-down of the weir, e.g. is the flow to be maintained at a constant level or can the weir be drawn down and flows allowed to pass periodically. This issue is related to the GWCWA's infrastructure limitations. Currently Department of Primary Industries has an agreement with GWCWA to provide fish passage over the Wyong Weir during specific periods of the year by limiting extraction. These rules will be reviewed to consider operational constraints and to refine the timing of providing fish passage, both diurnally (e.g. all day, dawn, dusk) and seasonally.

(e) amend the share component of the local water utility or major utility access licences specified in clauses 28 and 29 of this Plan, and

Note-

The share component refers to the annual volume of water specified on the access licence. The outcomes of the study and ongoing monitoring and investigations may alter the share components currently specified. The Water Sharing Plan for the Central Coast Unregulated River Water Sources currently proposes an annual share component of 34,600 ML (annual maximum) from the Wyong River. The Water Sharing Plan for the Ourimbah Creek Water Source currently specifies a share component of 5,000 ML from Ourimbah Creek with a 3 year rolling average with a maximum of 200% access in any one year. The share component for the Wyong River has been initially set at a high level to allow GWCWA to fill its storages during high flows.

- (f) amend the percentage extraction for local water utility access licences in clause 47(3) and (4) of this Plan.
- (2) In amending any of the provisions as specified in subclause (1) the net effect should not reduce the yield of the local water utilities water supply below 47,300 ML/yr,

including any water sourced from Hunter Water Corporation.

Note-

47,300 ML/yr refers to the 2050 demand projection for the Central Coast.

- (3) The Minister should cause any ongoing activities in subclauses (1) (a) to (1) (f) to be undertaken during the term of this Plan.
- (4) In undertaking the ongoing monitoring and investigations:
 - (a) consultation with the Department of Water and Energy, the Department of Primary Industries, the Department of Environment and Climate Change, the Gosford Wyong Councils Water Authority, the relevant Catchment Management Authority, and representatives of interest groups as required should be undertaken, and

Note-

Interest groups may include representatives of local Water User Associations (or licence holders in the absence of WUA), Landcare or environment groups, local industry and commerce representatives, Aboriginal groups, local government etc.

- (b) a report should be prepared to be used by the agencies and stakeholders specified in subclause (a) documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the ongoing monitoring and investigations results and conclusions in relation to:
 - (1) flow classes,
 - (2) total daily extraction limits,
 - (3) share components for local water utility access licences, and
 - (4) environmental flow provisions, and
 - (iv) the socio-economic impacts of recommended changes including anticipated impact on local water utility yield.

Note-

This amendment provision reflects the need to have an improved understanding of the flow requirements of the estuary prior to any additional extraction occurring in the water sources feeding into the estuary.

76 Amendments due to floodplain harvesting

This Plan may be amended to provide for the floodplain harvesting of water, subject to the amendments not affecting the outcomes of the long-term average annual extraction limit specified within this Plan.

Note-

This means that this Plan can be changed to issue and manage floodplain harvesting licences provided that the long-term average annual extraction limit (LTAAEL) does not increase or decrease. Floodplain harvesting in coastal systems is limited compared to inland systems. By not amending the LTAAEL with the granting of these licences, coastal systems are being consistent with inland systems where growth is managed within the existing LTAAEL.

77 Amendments for stormwater harvesting

The Minister may amend this Plan to amend:

(a) Part 3 and/or Part 4 to permit the taking of water in any Flow Class where a stormwater harvesting licence and nominated water supply works are being used to provide inflows to the water source which are then able to substitute for all or part of the flow requirements of the Very Low Flow Class. The extent to which Part 3 and/or Part 4 can be amended is to be in proportion to the extent that the stormwater harvesting can substitute for the flow requirements of any Flow Class, and such that there is no net disbenefit to the environment,

Note-

Approval of any substitution flows is at the discretion of the Minister and is subject to consideration of the likely impact of the flows on water quality, aquatic biology etc.

- (b) Part 8, to permit the application for and granting of a stormwater harvesting access licence, if such a category has been created under the Act,
- (c) Part 9, to account for water taken and/or returned to the water source under a stormwater harvesting access licence, against the respective long-term average annual extraction limit,
- (d) Part 10, Division 2, to account for water taken and/or returned to the water source under a stormwater harvesting access licence, against access licence water allocation accounts,
- (e) Part 10, Division 3, to account for water taken under a stormwater harvesting access licence, against the total daily extraction limit or to permit the taking of water in excess of the total daily extraction limit where a stormwater harvesting access licence and nominated water supply works are being used to provide additional inflows to the water source such that there is no net disbenefit to the environment,
- (f) Part 11, to prescribe the types of access licence dealings that stormwater harvesting access licences can and can't undertake,
- (g) Part 12, to prescribe the mandatory conditions that are to apply to stormwater harvesting access licences and water supply works, and
- (h) Part 14, to prescribe any system operational rules for stormwater harvesting water supply works.

78 Amendments in relation to Schedule 2 (Very Low Flow) and mandatory conditions

- (1) The Minister may amend this Plan to:
 - (a) add a *Water Act 1912* entitlement to Schedule 2, but only if the taking of water under that entitlement was for a purpose referred to in this clause and the purpose existed prior to 1 July 2008, or
 - (b) remove a Water Act 1912 entitlement from Schedule 2, if:
 - (i) any access licence dealing results in water being extracted, under the access licence which replaced the *Water Act 1912* entitlement, from a different location, or
 - (ii) an alternative water supply is obtained that satisfies the requirement(s) for water for the purposes listed in this clause, or the purpose no longer exists, or
 - (iii) the access licence which replaced the *Water Act 1912* entitlement is surrendered or cancelled.
 - (c) amend or remove Schedule 2 to this Plan, following an assessment which determines that the requirement for access to water in the Very Low Flow Class under this clause is no longer required generally or for specific access licences.
- (2) After major augmentation of the local water utility's water supply infrastructure, as specified in Schedule 3, the Minister may amend the mandatory conditions and Schedule 2 of this Plan to permit the taking of water by the holders of local water utility access licences during periods of very low flows following the establishment of works to discharge urban stormwater, reused water, recycled water or other return flows approved by the Minister from time to time.
- (3) The volume of water which may be extracted during very low flows under subclause(2) is to be equal to the volume of the substitution flows.

Note-

Approval of any substitution flows is at the discretion of the Minister and is subject to consideration of the likely impact of the flows on water quality, aquatic biology etc.

Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

flow gauging station is a device that is used to measure the height of a river or flow in a river.

individual daily extraction limit (IDEL) is described in clause 51 of this Plan.

in-river dam is a dam located in or on a river.

management zone is an area within the surface water source in which daily extraction limits may be

defined or where dealing restrictions are approved. Management zones may be designated where the surface water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area. They may also be designated where local dealing restrictions are in place.

mangrove limit has the same meaning as defined in the '*DIPNR Survey of tidal limits and mangrove limits in NSW estuaries 1996 to 2003*' (NSW Dept of Commerce, Manly Hydraulics Laboratory) 2005.

monitoring bore refers to a bore constructed for the purpose of measuring water levels and/or taking samples for water quality analysis.

registered plan for these water sources means the registered plan called The Central Coast Unregulated Water Sources (WSP005) maintained by the Department. **Note**—

An overview of the registered plan is shown in Appendix 1. Copies of the registered plan may be inspected at offices of the Department listed in Appendix 2.

runoff harvesting dam is a privately owned dam that captures surface or rainfall runoff. Note–

The taking of water from a runoff harvesting dam requires an access licence and a water supply work approval, except to the extent that the runoff harvesting dam is within an owner or an occupier's harvestable rights entitlement under section 53 of the Act, in which case it will not require an access licence or water supply work approval.

stream order is defined by the Strahler stream ordering method.

Note-

The Strahler stream ordering methods is explained as follows.

- Starting at the top of a catchment, any watercourse that has no other watercourses flowing into it is classed as a 1st order watercourse,
- · Where two 1st order watercourses join, the watercourse becomes a 2nd order watercourse,
- If a 2nd order watercourse is joined by a 1st order watercourse it remains a 2nd order watercourse,
- When two or more 2nd order watercourses join they form a 3rd order watercourse, and
- A 3rd order watercourse does not become a 4th order watercourse until it is joined by another 3rd order watercourse and so on.

Note—

The Strahler stream ordering method is described in the order made under section 5 of the *Water Act 1912* published in the NSW Government Gazette no. 37 on 24 March 2006 page 1500, or as may be amended or updated from time to time by further order.

tidal limit has the same meaning as defined in the '*DIPNR Survey of tidal limits and mangrove limits in NSW estuaries 1996 to 2003*' (NSW Dept of Commerce, Manly Hydraulics Laboratory) 2005.

tidal pool is defined, for the purposes of this Plan, as the area of water between the upper mangrove limit and the lower tidal limits.

Note-

Mangrove limit and tidal limit are defined in the 'DIPNR Survey of tidal limits and mangrove limits in NSW estuaries 1996 to 2003' (NSW Dept of Commerce, Manly Hydraulics Laboratory).

total daily extraction limit (TDEL) is described in clause 47 of this Plan.

visible flow is the continuous downstream movement of water that is perceptible to the eye.

water year means a year commencing 1 July.

Schedule 2 Licences with access to very low flows

Schedule 2 currently lists *Water Act 1912* licences from which access licences will be derived upon commencement of the Water Sharing Plan.

Brisbane Water Water Source

No licences with access to very low flows at the commencement of the Plan.

Mooney Mooney Creek Water Source			
10SL050381	10SL038117	205L023693	
Mangrove Creek Water Source			
10SL019457	10SL025461	10SL032168	10SL040385
10SL056675	10SL056720	10SL056057	10SL056467
10SL040230	20SL045333	20SL039289	20SL051226
Wyong River Water Source			
		2051 050745	2001000770
20SL033407	20SL044633	20SL060746	20SL060776
20SL039830	20SL019691		

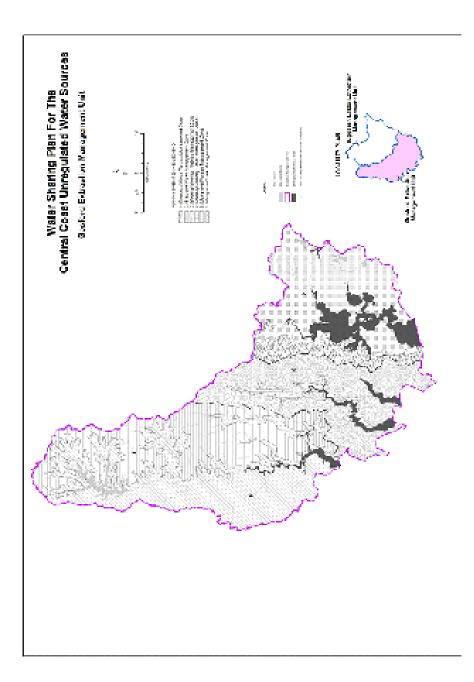
Tuggerah Lakes Water Source

20SL060789

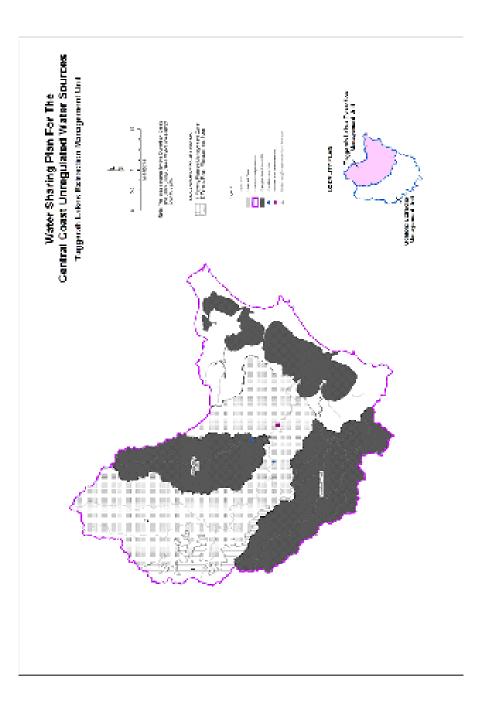
Schedule 3 Local water utilities water supply infrastructure

The following Gosford City Council and Wyong Council infrastructure works are listed for the purpose of clause 47:

- Wyong River Weir fish way upgrade,
- New Wyong River pumping station,
- New rising main between the New Wyong River Pump station and Mardi Dam,
- Mangrove Creek Dam inlet outlet upgrade (Boomerang Creek),
- Transfer system between Mardi Dam and Mangrove Creek Dam, and
- Water Treatment works.



Appendix 1 Area covered by this plan



Appendix 2 Location of registered plans for these water sources

Copies of the registered plans for these water sources in relation to this Plan may be inspected at:

Department of Water and Energy Level 3, 107 Mann Street GOSFORD NSW 2250

Department of Water and Energy Level 3, 26 Honeysuckle Drive NEWCASTLE NSW 2300

Department of Water and Energy 10 Valentine Ave PARRAMATTA NSW 2150