



New South Wales

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009

under the

Water Management Act 2000

Pursuant to section 50 of the *Water Management Act 2000*, I, the Minister for Water, make the following Minister's Plan.

PHILLIP COSTA, MP
Minister for Water

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009

Contents

	Page
Part 1 Introduction	
1 Name of this Plan	7
2 Nature and Status of this Plan	7
3 Date of commencement	7
4 Water sources to which this Plan applies	7
5 Management zones	10
6 Amendment of this Part	11
7 Interpretation	12
Part 2 Vision, objectives, strategies and performance indicators	
8 Vision, objectives, strategies and performance indicators	13
9 Vision	13
10 Objectives	13
11 Strategies	14
12 Performance indicators	14
Part 3 Basis for water sharing	
13 Basis for water sharing	16
14 Climatic variability	16
15 Extraction management unit for these water sources	16
16 Flow reference points	18
17 Flow classes for these water sources	18
Part 4 Environmental water provisions	
18 Environmental water provisions	37
19 Planned environmental water	37
20 Adaptive environmental water	39
Part 5 Basic landholder rights	
21 Basic landholder rights	40
22 Domestic and stock rights	40
23 Native title rights	41
24 Harvestable rights	42
Part 6 Bulk access regime	
25 Bulk access regime	43

		Page
Part 7	Requirements for water under access licences	
26	Requirements for water under access licences	44
27	Share component of domestic and stock access licences	44
28	Share component of local water utility access licences	45
29	Share component of major utility access licences	46
30	Share component of unregulated river access licences	47
31	Share component of unregulated river (high flow) access licences	48
32	Share component of aquifer access licences	49
33	Changes to total share components	50
Part 8	Rules for granting access licences	
34	Rules for granting access licences	51
Part 9	Rules for granting or amending water supply works approvals	
	Division 1 General	
35	Granting or amending water supply works approvals	53
36	Runoff harvesting dams	53
37	In-river dams	53
	Division 2 Water supply works used to take water from the alluvial sediments in these water sources	
38	Rules for granting or amending approvals for water supply works used to take water from the alluvial sediments in these water sources	54
39	Rules for granting water supply works approvals	54
40	Rules for granting water supply works approvals near contamination sources	57
41	Rules for granting water supply works approvals near sensitive environmental areas	58
Part 10	Limits to the availability of water	
	Division 1 Long-term average annual extraction limit	
42	Limits to the availability of water	62
43	Extraction management unit for these water sources	62
44	Long-term average annual extraction limit	62
45	Variation of the long-term average annual extraction limits	65
46	Assessment of the long-term average annual extraction limit	65
47	Compliance with the long-term average annual extraction limits	65

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009

Contents

	Page
Division 2 Available water determinations	
48 Available water determinations	68
49 Available water determinations for domestic and stock access licences	68
50 Available water determinations for local water utility access licences	69
51 Available water determinations for major utility access licences	69
52 Available water determinations for unregulated river access licences	69
53 Available water determinations for unregulated river (high flow) access licences	69
54 Available water determination for aquifer access licences	69
Part 11 Rules for managing access licences	
Division 1 General	
55 Rules for managing access licences	72
Division 2 Water allocation account management	
56 Individual access licence account management rules	72
57 Accounting for bulk water transfers to other water utilities	75
Division 3 Sharing surface water flows on a daily basis	
58 Sharing surface water flows on a daily basis	76
59 Establishment and assignment of total daily extraction limits	76
60 Unassigned TDEL	77
61 Granting of unassigned TDEL	77
62 Individual daily extraction limits for access licences	78
63 Adjustment to TDELS and IDELS	78
64 Administrative arrangements for managing access to daily flows (approved groups)	79
65 Amendments to this Plan for the purposes of sharing of surface water flows on a daily basis	80
66 Williams River Water Source Accreditation Scheme	81
67 Access to the Very Low Flow Class in these water sources	81
Division 4 Management of surface and groundwater connectivity	
68 Access licences which nominate a water supply work which may be used to take water from the alluvial sediments in these water sources	81

	Page
Part 12 Access licence dealing rules	
69 Access licence dealing rules	83
70 Rules relating to constraints within these water sources	83
71 Rules for change of water source	91
72 Rules for conversion of access licence category	93
73 Rules for interstate access licence transfer and assignment of water allocation	94
74 Rules for water allocation assignments between water sources	94
Part 13 Mandatory conditions	
Division 1 Mandatory conditions on access licences	
75 Mandatory conditions on all access licences	97
76 Mandatory conditions relating to the taking of water	97
77 Mandatory conditions for access to the Very Low Flow Class	101
78 Mandatory conditions on domestic and stock access licences	102
79 Mandatory conditions on aquifer access licences	102
80 Mandatory conditions on Aboriginal cultural and Aboriginal community development access licences	102
81 New access licences granted in these water sources	103
Division 2 Mandatory conditions on water supply work approvals	
82 Mandatory conditions on all water supply work approvals (except works taking water from the alluvial sediments)	104
83 Mandatory conditions on approvals for water supply works taking water from the alluvial sediments in these water sources	105
84 Mandatory conditions for existing water supply works taking water from the alluvial sediments in these water sources	108
Part 14 System operation rules	
85 Release rules from major utility storages	109
Part 15 Amendment of this Plan	
86 Amendment of this Plan	111
87 Amendment of tidal pool provisions	111
88 Amendment of pool protection provisions	111
89 Amendments due to floodplain harvesting	112

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009

Contents

	Page	
90	Amendments due to the construction and/or operation of Tillegra Dam	112
91	Amendments for alluvial aquifers downstream of the tidal limit	113
92	Amendments for stormwater harvesting	113
93	Amendments in relation to Schedule 2 (Very Low Flow)	113
Schedule 1	Dictionary	114
Schedule 2	Licences with access to very low flows	117
Schedule 3	Contamination sources in the Hunter Unregulated and Alluvial Water Sources	119
Schedule 4	High Priority Groundwater Dependent Ecosystems in the Hunter Unregulated and Alluvial Water Sources	120
Appendix 1	Hunter Unregulated and Alluvial Water Sources and Hunter, Hunter Regulated River Alluvium, Goulburn and Lake Macquarie Extraction Management Units	123
Appendix 2	Location of registered plans	126

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009

under the

Water Management Act 2000

Part 1 Introduction

1 Name of this Plan

This Plan is the *Water Sharing Plan for the Hunter Unregulated and Alluvial 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 Munmurra River Water Source,
 - (b) the Krui River Water Source,
 - (c) the Bow River Water Source,
 - (d) the Merriwa River Water Source,
 - (e) the Halls Creek Water Source,
 - (f) the Baerami Creek Water Source,
 - (g) the Widden Brook Water Source,
 - (h) the Bylong River Water Source,
 - (i) the Wollar Creek Water Source,
 - (j) the Upper Goulburn River Water Source,
 - (k) the Lower Goulburn River Water Source,
 - (l) the Dart Brook Water Source,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 4 2009

Part 1 Introduction

- (m) the Pages River Water Source,
- (n) the Isis River Water Source,
- (o) the Upper Hunter River Water Source,
- (p) the Rouchel Brook Water Source,
- (q) the Muswellbrook Water Source,
- (r) the Jerrys Water Source,
- (s) the Glennies Water Source,
- (t) the Glendon Brook Water Source,
- (u) the Luskintyre Water Source,
- (v) the Singleton Water Source,
- (w) the Martindale Creek Water Source,
- (x) the Doyles Creek Water Source,
- (y) the Lower Wollombi Brook Water Source,
- (z) the Black Creek Water Source,
- (aa) the Wallis Creek Water Source,
- (bb) the Newcastle Water Source,
- (cc) the Paterson/Allyn Rivers Water Source,
- (dd) the Williams River Water Source,
- (ee) the Upper Paterson Water Source,
- (ff) the Upper Wollombi Brook Water Source,
- (gg) the North Lake Macquarie Water Source,
- (hh) the South Lake Macquarie Water Source,
- (ii) the Dora Creek Water Source,
- (jj) the Hunter Regulated River Alluvial Water Source,

Note. The Hunter Regulated River Alluvial Water Source extends from the top of the high bank of the Hunter Regulated River or Glennies Creek to the boundary of the alluvial aquifer covering the unconsolidated alluvial sediments, excluding the alluvial sediments covered by the Hunter Regulated River Water Sharing Plan. The Regulated Plan covers waterfront land except for alluvial sediments within one metre of works taking water pursuant to licences issued under Part 5 of the Water Act 1912. This water source includes alluvial waters only.

- (kk) the Wallis Creek Tidal Pool Water Source,

Note. The Wallis Creek Tidal Pool Water Source extends between the mangrove and tidal limits and only includes the water within the tidal stretch of Wallis Creek, not including any freshwater tributaries. This water source includes unregulated waters only and excludes alluvial groundwater.

-
- (ll) the Paterson River Tidal Pool Water Source, and

Note. The Paterson River Tidal Pool Water Source extends between the mangrove and tidal limits and only includes the water within the tidal stretch of the Paterson River, not including any freshwater tributaries. This water source includes unregulated waters only and excludes alluvial groundwater.

- (mm) the Hunter River Tidal Pool Water Source,

Note. The Hunter River Tidal Pool Water Source extends between the mangrove and tidal limits and only includes the water within the tidal stretch of the Newcastle Water Source, not including any freshwater tributaries. This water source includes unregulated waters only and excludes alluvial groundwater.

and shall be known as the Hunter Unregulated and Alluvial 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 The Hunter Unregulated and Alluvial Water Sources (WSP003) 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 or below 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, and
- (c) all water contained within all alluvial sediments below the surface of the land shown on the registered plan for these water sources (hereafter the alluvial sediments in these water sources), including any water contained in those unconsolidated alluvial sediments underlying the waterfront land within 1 metre of works taking water pursuant to licences issued under Part 5 of the *Water Act 1912* or their equivalent aquifer access licence issued under the Act, that are not part of the Hunter Regulated River Water Source.

Note. The Hunter Regulated River Water Source is defined in the Water Sharing Plan for the Hunter Regulated River Water Source 2003.

- (4) These water sources do not include:

- (a) any water contained in alluvial sediments downstream of the tidal limit in these water sources,

Note. This exclusion applies to the Wallis Creek Tidal Pool Water Source, the Paterson River Tidal Pool Water Source and Hunter River Tidal Pool Water Source.

- (b) any water contained in the coastal sands in these water sources,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 5 2009

Part 1 Introduction

- (c) any water contained in fractured rock aquifers and basement rocks in these water sources,
- (d) any water contained in the unconsolidated alluvial sediments underlying the waterfront land of all rivers within the Hunter Regulated River Water Source, except as provided for in subclause (3) (c),

Note. The Hunter Regulated River Water Source is defined in the Water Sharing Plan for the Hunter Regulated River Water Source 2003.

- (e) the area of the Wybong Creek Water Source, as defined in the Water Sharing Plan for the Wybong Creek Water Source 2003,
- (f) the area of the Hunter Regulated River Water Source, as defined in the Water Sharing Plan for the Hunter Regulated River Water Source 2004,
- (g) the area of the Paterson Regulated River Water Source, as defined in the Water Sharing Plan for the Paterson Regulated River Water Source 2008, and
- (h) the area of land below the mangrove limit, except for the Mannering Lake in South Lake Macquarie Water Source and the Belmont Lagoon in the North Lake Macquarie Water Source.

Note. The mangrove limit is defined in the dictionary.

- (5) These water sources are within part of the Hunter Water Management Area and 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 Halls Creek Water Source is divided into the:
 - (i) Halls Creek Management Zone, and
 - (ii) Giants Creek Management Zone,
- (b) the Pages River Water Source is divided into the:
 - (i) Murrurundi Management Zone,
 - (ii) Scotts Creek Management Zone,
 - (iii) Kewell Creek Management Zone,
 - (iv) Gundy Management Zone, and
 - (v) Segenhoe Management Zone,
- (c) the Dart Brook Water Source is divided into the:
 - (i) Upper Dart Brook Management Zone,
 - (ii) Upper Middle Brook Management Zone,

-
- (iii) Petwyn Vale Management Zone,
 - (iv) Lower Dart Brook Management Zone, and
 - (v) Lower Middle Brook and Kingdon Ponds Management Zone,
- (d) the Paterson/Allyn Rivers Water Source is divided into the:
- (i) Paterson River Tributaries Management Zone, and
 - (ii) Allyn River Management Zone,
- (e) the Upper Wollombi Water Source is divided into the:
- (i) Congewai Creek Management Zone, and
 - (ii) Wollombi Brook Arm Management Zone,
- (f) the Williams River Water Source is divided into the:
- (i) Williams River Management Zone, and
 - (ii) Seaham Weir Management Zone,
- (g) the Hunter Regulated River Alluvial Water Source is divided into the:
- (i) Upstream Glennies Creek Management Zone (hereafter *u/s Glennies Creek Management Zone*), for that part of the water source adjacent to the Hunter River upstream of its junction with Glennies Creek,
 - (ii) Downstream Glennies Creek Management Zone (hereafter *d/s Glennies Creek Management Zone*), for that part of the water source adjacent to the Hunter River downstream of its junction with Glennies Creek, and
 - (iii) Glennies Creek Management Zone, for that part of the water source adjacent to Glennies Creek,
- (h) the Jerrys Water Source is divided into the:
- (i) Jerrys Management Zone, and
 - (ii) Appletree Flat Management Zone, and
- (i) the Upper Hunter Water Source is divided into the:
- (i) Upper Hunter Management Zone, and
 - (ii) Stewarts Brook Management Zone.

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,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 7 2009

Part 1 Introduction

- (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.

- (c) vary the water sources included in these water sources, including to add a river or section of river to one of these water sources or to remove a river or section of river from one of these water sources providing that:

- (i) the river or section of river that is to be added has been removed from an order which declared that river or section of river to be a regulated river, or
- (ii) the river or section of river that is to be removed has been added to an order which declared that river or section of river to be a regulated river, and
- (iii) the Minister is satisfied that there will be no impact on environmental water, domestic and stock rights, native title rights or on the water available to any access licences in these water sources.

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 the 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 and high priority groundwater dependent ecosystems of these water sources,
- (b) protect, preserve, maintain or enhance the Aboriginal, cultural and heritage values of these water sources,
- (c) protect basic landholder rights,
- (d) manage these water sources to ensure equitable sharing between users,
- (e) provide opportunities for market based trading of access licences and water allocations within sustainability and system constraints,
- (f) provide recognition of the connectivity between surface water and groundwater,
- (g) provide sufficient flexibility in water account management to encourage responsible use of available water, and

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 11 2009

Part 2 Vision, objectives, strategies and performance indicators

(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, and
- (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 groundwater extraction relative to the long-term average annual extraction limit,
- (d) extent of groundwater level fluctuations,
- (e) change in local water utilities access,
- (f) change in, or maintenance of, ecological value of key water sources and their dependent ecosystems,

-
- (g) extent to which basic landholder rights requirements have been met,
 - (h) extent to which major and local water utility requirements have been met,
 - (i) extent to which native title rights requirements have been met,
 - (j) change in economic benefits derived from water extraction and use, and
 - (k) extent of recognition of spiritual, social, economic and customary values of water to Aboriginal people.

Note. 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.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 13 2009

Part 3 Basis for water sharing

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 and groundwater level 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,
- (b) the sharing of flows that occur in specified water sources on a daily basis, and
- (c) water extraction to maintain groundwater dependent ecosystems.

15 Extraction management unit for these water sources

- (1) 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 Goulburn Extraction Management Unit, the Hunter Extraction Management Unit, the Lake Macquarie Extraction Management Unit and the Hunter Regulated River Alluvium Extraction Management Unit (hereafter *these Units*), and are shown on the registered plan for these water sources.
- (3) The Goulburn Extraction Management Unit consists of the following water sources:
 - (a) Munmurra River Water Source,
 - (b) Krui River Water Source,
 - (c) Bow River Water Source,
 - (d) Merriwa River Water Source,
 - (e) Halls Creek Water Source,
 - (f) Baerami Creek Water Source,
 - (g) Widden Brook Water Source,
 - (h) Bylong River Water Source,
 - (i) Wollar Creek Water Source,
 - (j) Upper Goulburn River Water Source,

-
- (k) Lower Goulburn River Water Source, and
 - (l) Wybong Creek Water Source as defined in the Water Sharing Plan for the Wybong Creek Water Source 2003.
- (4) The Hunter Extraction Management Unit consists of the following water sources:
- (a) Dart Brook Water Source,
 - (b) Pages River Water Source,
 - (c) Isis River Water Source,
 - (d) Upper Hunter River Water Source,
 - (e) Rouchel Brook Water Source,
 - (f) Muswellbrook Water Source,
 - (g) Jerrys Water Source,
 - (h) Glennies Water Source,
 - (i) Glendon Brook Water Source,
 - (j) Luskintyre Water Source,
 - (k) Singleton Water Source,
 - (l) Martindale Creek Water Source,
 - (m) Doyles Creek Water Source,
 - (n) Lower Wollombi Brook Water Source,
 - (o) Black Creek Water Source,
 - (p) Wallis Creek Water Source,
 - (q) Newcastle Water Source,
 - (r) Paterson/Allyn River Water Source,
 - (s) Williams River Water Source,
 - (t) Upper Paterson Water Source,
 - (u) Upper Wollombi Brook Water Source,
 - (v) Wallis Creek Tidal Pool Water Source,
 - (w) Paterson River Tidal Pool Water Source, and
 - (x) Hunter River Tidal Pool Water Source.
- (5) The Lake Macquarie Extraction Management Unit consists of the following water sources:
- (a) North Lake Macquarie Water Source,
 - (b) South Lake Macquarie Water Source, and
 - (c) Dora Creek Water Source.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 16 2009

Part 3 Basis for water sharing

- (6) The Hunter Regulated River Alluvium Extraction Management Unit consists of the Hunter Regulated River Alluvial Water Source.

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 subclause 17 (2) of this Plan.
- (3) The Minister may amend a flow reference point where the flow reference point has been removed in line with the NSW Weirs Policy.

Note. In some instances flow reference points refer to a weir site which may be removed in line with the NSW Weirs Policy.

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:

Note. Any restrictions specified in an order under section 324 of the Act, for these water sources, may be based on local Water User Association rostering arrangements.

Note. It is recognised that Water User Associations (WUAs) exist in many areas and play an important role in low flow rostering and sharing of water between users. Where appropriate the flow classes specified in this Plan reflect the existing sharing arrangements of these groups. It is intended that WUAs will have an ongoing role in water management and continue to assist in reducing the frequency of triggering the very low flow classes specified within this Plan.

Note. The following flow classes apply to all access licences extracting from surface water specified for each water source from the commencement date of this Plan, excluding those access licences to which clause 77 applies and access licences that nominate a work that is a runoff harvesting dam.

For those aquifer access licences in the Munmurra River Water Source, the Krui River Water Source, the Bow River Water Source, the Merriwa River Water Source, the Halls Creek Water Source, the Baerami Creek Water Source, the Widden Brook Water Source, the Appletree Flat Management Zone of the Jerrys Water Source, the Bylong River Water Source, the Wollar Creek Water Source, the Upper Goulburn River Water Source, the Lower Goulburn River Water Source, the Dart Brook Water Source, the Pages River Water Source, the Martindale Creek Water Source, the Doyles Creek Water Source, the Lower Wollombi Brook Water Source and the Upper Wollombi Brook Water Source, the flow classes in clause 17 (1) will apply.

They will also apply to all aquifer access licence holders in the Isis River Water Source, the Upper Hunter River Water Source, the Rouchel Brook Water Source, the Muswellbrook Water Source, the Jerrys Management Zone of the Jerrys Water Source, the Glennies Water Source, the Glendon Brook Water Source, the Luskintyre Water Source, the Singleton Water Source, the Black Creek Water Source, the Wallis Creek Water Source, the Newcastle Water Source, the Paterson/Allyn Rivers Water Source, the Williams River Water Source, the Upper Paterson Water Source, the North Lake Macquarie Water Source, the South Lake Macquarie Water Source and the Dora Creek Water Source extracting from alluvial aquifers within 40 metres of the top of the high bank of the river from year six of this Plan, except where provided for under clause 68 (3) of this Plan. For those aquifer access licences extracting outside the 40 metres from the top of the high bank in the Isis River Water Source, the Upper Hunter River Water Source, the Rouchel Brook Water Source, the Muswellbrook Water Source, the Jerrys Water Source, the Glennies Water Source, the Glendon Brook Water Source, the Luskintyre Water Source, the Singleton Water Source, the Black Creek Water Source, the Wallis Creek Water Source, the Newcastle Water Source, the Paterson/Allyn Rivers Water Source, the Williams River Water Source, the Upper Paterson Water Source, the North Lake Macquarie Water Source, the South Lake Macquarie Water Source and the Dora Creek Water Source, the flow classes in clause 17 (1) will not apply.

- (a) for the Munmurra River Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (b) for the Krui River Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (c) for the Bow River Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (d) for the Merriwa River Water Source, as measured at Merriwa River at Upstream Vallances Creek gauge (210066), no flow classes are established for the first five years of this Plan, thereafter:

- (i) the Very Low Flow Class is when flows are at or below 0.5 megalitres per day (hereafter *ML/day*), and

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

Note. 0.5 ML/day corresponds to the estimated 80th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

(ii) A Class is when flows are greater than 0.5 ML/day,

Note. The Merriwa River Water Source may be divided into management zones during the term of this Plan based on the reinstatement of gauging infrastructure, and flow classes amended, as set out under clause 17 (2) (h) of this Plan.

Note. For the first five years of this Plan, the taking of water from a river by a nominated water supply work is permitted only where it complies with the flow conditions imposed on the authorised water supply work, or in the absence of such condition, if there is a visible flow in the river in the downstream vicinity of the water supply, as required under clause 19 (3) (d) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

(e) for the Halls Creek Water Source, no flow classes are established by this Plan,

Note. By year ten of this Plan, Very Low Flow Class and A Class may be established for access licences in the Halls Creek Management Zone, based on studies to determine appropriate cease to pump level and flow reference point, as required under clause 17 (2) (b) of this Plan.

Note. By year ten of this Plan, Very Low Flow Class and A Class may be established for access licences in the Giants Creek Management Zone, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

(f) for the Baerami Creek Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

(g) for the Widden Brook Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

(h) for the Bylong River Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

- (i) for the Wollar Creek Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

- (j) for the Upper Goulburn River Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

- (k) for the Lower Goulburn River Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

Note. The augmentation of the local water utility in this water source may trigger review of the flow access rules specified within this Plan in accordance with clause 17 (2) (l).

- (l) for the Upper Dart Brook Management Zone in the Dart Brook Water Source, as measured at Dart Brook at Yarrandi Bridge gauge (210124):

(i) the Very Low Flow Class is when there is no visible flow, and

(ii) A Class is when there is a visible flow,

Note. The flow classes may be amended at year six of this Plan, as set out under clause 17 (2) (c) of this Plan.

- (m) for the Upper Middle Brook Management Zone in the Dart Brook Water Source, as measured at the Middle Brook road bridge:

(i) the Very Low Flow Class is when there is no visible flow, and

(ii) A Class is when there is a visible flow,

Note. The flow classes may be amended at year six of this Plan, as set out under clause 17 (2) (c) of this Plan.

- (n) for the Petwyn Vale Management Zone, the Lower Dart Brook Management Zone and the Lower Middle Brook and Kingdon Ponds Management Zone in the Dart Brook Water Source, no flow classes are established by this Plan,

Note. In the Lower Dart Brook and Lower Middle Brook and Kingdon Ponds Management Zones the Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

infrastructure being in place to allow rule review, as set out under clause 17 (2) (a) of this Plan.

Note. In the Petwyn Vale Management Zone from year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

Note. The augmentation of the local water utility in this water source may trigger review of the flow access rules specified within this Plan in accordance with clause 17 (2) (l).

- (o) for the Murrurundi Management Zone in the Pages River Water Source, as measured at Benhams Bridge:
- (i) the Very Low Flow Class is when there is no visible flow, and
 - (ii) A Class is when there is a visible flow,

Note. The augmentation of the local water utility in this water source may trigger review of the flow access rules specified within this Plan in accordance with clause 17 (2) (l).

- (p) for the Scotts Creek Management Zone in the Pages River Water Source, as measured at the Pages River at Blandford gauge (210061):
- (i) the Very Low Flow Class is when there is no visible flow, and
 - (ii) A Class is when there is a visible flow,

Note. The flow classes may be amended at year six of this Plan, as set out under clause 17 (2) (c) of this Plan.

- (q) in the Kewell Creek Management Zone in the Pages River Water Source:
- (i) for the first five years of this Plan, the Very Low Flow Class is when there is no visible flow as measured at the Pages River upstream of Kewell Creek gauge (210142), thereafter, the Very Low Flow Class is when flows are at or below a flow equivalent to the cease to pump level identified for the Gundy Management Zone as per clause 16 (2) (d) of this Plan,
 - (ii) for the first five years of this Plan, A Class is when there is a visible flow as measured at the Pages River upstream of Kewell Creek gauge (210142), and less than 31 ML/day as measured at the Pages River at Gundy Recorder gauge (210052), thereafter A Class is when flows are greater than a flow identified for the Gundy Management Zone as per clause 16 (2) (d) of this Plan, and less than 31 ML/day as measured at the Pages River at Gundy Recorder gauge (210052), and

Note. 31 ML/day corresponds to the estimated 50th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

- (iii) B Class is when flows are equal to or greater than 31 ML/day, as measured at the Pages River at Gundy Recorder gauge (210052),

Note. Due to the limited period that the Kewell Creek gauge (210142) has been in place an equivalent flow cannot be determined at the commencement of this Plan. The flow reference point and separate management zone may be amended by year ten of this Plan, based on correlations of the Kewell Creek gauge to the Blandford and Gundy gauges, as set out under clause 17 (2) (e) of this Plan.

- (r) in the Gundy Management Zone in the Pages River Water Source, as measured at the Pages River at Gundy Recorder gauge (210052):
 - (i) the Very Low Flow Class is when there is no visible flow,
 - (ii) A Class is when there is a visible flow and flows are less than 31 ML/day, and

Note. 31 ML/day corresponds to the estimated 50th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

- (iii) B Class is when flows are equal to or greater than 31 ML/day,

Note. The flow classes may be amended by year six of this Plan, as set out under clause 17 (2) (d) of this Plan.

- (s) in the Segenhoe Management Zone in the Pages River Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and the bottom of A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

- (t) for the Isis River Water Source:
 - (i) the Very Low Flow Class is when there is no visible flow as measured at the Isis River at Stick-Me-Up Bridge gauge (210118),
 - (ii) A Class is when there is a visible flow as measured at Stick-Me-Up Bridge gauge (210118) and flows are less than 31 ML/day as measured at the Pages River at Gundy Recorder gauge (210052), and

Note. 31 ML/day corresponds to the estimated 50th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

- (iii) B Class is when flows are equal to or greater than 31 ML/day as measured at the Pages River at Gundy Recorder gauge (210052),

Note. Due to the short period of record of flow data at the specified gauge site, studies to determine environmental water requirements and data extension may be undertaken during the term of this Plan to amend the flow conditions by year six of this Plan, as set out under clause 17 (2) (n) of this Plan. This may include development of management zones, separate flow reference points and flow classes. When sufficient data is available B class flows will be measured at the Isis River at Stick-Me-Up Bridge gauge.

- (u) for the Upper Hunter Management Zone of the Upper Hunter River Water Source, as measured at Hunter River at Moonan Damsite gauge (210018) and Hunter River at Belltrees gauge (210039):

- (i) for the first five years of this Plan, the Very Low Flow Class is when there is no visible flow at the Hunter River at Belltrees gauge, for years six to nine of this Plan the Very Low Flow Class is when flows are at or below 7 ML/day at the Hunter River at Moonan Dam gauge and there is no visible flow at the Hunter River at Belltrees gauge, and from year ten of this Plan the Very Low Flow Class is when flows are at or below 12 ML/day at the Hunter River at Moonan Dam gauge and there is no visible flow at the Hunter River at Belltrees gauge, and

Note. 7 ML/day corresponds to the estimated 97th percentile and 12ML/day corresponds to the estimated 95th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

- (ii) for the first five years of this Plan, A Class is when there is a visible flow at the Hunter River at Belltrees gauge, for years six to nine of this Plan A Class is when flows are greater than 7 ML/day at the Hunter River at Moonan Dam gauge and there is a visible flow at the Hunter River at Belltrees gauge, and from year ten of this Plan A Class is when flows are at or below 12 ML/day at the Hunter River at Moonan Dam gauge and there is a visible flow at the Hunter River at Belltrees gauge,

Note. The Very Low Flow Class and A Class may be amended by year ten of this Plan, based on data extension and flow records for the Hunter River at Belltrees gauge (210039) to develop an equivalent percentile flow level to the level at the Moonan Damsite gauge (210018) if this is determined appropriate in consultation with water users, or a new management zone and flow classes may be established in the lower catchment, as set out under clause 17 (2) (f) of this Plan.

- (v) for the Stewarts Brook Management Zone of the Upper Hunter Water Source, as measured at Garlands Bridge and at Hunter River at Belltrees gauge (210039):

- (i) the Very Low Flow Class is when there is no visible flow at Garlands Bridge and at Hunter River at Belltrees gauge (210039), and
- (ii) A Class is when there is a visible flow at Garlands Bridge and at Hunter River at Belltrees gauge (210039),

Note. The Very Low Flow Class and A Class may be amended by year ten of this Plan, based on data extension and flow records for the Hunter River at Belltrees gauge (210039) to amend the visible flow level to a flow level equivalent to the 95th percentile flow class, as set out under clause 17 (2) (f) of this Plan.

- (w) for the Rouchel Brook Water Source, as measured at Rouchel Brook at Rouchel Brook (The Vale) gauge (210014):

- (i) during October to March inclusive:
- (1) the Very Low Flow Class is when flows are equal to or less than 10 ML/day on a rising river, or equal to and less than 2 ML/day on a falling river,
Note. 2 ML/day corresponds to the estimated 85th percentile and 10 ML/day corresponds to the estimated 75th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.
- (2) A Class is when flows are greater than 10 ML/day and less than 35 ML/day on a rising river, or greater than 2 ML/day and less than 35 ML/day on a falling river, and
Note. 35 ML/day corresponds to the estimated 50th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.
- (3) B Class is when flows are equal to or greater than 35 ML/day, and

- (ii) during April to September inclusive:
- (1) the Very Low Flow Class is when flows are equal to or less than 10 ML/day on a rising river, or equal to or less than 1 ML/day on a falling river,
Note. 1 ML/day corresponds to the estimated 88th percentile and 10 ML/day corresponds to the estimated 75th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

- (2) A Class is when flows are greater than 10 ML/day and less than 35 ML/day on a rising river or greater than 1 ML/day and less than 35 ML/day on a falling river, and

Note. 35 ML/day corresponds to the estimated 50th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

Note. In addition to the cease to pump rules, the taking of water from pools will only be permitted when there is a visible inflow and outflow. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (3) B Class is when flows are equal to or greater than 35 ML/day,

Note. 2 ML/day and 1 ML/day are referred to as the 'cease to pump' on a falling river, and 10 ML/day referred to as the 'commence to pump' on a rising river. The basis for using a differential cease to pump in this water source is in recognition of the location of the gauge mid way up the system and the 'losing' nature of the Brook. This means that increased flows are required during the spring/summer months to achieve the same level of flow at the end of the water source as would be achieved through the autumn/winter period. These figures will be reviewed by year six of this Plan, as set out under clause 17 (2) (m) of this Plan.

- (x) for the Muswellbrook Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, as required under clause 19 (3) (c) of this Plan. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue. In Sandy Creek there are a number of licences with existing conditions relating to Rouchel Lane Causeway which will be maintained.

Note. Licences located in the alluvial areas downstream of Wells Gully road bridge will be identified as part of the relevant Hunter Regulated River Alluvial Water Source.

- (y) for the Jerrys Management Zone of the Jerrys Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, in the Jerrys Management Zone the taking of water from pools will only be permitted when there is a visible inflow and outflow, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (z) for the Appletree Flat Management Zone of the Jerrys Water Source, no flow classes are established by this Plan,

Note. Very Low Flow Class and A Class may be established by year ten of this Plan for the Appletree Flat Management Zone, based on studies to determine appropriate groundwater levels and trigger points, and

appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

- (aa) for the Glennies Water Source, as measured at the causeway on Goorangoola Creek (230 metres downstream of the boundary between DP 752462, Lot 23 and Lot 24):
- (i) the Very Low Flow Class is when there is no visible flow, and
 - (ii) A Class is when there is a visible flow,
- (bb) for the Glendon Brook Water Source, no flow classes are established by this Plan,
- Note.** From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.
- (cc) for the Luskintyre Water Source, no flow classes are established by this Plan,
- Note.** From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.
- (dd) for the Singleton Water Source, no flow classes are established by this Plan,
- Note.** From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.
- (ee) for the Martindale Creek Water Source, no flow classes are established by this Plan,
- Note.** Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.
- (ff) for the Doyles Creek Water Source, no flow classes are established by this Plan,
- Note.** Very Low Flow Class and A Class may be established at year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.
- (gg) for the Lower Wollombi Brook Water Source, as measured at Wollombi Brook at Warkworth gauge (210004):
- (i) no Very Low Flow Class or A Class is established at the commencement of this Plan, and

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

- (ii) B Class is when flows are equal to or greater than 38 ML/day,

Note. 38 ML/day corresponds to the estimated 50th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.

Note. Very Low Flow Class and A Class may be established by year ten of this Plan, based on studies to determine appropriate groundwater levels and trigger points, and appropriate infrastructure being in place to allow rule development, as set out under clause 17 (2) (a) of this Plan.

- (hh) for the Black Creek Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

Note. While it is recognised that the low flows down Black Creek are largely provided for by discharge from Cessnock sewage treatment plant, the Department cannot guarantee that these discharges will continue. The flow access rules will continue in the event that the discharges cease.

- (ii) for the Wallis Creek Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (jj) for the Newcastle Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (kk) for the Allyn River Management Zone of the Paterson/Allyn Rivers Water Source, as measured at the Allyn River at Halton gauge (210022):

- (i) the Very Low Flow Class is when flows are equal to or less than 15 ML/day on a rising river, or equal to or less than 7 ML/day on a falling river, and there is no visible flow at the Allyn River at Flying Fox Lane (210143),

Note. 7 ML/day corresponds to the estimated 92nd percentile and is referred to as the cease to pump on a falling river, and 15 ML/day corresponds to the estimated 85th percentile and is referred to as the commence to pump on a rising river. The percentile refers to the lowest flow month at the gauge and includes all days of record.

- (ii) A1 Class is when flows are greater than 15 ML/day and less than 58 ML/day on a rising river, or greater than 7 ML/day and less than 58 ML/day on a falling river, and there is a visible flow at the Allyn River at Flying Fox Lane (210143),
- Note.** 58 ML/day corresponds to the estimated 50th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.
- Note.** A1 Class applies to all access licences, excluding local water utility access licences, except where provided for under clause 76 (8) and unregulated river (high flow) access licences.
- (iii) A2 Class is when flows are greater than 25 ML/day and less than 58 ML/day, and
- Note.** 25 ML/day corresponds to the estimated 75th percentile. The percentile refers to the lowest flow month at the gauge and includes all days of record.
- Note.** A2 Class only applies to local water utility access licences.
- (iv) B Class is when flows are equal to or greater than 58 ML/day,
- Note.** These figures may be reviewed during the term of this Plan with the introduction of a new gauge at a point lower in the water source than the existing gauge as specified in clause 17 (2) (g).
- (ll) for the Paterson River Tributaries Management Zone of the Paterson/Allyn Rivers Water Source, no flow classes are established by this Plan,
- Note.** From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.
- (mm) for the Williams River Management Zone of the Williams River Water Source, as measured at the Williams River at Glen Martin (Mill Dam Falls) (210010):
- (i) the Very Low Flow Class is when flows are equal to or less than 6 ML/day,
- Note.** 6 ML/day has the same estimated frequency as 0 ML/day when Chichester Dam was not making transparent releases.
- (ii) the Low Flow Class is when flows are equal to or less than 15 ML/day, and
- Note.** 15 ML/day corresponds to the estimated natural 95th percentile flow as used in the Healthy Rivers Commission deliberations.
- (iii) A Class is when flows are greater than 15 ML/day,
- Note.** The Very Low Flow Class and Low Flow classes are required for the operation of the Williams River Pilot Low Flow Accreditation Scheme. Note that operation to the cease to pump (CtP) specified under the Very

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

Low Flow Class is only operational where an accreditation condition is imposed on the use approval. The CtP level for the Low Flow Class applies to all other access licences.

(nn) for the Seaham Weir Management Zone of the Williams River Water Source:

(i) for all access licences, excluding major utility access licences, as measured at the visual gauge board at Seaham Weir for extractions from the Seaham Weir Pool:

(1) the Very Low Flow Class is when water levels are equal to or less than 0.38 metres pool height,

(2) A Class is when water levels are greater than 0.38 metres pool height and less than or equal to 0.42 metres pool height, and

Note. The 0.38 metres pool height may be amended by year five of this Plan based on studies as specified in clause 17 (2) (i).

(3) B class is when water levels are greater than 0.42 metres pool height,

(ii) for all major utility access licences:

(1) the Very Low Flow Class is when water levels are equal to or less than 0.42 metres pool height, as measured at the visual gauge board at Seaham Weir for the taking of water from the Seaham Weir Pool, or when flows are equal to or less than 15 ML/day as measured at the Williams River at Glen Martin (Mill Dam Falls) gauge (210010), and

(2) the A Class is when water levels are greater than 0.42 metres pool height, as measured at the visual gauge board at Seaham Weir for the taking of water from the Seaham Weir Pool, or when flows are greater than 15 ML/day as measured at the Williams River at Glen Martin (Mill Dam Falls) gauge (210010), and

(iii) notwithstanding subclause (ii) when flows as measured at the Williams River at Glen Martin (Mill Dam Falls) gauge (210010) are greater than 600 ML/day, the taking of water by a major utility access licences is only permitted when water levels in the Seaham weir pool in the Williams River Water Source are greater than 0.32 metres pool height,

Note. Flow classes for major utility access licences may be amended in the Williams River Water Source upon completion of studies by the Hunter Water Corporation to develop water access rules for the Lower Williams River based on the outcomes of the 'Surface Water Access Rules for the Lower Williams River' Supplementary Study, as per clause 17 (2) (i) of this Plan.

(oo) for the Upper Paterson Water Source, as measured at the Beresford property crossing:

(i) the Very Low Flow Class is when there is no visible flow, and

(ii) A Class is when there is a visible flow,

Note. The Very Low Flow Class and A Class may be amended at year six of this Plan to introduce a cease to pump at the 95th percentile flow if infrastructure is in place, as set out under clause 17 (2) (j) of this Plan.

(pp) for the Upper Wollombi Brook Water Source, no flow classes are established by this Plan,

Note. By year ten of this Plan, Very Low Flow Class and A Class may be established for access licences in the Wollombi Brook Management Zone and Congewai Creek Management Zone, based on studies to determine appropriate cease to pump level and reference site, as required under clause 17 (2) (b) of this Plan.

(qq) for the North Lake Macquarie Water Source:

(i) for the Cockle Creek catchment, as measured at the causeway on The Weir Road, Barnsley:

(1) the Very Low Flow Class is when there is no visible flow, and

(2) A Class is when there is a visible flow, and

(ii) for all other tributaries, no flow classes established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, in all tributaries apart from Cockle Creek, as required under clause 19 (3) (c) of this Plan. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

(rr) for the South Lake Macquarie Water Source, no flow classes are established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, as required under clause 19 (3) (c) of this Plan. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

(ss) for the Dora Creek Water Source:

(i) for the Dora Creek catchment, as measured at the weir downstream of the road bridge on Freemans Drive, Cooranbong:

(1) the Very Low Flow Class is when there is no visible flow, and

(2) A Class is when there is a visible flow, and

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

- (ii) for Stockton Creek, Jigadee Creek, and all other tributaries, no flow classes established by this Plan,

Note. From year six of this Plan, the taking of water from pools will only be permitted when there is a visible inflow and outflow of that pool, in all tributaries apart from Dora Creek, as required under clause 19 (3) (c) of this Plan. This only applies to licences with no existing conditions. Where higher or more stringent flow conditions currently exist on licences, these conditions will continue.

- (tt) for the Hunter Regulated River Alluvial Water Source, no flow classes are established by this Plan,

Note. The augmentation of the local water utility in this water source may trigger review of the flow access rules specified within this Plan in accordance with clause 17 (2) (l).

- (uu) for the Wallis Creek Tidal Pool Water Source, no flow classes are established by this Plan,

Note. Flow classes may be established during the term of this Plan as per the studies specified in clause 17 (2) (k) of this Plan.

- (vv) for the Paterson River Tidal Pool Water Source, no flow classes are established by this Plan, and

Note. Flow classes may be established during the term of this Plan as per the studies specified in clause 17 (2) (k) of this Plan.

- (ww) for the Hunter River Tidal Pool Water Source, no flow classes are established by this Plan.

Note. Flow classes may be established during the term of this Plan as per the studies specified in clause 17 (2) (k) of this Plan.

- (2) The Minister may amend subclauses (1) (a) to (1) (ww) to alter the existing flow classes or establish new or additional flow classes in:

- (a) the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source, the Giants Creek Management Zone of the Halls Creek Water Source, and the Lower Dart Brook Management Zone, the Lower Middle Brook and the Kingdon Ponds Management Zone of the Dart Brook Water Source, by the commencement of year ten of this Plan, based on studies to determine appropriate groundwater levels, trigger points and groundwater dependent ecosystems, and appropriate infrastructure being in place to allow rule development, including the identification of appropriate commence to pump levels,

Note. Commence to pump levels may be required to assist in the protection of recharge in highly connected surface waters and groundwater.

- (b) the Halls Creek Management Zone of the Halls Creek Water Source, and the Wollombi Brook Management Zone and the Congewai Creek Management Zone of the Upper Wollombi Brook Water Source, by the commencement of year ten of this Plan, based on studies to determine appropriate groundwater levels or surface water levels, and flow reference points, to allow rule development,
- (c) the Upper Dart Brook Management Zone and the Upper Middle Brook Management Zone of the Dart Brook Water Source, and the Scotts Creek Management Zone of the Pages River Water Source, by the commencement of year six of this Plan, up to a maximum of the 95th percentile flow level, subject to consideration of the socio-economic impacts and environmental requirements,
- (d) the Gundy Management Zone of the Pages River Water Source, by the commencement of year six of this Plan, amend the Very Low Flow Class up to a maximum of 0.6 ML/day, subject to consideration of the socio-economic impacts of the increased cease to pump level on water users, and the environmental requirements of the water source,

Note. In the Gundy Management Zone 0.6 ML/day (cease to pump) and 1.0 ML/day (commence to pump) access rules were originally proposed by the Pages River and Tributaries Water Users Association (WUA) as part of the targeted consultation period. In light of concerns raised by water users about the implementation of access rules at this level for the specified five year period, the WUA is encouraged to review the frequency of these flow levels and impacts on the taking of water and livelihood during the first five years of this Plan to help inform the setting of appropriate cease to pump rules at year six of this Plan.

- (e) the Kewell Creek Management Zone of the Pages River Water Source, by the commencement of year six of this Plan, following the extension of flow records for the Pages River upstream of Kewell Creek gauge (210142), specify the equivalent flow of subclause 17 (2) (d) as measured at the Pages River at Gundy Recorder gauge (210052), or amend the Very Low Flow Class and A Class based on correlation of flows between the Pages River upstream of Kewell Creek gauge (210142), the Pages River at Gundy Recorder gauge (210052) and the Pages River at Blandford gauge (210061),

Note. The correlation of flows for the Kewell Creek Management Zone may result in a change to the flow reference point used for the access rules or the need for a separate management zone for Kewell Creek.

- (f) the Upper Hunter Water Source, by year ten of this Plan, following the extension of flow records for the Hunter River at Belltrees gauge (210039) and consultation with water users:
 - (i) for the Upper Hunter Management Zone to specify the Very Low Flow Class as being when flows are at or below the equivalent percentile flow, and A Class as being when flows are greater than the equivalent percentile flow at the Hunter River at Belltrees gauge (210039), or if more appropriate, a new management zone established between Hunter River at Moonan Damsite gauge (210018) with flow classes triggered at the Hunter River at Belltrees gauge (210039), at a flow level equivalent to the flow classes at the Hunter River at Moonan Damsite gauge (210018), and
 - (ii) for the Stewarts Brook Management Zone, to specify the Very Low Flow Class as being when there is no visible flow at the Hunter River at Moonan Damsite gauge (210018) and at a flow equivalent to the 95th percentile flow at Belltrees gauge (210039), and A Class as being when there is a visible flow at the Hunter River at Moonan Damsite gauge (210018) and at a flow greater than the 95th percentile flow at Belltrees gauge (210039).
- (g) the Allyn River Management Zone of the Paterson/Allyn Water Source, by year ten of this Plan, following the introduction of a new flow gauge within the management zone located at a point lower in the system than the existing gauge and studies to investigate equivalent flow class levels, based on flow data from the new gauge,
- (h) the Merriwa River Water Source, following the reinstatement of infrastructure within the water source, taking into account the previous licence conditions relevant to the Merriwa Town gauge,
- (i) the Williams River Water Source:
 - (i) by year five of this Plan, for B Class access, following the completion of the supplementary study Development of Access Rules for the Lower Williams River,
Note. The supplementary study referred to is a requirement of Hunter Water Corporation's current water licence. The study aims to determine appropriate entitlement and access rules to manage the taking of water from Seaham Weir Pool by Hunter Water Corporation. The outcomes of the study will be used to inform any amendment of this Plan provisions.
 - (ii) at the end of the trial for the Williams River Flow Accreditation Scheme, to amend the Very Low Flow Class and Low Flow Class, and

-
- (iii) during the term of this Plan, the Very Low Flow Class for users extracting from the Seaham Weir Management Zone, following any studies to determine the appropriateness of the 0.38 metres flow level cease to pump in protecting environmental values,
 - (j) the Upper Paterson Water Source, from year six of this Plan, following any introduction of a flow gauge within the water source and studies to investigate the 95th percentile flow level,
 - (k) in the Hunter River Tidal Pool, the Wallis Creek Tidal Pool and the Paterson River Tidal Pool Water Sources, during the term of this Plan, following a study to determine the appropriate location for the installation of a salinity probe, or other relevant infrastructure, and assessment of the users and the taking of water within the water source,

Note. It is recognised that tidal pool water sources are different systems from those upstream. Tidal influences and salinity may impact on the ability of users to extract water generally more than instantaneous flow levels. Flow levels are used to manage upstream water sources, however, in tidal pool water sources different management options such as salinity levels should be considered. The differences between the tidal pool water sources in the Hunter should also be noted. For example the Paterson River Tidal Pool Water Source and Hunter River Tidal Pool Water Source receive different end of system flows due to the respective upstream Water Sharing Plans for the regulated river systems, and also have differing characteristics which may influence salinity levels (e.g. the size and frequency of freshes). As a result the tidal pool water sources may not only have different access rules in their respective upstream water sources but also from each other due to the unique characteristics of each tidal pool area.

- (l) the Pages River Water Source, the Dart Brook Water Source, the Lower Goulburn River Water Source, the Hunter Regulated River Alluvial Water Source, during the term of this Plan, based on augmentation of the local water utility,
- (m) the Rouchel Brook Water Source, by the commencement of year six of this Plan, up to a maximum of 2 ML/day and down to a minimum of 0 ML/day, subject to consideration of the socio-economic impacts and environmental requirements,
- (n) the Isis River Water Source, by the commencement of year six of this Plan, if:
 - (i) separate management zones are not established, up to a maximum of the 95th percentile flow level or 1.5 ML/day, whichever is the higher, subject to consideration of the socio-economic impacts and environmental requirements, and

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 17 2009

Part 3 Basis for water sharing

- (ii) separate management zones are established:
 - (1) for an upper management zone, a cease to pump based on studies to determine an appropriate surface water cease to pump level, including consideration of longitudinal connectivity and links between flows in the upper management zone and water levels in remnant pools in the lower management zone, and flow reference points, and
 - (2) for a lower management zone, up to a maximum of the 95th percentile flow level or 1.5 ML/day, whichever is the higher, subject to consideration of the socio-economic impacts and environmental requirements, and

Note. In the Isis River Water Source the determination of a cease to pump level should take into the consideration the initial cease and commence to pump levels of 1.5 ML/day and 3 ML/day respectively originally proposed by the Pages River and Tributaries Water Users Association (WUA) as part of the targeted consultation period. In light of concerns raised by water users about the implementation of access rules at this level for the specified five year period, the WUA is encouraged to review the frequency of these flow levels and impacts on the taking of water and livelihood during the first five years of this Plan to help inform the setting of appropriate access rules at year six of this Plan. There is currently insufficient data available from the river gauge on the Isis River to determine the 95th percentile.

- (o) any water source where management zones or water sources are added or amended as per clause 6 during the term of this Plan.
- (3) The Minister may amend the existing flow classes or establish new or additional flow classes based on the introduction of a Flow Accreditation Scheme to a water source.

Note. This reflects the level of interest shown by many Water Users Associations during the targeted consultation period to the potential application (dependent on available resources) of the Flow Accreditation Scheme, currently being trialled in the Williams River, to other water sources in the future. It is recognised that management of water extraction is only one component of river management and many landholders are carrying out on-farm activities to achieve environmental outcomes.

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 44 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 the taking of 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 47 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 management zones or water sources 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 77 (7), access licences taking water from the alluvial sediments in these water sources that are not subject to the mandatory conditions under clause 68 of this Plan, and access licences that nominate a runoff harvesting dam, are not permitted to take water when flows are within the Very Low Flow Class,
 - (b) in the Rouchel Brook Water Source, and excluding access licences listed in Schedule 2, domestic and stock access licence or a domestic and stock (subcategory “domestic”) access licence under clause 77 (7), access licences taking water from the alluvial sediments in these water sources that are not subject to the mandatory conditions under clause 68 of this Plan, and access licences that nominate a runoff harvesting dam, notwithstanding

2009 No 347

Clause 19

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 4

Environmental water provisions

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 imposed on the authorised water supply work, 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, if there is a visible inflow and outflow to and from that pool,
- (c) in the Munmurra River Water Source, the Krui River Water Source, the Bow River Water Source, the Muswellbrook Water Source, the Jerrys Water Source, the Glendon Brook Water Source, the Luskintyre Water Source, the Singleton Water Source, the Black Creek Water Source, the Wallis Creek Water Source, the Paterson River Tributaries Management Zone of the Paterson/Allyn Rivers Water Source, the Petwyn Vale Management Zone of the Dart Brook Water Sources, the North Lake Macquarie Water Source excluding Cockle Creek tributary, the South Lake Macquarie Water Source, the Dora Creek Water Source excluding Dora Creek tributary, and the Newcastle Water Source, 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 77 (7), access licences taking water from the alluvial sediments in these water sources that are not subject to the mandatory conditions under clause 68 of this Plan, 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 imposed on the authorised water supply work, 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, and
- (d) in the Merriwa River Water Source for the first five years 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 77 (7) and access licences that nominate a work that is 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 imposed on the authorised water supply work, or in the absence of such

condition, if there is a visible flow in the river in the downstream vicinity of the water supply work.

Note. These rules 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. Highly connected water sources may not have such rules in place until year ten of this Plan.

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

- (4) Following the establishment of a flow class or flow classes within any water source under clauses 17 (2) and 17 (3) of this Plan, the Minister may amend subclauses (1), (2) and (3) to identify, establish and maintain planned environmental water in the relevant water source.
- (5) The Minister may amend this Plan to amend subclause (3) in accordance with clause 88 of this Plan, within five years of commencement of this Plan, to identify pools in applicable water sources, that require special protection and to establish initial pool control levels at key sites, so that, notwithstanding all other rights and conditions, the taking of water from a designated pool is not permitted below a specified level.
- (6) Before undertaking the amendment pursuant to subclause (5) the Minister should consult with relevant Government agencies and the water users in the water source, for the purpose of establishing the pool control levels referred to in subclause (5).

20 Adaptive environmental water

- (1) 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.
- (2) 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 these water source for environmental purposes, the Minister may establish Total Daily Extraction Limits under clause 59 (5) of this Plan in the relevant water source or management zone.

Note. TDEs 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.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 21 2009

Part 5 Basic landholder rights

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

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights within these water sources are estimated to total 39.68 megalitres per day (hereafter *ML/day*) and are distributed as follows:
- (a) 0.94 ML/day in the Munmurra River Water Source,
 - (b) 0.87 ML/day in the Krui River Water Source,
 - (c) 0.36 ML/day in the Bow River Water Source,
 - (d) 1.71 ML/day in the Merriwa River Water Source,
 - (e) 0.60 ML/day in the Halls Creek Water Source,
 - (f) 0.32 ML/day in the Baerami Creek Water Source,
 - (g) 0.19 ML/day in the Widden Brook Water Source,
 - (h) 1.01 ML/day in the Bylong River Water Source,
 - (i) 0.04 ML/day in the Wollar Creek Water Source,
 - (j) 0.32 ML/day in the Upper Goulburn River Water Source,
 - (k) 0.66 ML/day in the Lower Goulburn River Water Source,
 - (l) 4.77 ML/day in the Dart Brook Water Source,
 - (m) 2.33 ML/day in the Pages River Water Source,
 - (n) 1.73 ML/day in the Isis River Water Source,
 - (o) 3.27 ML/day in the Upper Hunter River Water Source,
 - (p) 0.47 ML/day in the Rouchel Brook Water Source,
 - (q) 0.14 ML/day in the Muswellbrook Water Source,
 - (r) 2.14 ML/day in the Jerrys Water Source,
 - (s) 0.82 ML/day in the Glennies Water Source,
 - (t) 0.34 ML/day in the Glendon Brook Water Source,
 - (u) 0.22 ML/day in the Luskintyre Water Source,
 - (v) 1.00 ML/day in the Singleton Water Source,
 - (w) 0.32 ML/day in the Martindale Creek Water Source,
 - (x) 0.03 ML/day in the Doyles Creek Water Source,
 - (y) 1.04 ML/day in the Lower Wollombi Brook Water Source,

-
- (z) 0.42 ML/day in the Black Creek Water Source,
 - (aa) 2.39 ML/day in the Wallis Creek Water Source,
 - (bb) 0.78 ML/day in the Newcastle Water Source,
 - (cc) 1.71 ML/day in the Paterson/Allyn River Water Source,
 - (dd) 4.81 ML/day in the Williams River Water Source,
 - (ee) 0.07 ML/day in the Upper Paterson Water Source,
 - (ff) 0.36 ML/day in the Upper Wollombi Brook Water Source,
 - (gg) 0.12 ML/day in the North Lake Macquarie Water Source,
 - (hh) 0.07 ML/day in the South Lake Macquarie Water Source,
 - (ii) 0.22 ML/day in the Dora Creek Water Source,
 - (jj) 2.7 ML/day in the Hunter Regulated River Alluvial Water Source,

Note. This estimate includes domestic and stock rights for aquifer users only.

- (kk) 0.07 ML/day in the Wallis Creek Tidal Pool Water Source,
- (ll) 0.16 ML/day in the Hunter River Tidal Pool Water Source, and
- (mm) 0.16 ML/day in the Paterson River Tidal Pool Water Source.

Note. The estimates of domestic and stock rights in the Munmurra River, Krui River, Bow River, Merriwa River, Halls Creek, Baerami Creek, Widden Brook, Bylong River, Wollar Creek, Upper Goulburn River, Lower Goulburn River, Dart Brook, Pages River, Martindale Creek, Lower Wollombi Brook, and Upper Wollombi Brook water sources include both aquifer and unregulated users.

- (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 or overlying alluvial groundwater 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.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 24 2009

Part 5 Basic landholder rights

- (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 10, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 10, Division 1 of this Plan,
 - (e) establishes rules according to which access licences are managed as provided for in Parts 10 and 11 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 10 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

- (1) 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 736.5 megalitres per year (hereafter **ML/year**), distributed as follows:
- (a) 6 ML/year in the Munmurra River Water Source,
 - (b) 0 ML/year in the Krui River Water Source,
 - (c) 1 ML/year in the Bow River Water Source,
 - (d) 6.5 ML/year in the Merriwa River Water Source,
 - (e) 41 ML/year in the Halls Creek Water Source,
 - (f) 0 ML/year in the Baerami Creek Water Source,
 - (g) 5 ML/year in the Widden Brook Water Source,
 - (h) 0 ML/year in the Bylong River Water Source,
 - (i) 19 ML/year in the Wollar Creek Water Source,
 - (j) 8 ML/year in the Upper Goulburn River Water Source,
 - (k) 84.5 ML/year in the Lower Goulburn River Water Source,
 - (l) 87 ML/year in the Dart Brook Water Source,
 - (m) 94.5 ML/year in the Pages River Water Source,
 - (n) 13 ML/year in the Isis River Water Source,
 - (o) 18 ML/year in the Upper Hunter River Water Source,
 - (p) 11 ML/year in the Rouchel Brook Water Source,
 - (q) 67 ML/year in the Muswellbrook Water Source,
 - (r) 7 ML/year in the Jerrys Water Source,
 - (s) 0 ML/year in the Glennies Water Source,
 - (t) 16.5 ML/year in the Glendon Brook Water Source,
 - (u) 2 ML/year in the Luskintyre Water Source,
 - (v) 7 ML/year in the Singleton Water Source,
 - (w) 5 ML/year in the Martindale Creek Water Source,

- (x) 0 ML/year in the Doyles Creek Water Source,
- (y) 90 ML/year in the Lower Wollombi Brook Water Source,
- (z) 93 ML/year in the Black Creek Water Source,
- (aa) 2 ML/year in the Wallis Creek Water Source,
- (bb) 0 ML/year in the Newcastle Water Source,
- (cc) 11.5 ML/year in the Paterson/Allyn River Water Source,
- (dd) 24 ML/year in the Williams River Water Source,
- (ee) 0 ML/year in the Upper Paterson Water Source,
- (ff) 12 ML/year in the Upper Wollombi Brook Water Source,
- (gg) 0 ML/year in the North Lake Macquarie Water Source,
- (hh) 0 ML/year in the South Lake Macquarie Water Source,
- (ii) 5 ML/year in the Dora Creek Water Source,
- (jj) 0 ML/year in the Hunter Regulated River Alluvial Water Source,
- (kk) 0 ML/year in the Wallis Creek Tidal Pool Water Source,
- (ll) 0 ML/year in the Hunter River Tidal Pool Water Source, and
- (mm) 0 ML/year in the Paterson River Tidal Pool Water Source.

Note. Prior to the commencement of this Plan, use within the Wallis Creek Tidal Pool Water Source, the Hunter River Tidal Pool Water Source and the Paterson River Tidal Pool Water Source was not licenced.

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 5,597 ML/year, distributed as follows:

- (a) 232 ML/year in the Pages River Water Source,
- (b) 198 ML/year in the Dart Brook Water Source,
- (c) 105 ML/year in the Lower Goulburn River Water Source,
- (d) 55 ML/year in the Munmurra River Water Source,
- (e) 4,932 ML/year in the Hunter Regulated River Alluvial Water Source,
- (f) 75 ML/year in the Paterson/Allyn River Water Source, and
- (g) 0 ML/year in all other water sources.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 29 2009

Part 7 Requirements for water under access licences

29 Share component of major utility access licences

- (1) 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 346,700 ML/year distributed as follows:

- (a) 100,000 ML/year in the Newcastle Water Source,

Note. The 100,000 ML/year specified above refers to the maximum historic extractions from Grahamstown Dam via the George Schroder Pumping Station and may be increased in line with Grahamstown water treatment plant upgrades.

- (b) 239,000 ML/year in the Williams River Water Source, including 189,000 ML/year extracted at Balickera Pumping Station, and 50,000 ML/year extracted at Chichester Dam,

Note. The 189,000 ML/year specified provides for Grahamstown Dam to be filled during a single wet year. This figure is an interim figure pending the completion of the supplementary study on Development of Access Rules for the Lower Williams River. Total use from the Williams River and Newcastle Water Sources will be limited by Operating Licence and the Integrated Water Resources Plan. The Integrated Water Resources Plan may be amended during the term of this Plan to allow for future growth in the area of operation of the major utility.

- (c) 7,700 ML/year in the Jerrys Water Source, and

- (d) 0 ML/year in all other water sources.

- (2) The Minister may, pursuant to section 68A of the Act, amend the share and/or extraction components of a major utility access licence in the water sources listed in subclauses (1) (a), (1) (b) and (1) (c) above, following:

- (a) the completion of the supplementary study Development of Access Rules for the Lower Williams River, and/or

- (b) the completion of Tillegra Dam to provide a share component in the Williams River Water Source for Tillegra Dam.

Note. The NSW Government has announced that a town water supply dam is proposed to be built at Tillegra on the Williams River with a capacity of up to 450,000 ML within the next decade. This dam is proposed to be used in conjunction with Chichester Dam and Grahamstown Dam, and there may be opportunities at the time to review and redistribute Hunter Water's existing entitlements (for example, entitlements for extractions at Seaham). Hunter Water's overall demand for water from the Williams River will continue to be driven by customer water use requirements. Any growth in demand will largely occur as a result of population increase. A new dam at Tillegra would provide a storage buffer against drought for the current and growing population, but would not otherwise signal an increase in overall demand for water from the Williams River. With the construction of the dam at Tillegra, relevant plan provisions will need to be amended. The share component established for the Tillegra pipeline link is anticipated to be similar to that of the Chichester trunk gravity main e.g. in the vicinity of 50,000 ML/yr.

30 Share component of unregulated river access licences

- (1) 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 80,652 unit shares, distributed as follows:
- (a) 109 unit shares in the Munmurra River Water Source,
 - (b) 1,449 unit shares in the Krui River Water Source,
 - (c) 200 unit shares in the Bow River Water Source,
 - (d) 4,024 unit shares in the Merriwa River Water Source,
 - (e) 3,096 unit shares in the Halls Creek Water Source,
 - (f) 1,490 unit shares in the Baerami Creek Water Source,
 - (g) 2,007 unit shares in the Widden Brook Water Source,
 - (h) 65 unit shares in the Bylong River Water Source,
 - (i) 78 unit shares in the Wollar Creek Water Source,
 - (j) 1,661 unit shares in the Upper Goulburn River Water Source,
 - (k) 14,205 unit shares in the Lower Goulburn River Water Source,
 - (l) 1,219 unit shares in the Dart Brook Water Source,
 - (m) 4,639 unit shares in the Pages River Water Source,
 - (n) 2,000 unit shares in the Isis River Water Source,
 - (o) 3,394 unit shares in the Upper Hunter River Water Source,
 - (p) 1,086 unit shares in the Rouchel Brook Water Source,
 - (q) 531 unit shares in the Muswellbrook Water Source,
 - (r) 2,573 unit shares in the Jerrys Water Source,
 - (s) 260 unit shares in the Glennies Water Source,
 - (t) 1,530 unit shares in the Glendon Brook Water Source,
 - (u) 387 unit shares in the Luskintyre Water Source,
 - (v) 960 unit shares in the Singleton Water Source,
 - (w) 3,241 unit shares in the Martindale Creek Water Source,
 - (x) 570 unit shares in the Doyles Creek Water Source,
 - (y) 6,663 unit shares in the Lower Wollombi Brook Water Source,
 - (z) 5,113 unit shares in the Black Creek Water Source,
 - (aa) 490 unit shares in the Wallis Creek Water Source,
 - (bb) 551 unit shares in the Newcastle Water Source,
 - (cc) 3,645.5 unit shares in the Paterson/Allyn River Water Source,
 - (dd) 8,239 unit shares in the Williams River Water Source,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 31 2009

Part 7 Requirements for water under access licences

- (ee) 196 unit shares in the Upper Paterson Water Source,
- (ff) 2,703 unit shares in the Upper Wollombi Brook Water Source,
- (gg) 1,216 unit shares in the North Lake Macquarie Water Source,
- (hh) 169 unit shares in the South Lake Macquarie Water Source,
- (ii) 859 unit shares in the Dora Creek Water Source,
- (jj) 0 unit shares in the Hunter Regulated River Alluvial Water Source,
- (kk) 0 unit shares in the Wallis Creek Tidal Pool Water Source,
- (ll) 0 unit shares in the Hunter River Tidal Pool Water Source, and
- (mm) 0 unit shares in the Paterson River Tidal Pool Water Source.

Note. Prior to the commencement of this Plan, use within the Wallis Creek Tidal Pool Water Source, the Hunter River Tidal Pool Water Source and the Paterson River Tidal Pool Water Source was not licenced.

Note. The total share components for unregulated river access licences specified in the clause above include total share components for unregulated river (subcategory "Aboriginal community development") access licences.

31 Share component of unregulated river (high flow) access licences

It is estimated that at the time of commencement of this Plan, the share components of unregulated river (high flow) access licences authorised to extract water from these water sources will total 42 unit shares, distributed as follows:

- (a) a total of 0 unit shares in the Pages River Water Source,
- (b) a total of 0 unit shares in the Isis River Water Source,
- (c) a total of 0 unit shares in the Lower Wollombi Brook Water Source,
- (d) a total of 0 unit shares in the Rouchel Brook Water Source, and
- (e) a total of 42 unit shares in the Paterson/Allyn Rivers Water Source.

Note. The Pages River Water Source, the Isis River Water Source, the Lower Wollombi Brook Water Source, the Rouchel Brook Water Source and the Paterson/Allyn Rivers Water Sources are the only water sources within this Plan area which have been identified as suitable for unregulated river (high flow) access licences. This Plan allows for a specified amount of unregulated river access licences to be converted to the unregulated river (high flow) access licences, however at the commencement of this Plan, apart from an existing licence in the Paterson/Allyn Rivers Water Source, there are no other existing access licences of this category hence the 0 unit shares indicated.

32 Share component of aquifer access licences

- (1) It is estimated that at the time of commencement of this Plan, the share components of aquifer access licences authorised to extract water from these water sources will total 80,391 unit shares, distributed as follows:
- (a) 10 unit shares in the Munmurra River Water Source,
 - (b) 5 unit shares in the Krui River Water Source,
 - (c) 5 unit shares in the Bow River Water Source,
 - (d) 900 unit shares in the Merriwa River Water Source,
 - (e) 421 unit shares in the Halls Creek Water Source,
 - (f) 2,259 unit shares in the Baerami Creek Water Source,
 - (g) 1,191 unit shares in the Widden Brook Water Source,
 - (h) 5,843 unit shares in the Bylong River Water Source,
 - (i) 1,354 unit shares in the Wollar Creek Water Source,
 - (j) 2 unit shares in the Upper Goulburn River Water Source,
 - (k) 2,494 unit shares in the Lower Goulburn River Water Source,
 - (l) 28,051 unit shares in the Dart Brook Water Source,
 - (m) 8,059 unit shares in the Pages River Water Source,
 - (n) 0 unit shares in the Isis River Water Source,
 - (o) 0 unit shares in the Upper Hunter River Water Source,
 - (p) 0 unit shares in the Rouchel Brook Water Source.
 - (q) 0 unit shares in the Muswellbrook Water Source,
 - (r) 0 unit shares in the Jerrys Water Source,
 - (s) 0 unit shares in the Glennies Water Source,
 - (t) 0 unit shares in the Glendon Brook Water Source,
 - (u) 0 unit shares in the Luskintyre Water Source,
 - (v) 0 unit shares in the Singleton Water Source,
 - (w) 593 unit shares in the Martindale Creek Water Source,
 - (x) 0 unit shares in the Doyles Creek Water Source
 - (y) 5,071 unit shares in the Lower Wollombi Brook Water Source,
 - (z) 0 unit shares in the Black Creek Water Source,
 - (aa) 0 unit shares in the Wallis Creek Water Source,
 - (bb) 0 unit shares in the Newcastle Water Source,
 - (cc) 0 unit shares in the Paterson/Allyn River Water Source,
 - (dd) 0 unit shares in the Williams River Water Source,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 33 2009

Part 7 Requirements for water under access licences

- (ee) 0 unit shares in the Upper Paterson Water Source,
- (ff) 10 unit shares in the Upper Wollombi Brook Water Source,
- (gg) 0 unit shares in the North Lake Macquarie Water Source,
- (hh) 0 unit shares in the South Lake Macquarie Water Source,
- (ii) 0 unit shares in the Dora Creek Water Source,
- (jj) 24,132 unit shares in the Hunter Regulated River Alluvial Water Source,
- (kk) 0 unit shares in the Wallis Creek Tidal Pool Water Source,
- (ll) 0 unit shares in the Hunter River Tidal Pool Water Source, and
- (mm) 0 unit shares in the Paterson River Tidal Pool Water Source.

Note. Prior to the commencement of this Plan, use within the Wallis Creek Tidal Pool Water Source, the Hunter River Tidal Pool Water Source and the Paterson River Tidal Pool Water Source was not licenced.

Note. The total share components for aquifer access licences specified in these water sources could be higher as a result of additional share components for unidentified aquifer access licences in the alluvial groundwater.

33 Changes to total share components

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 13 of this Plan,
- (c) the variation of local water utility licences under section 66 of the Act,
- (d) the variation of major utility (subcategory “urban water”) water access licence(s) held by Hunter Water Corporation,

Note. In the event that Hunter Water Corporation takes on the share component of a cancelled local water utility access licences, the share component of the major utility (subcategory “urban water”) access licence may be increased by the amount of the cancelled access licence. This is in addition to increases as a result of clause 29 (2).

- (e) the re-allocation of access licences into or out of a water source covered by this Plan where they have been incorrectly identified in relation to the taking of water from that water source, and
- (f) any changes due to the volumetric conversion of *Water Act 1912* entitlements that are currently non-volumetric.

Part 8 Rules for granting access licences

34 Rules for granting access licences

(1) This Part 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) an access licence that may be granted in accordance with an access licence dealing,

Note. Dealings include the conversion of unregulated river access licences to unregulated river high flow access licences as specified in clause 72 of this Plan.

(b) an unregulated river (subcategory “Aboriginal community development”) access licence, to take water from B Class flows only (flows greater than the 50th percentile flow), provided that the grant of any such access licence will cause no more than minimal harm to the water source at the water source level impact assessment and provided that the total share components of all unregulated river (subcategory “Aboriginal community development”) access licences in the water sources listed below do not exceed:

(i) 170 unit shares in the Isis/Pages Rivers Water Sources,

(ii) 208 unit shares in the Lower Wollombi Brook Water Source,

(iii) 318 unit shares in the Paterson/Allyn River Water Source, and

(iv) 192 unit shares in the Rouchel Brook Water Source, and

Note. Approval for granting of an unregulated river (subcategory “Aboriginal community development”) access licence will be subject to assessment of the application in regard to the level of impact of the proposed extraction. This may include consideration of the potential impact on high flow (e.g. flows greater than the 50th percentile flow) values, and any potential impact on the water source as a whole.

Note. An unregulated river (subcategory “Aboriginal community development”) access licence will not be fully commercial. Allocations under these licences will be able to be traded to non-Aboriginal people however the licence itself can only be traded amongst Aboriginal people, and as such will remain in the Aboriginal community for the life of the licence. These licences will not be able to be converted to any other category of licence. Aboriginal communities, enterprises and individuals are encouraged to seek financial assistance from funding bodies to purchase fully commercial licences.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 34 2009

Part 8 Rules for granting access licences

(c) a major utility (subcategory “urban water”) access licence which replaces a local water utility access licence.

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 Hunter River Tidal Pool Water Source, the Paterson River Tidal Pool Water Source and the Wallis Creek Tidal Pool Water Source 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.
- (8) Applications for new access licences shall not be permitted to be made and new access licences should not be granted in the Hunter Regulated River Alluvial Water Source, except as a result of an access licence dealing.

Note. Any new access licence granted in these water sources may be subject to specific mandatory conditions as set out in Part 13 of this Plan.

Part 9 Rules for granting or amending water supply works approvals

Division 1 General

35 Granting or amending water supply works approvals

- (1) This Part is made in accordance with section 21 (b) and 21 (e) of the Act.
- (2) A water supply work approval shall not be granted under section 95 of the Act, amended under section 107 of the Act, or amended under section 71W of the Act, where the water supply work to be constructed or used is located upstream of the high priority groundwater dependent ecosystem identified in Schedule 4 of this Plan in the Paterson/Allyn Rivers, the Williams River, the Isis River or the Newcastle Water Sources.

36 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 exceed 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 12 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.

37 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 Dora Creek, the Glennies, the Upper Paterson, the Merriwa River, the Newcastle, the Paterson/Allyn Rivers, the Rouchel Brook, the Upper

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 38 2009

Part 9 Rules for granting or amending water supply works approvals

Goulburn River, the Upper Hunter and the Upper Wollombi Brook Water Sources.

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*.

Division 2 Water supply works used to take water from the alluvial sediments in these water sources

38 Rules for granting or amending approvals for water supply works used to take water from the alluvial sediments in these water sources

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

Note. The taking of groundwater results in the drawdown of water levels in the water source in vicinity of the extraction. Extraction may result in unacceptable water level declines in other water supply works/bore close by, increasing the pumping costs associated with this extraction, or even cutting off supply altogether. It may interfere with the results of the regional water level monitoring undertaken by the Department. It may also lower the water levels in groundwater dependent ecosystems and cultural features close by. Finally, it may mobilise contaminated groundwater in the area, drawing it towards a point of extraction. It is important, therefore, to manage the location at which groundwater is extracted to minimise these local impacts, by applying a minimum distance conditions to water supply works.

39 Rules for granting water supply works approvals

- (1) A water supply work approval shall not be granted under section 95 of the Act, amended under section 107 of the Act, or amended under section 71W of the Act, where a water supply work to be constructed or used to take water from the alluvial sediments in these water sources is located within:
 - (a) 400 metres of a water supply work being constructed or used to take water from the alluvial sediments in these water sources nominated by another access licence,
 - (b) 200 metres of a water supply work being constructed or used to take water from the alluvial sediments in these water sources for basic landholder rights,
 - (c) 50 metres from the property boundary,

-
- (d) 500 metres from a water supply works being constructed or used to take water from alluvial sediments in these water sources by a local water utility or a major utility, or
- (e) 400 metres of a Departmental observation or monitoring bore.
- Note.** The distance conditions in this clause apply to new or amended approvals. That is, when the applicant wants to construct a new water supply work being used to take water from the alluvial sediments in these water sources, and add it to an existing approval. The distance conditions also apply when the licence holder wants to nominate new or different works on the licence.
- (2) The distance restrictions specified in subclause (1) do not apply where the application:
- (a) relates to a water supply work which is constructed or used solely for the purpose of exercising basic landholder rights,
- (b) is for a replacement bore,
- Note.** Replacement bore is defined in the Dictionary.
- (c) relates to a water supply work which is to be constructed or used to take water from the alluvial sediments in these water sources for monitoring, environmental management purposes, or remedial works, or
- (d) relates to a water supply work which is to be constructed or used to take water from the alluvial sediments in these water sources and which is nominated solely by a domestic and stock access licence, a local water utility access licence, an access licence of the subcategory “town water supply” or an access licence of the subcategory “urban water”.
- (3) A water supply work approval shall not be granted under section 95 of the Act, amended under section 107 of the Act, or amended under section 71W of the Act, where the water supply work to be constructed or used to take water from the alluvial sediments in these water sources, nominated by a local water utility access licence, or an access licence of the subcategory “town water supply” or an access licence of the subcategory “urban water” is located within:
- (a) 400 metres of a water supply work constructed or used to take water from the alluvial sediments in these water sources nominated by another access licence,
- (b) 200 metres of a water supply work constructed or used to take water from the alluvial sediments in these water sources for basic landholder rights,

2009 No 347

Clause 39

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 9

Rules for granting or amending water supply works approvals

- (c) 200 metres from the property boundary, if the property is greater than 500 metres in the minimum width or depth (whichever is the lesser), and
 - (d) 400 metres of a Departmental observation or monitoring bore.
- (4) A water supply work approval shall not be granted under section 95 of the Act, amended under section 107 of the Act, or amended under section 71W of the Act, where water supply work to be constructed or used to take water from the alluvial sediments in these water sources, nominated only by a domestic and stock access licence is located within:
 - (a) 200 metres of an approved water supply work constructed or used to take water from the alluvial sediments in these water sources nominated by another access licence,
 - (b) 200 metres of a water supply work constructed or used to take water from the alluvial sediments in these water sources for basic landholder rights,
 - (c) 40 metres from the property boundary, if the property is greater than 100 metres in the minimum width or depth (whichever is the lesser),
 - (d) 200 metres from water supply works being constructed or used to take water from alluvial sediments in these water sources by local water utility or a major utility, or
 - (e) 100 metres of a Departmental observation or monitoring bore.
- (5) The distance restrictions specified in subclauses (3) and (4) do not apply where:
 - (a) the application is for a replacement bore, or
Note. Replacement bore is defined in the Dictionary.
 - (b) the application relates to a water supply work which is to be constructed or used to extract water from alluvial sediments in these water sources for monitoring, environmental management purposes or remedial works.
- (6) Where the distance restrictions specified in subclauses (1), (3) and (4) cannot be met, a water supply work approval may be granted provided:
 - (a) a hydrogeological study undertaken by the applicant, and assessed as adequate by the Department, demonstrates that the water supply work will have no more than minimal impacts on the existing licenced taking of water from the water source,

- (b) all potentially affected persons in the near vicinity of the water supply work, holding an access licence or having a right under the Act to take water, have been notified by the applicant, and

Note. These persons may include neighbouring access licence, approval holders or other persons having a right to take water in the near vicinity of the water supply work.

- (c) any approval granted contains conditions setting out a process for remediation in the event that any more than minimal impact on existing extraction from the water source occurs in the future.

Note. In some water sources the general size of properties means that the application of exclusion distances would result in no new or replacement bores being able to be installed. Applicants must apply to the Department for special consideration in these instances.

- (7) The Minister may amend this Plan to alter the distance restriction in specified in this clause or add additional restrictions, after year 5 of this Plan or if a temporary water restriction order is made in these water sources under section 324 (2) of the Act.

40 Rules for granting water supply works approvals near contamination sources

- (1) A water supply work approval shall not be granted under section 95 of the Act, amended 1 under section 107 of the Act, or amended under section 71W of the Act, where a water supply work to be constructed or used to take water from the alluvial sediments in these water sources is located within:
- (a) 100 metres of a contamination source as listed in Schedule 3, unless the applicant can demonstrate to the Minister's satisfaction, that:
 - (i) a lesser distance will result in no more than minimal harm to the water source, and
 - (ii) the taking of water will not impact on the environment or cause a threat to public health as confirmed by the Minister for Health, or
 - (b) a greater distance than in subclause (a), as determined by the Minister, to ensure that no more than minimal harm will occur to the water source, and that extraction will not impact on the environment or cause a threat to public health as confirmed by the Minister for Health.
- (2) A water supply work approval shall not be granted for a new water supply work to be constructed or used to take water from the alluvial sediments in these water sources for any purpose, except basic landholder rights, which is between 100 metres and 500 metres of a contamination source listed in Schedule 3, unless the applicant provides evidence, to the Minister's satisfaction, that no drawdown of

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 41 2009

Part 9 Rules for granting or amending water supply works approvals

groundwater within 100 metres of the respective contamination source will occur.

Note. Schedule 3 is relevant to the granting of access licences and approvals for water supply works to be constructed or used to take water from the alluvial sediments in these water sources.

- (3) The distance restrictions specified in subclauses (1) and (2) do not apply to:
 - (a) a water supply work to be constructed or used for monitoring, environmental management purposes or remedial works, or
 - (b) an application for a replacement bore.

Note. Replacement bore is defined in the Dictionary.
- (4) The Minister may amend this Plan to include or remove a contamination source from Schedule 3, based on the results of a site inspection or any other relevant information provided to the Minister.
- (5) Subclauses (1) and (2) may be applied by the Minister in relation to contamination sources not in Schedule 3, based on the results of a site inspection or other relevant information provided to the Minister.

41 Rules for granting water supply works approvals near sensitive environmental areas

- (1) A water supply work approval shall not be granted under section 95 of the Act, amended under section 107 of the Act, or amended under section 71W of the Act, where the water supply work to be constructed or used to take water from the alluvial sediments in these water sources, excluding the Lower Goulburn River, the Upper Goulburn River and Hunter Regulated River Alluvial Water Sources, is located within:
 - (a) 100 metres of a high priority groundwater dependent ecosystem, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4, for basic landholders rights only, or
 - (b) 200 metres of a high priority groundwater dependent ecosystem, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4 for water supply works nominated by an access licence, or
 - (c) 500 metres of a high priority karst environment groundwater dependent ecosystem, listed in and shown on the maps in Schedule 4, or

- (d) in the bed of a third order of higher stream and perennial rivers, unless assessment indicates that the work will have minimal impact on the river environment or river stability, or

Note. It is acknowledged that there will be some impact from the replacement of works however these must not have a detrimental impact on river bed levels or slope, cause diversion of flows or contribute to bank destabilisation.

- (e) if there is likely to be drawdown at the outside edge of the distances referred to in subclauses (a) and (b).

Note. Subclause (1) will not apply to current authorised extraction from an existing water supply work being used to take water from the alluvial sediments in these water sources until such time as the work is replaced.

- (2) A water supply work approval shall not be granted under section 95 of the Act, amended under section 107 of the Act, or amended under section 71W of the Act, where the water supply work to be constructed or used to take water from the alluvial sediments in the Lower Goulburn River and the Upper Goulburn River Water Sources, where a water supply work being used to take water from the alluvial sediments, is located:

- (a) Upstream of Kerrabee:
- (i) within 100 metres of a high priority groundwater dependent ecosystem, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4, for basic landholders rights only, or
 - (ii) within 200 metres of a high priority groundwater dependent ecosystem, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4, for water supply works nominated by an access licence, or
 - (iii) within 500 metres of a high priority karst environment groundwater dependent ecosystem, listed in and shown on the maps in Schedule 4, or
 - (iv) within 40 metres of the top of the high bank of any third order or above stream, or lagoon, or
 - (v) within 40 metres of first and second order stream, unless:
 - (1) the water supply work to be constructed or used is drilled into the underlying parent material, and the slotted intervals of the works commences deeper than 30 metres, and
 - (2) the applicant can demonstrate that the bore will have no more than minimal impact on base flows in the stream, and

- (vi) if there is likely to be drawdown at the outside edge of the distances referred to in subclauses (a) (i) and (a) (ii), and
- (b) Downstream of Kerrabee:
 - (i) within 100 metres of a high priority groundwater dependent ecosystems, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4, for basic landholders rights only, or
 - (ii) within 200 metres of a high priority groundwater dependent ecosystems, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4, for water supply works nominated by an access licence, or
 - (iii) within 500 metres of a high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4,
 - (iv) in the bed of a third order or higher stream and perennial rivers, unless assessment indicates that the water supply work will have no more than minimal impact on the river environment or river stability, or
Note. It is acknowledged that there will be some impact from the replacement of works however these must not have a detrimental impact on river bed levels or slope, cause diversion of flows or contribute to bank destabilisation.
 - (v) if there is likely to be drawdown at the outside edge of the distances referred to in subclauses (b) (i) and (b) (ii).
Note. Subclause (2) will not apply to current authorised extraction from an existing water supply work being used to take water from the alluvial sediments in these water sources until such time as the work is replaced.
- (3) A water supply work approval shall not granted under section 95 of the Act, amended under section 107 of the Act, or amended under section 71W of the Act, where the water supply work being used to take water from the alluvial sediments in the Hunter Regulated River Alluvial Water Sources, is located:
 - (i) within 100 metres of a high priority groundwater dependent ecosystem, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4, for basic landholders rights only, or
 - (ii) within 200 metres of a high priority groundwater dependent ecosystem, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 4, for water supply works nominated by an access licence, or

- (iii) within 500 metres of a high priority karst environment groundwater dependent ecosystem, listed in and shown on the maps in Schedule 4, or
 - (iv) within 200 metres of the top of the high bank of the Hunter Regulated River, or any third order or above stream, or lagoon, or
 - (v) within 40 metres of first and second order stream, unless:
 - (1) the water supply work which is to be constructed or used is drilled into the underlying parent material, and the slotted intervals of the works commences deeper than 30 metres, and
 - (2) the applicant can demonstrate that the bore will have no more than minimal impact on base flows in the stream, or
 - (vi) if there is likely to be drawdown at the outside edge of the buffer zone referred to in subclauses (a) (i) and (a) (ii).
- (4) Subclauses (1), (2) and (3) do not apply in relation to a replacement bore.
Note. Replacement bore is defined in the Dictionary.
- (5) Subclauses (1) (a) (iv), (1) (a) (v), (3) (iv) and (3) (v) do not apply to a new water supply works which are constructed or used to take water from the alluvial sediments in these water sources required as part of a dealing involving the conversion of an unregulated river access licence to an aquifer access licence under section 71O of the Act.
- (6) The distance restrictions specified in subclauses (1), (2) or (3) do not apply to a water supply work which is to be constructed or used to take water from alluvial sediments in these water sources for monitoring, environmental management purposes or remedial works.
- (7) The Minister may amend this Plan to:
- (i) alter the exclusion distances in subclauses (1), (2) or (3), during the term of this Plan, based on further studies of groundwater ecosystem dependency caused to be undertaken by the Minister, or
 - (ii) include a new identified high priority groundwater dependent ecosystem in Schedule 4 during the term of this Plan, based on further studies of groundwater ecosystem dependency caused to be undertaken by the Minister,
 - (iii) delete a high priority groundwater dependent ecosystem from Schedule 4 identified as not having groundwater dependency, based on further studies of groundwater ecosystem dependency caused to be undertaken by the Minister.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 42 2009

Part 10 Limits to the availability of water

Part 10 Limits to the availability of water

Division 1 Long-term average annual extraction limit

42 Limits to the availability of water

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

43 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 Goulburn Extraction Management Unit, Hunter Extraction Management Unit, Lake Macquarie Extraction Management Unit and the Hunter Regulated River Alluvium Extraction Management Unit (hereafter *these Units*).

44 Long-term average annual extraction limit

- (1) The long-term average annual extraction limit for the Lake Macquarie Extraction Management Unit is equal to the total of:
 - (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in the Lake Macquarie Extraction Management Unit, immediately prior to the commencement of this Plan for water sources in the Lake Macquarie Extraction Management Unit, plus
 - (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in the water sources in the Lake Macquarie Extraction Management Unit at the commencement of this Plan, plus
 - (c) the share component of access licences granted in the Lake Macquarie Extraction Management Unit under the Regulations and Part 8 of this Plan.
- (2) The long-term average annual extraction limit for the Goulburn Extraction Management Unit is equal to the total of:
 - (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 or Part 5 of the *Water Act 1912* in the Goulburn Extraction Management Unit, immediately prior to the commencement of this Plan for water sources in the Goulburn Extraction Management Unit, plus
 - (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in the water sources in the Goulburn Extraction Management Unit, excluding the Wybong Creek Water Source, at the commencement of this Plan, plus

-
- (c) the sum of share components of access licences in the Wybong Creek Water Source at the commencement of the Water Sharing Plan for the Wybong Creek Water Source 2003, where the share component is expressed as a number of ML/year, plus
 - (d) the sum of share components of access licences in the Wybong Creek Water Source at the commencement of the Water Sharing Plan for the Wybong Creek Water Source 2003, where the share component is expressed as a number of unit shares, plus
 - (e) an estimate of annual extraction of water under domestic and stock rights and native title rights in the Wybong Creek Water Source at the commencement of the Water Sharing Plan for the Wybong Creek Water Source 2003, plus
 - (f) the share component of access licences granted in the Goulburn Extraction Management Unit under the Regulations and Part 8 of this Plan.
- (3) In the Hunter Extraction Management Unit there will be separate long-term extraction limits applying to extractions under:
- (a) basic landholder rights and access licences, other than those major utility access licences held by Hunter Water Corporation, and
 - (b) major utility access licences held by Hunter Water Corporation.
- (4) The long-term average annual extraction limit established under subclause (3) (a) in the Hunter Extraction Management Unit is equal to the total of:
- (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the Water Act 1912 in this Unit, immediately prior to the commencement of this Plan for water source in the Hunter Extraction Management Unit, excluding entitlements held by Hunter Water Corporation, plus
 - (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in the Hunter Extraction Management Unit at the commencement of this Plan, plus
 - (c) the share component of access licences granted in the Hunter Extraction Management Unit under the Regulations, Part 8 of this Plan and any transitional regulations made pursuant to this Plan.
- (5) The long-term average annual extraction limit established under subclause (3) (b) for the major utility access licences held by Hunter Water Corporation in the Hunter Extraction Management Unit will be equal to 78,500 ML/year minus the long-term average annual extraction under access licences held by Hunter Water Corporation in the Tomago, Tomaree and Stockton Groundwater Source.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 44 2009

Part 10 Limits to the availability of water

Note. Water flowing from Hunter Water Corporation 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 78,500 ML/year figure is based on demand projections to 2013 taking into consideration projected increases in the domestic and non-domestic sectors, as well as non-metered demand. Water efficiency savings are incorporated in this estimate based on both NSW Government and Hunter Water driven programs. 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 will need to be reviewed to determine their appropriateness in line with the new operations.

- (6) After commencement of releases from Tillegra Dam, or after 1 July 2013, whichever occurs sooner, the long-term average annual extraction limit established under subclause (3) (b) for the major utility access licences held by Hunter Water Corporation in the Hunter Extraction Management Unit will be reviewed.
- (7) The review under subclause (6) shall consider the need to vary the long-term average annual extraction limit specified in subclause (5) based on consideration of the environmentally sustainable level of extraction with regard to:
 - (a) environmental flow releases from water supply dams to meet:
 - (i) instream habitat requirements, and
 - (ii) passage of flow through Seaham Weir to meet estuary requirements, and
 - (b) Seaham Weir infrastructure, operation and extraction.
- (8) The Minister may amend the long-term average annual extraction limit specified in subclause (5) in accordance with the outcomes of the review specified in clauses (6) and (7).
- (9) The long-term average annual extraction limit for the Hunter Regulated River Alluvium Extraction Management Unit is equal to the total of:
 - (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 5 of the Water Act 1912 in this Unit, immediately prior to the commencement of this Plan for water source in the Hunter Regulated River Alluvium Extraction Management Unit, plus
 - (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in the Hunter Regulated River Alluvium Extraction Management Unit at the commencement of this Plan, plus

-
- (c) the share component of access licences granted in the Hunter Regulated River Alluvium Extraction Management Unit under the Regulations and Part 8 of this Plan.

45 Variation of the long-term average annual extraction limits

- (1) 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 12 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.
- (3) The long-term average annual extraction limit for the Hunter Extraction Management Unit may vary upon the conversion of access licences from unregulated river access licence to an unregulated river (high flow) access licence.
- (3) The variation in subclause (3) will result in the long-term average annual extraction limit being reduced by the amount of the cancelled share component of the unregulated river access licence and increased by the amount of the share component of the granted unregulated river (high flow) access licence.

46 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 access licences held by Hunter Water Corporation, will be assessed each water year to determine if the long-term average annual extraction limit established by clause 44 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.

47 Compliance with the long-term average annual extraction limits

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 46 determines that the long-term average annual extraction limit for any extraction management unit in these water sources established under clause 44 has been exceeded by 5% or

2009 No 347Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 47 2009Part 10 Limits to the availability of water

greater, then the available water determination made under Division 2 of this Part for unregulated river access licences, unregulated river (high flow) access licences and aquifer 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 management unit to the long-term average annual extraction limit.

- (2) If the assessment in clause 46 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 44, then the available water determination made under Division 2 of this Part for unregulated river access licences, unregulated river (high flow) access licences, and aquifer 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 management unit to increase to the long-term average annual extraction limit.
- (3) Any reduction or increase to the available water determination made under Division 2 of this Part for unregulated river access licences, unregulated river (high flow) access licences and aquifer access licences shall be the same.
- (4) Any reduction or increase to the available water determinations made Division 2 of this Part for unregulated river access licences, unregulated river (high flow) access licences and aquifer access licences, in these water sources 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 respective extraction management unit to return to the long-term average annual extraction limit.
- (5) Any reduction or increase to the available water determinations made under Division 2 of this Plan for unregulated river access licences in water sources within the Goulburn Extraction Management Unit, under this clause, shall be equivalent to the corresponding reduction or increase made to available water determinations for unregulated river access licences in the Wybong Creek Water Source.
- (6) The average annual volume of water taken under all major utility access licences held by Hunter Water Corporation in any 10 consecutive water years in the Hunter Extraction Management Unit may not exceed a volume equal to the long-term extraction limit specified in clause 44 (5) of this Plan.

-
- (7) For the purpose of assessing growth above the respective major utility long-term average annual extraction limit the water taken in the Hunter Extraction Management Unit under major utility licences within these water sources will be determined as:
- (a) the water passing the outlet of Grahamstown Water Treatment Plant minus any water passing the boundary meter from Hunter Water Corporation to Gosford Wyong Councils, plus
 - (b) any water passing the boundary meter from Gosford Wyong Councils to Hunter Water Corporation, plus
 - (c) water taken by any other major utility infrastructure nominated by Hunter Water Corporation and agreed to by the Minister.
- (8) In the Hunter Extraction Management Unit total water extractions under major utility access licences held by Hunter Water Corporation, will be monitored each year to determine if there is any growth in the volumes extracted above the extraction limit established under clause 44 (5) based on a comparison of the extraction limit against the average extraction over a rolling ten year period commencing from the start of this Plan, except where subclause (9) applies.
- (9) If the long-term average annual extraction limit specified in clause 44 (5) is amended under clause 44 (8) then growth in volumes extracted above the respective extraction limit specified in clause 44 (5) shall be determined based on a comparison of the extraction limit against the average extraction under major utility access licences held by Hunter Water Corporation within the Hunter Extraction Management Unit over a rolling ten year period commencing from the water year in which the amendment was made.
- (10) If monitoring of total water extractions under major utility access licences held by the Hunter Water Corporation indicates growth above the respective long-term average annual extraction limit as specified in clause 44 (5), then a review shall be undertaken which considers:
- (a) the Hunter Water Corporation's urban water supply requirements, and
 - (b) the impacts associated with an increase to the respective long-term average annual extraction limit.

Note. It is recognised that the initial long-term average annual extraction limit (LTAAEL) for major utility access licences is based on demand projections until 2013 and as such should cater for anticipated extraction demands over this period within the proposed limit. This figure however does not include provision for contingencies such as new large scale development of regional significance. If such a development was to occur, the major utility access licence holder could seek a review of the LTAAEL to allow for an increase to meet the demands of such a development.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 48 2009

Part 10 Limits to the availability of water

- (11) For the purposes of auditing compliance against the long-term average annual extraction limit established under clause 44, 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).

Division 2 Available water determinations

48 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 megalitres per 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.

49 Available water determinations for domestic and stock access licences

- (1) 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 and should, where possible, be for 100% of access licence share component.

50 Available water determinations for local water utility access licences

- (1) The available water determination made at the commencement of the first year of this Plan, for local water utility 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 local water utility access licences in these water sources should, where possible, be for 100% of access licence share component.

51 Available water determinations for major utility access licences

An available water determination made at the commencement of each water year for major utility access licences in these water sources should, where possible, be for 100% of access licence share component.

52 Available water determinations for unregulated river access licences

- (1) 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 47.

53 Available water determinations for unregulated river (high flow) access licences

- (1) The available water determination made at the commencement of the first year of this Plan, for unregulated river (high flow) access licences in these water sources, should be equal to 2 megalitres per unit of access licence share component.
- (2) The available water determination made at the commencement of each subsequent water year for unregulated river (high flow) access licences in these water sources should, where possible, be equal to 1 megalitre per unit share of access licence share component, or such lower amount resulting from clause 47.

54 Available water determination for aquifer access licences

- (1) An available water determination shall be made at the commencement of each water year for aquifer access licences in these water sources, excluding the Hunter Regulated River Alluvial, the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 54 2009

Part 10 Limits to the availability of water

Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source, the Halls Creek, the Lower Middle Brook and Kingdon Ponds Management Zone of the Lower Dart Brook, and the Upper Wollombi Brook Water Source, equal to 1 megalitre per unit of access licence share component.

- (2) An available water determination shall be made at the commencement of each water year for all aquifer access licences in the Hunter Regulated River Alluvial Water Source and should be equivalent to the available water determination made for regulated river (high security) access licences under the Water Sharing Plan for the Hunter Regulated River Water Source 2003.
- (3) An available water determination shall be made at the commencement of each water year for all aquifer access licences in the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source, the Halls Creek, the Lower Middle Brook and Kingdon Ponds Management Zone of the Lower Dart Brook and the Upper Wollombi Brook Water Source, equivalent to the available water determination made for unregulated river access licences in these water sources.
- (4) The Minister may amend this Plan, from year six of this Plan, based on outcomes of further data collection and any surface/groundwater connectivity studies undertaken, to amend the available water determination in subclause (2) to be:
 - (a) equivalent to 100% of the available water determination made for regulated river (general security) access licences under the Water Sharing Plan for the Hunter Regulated River Water Source 2003, or
 - (b) equivalent to 100% of the available water determination made for aquifer access licences, or
 - (c) the sum of specified percentages (equal to 100%) of the available water determination made for regulated river (general security) access licences under the Water Sharing Plan for the Hunter Regulated River Water Source 2003 and aquifer access licences.

Note. For example, under subclause 4 (c) the available water determination may be the sum of 50% of the available water determination (AWD) for general security and 50% of the AWD for aquifer access licences or some other variation of percentage equal to 100%. It may also be appropriate to have a sliding scale of AWD application based on distance from the river if justified.

-
- (5) In relation to any amendment under subclause (4) an adjustment period may be included, if necessary, to allow for a phasing in period in achieving the new available water determination.
 - (6) In reviewing the outcomes of data collection and further studies as specified in subclause (4) and amendments of the available water determination rules the Minister should consult with the Department of Environment and Climate Change, the Department of Primary Industries, the relevant Catchment Management Authority, and representatives of interest groups and water users as appropriate.

2009 No 347

Clause 55 Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 11 Rules for managing access licences

Part 11 Rules for managing access licences

Division 1 General

55 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 regards to:

- (a) the environmental water 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

56 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.

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, local water utility, unregulated river, unregulated river (high flow) and aquifer access licences in these water sources, excluding those within the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source, the Halls Creek, the Lower Middle Brook and Kingdon Ponds Management Zone of the Lower Dart Brook and the Upper Wollombi Brook Water Source, in any 3 consecutive water years may not exceed a volume equal to:
 - (a) the sum of water allocations accrued under the 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 reccredited 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, local water utility, unregulated river, unregulated river (high flow) and aquifer access licences in these water sources, excluding those within the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek, the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source, the Halls Creek, the Lower Middle Brook and Kingdon Ponds Management Zone of the Lower Dart Brook and the Upper Wollombi Brook Water Source, 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 re-credited 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 volume that may be taken under a domestic and stock, local water utility, unregulated river, unregulated river (high flow) and aquifer access licences in the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source, the Halls Creek, the Lower Middle Brook and Kingdon Ponds Management Zone of the Lower Dart Brook and the Upper Wollombi Brook Water Source may not exceed a volume equal to:
- (a) the sum of water allocations accrued under the licence from available water determinations in that year,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 56 2009

Part 11 Rules for managing access licences

- (b) plus any water allocations assigned from another access licence under section 71T of the Act, in that year,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act, in that year, and
 - (d) minus any water allocations assigned to another access licence under section 71T of the Act, in that year.
- (6) The Minister may amend subclauses (3), (4) and (5) to amend the limits to volumes that may be taken under access licences in the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water, the Halls Creek, the Lower Middle Brook and Kingdon Ponds Management Zone of the Lower Dart Brook and the Upper Wollombi Brook Water Source, from year five of this Plan, following a review of the possible impacts of differing carry over and 3 year annual use limits on the recovery time of the aquifer, and when appropriate groundwater trigger levels can be identified.
- (7) The Minister may amend this Plan to replace this subclause with water allocation account management rules for major utility access licences, or subcategories of major utility licences, for extraction from Seaham Weir Pool, and natural inflows to Grahamstown Dam, based on the supplementary study Development of Access Rules for the Lower Williams River.
- (8) The maximum water allocation that can be carried over in the accounts of domestic and stock, local water utility, unregulated river, unregulated river high flow and aquifer access licences from one water year to the next, in these water sources excluding the Hunter Regulated River Alluvial, the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source and the Wollombi Brook Management Zone of the Upper Wollombi Brook Water Source, 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.

-
- (9) The Minister may amend this Plan to replace this subclause with carry over rules for major utility access licences, or subcategories of major utility licences, for extraction from Seaham Weir Pool, and natural inflows to Grahamstown Dam, based on the supplementary study Development of Access Rules for the Lower Williams River.
- (10) The maximum water allocation that can be carried over in the accounts of access licences within the Hunter Regulated River Alluvial Water Source from one water year to the next shall be equal to:
- (a) 10% of access licence share component for access licences with share components expressed as megalitres per year, or
 - (b) 0.1 megalitre per unit share of access licence share component, for access licences with share components expressed as a number of unit shares.
- (11) In the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source and the Wollombi Brook Management Zone of the Upper Wollombi Brook Water Source, water allocations cannot be carried over from one water year to the next.
- (12) The Minister may amend subclauses (8) and (11) to include carryover provisions for the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Lower Goulburn River, the Martindale Creek, the Doyles Creek and the Lower Wollombi Brook Water Sources, the Appletree Flat Management Zone of the Jerrys Water Source, the Segenhoe Management Zone of the Pages River Water Source and the Wollombi Brook Management Zone of the Upper Wollombi Brook Water Source, from year five of this Plan, following a review of the possible impacts of differing carry over and 3 year annual use limits on the recovery time of the aquifer and when appropriate groundwater trigger levels can be identified.
- (13) If water that, pursuant to an access licence in these water sources is committed as adaptive environmental water to be left in a water source for environmental purposes, then the water allocation taken under that access licence shall be assumed to be 100% of the available water determination made in Division 2 Part 10 of this Plan.

57 Accounting for bulk water transfers to other water utilities

- (1) Any volume of water received from the Gosford Wyong Councils Water Authority via the Hunter pipeline link will be accounted against the long-term average annual extraction limit for the major utility access licences in the Hunter Extraction Management Unit.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 58 2009

Part 11 Rules for managing access licences

- (2) Any volume of water sent to the Gosford Wyong Councils Water Authority via the Hunter pipeline link from Hunter Water Corporation will be accounted against the long-term average annual extraction limit for the local utility access licences in the Gosford and Tuggerah Extraction Management Units within the Water Sharing Plan for the Central Coast Unregulated Rivers.

Note. When water is transferred between Hunter Water Corporation and Gosford Wyong Councils Water Authority, the long-term average annual extraction limit for either utility is not changed. For the purposes of accounting against the long-term average annual extraction limit, transfers are treated as extractions by the recipient only. This means that the volume of water able to be extracted from water sources within the recipient's plan area is reduced by this volume. The long-term average annual extraction limit of the sender of the transfer is not affected.

- (3) The Minister may amend the accounting rules specified in subclauses (1) and (2) following the commencement of release from Tillegra Dam.

Division 3 Sharing surface water flows on a daily basis

58 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.

59 Establishment and assignment of total daily extraction limits

- (1) At the commencement of this Plan, total daily extraction limits (*hereafter TDEL*) have not been established or assigned in the Munmurra River, the Krui River, the Bow River, the Merriwa River, the Halls Creek, the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Muswellbrook, Lower Goulburn, Dart Brook, the Upper Hunter River, the Jerrys, Glennies, the Glendon Brook, the Luskintyre, the Singleton, the Martindale Creek, the Doyles Creek, the Black Creek, the Wallis Creek, the Newcastle, the Upper Paterson, the Upper Wollombi Brook, the North Lake Macquarie, the South Lake Macquarie, Dora Creek, the Hunter Regulated River Alluvial, the Wallis Creek Tidal Pool, the Hunter River Tidal Pool or the Paterson Tidal Pool Water Sources.

- (2) This Plan establishes and assigns TDELs for unregulated river (high flow) access licences in B Class flows in the following water sources:

- (a) 3.1 ML/day for B Class flows in the Pages River Water Source and the Isis River Water Source combined,

Note. This volume equates to a total of 10% of the annual 50th percentile flow at the flow reference point (Pages River at Gundy Recorder Gauge) in the Pages River Water Source and Isis River Water Source combined.

-
- (b) 3.8 ML/day for B Class flows in the Lower Wollombi Brook Water Source,
Note. This volume equates to a total of 10% of the annual 50th percentile flow at the flow reference point (Wollombi Brook at Warkworth Gauge) in the Lower Wollombi Brook Water Source.
- (c) 3.5 ML/day for B Class flows in the Rouchel Brook Water Source, and
Note. This volume equates to a total of 10% of the annual 50th percentile flow at the flow reference point (Rouchel Brook at The Vale Gauge) in the Rouchel Brook Water Source.
- (d) 5.8 ML/day for B Class flows in the Paterson/Allyn Rivers Water Source.
Note. This volume equates to a total of approximately 10% of the annual 50th percentile flow at the flow reference points in the Paterson/Allyn Rivers Water Source.
Note. If this Plan is amended to change the flow reference point for the Paterson/Allyn Water Source to Allyn River at Flying Fox Lane gauge, the 10% of the 50th percentile will be calculated using that flow reference point, once adequate data is available.
- (3) The Minister may amend this Plan to allow for the establishment of TDELS in the Williams River Water Sources for major utility access licences or subcategories of major utility access licences in any new flow classes established under clause 17 (2) (i) of this Plan.
- (4) Following the conversion of an unregulated river access licence to an unregulated river (high flow) access licence under clause 72 of this Plan, the Minister may amend subclause (1) and (2) to establish a TDEL for A Class in the relevant water source or management zone.
- (5) 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 subclauses (4) and (5) 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.

60 Unassigned TDEL

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

61 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.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 62 2009

Part 11 Rules for managing access licences

62 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:
 - (i) unregulated river (high flow) access licences in B Class flows in the Pages River, the Isis River, the Lower Wollombi Brook, the Rouchel Brook and the Paterson/Allyn Rivers Water Sources, and
 - (ii) any other access licence 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.

63 Adjustment to TDELS and IDELS

- (1) The TDELS established in this Plan may be adjusted, 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.
- (2) Where an IDEL is assigned under clause 62 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 59 may be decreased by the IDEL on the access licence so committed and clauses 59 and 62 adjusted accordingly, or
 - (b) removed from an access licence, then the TDEL established under clause 59 will be increased by the IDEL on the access licence so uncommitted and clause 59 and 62 adjusted accordingly.

**64 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,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 65 2009

Part 11 Rules for managing access licences

- (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,
- (l) 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.

65 Amendments to this Plan for the purposes 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.

66 Williams River Water Source Accreditation Scheme

There is a Williams River Water Source Accreditation Scheme which affects unregulated river access licences in the Williams River Water Source, as specified in clauses 76 (5) and 17 (1) (mm) (ii) of this Plan.

Note. The Williams River Water Source Accreditation Scheme is defined in the Dictionary.

67 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 77 of this Plan.

Note. Clause 93 provides for amendments to Schedule 2.

Division 4 Management of surface and groundwater connectivity

68 Access licences which nominate a water supply work which may be used to take water from the alluvial sediments in these water sources

(1) Except for an aquifer access licence referred to in subclause (3), all aquifer access licences:

(a) in the Isis River Water Source, the Upper Hunter River Water Source, the Rouchel Brook Water Source, the Muswellbrook Water Source, the Jerrys Management Zone of the Jerrys Water Source, the Glennies Water Source, the Glendon Brook Water Source, the Luskintyre Water Source, the Singleton Water Source, the Black Creek Water Source, the Wallis Creek Water Source, the Newcastle Water Source, the Paterson/Allyn Rivers Water Source, the Williams River Water Source, the Upper Paterson Water Source, the North Lake Macquarie Water Source, the South Lake Macquarie Water Source or the Dora Creek Water Source, and

(b) which nominate a water supply work which may be used to take water from the alluvial sediments in these water sources, which is located at or less than 40 metres from the top of the high bank of a river,

shall, from year six of this Plan, be subject to the same mandatory condition(s) imposed under clause 76 of this Plan on an unregulated river access licence in the same water source or management zone as the aquifer access licence.

(2) Except for an aquifer access licence referred to in subclause (3), all aquifer access licences:

(a) in the Munmurra River Water Source, the Krui River Water Source, the Bow River Water Source, the Merriwa River Water Source, the Halls Creek Water Source, the Baerami Creek Water

2009 No 347

Clause 68

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 11

Rules for managing access licences

Source, the Widden Brook Water Source, the Bylong River Water Source, the Wollar Creek Water Source, the Upper Goulburn River Water Source, the Lower Goulburn River Water Source, the Dart Brook Water Source, the Pages River Water Source, the Martindale Creek Water Source, the Doyles Creek Water Source, the Lower Wollombi Brook Water Source or the Upper Wollombi Brook Water Source, and

- (b) which nominate a water supply work which may be used to take water from the alluvial sediments in these water sources,

shall be subject to the same mandatory condition(s) imposed under clause 76 of this Plan on an unregulated river access licence in the same water source or management zone as the aquifer access licence.

- (3) Any aquifer access licence arising from a dealing involving the conversion of an unregulated river access licence to an aquifer access licence, under Part 12 of this Plan, shall be subject to the same to mandatory condition(s) imposed under clause 76 of this Plan on an unregulated river access licence in the same water source or management zone as the aquifer access licence.
- (4) A local water utility access licence which nominates a new water supply work which may be used to take water from the alluvial sediments in these water sources, which is at or less than 40 metres from the top of the high bank of a river, shall be subject to the same mandatory condition(s) imposed under clause 76 of this Plan on an unregulated river access licence in the same water source or management zone as the local water utility access licence.
- (5) A mandatory condition imposed on an unregulated river access licence under clause 76 of this Plan which requires a visible flow at the pump site shall, for the purposes of an aquifer access licence or a local water utility access licence to which this clause applies, be taken to mean a visible flow in the river immediately adjacent to the water supply work nominated by the aquifer access licence or the local water utility access licence.

Part 12 Access licence dealing rules

69 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.

Note. An unregulated river (subcategory "Aboriginal community development") access licence is not fully commercial. Allocations under these licences will be able to be traded to non-Aboriginal people however the licence itself can only be traded amongst Aboriginal people, and as such will remain in the Aboriginal community for the life of the licence. These licences will not be able to be converted to any other category of licence. Aboriginal communities, enterprises and individuals are encouraged to seek financial assistance from funding bodies to purchase fully commercial licences.

70 Rules relating to constraints within these water sources

- (1) This clause applies to any 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 dealing involves an assignment of water allocation under section 71T of the Act, from a major utility access licence or from

2009 No 347

Clause 70

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 12

Access licence dealing rules

- an unregulated river (high flow) access licence to another category of access licence within these water sources,
- (b) the dealing would result in the amount of total extraction of water from the alluvial sediments in these water sources, under aquifer access licences which nominate a water supply work used to take water from alluvial sediments in these water sources, plus basic landholder rights extractions, requiring a temporary water restriction order to be made under section 324 (2) of the Act,
 - (c) the 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 aquifer access licence that nominates a water supply works which may be used to take water from the alluvial sediments in these water source, which is located more than 40 metres from the top of the bank of a river to a water supply works which may be used to take water from the alluvial sediments in these water source, which is located within 40 metres from the top of the bank of a river, in the Isis River Water Source, the Upper Hunter River Water Source, the Rouchel Brook Water Source, the Muswellbrook Water Source, the Jerrys Water Source, the Glennies Water Source, the Glendon Brook Water Source, the Luskintyre Water Source, the Singleton Water Source, the Black Creek Water Source, the Wallis Creek Water Source, the Newcastle Water Source, the Paterson/Allyn Rivers Water Source, the Williams River Water Source, the Upper Paterson Water Source, the North Lake Macquarie Water Source, the South Lake Macquarie Water Source or the Dora Creek Water Source,
 - (d) the 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 which nominates a water supply works that is located more than 200 metres from the top of the bank of a river to an access licence which nominates a water supply works that is located within 200 metres from the top of the bank of a river, in the Hunter Regulated River Alluvial Water Source,
 - (e) the 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 which nominates a water supply work that is located within 200 metres from the top of the bank of the a river to an access which nominates a water supply work that is located at a distance that is closer to the top of the bank of the river, in the Hunter Regulated River Alluvial Water Source,

-
- (f) the 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 in:
- (i) the Upper Goulburn River Water Source, the Rouchel Brook Water Source and the Upper Wollombi Brook Water Source, to another access licence in an upstream direction, unless the dealing relates to access licences for the same property,
Note. In the Upper Wollombi Brook Water Source this rule will allow for dealings in a downstream direction between the Congewai Creek Management Zone and the Wollombi Brook Management Zone.
 - (ii) the Pages River Water Source in a downstream direction from the Murrurundi Management Zone, the Scotts Creek Management Zone, the Kewell Creek Management or the Gundy Management Zone into the Segenhoe Management Zone,
 - (iii) the Segenhoe Management Zone, the Gundy Management Zone or the Kewell Creek Management Zone in the Pages River Water Source, to another access licence in the Murrurundi Management Zone or the Scotts Creek Management Zone in the Pages River Water Source,
Note. This is to prevent dealings from below Camerons Gorge National Park to above Camerons Gorge National Park.
 - (iv) the Upper Middle Brook Management Zone, the Upper Dart Brook Management Zone or the Petwyn Vale Management Zone in the Dart Brook Water Source to another access licence not in the same management zone,
 - (v) the Upper Middle Brook Management Zone, the Upper Dart Brook Management Zone or the Petwyn Vale Management Zone to another access licence in the Lower Dart Brook Management Zone or the Lower Middle Brook and Kingdon Ponds Management Zone in the Dart Brook Water Source,
 - (vi) the Lower Dart Brook Management Zone to another access licence in the Lower Middle Brook and Kingdon Ponds Management Zone in the Dart Brook Water Source,
 - (vii) the Muswellbrook Water Source, the Jerrys Water Source, the Singleton Water Source, the Luskintyre Water Source or the Newcastle Water Source, to another access licence in different tributaries in the water source,
 - (viii) the Glennies Water Source, from streams below Glennies Creek Dam to another access licence in streams above Glennies Creek Dam,

2009 No 347

Clause 70

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 12

Access licence dealing rules

- (ix) the Black Creek Water Source from any access licence which nominates a water supply work with a runoff harvesting dam to another access licence in Black Creek or its tributaries,
 - (x) the Williams River Water Source, from streams below Chichester Dam to another access licence in streams above Chichester Dam, or
 - (xi) the Munmurra River, the Bow River, the Krui River, the Merriwa River, the Martindale River, the Dart Brook, the Hunter Regulated River Alluvial Water Source, the Pages River, the Upper Goulburn River, the Lower Goulburn River, the Upper Wollombi Brook, the Lower Wollombi Brook, the Halls Creek, the Baermai Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Upper Goulburn River, the Doyles Creek or the Lower Goulburn River Water Sources, to another access licence in the water source which is subject to an order under section 324 of the Act,
- (g) the dealing involves an assignment of access rights under section 71Q of the Act from an access licence in the Downstream Glennies Creek Management Zone and the Glennies Creek Management Zone of the Hunter Regulated River Alluvial Water Source, to an access licence in the Upstream Glennies Creek Management Zone of the Hunter Regulated River Alluvial Water Source, where it would result in the sum of all share components in the Upstream Glennies Creek Management Zone exceeding the total share components of all access licences in the Upstream Glennies Creek Management Zone at the commencement of this Plan,
- (h) the dealing involves an allocation assignment under section 71T of the Act from an access licence in the Downstream Glennies Creek Management Zone and the Glennies Creek Management Zone of the Hunter Regulated River Alluvial Water Source, to the Upstream Glennies Creek Management Zone, where in the opinion of the Minister:
- (i) the dealing would place the supply of water for water allocations already in the water allocation accounts of access licences nominating water supply works in Management Zone 1 specified in the Water Sharing Plan for the Hunter Regulated River Water Source 2003, at risk, or

-
- (ii) the dealing would place the future reliability of supply to access licences in Management Zone 1 specified in the Water Sharing Plan for the Hunter Regulated River Water Source 2003, at significant risk,

Note. At the commencement of this Plan, the Access Licence Dealing Principles Order 2002 does not allow for dealings between regulated river or unregulated river water sources to groundwater sources. Dealings between regulated river access licences and aquifer access licences may be allowed in future Water Sharing Plans. At the commencement of this Plan, the Water Sharing Plan for the Hunter Regulated River Water Source 2003 does not currently allow for dealings between alluvial and regulated river access licences.

- (i) the dealing involves an allocation assignment under section 71T of the Act from an access licence in the Upstream Glennies Creek Management Zone and the Downstream Glennies Creek Management Zone of the Hunter Regulated River Alluvial Water Source, to the Glennies Creek Management Zone of the Hunter Regulated River Alluvial Water Source, where in the opinion of the Minister:
 - (i) the dealing would place the supply of water for water allocations already in the water allocation accounts of access licences nominating water supply works in Management Zone 3 specified in the Water Sharing Plan for the Hunter Regulated River Water Source 2003, at any risk, or
 - (ii) the dealing would place the future reliability of supply to access licences in Management Zone 3 specified in the Water Sharing Plan for the Hunter Regulated River Water Source 2003, at significant risk,
- (j) the dealing involves an access licence that currently nominates a water supply works in:
 - (i) the Upper Goulburn River Water Source, the Rouchel Brook Water Source or the Upper Wollombi Brook Water Source, being amended under section 71W of the Act to nominate a water supply work located in an upstream direction,
 - (ii) the Murrurundi Management Zone, the Scotts Creek Management Zone, the Kewell Creek Management Zone or the Gundy Management Zone in the Pages River Water Source being amended under section 71W of the Act to nominate a water supply work in the Segenhoe Management Zone in the Pages River Management Zone,
 - (iii) the Segenhoe Management Zone, Gundy Management Zone or Kewell Creek Management Zone in the Pages River Water Source, being amended under section 71W of

- the Act to nominate a water supply work in the Murrurundi Management Zone or the Scotts Creek Management Zone in the Pages River Water Source,
- (iv) the Upper Middle Brook Management Zone, the Upper Dart Brook Management Zone or the Petwyn Vale Management Zone in the Dart Brook Water Source, being amended under section 71W of the Act to nominate a water supply work not in the same management zone,
 - (v) the Upper Middle Brook Management Zone, the Upper Dart Brook Management Zone or the Petwyn Vale Management Zone in the Dart Brook Water Source being amended under section 71W of the Act to nominate a water supply work in the Lower Dart Brook Management Zone or Lower Middle Brook and Kingdon Ponds Management Zone in the Dart Brook Water Source,
 - (vi) the Lower Dart Brook Management Zone in the Dart Brook Water Source being amended under section 71W of the Act to nominate a water supply work in the Lower Middle Brook and Kingdon Ponds Management Zone in the Dart Brook Water Source,
 - (vii) the Muswellbrook Water Source, the Jerrys Water Source, the Singleton Water Source, the Luskintyre Water Source, the Newcastle Water Source, being amended under section 71W of the Act to nominate a water supply work in a different tributary within the water source,
 - (viii) streams below Glennies Creek Dam being amended under section 71W of the Act to nominate a water supply work into streams above Glennies Creek Dam in the Glennies Water Source,
 - (ix) the Black Creek Water Source which is a runoff harvesting dam being amended under section 71W of the Act to nominate a water supply work which take water from Black Creek or its tributaries,
 - (x) streams below Chichester Dam being amended under section 71W of the Act to nominate a water supply work into streams above Chichester Dam in the Williams River Water Source,
 - (xi) the Murrumbidgee River, the Bow River, the Krui River, the Merriwa River, the Martindale River, the Doyles River, the Dart Brook, Hunter Regulated River Alluvial Water Source, the Pages River, the Upper Goulburn River, the Lower Goulburn River, the Upper Wollombi Brook, the Lower Wollombi Brook, the Halls Creek, the Baermai Creek, the Widden Brook, the Bylong River, the Wollar

-
- Creek, the Upper Goulburn River and the Lower Goulburn River Water Sources, being amended under section 71W of the Act to nominate a water supply work in an area which is subject to an order under section 324 of the Act,
- (xii) the Downstream Glennies Creek Management Zone and the Glennies Creek Management Zone in the Hunter Regulated River Alluvial Water Source being amended under section 71W of the Act to nominate a water supply work in the Upstream Glennies Creek Management Zone in the Hunter Regulated River Alluvial Water Source if the dealing would result in the sum of all share components and basic landholder rights requirements in the Upstream Glennies Creek Management Zone exceeding 12,615 megalitres and unit shares, and
 - (xiii) the Downstream Glennies Creek Management Zone and the Upstream Glennies Creek Management Zone of the Hunter Regulated River Alluvial Water Source, being amended under section 71W of the Act to nominate a water supply work in the Glennies Creek Management Zone in the Hunter Regulated River Alluvial Water Source if, in the opinion of the Minister, this would place the supply of water allocations already in the water for water allocation accounts of access licences which nominate a water supply work in the Glennies Creek Management Zone, at risk,
- (k) the dealing involves an access licence that nominate a water supply works which may be used to take water from the alluvial sediments in these water sources, which is located more than 40 metres from the top of the bank of a river being amended under section 71W of the Act to nominate a water supply work which may be used to take water from the alluvial sediment in these water sources which is located within 40 metres from the top of the bank of a river, in the Isis River Water Source, the Upper Hunter River Water Source, the Rouchel Brook Water Source, the Muswellbrook Water Source, the Jerrys Water Source, the Glennies Water Source, the Glendon Brook Water Source, the Luskintyre Water Source, the Singleton Water Source, the Black Creek Water Source, the Wallis Creek Water Source, the Newcastle Water Source, the Paterson/Allyn Rivers Water Source, the Williams River Water Source, the Upper Paterson Water Source, the North Lake Macquarie Water Source, the South Lake Macquarie Water Source and the Dora Creek Water Source,
- (l) the dealing involves an access licence that nominates a water supply works which is located more than 200 metres from the top of the bank of a river being amended under section 71W of the

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 70 2009

Part 12 Access licence dealing rules

Act to nominate a water supply work which is located within 200 metres from the top of the bank of a river, in the Hunter Regulated River Alluvial Water Source, and

- (m) the dealing involves access licence that nominates a water supply work which is located within 200 metres from the top of the bank of the a river being amended under section 71W of the Act to nominate a water supply work which is located at a distance closer to the top of the bank of the river, in the Hunter Regulated River Alluvial Water Source.
- (3) The Minister may amend this Plan, at year five of this Plan, to modify the rules relating to access licence dealings within the Pages River Water Source to allow downstream dealings, based on studies which determine how dealing rules influence the spread of access licences and the ability to mitigate clustering of licenced entitlement.
- Note.** The intention of the study is to prevent the occurrence of hotspots in the Segenhoe Management Zone through the spread of entitlement and adoption of appropriate dealing limits.
- (4) The Minister may amend this Plan, during the term of this Plan, to modify the rules relating to access licence dealings within the Upper Wollombi, the Upper Goulburn and the Rouchel Brook (excluding Back Creek) Water Sources to allow upstream dealings, based on studies which define groundwater dependent ecosystems or aquatic environmental features and their water requirements.
- Note.** The intention of the study is to allow for increased flexibility in dealing rules whereby upstream dealings may be considered where key environmental values can be identified and protected within the water source.
- (5) The Minister may amend this Plan, during the term of this Plan, to amend the access licence dealing rules within the Hunter River, Paterson River and Wallis Creek Tidal Pool Water Sources in association with the development of access rules for those water sources.
- (6) The Minister may amend this Plan to increase the limit set in subclause (2) (d) (xiii) providing that:
- (i) an assessment of the possible impacts on the environment and water access has been carried out,
 - (ii) consultation with access licence holders and the Minister for the Environment has been undertaken, and
 - (iii) the Minister is satisfied that there will be no impact on environmental water in the water source or on water access in the water source.

71 Rules for change of water source

- (1) This clause relates to 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 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 these water sources if:
- (a) the dealing involves a change of water source from one extraction management unit to another extraction management unit, and
 - (b) the dealing is from any water source within the Goulburn, Lake Macquarie or Hunter Extraction Management Units, except for:
 - (i) dealings from the Upper Wollombi Brook to the Lower Wollombi Brook Water Sources, and
 - (ii) dealings into the Krui River, the Bow River, the Bylong River, the Wollar Creek, Halls Creek, the Baerami Creek, the Widden Brook, Dart Brook, the Pages River, the Isis River, the Muswellbrook, the Jerrys, the Glendon Brook, the Luskintyre, the Singleton, the Martindale Creek, the Doyles Creek, the Lower Wollombi Brook, the Black Creek, the Wallis Creek and the North Lake Macquarie Water Sources, provided that the dealing does not cause the sum of all access licence share components in the respective water sources to exceed the sum of all access licence share components for the water source at the commencement of this Plan.
Note. Dealings between regulated river access licences and aquifer access licences may be allowed in future Water Sharing Plans. The Water Sharing Plan for the Hunter Regulated River Water Source 2003 does not currently allow for dealings between alluvial and regulated river access licences. These rules should be reviewed at the term of this Plan.
- (3) Dealings under section 71R and 71W of the Act to change the water source to which an access licence applies are prohibited in these water sources if the dealing involves an unregulated river (high flow) access licence.
- (4) Dealings under section 71R and 71W of the Act to change the water source to which an access licence applies are prohibited in these water sources if the dealing would result in the total extraction pursuant to access licences which nominate a water supply works which may be used to take water from the alluvial sediments in these water sources,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 71 2009

Part 12 Access licence dealing rules

plus basic landholder rights extraction would require a temporary water restriction order to be made under section 324 (2) of the Act.

- (5) Unless the application is for a replacement water supply work being used to take water from the alluvial sediments in these water sources that is part of a bore network for a local water utility or town water supply or a new water supply works which may be used to take water from alluvial sediments in these water sources required as part of a dealing involving the conversion of an unregulated river access licence to an aquifer access licence under section 71O of the Act, consent to a nominated work under section 71W, is not to be granted in these groundwater sources, if it would result in a water supply work which may be used to take water from the alluvial sediments in these water sources being authorised to extract water within 40 metres of the top of the high bank of a river.
- (6) Dealings under section 71R and 71W of the Act to change the water source to which an access licence applies are prohibited except where both access licences involved in the dealing:
- (a) nominate the same water supply work, or
 - (b) the nominated water supply work exists on the same area of land owned by the same person, or
 - (c) the nominated water supply work exists on adjoining areas of land owned by the same person.
- Note.** This is to allow for dealings to occur on a property, where the given property extends over two or more water sources, to allow for the reasonable movement of water around the property.
- (7) An access licence with a share component specifying a water source in these water sources may be cancelled and a new access licence issued in another water source outside these water sources only if:
- (a) the new access licence issued is in a water source that is within the Goulburn River, Hunter River or Lake Macquarie Extraction Management Units, and
 - (b) the access licence dealing rules in the other surface water source permit such a dealing.
- (8) An access licence with a share component specifying a water source outside of these water sources may be cancelled and a new licence issued in a water source in these water sources only if:
- (a) the access licence cancelled is in a water source that is within the Goulburn River, Hunter River or Lake Macquarie Extraction Management Units, and
 - (b) the access licence dealing rules in the other surface water source permit such a dealing.

-
- (9) The share component on any access licence issued under this clause is to be equal to the cancelled access licence share component.
- (10) The extraction component of any cancelled access licence is not to be carried over to the new access licence.
- (11) The Minister may amend this Plan, at year five of this Plan, to modify the rules for change of water source in the Goulburn River Extraction Management Unit to allow downstream dealings based on studies to determine how dealing rules influence the spread of access licences and the ability to mitigate clustering of licenced entitlement.
- Note.** The intention of the study is to prevent the occurrence of hotspots through the spread of entitlement and adoption of appropriate dealing limits.
- (12) The Minister may amend this Plan, during the term of this Plan, to amend the dealing rules to permit dealings into and/or out of the Hunter River, Paterson River and Wallis Creek Tidal Pool Water Sources in association with the development of access rules for those water sources.
- (13) The Minister may amend this Plan, during the term of this Plan, to amend the rules relating to prohibition of no trading into the Upper Goulburn River Water Source to allow no net gain dealings based on studies which define groundwater dependent ecosystems or aquatic environmental features and their water requirements.
- Note.** The intention of the study is to allow for increased flexibility in dealing rules whereby no net gain dealings may be considered where key environmental values can be identified and protected within the water source.

72 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71O of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category is permitted only if the conversion is from:
- (a) an unregulated river access licence to an aquifer access licence in these water sources,
 - (b) an aquifer access licence to an unregulated river access licence in the Martindale Creek, the Doyles River, the Dart Brook, the Pages River, the Upper Wollombi Brook, the Lower Wollombi Brook, the Munmurra River, the Krui River, the Bow River, the Merriwa River, the Halls Creek, the Baermai Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Jerrys, the Hunter Regulated River Alluvial, the Upper Goulburn River or the Lower Goulburn River Water Sources,
 - (c) an unregulated river access licence to an major utility access licence, or

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 73 2009

Part 12 Access licence dealing rules

- (d) an unregulated river access licence to an unregulated (high flow) access licence in the Pages River Water Source, the Isis River Water Source, the Lower Wollombi Brook Water Source, the Rouchel Brook Water Source or the Paterson/Allyn Rivers Water Source.
- (3) For any conversion of an access licence under subclause (2), the access licence being converted shall be cancelled and a new licence issued.
- (4) The share component on an access licence issued under subclause (2) (a), (b), and (c) is to be equal to the cancelled access licence share component.
- (5) The share component on an access licence issued under subclause (2) (d) is to be equal to 2 times the cancelled access licence share component.
- (6) This Plan establishes the following limits for the total amount of all access licence share components that may be converted to unregulated river (high flow) access licences under subclause (2) (d):
 - (a) a total of 282.5 unit shares in the Pages River Water Source (excluding the Murrurundi, Scotts Creek and Segenhoe Management Zones) and Isis River Water Source combined,
 - (b) 346.5 unit shares in the Lower Wollombi Brook Water Source,
 - (c) 159.5 unit shares in the Rouchel Brook Water Source, and
 - (d) 528.5 unit shares in the Paterson/Allyn Rivers Water Source (excluding the Paterson River Tributaries Management Zone).

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

- (1) This clause relates to 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.

74 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71T of the Act, in relation to water allocation assignments between water sources.
- (2) Dealings under section 71T of the Act that result in water allocation assignments from a major utility access licence to any other access licence are prohibited.
- (3) 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

prohibited if the dealing involves an unregulated river (high flow) access licence.

- (4) Dealings under section 71T 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 the water sources are prohibited in these water sources if the dealing would result in the total extraction under access licences through nominated water supply works which may be used to take water from alluvial sediments in these water sources, plus basic landholder rights extraction, requiring a temporary water restriction order to be made under section 324 (2) of the Act.
- (5) 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 prohibited if:
- (a) the dealing involves a change of water source from one extraction management unit to another extraction management unit, and
 - (b) the dealing involves a change of water source from any water source within the Goulburn, Lake Macquarie or Hunter Extraction Management Units, except for:
 - (i) dealings between the Upper Wollombi Brook and Lower Wollombi Brook Water Sources, and
 - (ii) dealings into the Krui River, the Bow River, the Halls Creek, the Baerami Creek, the Widden Brook, the Bylong River, the Wollar Creek, the Lower Goulburn River, the Dart Brook, the Pages River, the Isis River, the Muswellbrook, the Jerrys, the Glendon Brook, the Luskintyre, the Singleton, the Martindale Creek, the Doyles Creek, the Lower Wollombi Brook, the Black Creek, the Wallis Creek and the North Lake Macquarie Water Sources, provided it does not cause the total access licence share components in the respective water source to exceed the total access licence share components in that water source at the commencement of this Plan.
- (6) The Minister may, during the term of this Plan, amend the rules relating to prohibition of no trading into the Upper Goulburn River Water Source to allow no net gain dealings based on studies to define groundwater dependent ecosystems or aquatic environmental features and their water requirements.

Note. The intention of the study is to allow for increased flexibility in dealing rules whereby no net gain dealings may be considered where key environmental values can be identified and protected within the water source.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Clause 74

Part 12

Access licence dealing rules

- (7) Dealings that assign water allocations to or from an access licence inside one of the water sources to or from a water source outside these water sources, but inside the respective Goulburn River, Hunter River or Lake Macquarie Extraction Management Units, are permitted only if the access licence dealing rules in the other water source permit such a dealing.

Part 13 Mandatory conditions

Division 1 Mandatory conditions on access licences

75 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 11 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 11 Division 3 of this Plan.
Note. Approved groups are established in Part 11 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 11 of this Plan,
 - (d) any other conditions required to implement the provisions of this Plan.

76 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 77 of this Plan,

2009 No 347

Clause 76

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 13

Mandatory conditions

- (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) major utility access licences in the Seaham Weir Management Zone of the Williams River Water Source,
Note. See subclause (3) below.
 - (b) unregulated river (high flow) access licences,
Note. See subclause (4) below.
 - (c) unregulated river (subcategory “Aboriginal community development”) access licences,
Note. See subclause (4) below.
 - (d) unregulated river access licences in the Williams River Management Zone of the Williams River Water Source,
Note. See subclause (5) below.
 - (e) aquifer access licences in these water sources,
Note. See subclause (6) below.
 - (f) local water utility access licences in these water sources which nominate a new water supply work which may be constructed or used to take water from the alluvial sediments in these water sources,
Note. See subclause (7) below.
 - (g) 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,
 - (h) 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 in-river dam,
 - (i) local water utility in the Allyn River Management Zone of the Paterson/Allyn Rivers Water Source.
Note. See subclause (8) below.

-
- (3) All major utility access licences in the Seaham Weir Management Zone of the Williams 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) (nn) (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) when flows in the water source, as measured at the Glen Martin (Mill Dam Falls) gauge (210010), are less than or equal to 600 ML/day,
 - (e) when water levels in the Seaham Weir Pool are at or below 0.32 metres pool height.
- (4) All unregulated river (high flow) access licences and unregulated river (subcategory “Aboriginal community development”) access licences in these water sources must have a mandatory condition specifying that water must not be taken, 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 flows in the water source are below B Class, 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.
- (5) All unregulated river access licences in the Williams River Management Zone of the Williams River Water Source must have a

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 76 2009

Part 13 Mandatory conditions

mandatory condition specifying that water must not be taken, if any of the following apply:

- (a) if the access licence holder is not accredited under the Williams River Accreditation Scheme, when flows in the water source are below A Class, subject to clause 77 of this Plan, or, if the access licence holder is accredited under the Williams River Accreditation Scheme, when flows in the water source are below the Low Flow Class, 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.
- (6) All aquifer access licences in these water sources must have mandatory conditions to give effect to clause 68 of this Plan.
- (7) All local water utility access licences in these water sources which nominate a new water supply work which may be constructed or used to take water from the alluvial sediments in these water sources, must have a mandatory condition to give effect to clause 68 (4) of this Plan.
- (8) All local water utility access licences in these Allyn River Management Zone of the Paterson/Allyn Rivers Water Source must have a mandatory condition specifying that water must not be taken, 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 flows in the management zone are below A2 Class, subject to:
 - (i) subclause (d) when water quality in the Paterson Regulated River is unable to be treated to a potable standard by the Gresford Water Treat Plant due to blue green algae toxins being present at the water treatment plant offtake,
 - (ii) 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) if flow classes are established in the water source specified on the access licence under clause 17 (1) of this Plan, when flows in the management zone are below A1 Class.

77 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) only until major augmentation to the utility’s water supply work(s) has taken place.
- (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,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 78 2009

Part 13 Mandatory conditions

- (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.

78 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.

79 Mandatory conditions on aquifer access licences

In addition, all aquifer access licences in these water sources must have a mandatory condition which specifies that water must only be taken from an aquifer in these water sources.

80 Mandatory conditions on Aboriginal cultural and Aboriginal community development access licences

- (1) 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.

- (2) In addition, all unregulated river (subcategory “Aboriginal community development”) access licences 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 commercial purposes.

81 New access licences granted in these water sources

- (1) 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,
 - (b) a major utility (subcategory “Urban water”) 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,
 - (c) a new unregulated river (subcategory “Aboriginal community development”) 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, which specifies a water source in which B Class is established under clause 17 (1) of this Plan,
 - (c) an access licence of the subcategory “Aboriginal Community Development”, which specifies a water source in which B Class is established under clause 17 (1) of this Plan, or
 - (d) 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

82 Mandatory conditions on all water supply work approvals (except works taking water from the alluvial sediments)

- (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 new water supply work approval granted pursuant to clause 39 (6) must have a mandatory condition to give effect to clause 39 (6) (c) of this Plan.
- (5) 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 36 (2) of this Plan.

83 Mandatory conditions on approvals for water supply works taking water from the alluvial sediments in these water sources

A water supply work approval which authorises the construction or use of a water supply work to take water from the alluvial sediments in these water sources must have mandatory conditions to give effect to the following:

- (a) the approval holder must not construct the work, or cause or allow the work to be constructed, unless the construction is carried out by a person holding a current driller's licence issued pursuant to the *Water Act 1912* or the *Water Management Act 2000*, which is of a class that allows construction of the work to be constructed,
- (b) the approval holder must ensure that the construction of the work complies with:
 - (i) the construction standards prescribed in the *Minimum Construction Requirements for Water Bores in Australia*, 2003, ISBN 1 9209 2009 9, as may be amended from time to time, or any standards which supersede those standards,

2009 No 347Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 83 2009Part 13 Mandatory conditions

- (ii) if the Minister has specified any standards or requirements, in accordance with those standards or requirements (if any) specified by the Minister,
- (iii) must prevent contamination between aquifers through appropriate construction,
- (c) the approval holder must ensure that any work which is decommissioned or abandoned complies with:
 - (i) the 'minimum requirements for decommissioning bores' prescribed in the *Minimum Construction Requirements for Water Bores in Australia*, 2003, ISBN 1 9209 2009 9, as amended from time to time, or any standards which supersede those standards,
 - (ii) if the Minister has specified any other standards or requirements, in accordance with the standards or requirements (if any) specified by the Minister,
- (d) within 2 months of the decommissioning or abandonment of the work, the approval holder must notify the Minister that the work has been decommissioned or abandoned in accordance with subclause (c),
- (e) any new or replacement bore to take water for basic landholder rights must be constructed to a sufficient depth to ensure that access to water is not unacceptably impacted by other authorised extractions,
- (f) the approval holder must, within 2 months of completion of the construction of the work, or within 2 months after the issue of the approval if the work is existing, submit to the Department the following:
 - (i) the completed approved form,
 - (ii) details of the location of the work on a copy of the lot and deposited plan, its GPS reference, and the respective distance(s) of the work from the property boundaries,
 - (iii) if the Minister has requested any water analysis and/or pumping tests to be carried out, details of the water analysis and/or pumping tests as required by the Minister,
- (g) if, during the construction of the work, saline or contaminated water is encountered above the production aquifer, the approval holder must:
 - (i) notify the Department,
 - (ii) ensure that such water is sealed off by:
 - (1) inserting casing to a depth sufficient to exclude the saline or contaminated water from the work,

-
- (2) if specified by the Minister, placing an impermeable seal between the casing(s) and the walls of the work from the bottom of the casing to ground level as specified by the Minister,
 - (iii) if the Minister has specified any other requirements, comply with the requirements (if any) specified by the Minister,
 - (h) the approval holder must supply to the Minister on request, and to the required standard, a report pertaining to the quality of any water obtained from the work,
 - (i) the work must be constructed within 3 years of the approval being granted,
 - (j) 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,
 - (k) 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.
 - (l) 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,
 - (m) if the water supply work approval replaces a *Water Act 1912* entitlement which contained a limit(s) on the amount of water that may be taken through the work, the water supply work must not be used to take more water than the limit(s) (if any) contained on the *Water Act 1912* entitlement,
 - (n) any other conditions required to implement the provisions of this Plan.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 84 2009

Part 13 Mandatory conditions

84 Mandatory conditions for existing water supply works taking water from the alluvial sediments in these water sources

- (1) In addition, a water supply work approval which authorises the use of an existing water supply work to take water from the alluvial sediments in these water sources which is located within 500 metres of a contamination source identified in this Plan, must have a mandatory condition which specifies an annual extraction limit, being the maximum amount of water that may be taken through the water supply work each year, which is the equivalent amount of the share component of the access licence that nominates the water supply work as at the commencement of this Plan.
- (2) In addition, a water supply work approval which authorises the use of an existing water supply work to take water from the alluvial sediments in these water sources which is located within the distance criteria specified in clauses 39, 40 or 41, must have a mandatory condition which specifies an annual extraction limit, being the maximum amount of water that may be taken through the water supply work each year, which is the equivalent amount of the share component of the access licence that nominates the water supply work as at the commencement of this Plan.

Part 14 System operation rules

85 Release rules from major utility storages

- (1) In the Williams River Water Source:
 - (a) when combined inflows from the Chichester and Wangat Rivers into Chichester Dam storage are less than 14 ML/day, a daily flow release equivalent to the combined inflows must be maintained,
 - (b) when combined inflows from the Chichester and Wangat Rivers into Chichester Dam storage are equivalent to or greater than 14 ML/day, and Chichester Dam is not spilling, a minimum flow release of 14 ML/day must be maintained,
 - (c) notwithstanding subclause (b), when the combined inflows from the Chichester and Wangat Rivers are equivalent to or greater than 14 ML/day, and Chichester Dam is not spilling, Hunter Water Corporation may operate Chichester Dam releases in the range of 5 ML/day to 30 ML/day as per the release pattern shown in Attachment 1 of their licence or approval until the study as referred to in subclause (d) is completed, and must operate releases as directed by the Minister to achieve the requirements of this study,
 - (d) releases of water are not required to be made when Chichester Dam is spilling at a rate that equals or exceeds the minimal flow release requirement referred to in subclauses (a), (b) and (c),
 - (e) the Minister may suspend or alter the release requirements under subclauses (a), (b) and (c) for the purpose of an emergency or maintenance activity that has the potential to temporarily affect the flow volume or behaviour of water for periods of more than 24 hours, and
 - (f) the Minister may amend this Plan to vary the rules under subclause (c), during the term of this Plan, based on an assessment of the implementation of release rules recommended in the 'Chichester Dam Flow Release Acceptance Levels Study'.

Note. The 'Chichester Dam Flow Release Acceptance Levels Study' was a study required as part of Hunter Water Corporation's licence conditions, to review current release arrangements from Chichester Dam, with the aim of optimising the environmental outcomes.
- (2) The Minister may amend this Plan, during the term of this Plan, to amend subclause (1) to include release rules for Seaham Weir storage, based on the outcomes of the 'Surface Water Access Rules for the Lower Williams River' Supplementary Study to be undertaken by Hunter Water Corporation.

2009 No 347

Clause 85 Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Part 14 System operation rules

Note. A study, as part of the licence requirements, is currently being undertaken to determine access rules and entitlements for the major utility access licence in this water source. The major utility currently extracts from both low and high flows however a breakdown of the volume from each has not been undertaken.

- (3) In the Jerrys Water Source:
 - (a) no releases are required to be made from Lake Plashett, and
 - (b) releases from Lake Lidell may only be made in accordance with the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.
- (4) In the Upper Hunter Water Source, all natural inflows to Oakey Creek Dam must be allowed to pass downstream to Oakey Creek.
- (5) In the Newcastle Water Source, no releases are required to be made from Grahamstown Dam.

Part 15 Amendment of this Plan

86 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.

87 Amendment of tidal pool provisions

- (1) The Minister may amend this Plan to:
 - (i) establish or modify flow classes, or
 - (ii) amend access licence dealing rules,in the Wallis Creek Tidal Pool Water Source, the Paterson River Tidal Pool Water Source and the Hunter River Tidal Pool Water Source, following review of the study referred to in clause 17 (2) (k) and the determination of licence entitlements.
- (2) The Minister should cause the development of access rules, and review of dealing rules in subclause (1) to be undertaken by year five of this Plan where possible, and no later than year ten of this Plan.
- (3) In developing the access rules and reviewing the dealing rules the Minister should consult with the Department of Environment and Climate Change, the Department of Primary Industries, the relevant Catchment Management Authority, and representatives of interest groups and water users as required.

88 Amendment of pool protection provisions

- (1) The Minister may amend this Plan to establish pool control levels and key sites in applicable water sources.
- (2) For the purpose of such amendments, a study to identify pool control levels and key sites should be undertaken as soon as practicable, but before year six of this Plan.
- (3) The study should assess whether the pool control levels and key sites are required and whether they meet the objective specified in clause 10 (a) of this Plan, and specifically considering:
 - (a) the suitability of the location of the key sites used in assessing pool health upstream of the site,

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
Clause 89 2009

Part 15 Amendment of this Plan

- (b) the drawdown of the water levels from the pool upstream of the key site during periods of extraction, and
 - (c) the significance of the pools that are impacted by the drawdown.
- (4) In preparing the study:
- (a) consultation with the Department of Environment and Climate Change, the Department of Primary Industries, the relevant Catchment Management Authority and representatives of interest groups should be undertaken, as required, and
 - (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 field results and conclusions in terms of the degree to which the objective in clause 10 (a) is met,
 - (iv) the pool control levels and key sites recommended to meet the objective, and
 - (v) the socio-economic impacts of the recommended changes to the pool controls.

89 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 does not increase or decrease.

90 Amendments due to the construction and/or operation of Tillegra Dam

At commencement of flow capture by the Tillegra Dam storage, the Minister may amend this Plan:

- (a) to establish alternate management zones in the Williams River Water Source,
- (b) to amend or establish alternate flow classes in the Williams River Water Source,
- (c) to amend the share components in the Williams River and/or Newcastle Water Sources,
- (d) to amend the long-term average annual extraction limit for the Hunter Extraction Management Unit,
- (e) to amend and/or establish additional accounting provisions,

-
- (f) to limit dealings into or within management zones that are upstream of Tillegra Dam, and
 - (g) to establish rules for the release of water from Tillegra Dam.

91 Amendments for alluvial aquifers downstream of the tidal limit

The Minister may amend this Plan, where required, to include provisions and rules for any alluvial aquifer that is downstream of the tidal limit and within or outside of the area of this Plan.

92 Amendments for stormwater harvesting

The Minister may amend this Plan to include rules for any new category of access licence established under the Act for the purpose of stormwater harvesting.

93 Amendments in relation to Schedule 2 (Very Low Flow)

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.

Schedule 1 Dictionary

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

drawdown refers to a lowering of the level to which water will rise in cased bores. Natural drawdown may occur due to seasonal climatic changes. Groundwater pumping may also result in seasonal and long-term drawdown.

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

groundwater is water that occurs beneath the ground surface in the saturated zone.

groundwater dependent ecosystems include ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater.

high priority groundwater dependent ecosystems include groundwater dependent ecosystems which are considered high priority for protection or restoration.

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

individual daily extraction limit (IDEL) is described in clause 62 of this Plan.

karst environment means an area of land, including subterranean land, that has developed in soluble rock through the processes of solution, abrasion or collapse, together with its associated bedrock, soil, water, gases and biodiversity.

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.

recharge is the addition of water, usually by infiltration, to an aquifer.

registered plan for these water sources means the registered plan called The Hunter Unregulated and Alluvial Water Sources (WSP003) 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.

replacement bore, for the purposes of this Plan, refers to the replacement of an existing water supply work constructed or used to take water from the alluvial sediments in these water sources, where the share component for the access licence nominating the water supply work has not increased and is within the specifications of the water supply work approval, provided that:

- (a) the replacement water supply work is within 20 metres of the existing water supply work,

-
- (b) the water supply work approval does not compromise any other rules for granting water supply works being used to take water from alluvial sediments in these water sources,
- (c) the water supply work approval will be subject to the provisions relating to the amendment of an approval under section 107 of the Act.

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.

supplementary study Development of Access Rules for the Lower Williams River is a requirement of Hunter Water Corporation's current water licence. The study aims to determine appropriate entitlement and access rules to manage the taking of water from Seaham Weir Pool by Hunter Water Corporation. The outcomes of the study may be used to inform amendment of this Plan.

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 59 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.

2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Schedule 1 Dictionary

Williams River Accreditation Scheme means the ‘Water Use Accreditation Scheme’ operated by the NSW Department of Primary Industries and assessed as adequate by the Department.

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.

VERY LOW FLOW LICENCES		SURFACE WATER	
20SL007626	20SL029834	20SL046728	20SL060898
20SL012653	20SL030481	20SL046752	20SL060902
20SL013482	20SL033978	20SL047917	20SL060904
20SL014522	20SL034705	20SL047934	20SL060905
20SL014791	20SL035457	20SL047936	20SL060910
20SL015740	20SL037101	20SL047983	20SL060911
20SL016675	20SL037412	20SL048012	20SL060912
20SL018023	20SL037463	20SL048703	20SL060915
20SL019207	20SL037646	20SL048985	20SL060916
20SL019742	20SL037926	20SL048989	20SL060917
20SL019853	20SL037937	20SL050050	20SL060918
20SL020274	20SL038071	20SL050163	20SL060919
20SL021761	20SL040052	20SL050680	20SL060922
20SL022887	20SL040848	20SL051439	20SL060923
20SL022921	20SL042037	20SL060148	20SL060926
20SL023175	20SL044434	20SL060319	20SL060933
20SL024048	20SL044535	20SL060398	20SL060934
20SL024508	20SL044709	20SL060613	20SL060942
20SL024592	20SL045581	20SL060716	20SL060946
20SL028259	20SL045598	20SL060864	20SL060947
20SL028392	20SL045783	20SL060866	20SL060956
20SL029123	20SL046106	20SL060896	20SL060976
20SL029178	20SL046121	20SL060897	20SL060979
20SL061009	20SL061235	20SL061597	
20SL061032	20SL061314	20SL061598	
20SL061035	20SL061372	20SL061600	
20SL061060	20SL061382	20SL061602	
20SL061061	20SL061408	20SL061603	
20SL061062	20SL061471	20SL061606	
20SL061099	20SL061504	20SL061607	
20SL061112	20SL061509	20SL061613	
20SL061121	20SL061510	20SL061625	
20SL061128	20SL061514	20SL061629	

2009 No 347Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Schedule 2 Licences with access to very low flows

20SL061130	20SL061541	20SL061631	
20SL061134	20SL061546	20SL051567	
20SL061139	20SL061552	20SL051579	
20SL061144	20SL061555	20SL061009	
20SL061151	20SL061562	20SL061509	
20SL061166	20SL061564	20SL061510	
20SL061169	20SL061571		
20SL061187	20SL061585		
20SL061190	20SL061587		
20SL061199	20SL061595		
VERY LOW FLOW LICENCES		GROUNDWATER	
20BL028602	20BL166109		
20BL029479	20BL110726		
20BL104899	20BL134037		
20BL117731	20BL143716		
20BL018604	20BL118250		
20BL150468	20BL118252		
20BL150465	20BL118251		
20BL150467	20BL018388		
20BL166462	20BL018983		
	20BL106084		
LOCAL WATER UTILITY LICENCES			
Lower Goulburn	20SL060901	Hunter Alluvial	20BL130308 20BL130310 20BL130312 20BL130313 20BL130315 20BL128781 20BL128782 20BL128783 20BL128784
Pages	20SL030939	Dart	20BL010028 20BL010029 20BL017121 20BL018171 20BL019420 20BL122331

Schedule 3 Contamination sources in the Hunter Unregulated and Alluvial Water Sources

Contamination sources in these water sources include:

- (a) on site sewage disposal systems or septic tanks,
- (b) any sites where contamination has been assessed as presenting a significant risk of harm under *Contaminated Land Management Act 1997*,
- (c) any sites with an historical use listed in Table 1 of “*Managing Land Contamination. Planning Guidelines. SEPP 55 – Remediation of Land*”, and
- (d) any relevant sites listed in an agency database relating to contamination sources.

2009 No 347

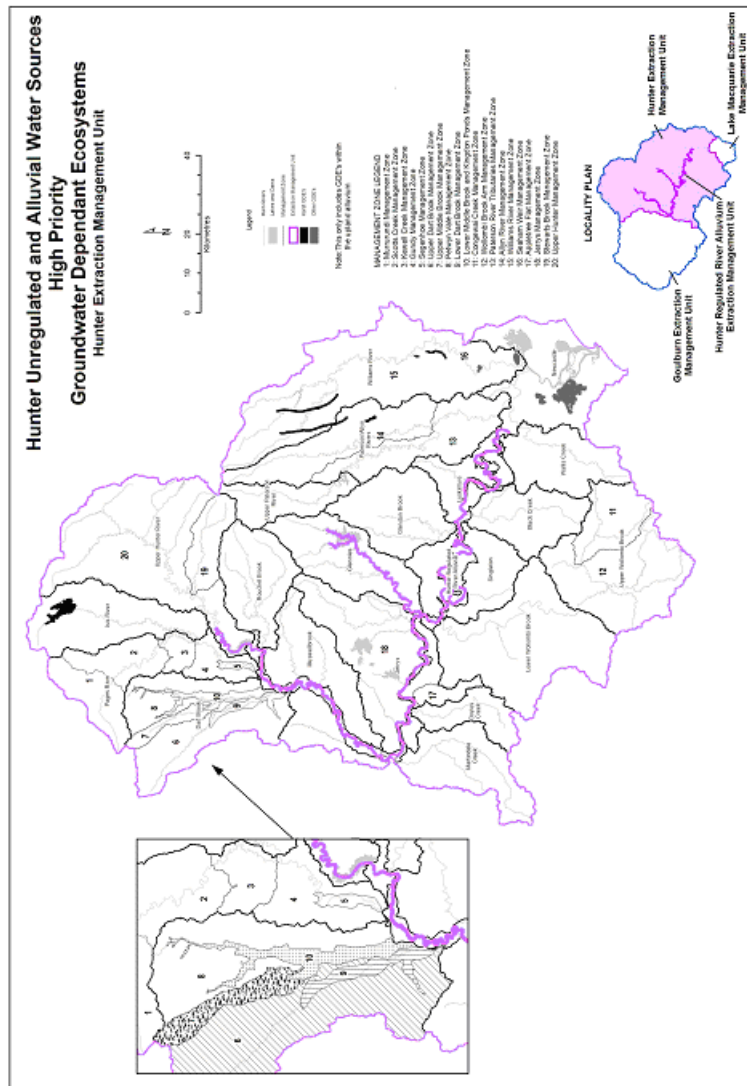
Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Schedule 4

High Priority Groundwater Dependent Ecosystems in the Hunter Unregulated and Alluvial Water Sources

Schedule 4

High Priority Groundwater Dependent Ecosystems in the Hunter Unregulated and Alluvial Water Sources



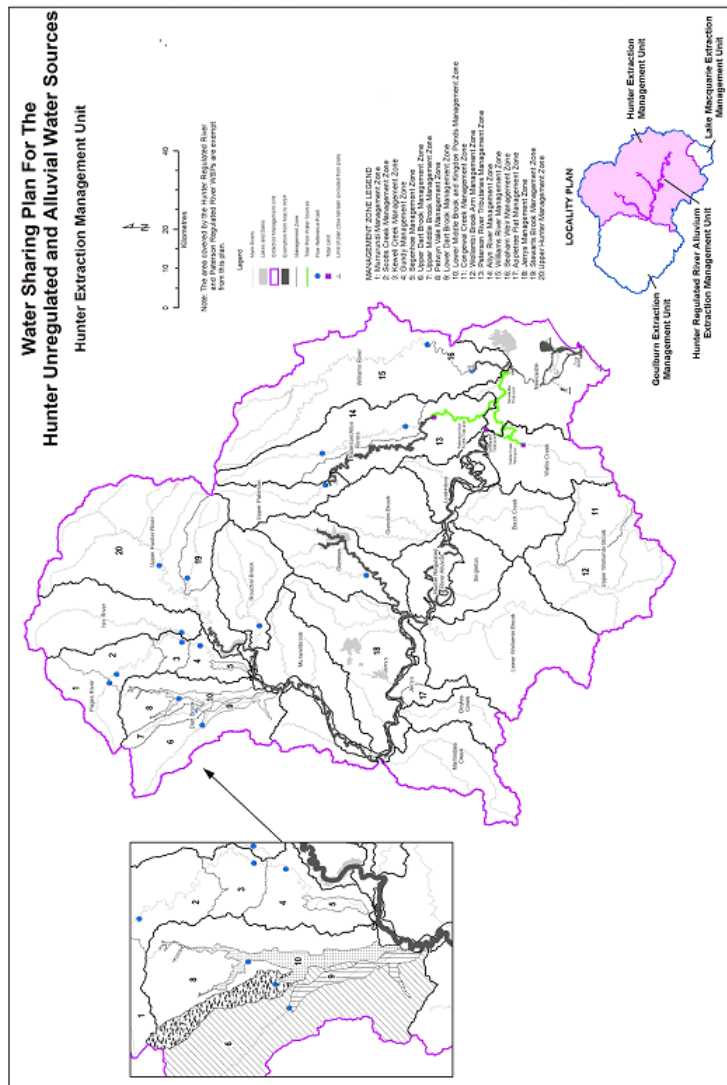
Note. High priority groundwater dependent ecosystems are currently under investigation and some of these may be identified during the term of this Plan. The full list of potential GDEs will be identified on the DWE GDE Register and as a precautionary approach, will be considered by staff in the assessment of any works approval within the plan area. If verified as high priority groundwater dependent ecosystems, the Schedule will be amended to include further GDEs.

Map ID	GDE name	Latitude	Longitude	Location	Area
Karst ▲	Bandon Grove Limestone Member	6429022	366412	Williams River, Paterson/Allyn Rivers	1,485,584 m ²
Karst ▲	Timor Limestone Member	6493402	320195	Isis River	1,2007,467 m ²
Karst ▲	Verulam Oolite Member	6432662	370915	Williams River	909,483
Karst ▲	Bandon Grove Limestone Member	6425745	372733	Williams River	512,009
Karst ▲	unnamed	6414711	368630	Paterson/Allyn Rivers	540,599
Karst ▲	unnamed	6403010	384625	Williams River	37,536
Karst ▲	unnamed	6397829	385502	Williams River	356,685
Karst ▲	Timor Limestone Member	6496957	316830	Isis River	185,742
Coastal Wetlands	SEPP 14 Coastal Wetlands 828b	6371437	373944	Newcastle	1,823,967
Coastal Wetlands	SEPP 14 Coastal Wetlands 840	6364136	375350	Newcastle	20,629,627
Coastal Wetlands	SEPP 14 Coastal Wetlands 802c	6386983	381757	Williams River	213,942
Coastal Wetlands	SEPP 14 Coastal Wetlands 841	6363537	371926	Newcastle	161,954

2009 No 347Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009Schedule 4 High Priority Groundwater Dependent Ecosystems in the Hunter
Unregulated and Alluvial Water Sources

Map ID	GDE name	Latitude	Longitude	Location	Area
Coastal Wetlands	SEPP 14 Coastal Wetlands 841a	6363977	370637	Newcastle	407,697
Coastal Wetlands	SEPP 14 Coastal Wetlands 804	6377493	383917	Williams River	1,994,618
Coastal Wetlands	SEPP 14 Coastal Wetlands 802d	6387255	380897	Williams River	48,357

Appendix 1 Hunter Unregulated and Alluvial Water Sources and Hunter, Hunter Regulated River Alluvium, Goulburn and Lake Macquarie Extraction Management Units

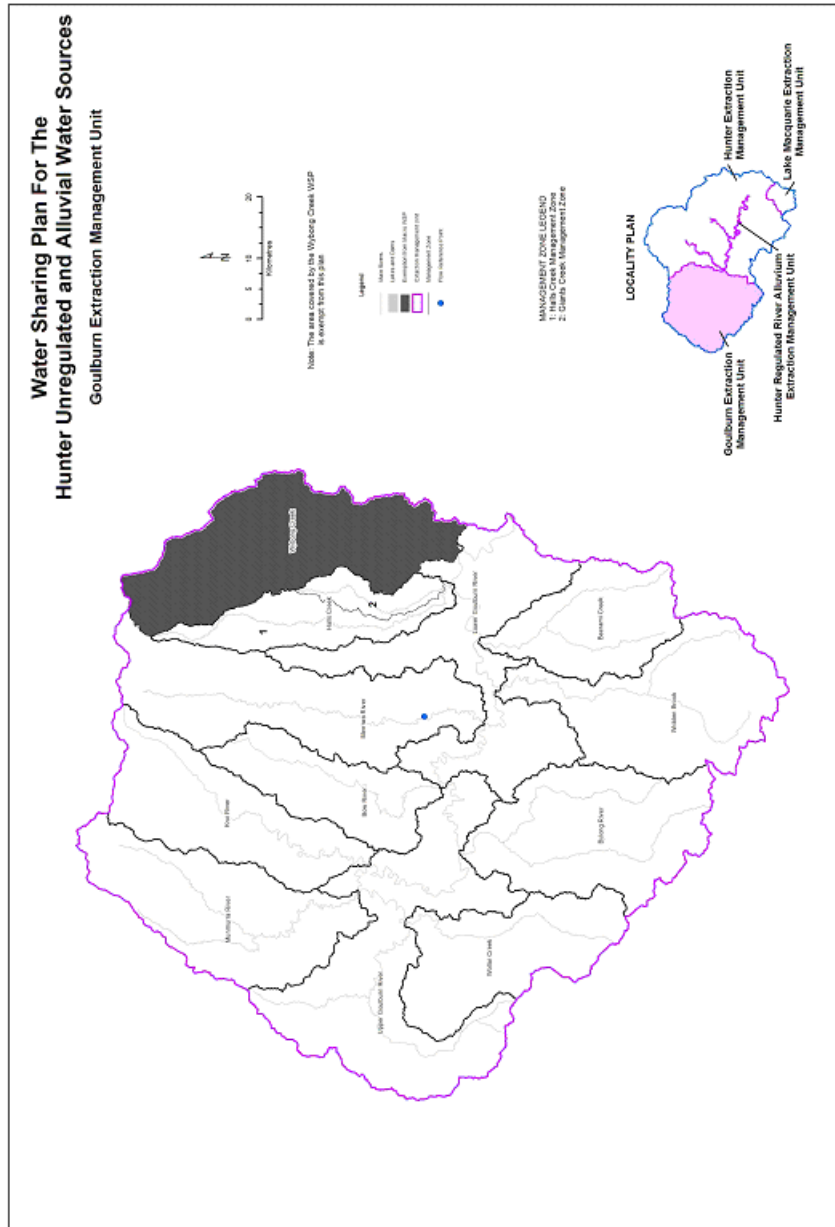


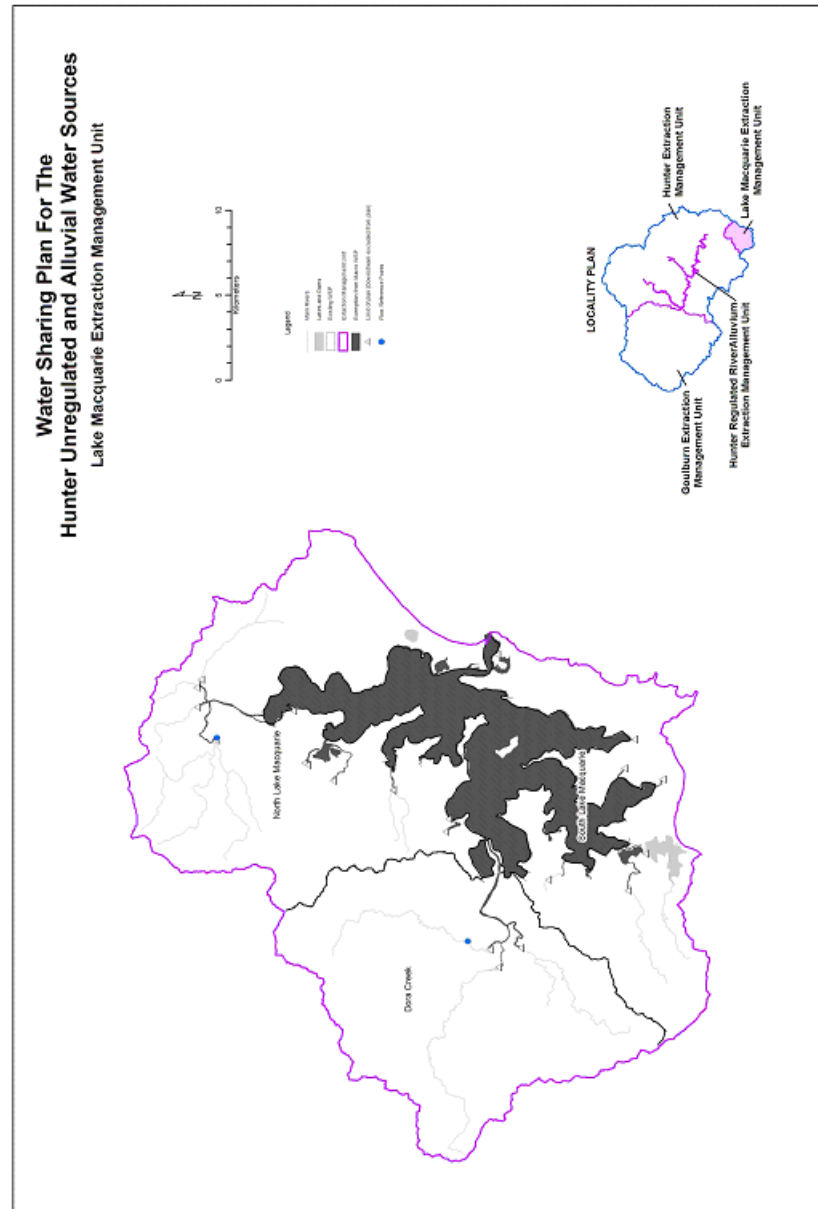
2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Appendix 1

Hunter Unregulated and Alluvial Water Sources and Hunter, Hunter
Regulated River Alluvium, Goulburn and Lake Macquarie Extraction
Management Units





2009 No 347

Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources
2009

Appendix 2 Location of registered plans

Appendix 2 Location of registered plans

Copies of registered plans in relation to this Plan may be inspected at:

Head Office
Department of Water and Energy
22-33 Bridge St
SYDNEY NSW 2000

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

District Office
Department of Water and Energy
Unit 2A, Alliance St
EAST MAITLAND NSW 2320

Newcastle City Council
282 King Street
NEWCASTLE NSW 2300

Maitland City Council
285-287 High Street
MAITLAND NSW 2230

Lake Macquarie City Council
126-138 Main Road
SPEERS POINT NSW 2284

Upper Hunter Shire Council
130 Liverpool Street
SCONE NSW 2337

Muswellbrook Shire Council
157 Maitland Street
MUSWELLBROOK NSW 2333

Singleton Shire Council
Civic Avenue
SINGLETON NSW 2330

BY AUTHORITY
