



New South Wales

Murray-Darling Basin Amendment Bill 2002

Explanatory note

This explanatory note relates to this Bill as introduced into Parliament.

Overview of Bill

Arrangements for the sharing of water from the rivers comprising the Murray-Darling Basin are the subject of an agreement entered into on 24 June 1992 between the Commonwealth, New South Wales, Victoria and South Australia (the *Murray-Darling Basin Agreement*). Legislative approval to that agreement was given when Parliament enacted the *Murray-Darling Basin Act 1992*. A copy of the agreement is set out in Schedule 1 to that Act.

The Commonwealth, New South Wales, Victoria and South Australia have subsequently entered into an agreement to amend the Murray-Darling Basin Agreement (the *Murray-Darling Basin Amending Agreement*) so as to make new arrangements for sharing water made available in the River Murray catchment above Hume Dam by the Snowy Scheme.

The object of this Bill is to amend the *Murray-Darling Basin Act 1992* so as to give legislative approval to the Murray-Darling Basin Amending Agreement. As a consequence of that approval, the Murray-Darling Basin Agreement will be amended in accordance with the terms of the Murray-Darling Basin Amending Agreement.

Outline of provisions

Clause 1 sets out the name (also called the short title) of the proposed Act.

Clause 2 provides for the commencement of the proposed Act on a day to be appointed by proclamation.

Clause 3 is a formal provision giving effect to the amendments to the *Murray-Darling Basin Act 1992* set out in Schedule 1.

Schedule 1 Amendments

Schedule 1 [1] substitutes the definition of *Agreement* in section 4 (1) to reflect the adoption of the Amending Agreement.

Schedule 1 [2] inserts a definition of *Amending Agreement* into section 4 (1).

Schedule 1 [3] inserts proposed section 6A. The new section gives legislative approval to the Amending Agreement.

Schedule 1 [4] inserts proposed Schedule 2. The new Schedule contains the text of the Amending Agreement.

First print



New South Wales

Murray-Darling Basin Amendment Bill 2002

Contents

	Page
1 Name of Act	2
2 Commencement	2
3 Amendment of Murray-Darling Basin Act 1992 No 65	2
Schedule 1 Amendments	3



New South Wales

Murray-Darling Basin Amendment Bill 2002

No. , 2002

A Bill for

An Act to amend the *Murray-Darling Basin Act 1992* so as to approve certain amendments to the agreement set out in Schedule 1 to that Act.

The Legislature of New South Wales enacts:	1
1 Name of Act	2
This Act is the <i>Murray-Darling Basin Amendment Act 2002</i> .	3
2 Commencement	4
This Act commences on a day to be appointed by proclamation.	5
3 Amendment of Murray-Darling Basin Act 1992 No 65	6
The <i>Murray-Darling Basin Act 1992</i> is amended as set out in Schedule 1.	7 8

Schedule 1 Amendments

1

(Section 3)

2

[1] Section 4 Definitions

3

Omit the definition of *Agreement* from section 4 (1). Insert instead:

4

Agreement means the agreement, a copy of which is set out in
Schedule 1, as the agreement is:

5

6

(a) deemed to be amended from time to time under
clause 50 or 134 of the agreement, and

7

8

(b) amended by the Amending Agreement.

9

[2] Section 4 (1)

10

Insert in alphabetical order:

11

Amending Agreement means the agreement a copy of which
is set out in Schedule 2.

12

13

[3] Section 6A

14

Insert after section 6:

15

6A Approval of Amending Agreement

16

The Amending Agreement is approved.

17

[4] Schedule 2	1
Insert after Schedule 1:	2
Schedule 2 The Amending Agreement	3
MURRAY-DARLING BASIN AMENDING AGREEMENT	4
The Murray-Darling Basin Amending Agreement made the third day of June two thousand and two.	5 6
BETWEEN	7
THE COMMONWEALTH OF AUSTRALIA (the “Commonwealth”)	8
THE STATE OF NEW SOUTH WALES (“New South Wales”)	9
THE STATE OF VICTORIA (“Victoria”)	10
THE STATE OF SOUTH AUSTRALIA (“South Australia”)	11
WHEREAS on 24 June 1992 the Commonwealth, New South Wales, South Australia and Victoria entered into the Murray-Darling Basin Agreement which was ratified by the Parliament of the Commonwealth and the Parliaments of the said States and subsequently amended (the “Principal Agreement”);	12 13 14 15
AND WHEREAS under the provisions of clause 134 of the Principal Agreement the State of Queensland (“Queensland”) became a party to the Principal Agreement on the terms and conditions set out in Schedule D to the Principal Agreement;	16 17 18
AND WHEREAS clause 3 of Schedule D provides that certain provisions of the Principal Agreement do not apply to Queensland;	19 20
AND WHEREAS the Commonwealth, New South Wales, South Australia and Victoria wish to:	21 22
(a) amend certain provisions of the Principal Agreement which do not apply to Queensland; and	23 24
(b) add a further Schedule G to the Principal Agreement, which will not apply to Queensland,	25 26
to make new arrangements for sharing water made available in the River Murray catchment above Hume Dam by the Snowy Scheme;	27 28

THE PARTIES AGREE AS FOLLOWS

- (1) In the following clauses of this Agreement, **“the Agreement”** means the Principal Agreement. 1
2
3
- (2) Clause 2 of the Agreement is amended— 4
- (a) by omitting the definition of “Authority”; 5
- (b) by inserting the following definition— 6
- “natural flow”** means the quantity of water that would have 7
flowed in a river past a particular point in a particular period 8
but for the effect during that period of diversions to or from, 9
and impoundments on, the river upstream of that point;” 10
- (c) by omitting the definition of “period of restriction”; and 11
- (d) by omitting the definition of “Snowy Mountains Agreement”. 12
- (3) Clause 46 of the Agreement is amended by adding the following 13
sub-clause— 14
- “(4) Despite sub-clause 46(3), sub-clauses 46(1) and 46(2) apply to 15
any proposal referred to in clause 24 of Schedule G.”. 16
- (4) Clause 91 of the Agreement is amended as follows— 17
- (a) by omitting paragraph (b) of sub-clause (1) and inserting the following 18
paragraph in its stead— 19
- “(b) half the natural flow at Doctors Point;” and 20
- (b) by deleting from paragraph (c) of sub-clause (1) the word “and”; and 21
- (c) by inserting in paragraph (d) of sub-clause (1), after the word “Point” 22
the word “and”; and 23
- (d) by adding to sub-clause (1) a paragraph— 24
- “(e) half of the volume of water calculated in accordance 25
with clause 8 of Schedule G.”. 26
- (5) Clause 98 of the Agreement is amended— 27
- (a) by omitting paragraph (d) and inserting the following paragraph in its 28
stead— 29
- “(d) the estimated natural flow of the River Murray at 30
Doctors Point before the end of the following May;” 31
and 32

Murray-Darling Basin Amendment Bill 2002

Schedule 1

Amendments

-
- (b) by omitting paragraph (e) and inserting the following paragraph in its stead— 1
2
 “(e) water calculated in accordance with clause 9 of 3
 Schedule G;”. 4
- (6) Clause 103 of the Agreement is amended by omitting sub-clause (1) and 5
inserting the following sub-clause in its stead— 6
 “(1) In respect of any period— 7
 (a) the natural flow of the River Murray at Doctors Point; 8
 and 9
 (b) the volume of water calculated in accordance with 10
 clause 10 of Schedule G, 11
 must be allocated between New South Wales and Victoria as 12
 provided in sub-clause 103(2).”. 13
- (7) Clause 105 of the Agreement is amended— 14
 (a) by inserting the number “(1)” after the number “105”; and 15
 (b) by adding the following sub-clauses— 16
 “(2) The volume of water calculated in accordance with sub-clause 17
 11(1) of Schedule G is allocated to New South Wales. 18
 (3) The volume of water calculated in accordance with sub-clause 19
 11(2) of Schedule G is allocated to Victoria.”. 20
- (8) Clause 106 of the Agreement is omitted and the following clause inserted 21
in its stead— 22
 “106. New South Wales and Victoria are respectively deemed to use 23
 the quantity of water— 24
 (a) diverted from the upper River Murray by an offtake 25
 under the jurisdiction of that State, unless the 26
 Commission determines otherwise; and 27
 (b) calculated under sub-clause 12(1) of Schedule G, in the 28
 case of New South Wales; and 29
 (c) calculated under sub-clause 12(2) of Schedule G, in the 30
 case of Victoria.”. 31
- (9) Clause 107 of the Agreement is omitted. 32
- (10) Clause 112 of the Agreement is omitted. 33
- (11) Clause 122 of the Agreement is amended by omitting sub-clause (3). 34

-
- (12) Part XII of the Agreement is amended by omitting from the heading of that Part the words “**MOUNTAINS AGREEMENT**” and inserting in their stead the word “**SCHEME**”. 1
2
3
- (13) Clause 132 of the Agreement is deleted and the following clause inserted in its stead— 4
5
“132. The Commission must determine the respective allocations to 6
New South Wales and Victoria of water made available from 7
the Snowy Scheme for the purposes of this Agreement, in the 8
manner set out in Schedule G.”. 9
- (14) The Agreement is amended by inserting after Schedule F the following new Schedule— 10
11

SCHEDULE G

 12

EFFECT OF SNOWY SCHEME

 13

PART I: PRELIMINARY

 14

1. Purpose

 15

The purpose of this Schedule is to make arrangements for 16
sharing between New South Wales, South Australia and 17
Victoria of water made available in the catchment of River 18
Murray above Hume Dam by the Snowy Scheme. 19

2. Definitions

 20

In this Schedule: 21

(1) “**Baseline Conditions**” means: 22

- (a) the infrastructure supplying water; 23
(b) the rules for allocating water and for water 24
management systems applying; 25
(c) the operating efficiency of water management 26
systems; and 27

-
- (d) existing entitlements to take and use water and the extent to which those entitlements were used, 1
2
3
- within the Murray-Darling Basin as at the Corporatisation Date; 4
5
- (2) **“Corporatisation Date”** means the date on which the *Snowy Mountains Hydro-electric Power Act 1949 (Cth)* is repealed by the *Snowy Hydro Corporatisation Act 1997 (Cth)*; 6
7
8
9
- (3) **“Environmental Entitlement”** means: 10
- (a) a category of environmental water referred to in section 8 of the *Water Management Act 2000 (NSW)*; and 11
12
13
- (b) a bulk entitlement granted under the **Water Act 1989 (Vic)** that includes conditions relating to environmental purposes; 14
15
16
- in both cases comprising a volume of water derived from either or both of Water Savings and Water Entitlements; 17
18
19
- (4) **“Goulburn River System”** means the Broken, Goulburn, Campaspe and Loddon Rivers and the water supply systems supplied by those rivers; 20
21
22
- (5) **“Licensee”** means the licensee under the *Snowy Water Licence*; 23
24
- (6) **“Long Term Diversion Cap”** means the long term diversion cap for the State of New South Wales or the State of Victoria under clauses 4 and 5 respectively of Schedule F; 25
26
27
28
- (7) **“Lower Darling River System”** means the Darling River and its anabranch system from the upstream extent of the Menindee Lakes Storage and downstream and the water supply systems supplied by that River; 29
30
31
32
- (8) **“Month”** means calendar month and **“Monthly”** means each calendar month; 33
34

-
- (9) **“Mowamba Borrowings Account”** means the water account to be maintained by the Licensee under the Snowy Water Licence to account for flows made under the Snowy Water Licence from the Mowamba River and Cobbon Creek in the first three years after the Corporatisation Date; 1
2
3
4
5
6
- (10) **“Murrumbidgee River System”** means the Murrumbidgee River and the water supply systems supplied by that river; 7
8
9
- (11) **“Relaxation Volume”** has the same meaning as in the Snowy Water Licence as at the Corporatisation Date; 10
11
- (12) **“Reliability”** with respect to a supply of water means the statistical probability of being able to supply a particular volume in any Water Year; 12
13
14
- (13) **“Required Annual Release”** has the same meaning as in the Snowy Water Licence taken as a whole as at the Corporatisation Date. For the avoidance of doubt, “Required Annual Release” is not a reference to “Agreed Annual Release” under that Licence and a change to the Snowy Water Licence after the Corporatisation Date will not affect the calculation of Required Annual Releases for the purposes of this Schedule; 15
16
17
18
19
20
21
22
23
- (14) **“Required Annual Release Shortfall”** means, in any Water Year, the volume by which the Required Annual Release from the Snowy-Murray Development in that Water Year exceeds the actual release from the Snowy Scheme to the catchment of the River Murray upstream of Hume Dam in that Water Year; 24
25
26
27
28
29
- (15) **“River Murray Above Target Releases”** means, in any Water Year, water that is released from the Snowy Scheme to the catchment of the River Murray upstream of Hume Dam in excess of the Required Annual Release from the Snowy-Murray Development in that Water Year; 30
31
32
33
34
35

-
- (16) **“River Murray Annual Allocation”** with respect to each Water Year means the annual allocation from the River Murray Apportioned Entitlement determined by New South Wales; 1
2
3
4
- (17) **“River Murray Apportioned Entitlement”** means the volume of water from the Environmental Entitlements that is apportioned to the River Murray Increased Flows by New South Wales; 5
6
7
8
- (18) **“River Murray Increased Flows”** means releases of water from major storages made by the Commission in accordance with Part V of this Schedule; 9
10
11
- (19) **“River Murray Increased Flows Accounts”** means the water accounts to be maintained by the Commission under clause 21 of this Schedule; 12
13
14
- (20) **“River Murray Increased Flows in Commission Storages Account”** means the water account to be maintained by the Commission under paragraph 21(1)(b) of this Schedule; 15
16
17
18
- (21) **“River Murray System”** means the aggregate of: 19
- (a) the River Murray; 20
 - (b) all tributaries entering the River Murray upstream of Doctors Point; 21
22
 - (c) the Ovens River; and 23
 - (d) the Lower Darling River System; 24
- (22) **“Seasonal Availability”** with respect to the water to which an entitlement refers means: 25
26
- (a) for that part of the entitlement whose availability is determined by reference to seasonal allocations: the final seasonal allocation announcement of the relevant State during the previous Water Year; and 27
28
29
30
31
 - (b) for that part of the entitlement whose availability is determined by reference to the entitlement of South Australia: the allocated volume received during the previous Water Year by South Australia as a proportion of its entitlement during that Water Year under this Agreement; 32
33
34
35
36
37

-
- (23) **“Snowy Montane Rivers External Increased Flows”** means releases of water made by the Licensee to montane rivers under the environmental flow requirements of the Snowy Water Licence which would have flowed through either:
- (a) the Murray 1 Power Station in the case of the Snowy-Murray Development; or
- (b) Jounama Pondage in the case of the Snowy-Tumut Development,
- if it were not released for environmental purposes;
- (24) **“Snowy-Murray Development”** means the component of the Snowy Scheme comprising works that regulate the waters of the Upper Snowy River, the Geehi River and Bogong Creek;
- (25) **“Snowy-Murray Development Annual Allocation”** means the annual allocation for any Water Year for the Snowy-Murray Development determined by New South Wales by reference to the Seasonal Availability of the water contained in the Snowy-Murray Development Designated Entitlement;
- (26) **“Snowy-Murray Development Designated Entitlement”** means that part of the Environmental Entitlements designated against the Snowy-Murray Development by New South Wales;
- (27) **“Snowy-Murray Development (River Murray) Environmental Entitlements”** means both:
- (a) a category of environmental water referred to in section 8 of the Water Management Act 2000 (NSW); and
- (b) a bulk entitlement granted under the **Water Act 1989** (Vic) that includes conditions relating to the protection of the environment,
- in both cases comprising a volume of water derived from either or both of Water Savings and Water Entitlements sourced from the River Murray System or the Goulburn River System;

- (28) **“Snowy Notional Spill”** means: 1
- (a) **in the case of the Snowy-Murray Development:** the calculated active volume of 2
water belonging to the Snowy-Murray 3
Development stored in Eucumbene Reservoir 4
exceeding 2,019 GL and accounted as a loss 5
from the Snowy-Murray Development and a 6
gain to the Snowy-Tumut Development; 7 8
- (b) **in the case of Snowy-Tumut Development:** the 9
calculated active volume of water belonging to 10
the Snowy-Tumut Development stored in 11
Eucumbene Reservoir exceeding 2,348 GL and 12
accounted as a loss from the Snowy-Tumut 13
Development and a gain to the Snowy-Murray 14
Development; 15
- (29) **“Snowy River”** means the Snowy River downstream of 16
Jindabyne Dam; 17
- (30) **“Snowy River Annual Allocation”** means the annual 18
allocation from the Snowy River Apportioned 19
Entitlement for any Water Year, determined by New 20
South Wales; 21
- (31) **“Snowy River Apportioned Entitlement”** means the 22
volume of water from the Environmental Entitlements 23
apportioned to environmental flows from the Snowy 24
Scheme to the Snowy River, by New South Wales; 25
- (32) **“Snowy Scheme”** means the dams, tunnels, power 26
stations, aqueducts and other structures that comprise 27
the Snowy-Murray Development and the Snowy-Tumut 28
Development, that together are known as the Snowy 29
Mountains Hydro-electric Scheme; 30
- (33) **“Snowy-Tumut Development”** means the component 31
of the Snowy Scheme comprising works that regulate 32
the waters of the Eucumbene River, the Tooma River, 33
the Upper Murrumbidgee River and the Upper Tumut 34
River; 35

-
- (34) **“Snowy-Tumut Development Annual Allocation”** with respect to each Water Year means the annual allocation for the Snowy-Tumut Development determined by New South Wales by reference to the Seasonal Availability of the water contained in the Snowy-Tumut Development Designated Entitlement; 1
2
3
4
5
6
- (35) **“Snowy-Tumut Development Designated Entitlement”** means that part of the Environmental Entitlements designated against the Snowy-Tumut Development by New South Wales; 7
8
9
10
- (36) **“Snowy Water Licence”** means the licence issued under Part 5 of the Snowy Hydro Corporatisation Act 1997 (NSW); 11
12
13
- (37) **“Strategy”** means the strategy for retaining and releasing River Murray Increased Flows determined under paragraph 20(1)(a) of this Schedule; 14
15
16
- (38) **“Translation Factors”** means the translation factors used to convert Water Savings and Water Entitlements into an Environmental Entitlement with specified Reliability; 17
18
19
20
- (39) **“Upper Snowy River”** means the Snowy River upstream of Jindabyne Dam (including the Mowamba River and the Cobbon Creek) but excluding the Eucumbene River; 21
22
23
24
- (40) **“Water Entitlement”** means: 25
- (a) an access licence granted under the Water Management Act 2000 (NSW); and 26
27
- (b) a water right, licence to take and use water or bulk entitlement under the **Water Act 1989** (Vic) together with any transferable allocation of sales water made to the holder of such a water right or licence, 28
29
30
31
32
- in either case purchased for the purpose of achieving either or both of: 33
34
- (c) environmental flows from the Snowy Scheme; 35
and 36
- (d) River Murray Increased Flows; 37
-

-
- (41) **“Water Market”** means, with respect to a Water Entitlement, the market from which the relevant Water Entitlement is drawn; 1
2
3
- (42) **“Water Savings”** means the volume of water saved through one or more projects that saves water: 4
5
- (a) by reducing transmission losses, evaporation or system inefficiencies; or 6
7
- (b) by achieving either or both of water management and environmental improvements, 8
9
for diversions from the River Murray System and either 10
or both of Murrumbidgee River System and the 11
Goulburn River System for the purpose of achieving: 12
- (c) environmental flows from the Snowy Scheme; 13
and 14
- (d) River Murray Increased Flows; 15
- (43) **“Water Year”** means the period of 12 Months commencing on 1 May in each year. 16
17

PART II: CALCULATING WATER VOLUMES 18

3. *The Snowy Scheme And The River Murray* 19

- (1) In this Agreement, **“Water Available to the Snowy-Murray Development”** means: 20
21
- Water of the Upper Snowy River regulated by the Snowy Scheme 22
23
- PLUS** water of the Geehi River and Bogong Creek regulated by the Snowy Scheme 24
25
- PLUS** any Snowy Notional Spill from the Snowy-Tumut Development to the Snowy-Murray Development 26
27
28
- PLUS** the transfer from the Snowy-Tumut Development to the Snowy-Murray Development of the Snowy-Tumut Development Annual Allocation 29
30
31
32

	PLUS	4.5 GL per Water Year transferred from the Snowy-Tumut Development to the Snowy-Murray Development	1 2 3
	PLUS	half of the balance of the Mowamba Borrowings Account	4 5
	MINUS	any Snowy Notional Spill from the Snowy-Murray Development to the Snowy-Tumut Development.	6 7 8
(2)		In this Agreement, “ Net Snowy-Murray Development Diversions to the River Murray ” means the volume of water calculated as follows:	9 10 11
		Water Available to the Snowy-Murray Development released by the Snowy Scheme to the catchment of the River Murray upstream of Hume Dam	12 13 14 15
	MINUS	the water of the Tooma River regulated by the Snowy Scheme	16 17
	MINUS	the natural flows of the Geehi River and Bogong Creek regulated by the Snowy Scheme.	18 19 20
(3)		In this Agreement, “ Murray to Murrumbidgee Inter-Valley Transfer ” means the volume of Water Available to the Snowy-Murray Development released by the Snowy Scheme to the catchment of the Murrumbidgee River.	21 22 23 24
4.		<i>The Snowy Scheme And The Murrumbidgee River</i>	25
(1)		In this Agreement, “ Water Available to the Snowy-Tumut Development ” means:	26 27
		The water of the Eucumbene River, the Tooma River, the Upper Murrumbidgee River and the Upper Tumut River regulated by the Snowy Scheme	28 29 30 31
	PLUS	any Snowy Notional Spill from the Snowy-Murray Development to the Snowy-Tumut Development	32 33 34

MINUS	half of the balance of the Mowamba Borrowings Account	1 2
MINUS	any Snowy Notional Spill from the Snowy-Tumut Development to the Snowy-Murray Development	3 4 5
MINUS	the transfer from the Snowy-Tumut Development to the Snowy-Murray Development of the Snowy-Tumut Development Annual Allocation	6 7 8 9
MINUS	4.5 GL per Water Year transferred from the Snowy-Tumut Development to the Snowy-Murray Development.	10 11 12
(2)	In this Agreement, “ Murrumbidgee to Murray Inter-Valley Transfer ” means the volume of Water Available to the Snowy-Tumut Development released by the Snowy Scheme to the catchment of the River Murray upstream of Hume Dam.	13 14 15 16
5.	<i>Excess Snowy River Releases</i>	17
	In this Agreement, “ Excess Snowy River Releases ” means the greater of zero and the volume of water calculated as follows:	18 19
	The regulated releases made to the Snowy River in the relevant Water Year, measured immediately below the confluence of the Snowy River and the Mowamba River	20 21 22 23 24
	MINUS 9 GL	25
	MINUS the Snowy River Annual Allocation in the relevant Water Year	26 27
	MINUS the change in the balance of the Mowamba Borrowings Account during the relevant Water Year.	28 29 30

-
- 6. *Snowy River Release Shortfalls*** 1
- In this Agreement, “**Snowy River Release Shortfalls**” means 2
the greater of zero and the volume of water calculated as 3
follows: 4
- The Snowy River Annual Allocation in 5
the relevant Water Year 6
- PLUS** 9 GL 7
- PLUS** the change in the balance of the 8
Mowamba Borrowings Account from the 9
commencement to the end of the relevant 10
Water Year 11
- MINUS** the regulated releases made to the Snowy 12
River in the relevant Water Year, 13
measured immediately below the 14
confluence of the Snowy River and the 15
Mowamba River. 16
- 7. *Accounting For Water Releases*** 17
- For the purposes of this Agreement, water releases from the 18
Snowy-Murray Development to the catchment of the River 19
Murray upstream of Hume Dam are to be accounted as: 20
- (1) water releases as at Murray 1 Power Station; and 21
- (2) any water that would have passed through the Murray 1 22
Power Station but does not: 23
- (a) for operational reasons; or 24
- (b) because it is released from the Snowy Scheme as 25
Snowy Montane Rivers External Increased 26
Flows, 27
- and that flows into the catchment of the River Murray 28
upstream of Hume Dam. 29
-

PART III: WATER ACCOUNTING

		1
8.	<i>Entitlements Of New South Wales And Victoria To Use Water</i>	2
	The volume of water referred to in paragraph 91(1)(e) of the Agreement is calculated as follows:	3
		4
	The Net Snowy-Murray Development Diversions to the River Murray	5
		6
	PLUS Murray to Murrumbidgee Inter-Valley Transfers	7
		8
	PLUS the Required Annual Release Shortfall	9
	PLUS the Snowy-Murray Development Annual Allocation	10
		11
	PLUS Excess Snowy River Releases in excess of the volume of the Snowy River Release Shortfall in the previous Water Year	12
		13
		14
		15
	MINUS At the discretion of the Commission, Murrumbidgee to Murray Inter-Valley Transfers	16
		17
		18
	MINUS the Required Annual Release Shortfall from the previous Water Year	19
		20
	MINUS River Murray Above Target Releases allocated to the River Murray Increased Flows received by Hume Reservoir.	21
		22
		23
9.	<i>Water Estimated To Be Under The Control Of The Commission</i>	24
	Water referred to in paragraph 98(e) of the Agreement is estimated as follows:	25
		26
	The Net Snowy-Murray Development Diversions to the River Murray	27
		28
	PLUS Murray to Murrumbidgee Inter-Valley Transfers	29
		30
	PLUS the Required Annual Release Shortfall	31
	PLUS the Snowy-Murray Development Annual Allocation	32
		33

PLUS	Excess Snowy River Releases in excess of the volume of the Snowy River Release Shortfall in the previous Water Year	1 2 3 4
MINUS	at the discretion of the Commission, Murrumbidgee to Murray Inter-Valley Transfers	5 6 7
MINUS	the Required Annual Release Shortfall from the previous Water Year	8 9
MINUS	River Murray Above Target Releases allocated to the River Murray Increased Flows received by Hume Reservoir,	10 11 12
	in each case before the end of the following May.	13
10.	<i>Allocation of Water to New South Wales and Victoria</i>	14
	The volume of water referred to in paragraph 103(1)(b) of the Agreement is calculated as follows:	15 16
	The Net Snowy-Murray Development Diversions to the River Murray	17 18
PLUS	Murray to Murrumbidgee Inter-Valley Transfers	19 20
PLUS	the Required Annual Release Shortfall	21
PLUS	the Snowy-Murray Development Annual Allocation	22 23
PLUS	Excess Snowy River Releases in excess of the volume of the Snowy River Release Shortfall in the previous Water Year	24 25 26 27
MINUS	at the discretion of the Commission, Murrumbidgee to Murray Inter-Valley Transfers	28 29 30
MINUS	the Required Annual Release Shortfall from the previous Water Year	31 32
MINUS	River Murray Above Target Releases allocated to the River Murray Increased Flows received by Hume Reservoir.	33 34 35

11. <i>Tributary Inflows</i>		1
(1) The volume of water referred to in sub-clause 105(2) of the Agreement is calculated as follows:		2
		3
	The component of the Required Annual Release Shortfall from the previous Water Year allocated to New South Wales under sub-clause 13(2) of this Schedule	4
		5
		6
		7
		8
PLUS	half of the River Murray Above Target Releases allocated to the River Murray Increased Flows received by Hume Reservoir	9
		10
		11
		12
PLUS	half of the Excess Snowy River Release up to the volume of half of the Snowy River Release Shortfall in the previous Water Year for which an adjustment was made under sub-clauses 11(2) and 12(1) of this Schedule in the previous Water Year	13
		14
		15
		16
		17
		18
		19
PLUS	at the discretion of the Commission, Murrumbidgee to Murray Inter-Valley Transfers.	20
		21
		22
(2) The volume of water referred to in sub-clause 105(3) of the Agreement is calculated as follows:		23
		24
	The component of the Required Annual Release Shortfall from the previous Water Year allocated to Victoria under sub-clause 13(2) of this Schedule	25
		26
		27
		28
PLUS	half of the River Murray Above Target Releases allocated to the River Murray Increased Flows received by Hume Reservoir	29
		30
		31
		32
PLUS	half of the Snowy River Release Shortfall, unless Victoria has previously advised the Commission that Victoria waives this element of its allocation in any Water Year.	33
		34
		35
		36
		37

12.	<i>Use By New South Wales And Victoria Of Allocated Water</i>	1
(1)	The quantity of water referred to in paragraph 106(b) of the Agreement is calculated as follows:	2
		3
	Murray to Murrumbidgee Inter-Valley Transfers	4
		5
	PLUS Excess Snowy River Releases in excess of the volume of the Snowy River Release Shortfall in the previous Water Year	6
		7
		8
		9
	PLUS the Snowy-Murray Development Annual Allocation sourced from New South Wales	10
		11
		12
	PLUS the component of the Required Annual Release Shortfall allocated to New South Wales under sub-clause 13(1) of this Schedule	13
		14
		15
		16
	PLUS unless otherwise agreed with Victoria, half of the Snowy River Release Shortfall.	17
		18
		19
(2)	The quantity of water referred to in paragraph 106(c) of the Agreement is calculated as follows:	20
		21
	The Snowy-Murray Development Annual Allocation sourced from Victoria	22
		23
	PLUS the component of the Required Annual Release Shortfall allocated to Victoria under sub-clause 13(1) of this Schedule	24
		25
		26
	PLUS half of the Excess Snowy River Release up to the volume of half of the Snowy River Release Shortfall in the previous Water Year for which an adjustment was made under sub-clauses 11(2) and 12(1) of this Schedule in the previous Water Year, (such adjustments to reflect any waiver or agreement with Victoria as referred to in those sub-clauses).	27
		28
		29
		30
		31
		32
		33
		34
		35

13. Required Annual Release Shortfalls

- (1) If at the end of a Water Year there is a Required Annual Release Shortfall, the Required Annual Release Shortfall is to be accounted for by the Commission in accordance with Table One.

TABLE ONE: WATER ACCOUNTING AND REQUIRED ANNUAL RELEASE SHORTFALLS

TYPE OF WATER YEAR	ARRANGEMENT WITH RESPECT TO REQUIRED ANNUAL RELEASE SHORTFALL	WATER ACCOUNTING OUTCOMES
Water Year during which a period of special accounting is not in effect	Victoria agrees to the Required Annual Release Shortfall	New South Wales and Victoria deemed to each have used the Required Annual Release Shortfall as agreed
	Victoria does not agree to the Required Annual Release Shortfall	New South Wales deemed to have used the whole of the Required Annual Release Shortfall
Water Year during which a period of special accounting is in effect	Victoria and the Commission agree to the Required Annual Release Shortfall	New South Wales and Victoria deemed to each have used the Required Annual Release Shortfall as agreed
	The Commission does not agree to the Required Annual Release Shortfall	New South Wales deemed to have used the whole of the Required Annual Release Shortfall

- (2) The volume of any Required Annual Release Shortfall from the previous Water Year must be allocated equally between New South Wales and Victoria until the balance of Required Annual Release Shortfalls for either State is zero and thereafter wholly to the other State.

14. <i>Other Water Accounting Provisions</i>	1
(1) Where under this Schedule the Commission is required to adjust accounts in connection with the Snowy-Murray Development Annual Allocation, it must make those adjustments in equal Monthly quantities.	2 3 4 5
(2) Where under this Schedule the Commission is required to adjust accounts in connection with inter-valley transfer, it must make those adjustments in equal Monthly quantities during the balance of the Water Year in which New South Wales notifies the Commission of the relevant inter-valley transfer.	6 7 8 9 10
(3) Each release of River Murray Increased Flows must be allocated half to New South Wales and half to Victoria.	11 12 13
PART IV: SNOWY-MURRAY DEVELOPMENT (RIVER MURRAY) ENVIRONMENTAL ENTITLEMENTS	14 15 16
15. <i>Translation Factors</i>	17
(1) New South Wales and Victoria must each transfer Water Savings and Water Entitlements to its respective Snowy-Murray Development (River Murray) Environmental Entitlement in accordance with Translation Factors agreed between each of them and the Commission.	18 19 20 21 22
(2) New South Wales, Victoria and the Commission must ensure that:	23 24
(a) the Translation Factors are determined in a manner consistent with the principles used to determine exchange rates in the relevant Water Market at the time of each transfer under sub-clause 18(2) of this Schedule; and	25 26 27 28 29
(b) the use of Translation Factors to transfer Water Savings and Water Entitlements to a Snowy-Murray Development (River Murray) Environmental Entitlement will not have a significant adverse impact on:	30 31 32 33 34

(i)	the level of Reliability of entitlements to water diverted from the River Murray System, the Murrumbidgee River System and the Goulburn River System;	1 2 3 4
(ii)	the environmental benefits related to the quantity and timing of water flows for environmental purposes in the River Murray System, the Murrumbidgee River System and the Goulburn River System;	5 6 7 8 9
(iii)	the Seasonal Availability of the entitlement to be received during that Water Year by South Australia under this Agreement; and	10 11 12
(iv)	water quality in the River Murray in South Australia.	13 14
16.	<i>Apportionment Of Environmental Entitlements</i>	15
	New South Wales and Victoria must notify the Commission of how each Environmental Entitlement has been apportioned between:	16 17 18
	(1) the Snowy River Apportioned Entitlement; and	19
	(2) the River Murray Apportioned Entitlement.	20
17.	<i>Valley Accounts</i>	21
	If:	22
	(1) New South Wales or Victoria transfers either or both of Water Savings and Water Entitlements to an Environmental Entitlement; and	23 24 25
	(2) the source of that water is from a valley for which the Commission maintains a valley account,	26 27
	New South Wales or Victoria (as the case may be) must notify the Commission of the volume and reliability of the entitlement required to be added to the relevant valley account to generate the Environmental Entitlement.	28 29 30 31

18. <i>Long Term Diversion Caps</i>	1
(1) Prior to New South Wales or Victoria transferring either or both of Water Savings and Water Entitlements to an Environmental Entitlement, the relevant State must calculate the equivalent volume by which its Long Term Diversion Cap must be reduced.	2 3 4 5 6
(2) If New South Wales or Victoria transfers either or both of Water Savings and Water Entitlements to an Environmental Entitlement, at the same time the relevant State must advise the Commission of its calculation as to the volume by which its Long Term Diversion Cap must be reduced.	7 8 9 10 11
(3) If the Commission is satisfied with the appropriateness of a calculation advised under sub-clause 18(2), it must recommend to the Ministerial Council that the relevant Long Term Diversion Cap be amended in accordance with the calculation.	12 13 14 15
(4) If the Commission is not satisfied with the appropriateness of a calculation advised under sub-clause 18(2), the Commission must arrange for the relevant volume referred to in sub-clause 18(1) to be re-calculated in consultation with the relevant State.	16 17 18 19
(5) If a majority of the Commissioners is satisfied with the appropriateness of a calculation made under sub-clause 18(4), the Commission must recommend to the Ministerial Council that the relevant Long Term Diversion Cap be amended in accordance with the calculation.	20 21 22 23 24
(6) Despite paragraph 8(b) of Schedule F, the Ministerial Council must amend a Long Term Diversion Cap in accordance with any recommendation made by the Commission under sub-clause 18(3) or 18(5).	25 26 27 28 29
PART V: RIVER MURRAY INCREASED FLOWS	30 31
19. <i>Obligation Of Commission To Make River Murray Increased Flows</i>	32 33
Subject to this Part, the Commission must release River Murray Increased Flows.	34 35

20. <i>Environmental Objectives And Strategy For River Murray Increased Flows</i>	1
	2
(1) Before the commencement of the second complete Water Year after the Corporatisation Date, the Ministerial Council must determine:	3
	4
	5
(a) a strategy for retaining and releasing River Murray Increased Flows to be implemented by the Commission; and	6
	7
	8
(b) the environmental objectives for the River Murray Increased Flows,	9
	10
in accordance with the provisions of this clause.	11
(2) The Strategy:	12
(a) must include a provision to the effect that River Murray Increased Flows have first priority from River Murray Above Target Releases;	13
	14
	15
(b) may provide that water credited to the River Murray Increased Flows in Commission Storages Account need not be released during the Water Year in which it is credited;	16
	17
	18
	19
(c) unless the Ministerial Council otherwise determines, must not have a significant adverse impact upon the security of entitlements to water;	20
	21
	22
(d) must integrate the environmental objectives for the River Murray Increased Flows with other environmental initiatives on the River Murray;	23
	24
	25
(e) must include adaptive management principles to allow the ability to optimise environmental benefits; and	26
	27
(f) must prescribe appropriate environmental reporting and monitoring conditions.	28
	29
(3) The Ministerial Council must determine the environmental objectives and Strategy in accordance with the following principles:	30
	31
	32
(a) Natural diversity of habitats and biota within the river channel, riparian zone and the floodplain should be maintained or enhanced.	33
	34
	35

(b)	Natural linkages between the river and the floodplain should be maintained or enhanced.	1 2
(c)	Natural metabolic functioning of aquatic ecosystems should be maintained or enhanced.	3 4
(d)	Elements of the natural flow regime, in particular, seasonality should be retained or enhanced as far as possible, in the interests of conserving a niche for native rather than invasive exotic species and in maintaining the natural functions of the river.	5 6 7 8 9
(e)	Consistent and constant flow and water level regimes should be avoided where practical, as this is contrary to the naturally variable flow regime of the River Murray.	10 11 12
(f)	The general principles of ecosystem services should be recognised.	13 14
(g)	Environmental benefit should be optimised.	15
(4)	The Ministerial Council may from time to time by resolution amend the environmental objectives and the Strategy.	16 17
(5)	As soon as practicable after the end of each Water Year, the Commission must report to the Contracting Governments on the environmental outcomes of the River Murray Increased Flows during that Water Year, in the light of the objectives determined by the Ministerial Council for those Increased Flows.	18 19 20 21 22 23
21.	<i>Commission To Maintain River Murray Increased Flows Accounts</i>	24 25
(1)	The Commission must maintain continuous water accounts of the River Murray Increased Flows to be known as:	26 27
(a)	the Initial River Murray Increased Flows Account; and	28
(b)	the River Murray Increased Flows in Commission Storages Account.	29 30
(2)	The Commission must:	31
(a)	credit the Initial River Murray Increased Flows Account with the River Murray Annual Allocation notified by New South Wales;	32 33 34

(b)	transfer from the Initial River Murray Increased Flows Account to the River Murray Increased Flows in Commission Storages Account, River Murray Above Target Releases allocated to the River Murray Increased Flows in accordance with the Strategy;	1 2 3 4 5
(c)	record in the River Murray Increased Flows in Commission Storages Account the transfer of water in that account between Commission storages; and	6 7 8
(d)	record in the River Murray Increased Flows in Commission Storages Account the release of River Murray Increased Flows from Commission storages.	9 10 11
(3)	The River Murray Increased Flows Accounts must be independently audited unless the Commission by resolution declares otherwise.	12 13 14
(4)	As soon as practicable after the completion of each audit, the Commission must send a copy of the audited River Murray Increased Flows Accounts to the Contracting Governments.	15 16 17
22.	<i>Implementing the Strategy</i>	18
	The Commission must commence to implement the Strategy on the later of:	19 20
(1)	the beginning of the second complete Water Year occurring after the Corporatisation Date; and	21 22
(2)	the receipt by Hume Reservoir from the Snowy Scheme of River Murray Above Target Releases allocated to the River Murray Increased Flows.	23 24 25
23.	<i>Binding Effect of Strategy</i>	26
	Despite any other provision in this Agreement, the Commission must:	27 28
(1)	allocate River Murray Above Target Releases to the River Murray Increased Flows Accounts; and	29 30
(2)	manage the water in and releases of water from the River Murray Increased Flows in Commission Storages Account,	31 32 33
	in accordance with the Strategy.	34 35

PART VI: NOTIFICATION AND CONSULTATION PROVISIONS	1
	2
24. <i>Commission To Be Informed Of New Proposals</i>	3
A Contracting Government must inform the Commission of any proposal:	4
	5
(1) to achieve Water Savings or to purchase Water Entitlements for the purpose of transferring those Water Savings or Water Entitlements to the Environmental Entitlements; or	6
	7
	8
	9
(2) to modify the reliability of a supply of water pursuant to an Environmental Entitlement,	10
	11
in accordance with sub-clause 46(4) of the Agreement.	12
25. <i>Snowy Scheme Annual Water Operating Plan</i>	13
(1) The parties acknowledge that as a result of provisions in the Snowy Water Licence and a deed between the Commonwealth, New South Wales and Victoria as at the Corporatisation Date, the Licensee is bound to consult with others, including the Commission, while developing each Annual Water Operating Plan and any variation to each Plan.	14
	15
	16
	17
	18
	19
(2) The Commonwealth, New South Wales and Victoria must:	20
(a) ensure the direct participation by the Commission in each consultation referred to in sub-clause 25(1) or held under any varied consultation arrangements; and	21
	22
	23
(b) consult with the Commission before varying existing consultation arrangements.	24
	25
26. <i>Notifications Required</i>	26
(1) Each Contracting Government must, at the time specified by the Commission, notify the Commission of such water volumes and estimates as are reasonably requested by the Commission to enable it to make calculations referred to in this Schedule.	27
	28
	29
	30
(2) The Commission must, at any time specified by New South Wales, notify New South Wales of such water volumes and estimates calculated by the Commission by reference to the	31
	32
	33

Baseline Conditions as are reasonably requested by New South Wales, to enable New South Wales to calculate the Required Annual Release. 1
2
3
4

PART VII: ANALYTICAL MODELS 5
6

27. *Developing Analytical Models* 7

- (1) The Commission must develop an analytical model for determining, in the case of the River Murray System: 8
9
 - (a) storage volumes; and 10
 - (b) total diversions, 11
 that would have occurred under Baseline Conditions. 12
- (2) New South Wales must develop an analytical model for determining, in the case of the Murrumbidgee River System: 13
14
 - (a) storage volumes; and 15
 - (b) total diversions, 16
 that would have occurred under Baseline Conditions. 17
- (3) An analytical model developed under this clause: 18
 - (a) must be the best model available to the Commission or New South Wales, from time to time, for the purpose of calculating the timing and quantity of the Relaxation Volume under Baseline Conditions; and 19
20
21
22
 - (b) must be tested against relevant historical data to determine the accuracy of the model. 23
24
- (4) New South Wales may at its own cost engage an independent auditor to evaluate whether the model developed under sub-clause 27(1) of this Schedule is: 25
26
27
 - (a) the best available to the Commission; and 28
 - (b) accurate. 29
30

PART VIII: OTHER PROVISIONS

	1
	2
28. <i>Inter-Valley Water Transfers</i>	3
(1) To facilitate water transfers, the Commission may request New South Wales to release:	4
	5
(a) Water Available to the Snowy-Murray Development to each or both of the Tumut River catchment and the Murrumbidgee River catchment; or	6
	7
	8
(b) Water Available to the Snowy-Tumut Development to the River Murray catchment upstream of Hume Dam.	9
	10
(2) If New South Wales agrees with the request made under sub-clause 28(1) of this Schedule, any inter-valley transfer referred to in sub-clause 28(1) must be converted into an allocation to New South Wales of water in Hume Reservoir.	11
	12
	13
	14