

SCHEDULE F
CAP ON DIVERSIONS

Purposes

1. The purposes of this Schedule are:
 - (a) to establish long-term caps on the volume of surface water used for consumptive purposes in river valleys within the Murray-Darling Basin (including, without limitation, water from waterways and distributed surface waters) in order to protect and enhance the riverine environment; and
 - (b) to set out action to be taken by the Ministerial Council, the Commission and State Contracting Governments to quantify and comply with annual diversion targets; and
 - (c) to prescribe arrangements for monitoring and reporting upon action taken by State Contracting Governments to comply with annual diversion targets.

Definitions

2. (1) In this Schedule, except where inconsistent with the context:

"baseline conditions" means:

 - (a) in the case of New South Wales and Victoria, means the level of water resource development for rivers within the Murray-Darling Basin as at 30 June 1994 determined by reference to:
 - (i) the infrastructure supplying water; and
 - (ii) the rules for allocating water and for operating water management systems applying; and
 - (iii) the operating efficiency of water management systems; and
 - (iv) existing entitlements to take and use water and the extent to which those entitlements were used; and
 - (v) the trend in the level of demand for water within and from the Murray-Darling Basin

at that date;

- (b) in the case of Queensland, means the conditions set out for each river valley in the Resource Operation Plan first adopted by the Government of Queensland in that river valley and published in the *Queensland Government Gazette*; and
- (c) in the case of the Australian Capital Territory, means the conditions proposed by the Government of that Territory and determined by the Ministerial Council on the recommendation of the Commission.

"Cap Register" means the Register referred to in sub-clause 13(7).

"designated river valley" means a river valley or water supply system referred to in, or designated under, sub-clause 3(1).

"diversions", with respect to a river valley, means the volume of surface water used for consumptive purposes determined in accordance with the formula entered in the Diversion Formula Register for that river valley.

"Diversion Formula Register" means the Register referred to in paragraph 4(1)(b).

"historical data" means data relevant to the period from 1 July 1983 to 30 June 1994, or such other period as the Commission may from time to time determine.

"river valley" means a river valley within the Murray-Darling Basin referred to in sub-clause 3(2).

"water year" in relation to a river valley or a water supply system means the relevant 12 month period applicable to the allocation of water entitlements and measurement of diversions in that river valley or water supply system.

- (2) In this Schedule:
 - (a) a reference to the "Government of a State" includes a reference to the Government of the Australian Capital Territory.
 - (b) a reference to a "State Contracting Government" includes a reference to the Government of the Australian Capital Territory.
 - (c) a reference to "State" includes Australian Capital Territory.

River Valleys and Designated River Valleys

- 3. (1) Subject to sub-clause 3(3), the river valleys or water supply systems listed in Appendix 1 are "designated river valleys" for the purposes of this Schedule.
- (2) Subject to sub-clause 3(3), the river valleys listed in Appendix 2 are "river valleys" for the purposes of this Schedule.

- (3) The Ministerial Council may, from time to time, on the recommendation of the Commission:
 - (a) amend the description of:
 - (i) any designated river valley described in Appendix 1; or
 - (ii) any river valley in Appendix 2;
 - (b) designate, for the purposes of this Schedule, any river valley or water supply system not referred to in Appendix 1; or
 - (c) add any river valley to those set out in Appendix 2.

Diversion Formula Register

4. (1) The Commission must:
 - (a) determine a formula for calculating diversions within each river valley for the purposes of this Schedule; and
 - (b) maintain a Diversion Formula Register which records each formula determined under paragraph (a) and the river valley to which the formula relates.
- (2) The Commission or States, as may be appropriate, must use the formula entered in the Diversion Formula Register with respect to a river valley for the purpose of:
 - (a) developing or approving any analytical model under clause 11;
 - (b) making any calculation under clause 12;
 - (c) preparing any report required under clause 13; and
 - (d) maintaining the Cap Register.
- (3) The Commission may from time to time amend:
 - (a) any formula determined under paragraph 4(1)(a); and
 - (b) any entry in the Diversion Formula Register.

Long-term diversion cap for New South Wales

5. (1) The Government of New South Wales must ensure that diversions within each designated river valley in New South Wales do not exceed diversions under baseline conditions in that designated river valley, as determined by reference to the model developed under sub-clause 11(4).
- (2) In calculating baseline conditions for the Border Rivers, allowance must be made for such annual volume as the Ministerial Council may, from time to time, determine in view of the special circumstances applying to Pindari Dam.

Long-term diversion cap for Victoria

6. (1) The Government of Victoria must ensure that diversions within each designated river valley in Victoria (including the upper River Murray) do not exceed diversions under baseline conditions in that designated river valley, as determined by reference to the model developed under sub-clause 11(4).
- (2) In calculating baseline conditions for either or both of the Goulburn/Broken/Loddon water supply system and the Murray Valley water supply system, allowance must be made for an additional 22 GL per year, or such other annual volume as the Ministerial Council may, from time to time, determine in view of the special circumstances applying to Lake Mokoan.

Long-term diversion cap for South Australia

7. (1) The Government of South Australia must ensure that diversions from the River Murray within South Australia:
 - (a) for water supply purposes delivered to Metropolitan Adelaide and associated country areas through the Swan Reach-Stockwell, Mannum-Adelaide and Murray Bridge-Onkaparinga pipeline systems do not exceed a total diversion of 650 GL over any period of 5 years;
 - (b) for Lower Murray Swamps irrigation do not exceed 94.2 GL per year;
 - (c) for water supply purposes for Country Towns do not exceed 50 GL per year; and
 - (d) for all other purposes do not exceed a long-term average annual diversion of 449.9 GL.
- (2) The Government of South Australia must ensure that:
 - (a) no part of any entitlement created in South Australia with respect to the diversion referred to in paragraph 7(1)(a) is either used, or transferred for use, for any purpose other than use in Metropolitan Adelaide and associated country areas; and
 - (b) at least 22.2 GL of the diversion referred to in paragraph 7(1)(b) is reserved for environmental purposes and is not transferred,unless the Ministerial Council determines otherwise.
- (3) If the Government of South Australia supplies any of the diversions referred to in paragraph 7(1)(d) through the Swan Reach-Stockwell, Mannum-Adelaide and Murray Bridge-Onkaparinga pipeline systems in any year, it must:
 - (a) record the volume of water so delivered for that purpose in that year; and
 - (b) account for that volume against the long-term average annual diversion referred to in paragraph 7(1)(d), when monitoring and reporting to the Commission under clause 13.

Long-term diversion cap for Queensland

8. The Government of Queensland must ensure that diversions from each designated river valley in Queensland do not exceed diversions under baseline conditions in that designated river valley, as determined by reference to the model determined under sub-clause 11(4).

Long-term diversion cap for the Australian Capital Territory

9. The Government of the Australian Capital Territory must ensure that diversions from the designated river valley in the Australian Capital Territory do not exceed diversions under baseline conditions in that designated river valley, as determined by reference to the model developed under sub-clause 11(4).

Power of Commission to alter long-term diversion caps

10. (1) Subject to sub-clause 10(2) the Ministerial Council may, on the recommendation of the Commission, make protocols determining how the Commission may alter any long-term diversion cap referred to in this Schedule.
- (2) The Commission, from time to time:
- (a) must alter a long-term diversion cap to reflect the result of transferring water entitlements or allocations within a State or between States, in accordance with any protocols established under Schedule E; and
 - (b) may only alter a long-term diversion cap to account for environmental water under Cap in accordance with a protocol made under sub-clause 10(1).

Developing Analytical Models

11. (1) The Commission must develop analytical models for determining the annual diversion targets for the upper River Murray.
- (2) Subject to sub-clause 11(1), the Governments of New South Wales, Victoria, Queensland and the Australian Capital Territory must each develop analytical models for determining the annual diversion target for each designated river valley within the territory of that State.
- (3) The Government of South Australia must develop analytical models for determining the annual diversion target for diversions referred to in paragraph 7(1)(d).
- (4) An analytical model developed under this clause:
- (a) must simulate the long-term diversion cap in the relevant designated river valley; and
 - (b) must be tested against relevant historical data to determine the accuracy of the model in estimating the annual diversion; and
 - (c) must be approved by the Commission before it is used to determine an annual diversion target under this Schedule; and
 - (d) may, from time to time, be modified in such ways as the Commission may

approve; and

- (e) must be used to determine the average annual diversion under the conditions of the relevant long-term diversion cap determined under this Schedule for either:
 - (i) the period between the start of the 1891 water year and the end of the 1997 water year; or
 - (ii) such other period as may be approved by the Commission.
- (5) The Commission may only approve an analytical model or a modification to an analytical model if the Commission considers that the model, when approved or modified, will fairly determine the relevant annual diversion target given the climatic conditions experienced in any year.

Calculation of annual diversion targets

- 12. (1) Within two months after the end of the relevant water year and using the analytical models developed and approved under clause 11:
 - (a) the Commission must calculate the annual diversion targets for New South Wales and Victoria for that year for the upper River Murray; and
 - (b) subject to paragraph (a), the Governments of New South Wales, Victoria, South Australia, Queensland and the Australian Capital Territory must, for each designated river valley within the territory of that State, calculate the annual diversion target for that year.
- (2) The Commission must promptly inform the Governments of New South Wales and Victoria of the results of every calculation made under paragraph 12(1)(a) with respect to the upper River Murray.
- (3) The Government of New South Wales, Victoria, South Australia, Queensland and the Australian Capital Territory, respectively, must each promptly inform the Commission of the results of every calculation made by it under paragraph 12(1)(b).

Monitoring and Reporting

- 13. (1) Each State Contracting Government must, for each water year and in relation to each river valley specified in Appendix 2 within its territory, monitor and report to the Commission upon:
 - (a) diversions made within and to; and
 - (b) water entitlements, announced allocations of water and declarations which permit the use of unregulated flows of water within; and
 - (c) trading of water entitlements within, to or from,the territory of that State in that water year.

- (2) Each State Contracting Government must, for each water year and in relation to each designated river valley within its territory, monitor and report to the Commission upon:
 - (a) the compliance by that State with each relevant annual diversion target calculated under this Schedule for that water year; and
 - (b) such actions which the State proposes to take to ensure that it does not exceed the annual diversion targets calculated under this Schedule for every ensuing water year.
- (3) For the purpose of sub-clauses 13(1) and (2) the expression "river valley within its territory" in relation to Victoria, includes that portion of the upper River Murray forming the border between Victoria and New South Wales.
- (4) A report under sub-clause 13(1) or (2) must be given to the Commission within four months after the end of each relevant water year or by such other time as the Commission may determine.
- (5) on the basis of the calculations referred to in sub-clause 12(1) and reports given to it under sub-clauses 13(1) and (2) the Commission:
 - (a) must, in relation to each State Contracting Government, produce a water audit monitoring report which includes information about that Government's compliance with the annual diversion target calculated for each designated river valley in the territory of that State and for the whole of the State in the relevant water year; and
 - (b) may publish any such report, or a summary thereof, in such manner as it may determine.
- (6) A water audit monitoring report under sub-clause 13(4) must be produced by 31 December following the conclusion of each relevant water year, or by such other time as the Commission may determine.
- (7) The Commission must maintain a Cap Register which records:
 - (a) for each designated river valley; and
 - (b) for each State,

the cumulative difference between actual annual diversions and the annual diversion targets calculated under this Schedule.
- (8) The Cap Register must:
 - (a) for New South Wales, Victoria and South Australia, include information for every water year concluding after 1 November 1997; and
 - (b) for Queensland, include information about each designated river valley in every water year commencing after the Resource Operations Plan first adopted by the Government of Queensland for that designated river valley is published in the Queensland *Government Gazette*; and

- (c) for the Australian Capital Territory, include information about its designated river valley in every water year commencing after the Ministerial Council determines the baseline conditions for the Australian Capital Territory; and
 - (d) if cumulative actual diversions for any designated river valley or for any State are less than the cumulative annual diversion targets calculated under this Schedule, as the case requires, record the difference as a credit; and
 - (e) if cumulative actual diversions for any designated river valley or for any State are greater than the cumulative annual diversion targets calculated under this Schedule, as the case requires, record the difference as a debit.
- (9) The Commission must include a report on the operation of this Schedule in any report made to the Ministerial Council under clause 84 of the Agreement.

Appointment of Independent Audit Group

14. The Commission must appoint an Independent Audit Group for the purpose of this Schedule.

Annual audit by the Independent Audit Group

15. (1) The Independent Audit Group must, until 31 December 2009, annually audit the performance of each State Contracting Government in implementing the long-term diversion cap in each water year which concludes on or between 1 June 1999 and 1 November 2009.
- (2) The Commission may direct the Independent Audit Group to audit the performance of any State Contracting Government in implementing the long-term diversion cap in any water year concluding after 1 November 2009.
- (3) The Independent Audit Group must report to the Commission on any audit conducted under this clause.

Power to require a special audit of a designated river valley

16. If, after receiving a report from a State Contracting Government under sub-clause 13(2) for any year, the Commission calculates that either:
- (a) the diversion for water supply to Metropolitan Adelaide and associated country areas over the last five years has exceeded 650 GL; or
 - (b) the diversion in the Warrego, Paroo, Moonie or Nebine designated river valley has exceeded the annual diversion target for that valley, determined under paragraph 12(1)(b); or
 - (c) the cumulative debit recorded in the Cap Register exceeds 20 % of the average annual diversion determined under paragraph 11(4)(e) for a particular designated river valley within that State,

the Commission must direct the Independent Audit Group to conduct a special audit of the performance of that State Contracting Government in implementing the long-term diversion cap in the relevant designated river valley.

Special audit by Independent Audit Group

17. (1) In conducting a special audit under clause 16, the Independent Audit Group must consider:
 - (a) data on diversions and annual diversion targets recorded on the Cap Register; and
 - (b) data submitted by the relevant State Contracting Government, including, for example, data about areas under irrigation, storage capacities, crop production, irrigation technology and the conjunctive use of groundwater in the designated river valley; and
 - (c) the impact that policies implemented by the State Contracting Government may have on the expected pattern of annual diversions; and
 - (d) whether the diversion for all years on the Cap Register exceeds the diversion expected under the long-term diversion cap for those years, and
 - (e) any other matter which the Independent Audit Group considers relevant.
- (2) The Independent Audit Group must:
 - (a) determine whether the long-term diversion cap has been exceeded in the designated river valley; and
 - (b) report to the Commission on the special audit and advise the Commission of its determination within six months after a direction given under clause 16.

Declaration that diversion cap has been exceeded

18. If the Commission receives a report under sub-clause 17(2) which determines that a State has exceeded the long-term diversion cap in a designated river valley, the Commission must:
 - (a) forthwith declare that the State has exceeded the Murray-Darling Basin diversion cap; and
 - (b) report the matter to the next meeting of the Ministerial Council.

Advice to Ministerial Council on remedial actions

19. (1) The Government of a State referred to in paragraph 18(a) must report to the next Ministerial Council after a declaration is made under that paragraph, setting out:
 - (a) the reasons why diversions exceeded the Murray-Darling Basin diversion cap; and
 - (b) action taken, or proposed to be taken by it to ensure that cumulative diversions recorded in the Cap Register are brought back into balance with the cap; and

- (c) the period within the relevant model referred to in clause 11 predicts that the cumulative diversions recorded in the Cap Register will be brought back into balance with the cap.
- (2) The Government of a State that has been required to report to the Ministerial Council under sub-clause 19(1) must report to each subsequent meeting of the Ministerial Council on action taken, or proposed to be taken by it to ensure that cumulative diversions recorded in the Cap Register are brought back into balance with the cap, until the Commission revokes a declaration pursuant to sub-clause 19(3).
- (3) When the Commission is satisfied that a State in respect of which a declaration has been made under paragraph 18(a) has brought the cumulative diversions recorded in the Cap Register back into balance with the cap and is once more complying with the Murray-Darling Basin diversion cap in all respects, it must:
 - (a) revoke the declaration; and
 - (b) report that fact to the next meeting of the Ministerial Council.

APPENDIX 1

DESIGNATED RIVER VALLEYS

1. **New South Wales**

The New South Wales portion of the Border Rivers catchment, excluding the portion of the Gil Gil Creek below the Carole Creek confluence and the Boomi River below the Gil Gil Creek confluence.

The New South Wales portion of the following catchments:

Moonie, Big Warrnambool, the Culgoa/Birrie/Bokhara/Narran , Warrego, Paroo and Nebine.

Gwydir catchment, including the portion of the Gil Gil Creek below the Carole Creek confluence and the Boomi River below the Gil Gil Creek confluence.

Namoi catchment.

The Macquarie/Castlereagh/Bogan catchments.

The Barwon/Upper Darling river system and the Lower Darling river system, from the furthest upstream reach of the Menindee Lakes to the furthest upstream reach of the Wentworth Weir Pool.

Lachlan catchment.

Murrumbidgee catchment excluding that part of the Murrumbidgee River that flows through the Australian Capital Territory, its sub-catchments in that Territory and the Canberra Water Supply System..

The New South Wales portion of the Murray Valley including the portion of the Lower Darling influenced by the Wentworth Weir Pool.

2. **Queensland**

The portion of the Condamine and Balonne catchments in Queensland.

The portion of the Border Rivers catchment in Queensland.

The portion of the Moonie catchment in Queensland.

The portion of the Warrego catchment in Queensland.

The portion of the Paroo catchment in Queensland.

The portion of the Nebine catchment in Queensland.

3. **Victoria**

The Goulburn/Broken/Loddon water supply system.

The Campaspe/Coliban water supply system.

The Wimmera/Mallee water supply system.

The Victorian portion of the Murray Valley including the Kiewa and Ovens catchments.

4. **South Australia**

The pumps on the Murray within South Australia used to supply Metropolitan Adelaide and associated country areas.

Lower Murray Swamps irrigation.

Country Towns water use.

Water Use for All Other Purposes from the Murray within South Australia.

5 **Australian Capital Territory**

That part of the Murrumbidgee River that flows through the Australian Capital Territory, its sub-catchments in that Territory and the Canberra Water Supply System..

APPENDIX 2

RIVER VALLEYS

1. New South Wales

The portion of the Border Rivers catchment in New South Wales, excluding the portion of Gil Gil Creek below the Carole Creek confluence and the Boomi River below the Gil Gil Creek confluence.

The portion of the Moonie catchment in New South Wales.

The portion of the Big Warrnambool catchment in New South Wales.

The portion of the Culgoa/Birrie/Bokhara/Narran catchments in New South Wales.

The portion of the Warrego catchment in New South Wales.

The portion of the Paroo catchment in New South Wales.

That portion of the Nebine catchment in New South Wales.

Gwydir catchment, including the portion of Gil Gil Creek below the Carole Creek confluence and the Boomi River below the Gil Gil Creek confluence.

Namoi catchment.

The Macquarie/Castlereagh/Bogan water catchments.

The Barwon/Upper Darling river system.

Lower Darling river system from the furthest upstream reach of the Menindee Lakes to the furthest upstream reach of the Wentworth Weir Pool.

Lachlan catchment.

Murrumbidgee catchment excluding that part of the Murrumbidgee River that flows through the Australian Capital Territory, its sub-catchments in that Territory and the Canberra Water Supply System..

The New South Wales portion of the Murray Valley including the portion of the Lower Darling influenced by the Wentworth Weir Pool.

2. Queensland

The portion of the Condamine and Balonne catchments in Queensland.

The portion of the Border Rivers catchment in Queensland.

The portion of the Moonie catchment in Queensland.

The portion of the Warrego catchment in Queensland.

The portion of the Paroo catchment in Queensland.

The portion of the Nebine catchment in Queensland.

3. **Victoria**

Kiewa catchment.

Ovens catchment.

Goulburn catchment.

Broken catchment.

Campaspe catchment.

Loddon catchment.

Wimmera/Mallee catchment.

The Victorian portion of the Murray Valley catchment.

4. **South Australia**

The pumps on the Murray within South Australia used to supply Metropolitan Adelaide and associated country areas.

Lower Murray Swamps irrigation.

Country Towns water use.

Water use for All Other Purposes from the Murray within South Australia.

5. **Australian Capital Territory**

That part of the Murrumbidgee River that flows through the Australian Capital Territory, its sub-catchments in that Territory and the Canberra Water Supply System.