

This document contains the full text of “Schedule F – Cap on Diversions” to the *Murray-Darling Basin Agreement*. This is the Schedule agreed upon by the Murray-Darling Basin Ministerial Council at Meeting 29 – 25 August 2000.

## **SCHEDULE F**

### **CAP ON DIVERSIONS**

#### **Purposes**

1. The purposes of this Schedule are:
  - (a) to establish long-term diversion caps from rivers within the Murray-Darling Basin, 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. In this Schedule, except where inconsistent with the context:

**"baseline conditions"** means the level of water resource development for rivers within the Murray-Darling Basin as at 30 June 1994 determined by reference to:

- (a) the infrastructure supplying water; and
- (b) the rules for allocating water and for operating water management systems applying; and
- (c) the operating efficiency of water management systems; and
- (d) existing entitlements to take and use water and the extent to which those entitlements were used; and
- (e) the trend in the level of demand for water within and from the Murray-Darling Basin

at that date.

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

**"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.

**"Register"** means the Register referred to in sub-clause 11(7).

**"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.

### **River Valleys and Designated River Valleys**

3. (1) Subject to sub-clause 3(3), the river valleys or water supply systems listed at Schedule 1 are "designated river valleys" for the purposes of this Schedule.
- (2) Subject to sub-clause 3(3), the river valleys listed at Schedule 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 Schedule 1; or
    - (ii) any river valley in Schedule 2;
  - (b) designate, for the purposes of this Schedule, any river valley or water supply system not referred to in Schedule 1; or
  - (c) add any river valley to those set out in Schedule 2.

### **Long-term diversion cap for New South Wales**

4. (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 9(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**

5. (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 9(4).
- (2) In calculating baseline conditions for the Goulburn/Broken/Loddon and/or the Murray Valley water supply systems, 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**

6. (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 83.4 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 440.6 GL.
- (2) Subject to sub-clause 6(3), the Ministerial Council may alter the annual diversion cap set out in:
  - (a) paragraph 6(1)(b) after considering a submission from the Government of South Australia on the 1993/94 level of diversions for the purposes referred to in that paragraph; and
  - (b) paragraph 6(1)(c) after considering the outcome of modelling studies.
- (3) The Ministerial Council may only alter an annual diversion cap under sub-clause 6(2) in order to represent more accurately diversions under baseline conditions.

- (4) The Government of South Australia must ensure that no part of any entitlement created in South Australia with respect to the diversion referred to in paragraph 6(1)(a) is either used, or transferred for use, for any purpose other than use in Metropolitan Adelaide and associated country areas, unless the Ministerial Council determines otherwise.
- (5) If the Government of South Australia supplies any of the diversions referred to in paragraph 6(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 6(1)(d), when monitoring and reporting to the Commission under clause 11.

### **Long-term diversion cap for Queensland**

- 7. (1) The Government of Queensland must ensure that diversions from each designated river valley in Queensland do not exceed such long-term diversion caps as may be fixed by the Ministerial Council on the recommendation of the Commission.
- (2) Until December 2002 –
  - (a) a long-term diversion cap fixed under sub-clause 7(1) may be expressed in terms of a long-term pattern of flow to be maintained at the end of a designated river valley; and
  - (b) if the long-term diversion cap is so expressed, in order to determine whether the cap has been complied with in Queensland:
    - (i) the expressions “diversion” or “diversions” occurring in clauses 9-17 must be read as if they referred to “end-of-valley flow” or “end-of-valley flows” respectively; and
    - (ii) the expression “credit” in paragraph 11(8)(b) must be read as if it referred to “debit”; and
    - (iii) the expression “debit” in paragraph 11(8)(c) must be read as if it referred to “credit”.
- (3) On or before 30 June 2000, the Government of Queensland will prepare and publish water management plans and water allocation management plans for all river valleys in Queensland.
- (4) After considering the plans referred to in sub-clause 7(3), the Commission must make the recommendations referred to in sub-clause 7(1).

### **Power of Ministerial Council to alter long-term diversion caps**

8. A long-term diversion cap referred to in clause 4, 5, 6 or 7 from time to time:
  - (a) must be altered by the Commission, to reflect the result of trading water entitlements within a State or between States; and
  - (b) may be altered by the Ministerial Council, on the recommendation of the Commission, for any other reason.

### **Developing Analytical Models**

9.
  - (1) The Commission must develop analytical models for determining the annual diversion targets for the upper River Murray.
  - (2) Subject to sub-clause 9(1), the Governments of New South Wales, Victoria and Queensland 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 6(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 clause 4, 5, 6 or 7 for either:
      - (i) the period between the start of the 1891 water year and the end of the 1997 water year; or
      - (ii) such a lesser 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**

10. (1) Within two months after the end of the relevant water year and using the analytical models developed and approved under clause 9:
- (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 and Queensland 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 10(1)(a) with respect to the upper River Murray.
- (3) The Government of New South Wales, Victoria, South Australia and Queensland, respectively, must each promptly inform the Commission of the results of every calculation made by it under paragraph 10(1)(b).

### **Monitoring and Reporting**

11. (1) Each State Contracting Government must, for each water year and in relation to each river valley specified in Schedule 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 11(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 11(1) or (2) must be given to the Commission within two months of 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 10(1) and reports given to it under sub-clauses 11(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 11(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 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 Register must:
  - (a) include information about every water year concluding after:
    - (i) 1 November 1997 for each State other than Queensland; and
    - (ii) for Queensland, a date determined by the Ministerial Council when it fixes long-term diversion caps under sub-clause 7(1); and

- (b) 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
  - (c) 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**

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

### **Annual audit by the Independent Audit Group**

13. (1) The Independent Audit Group must, until 31 December 2004, 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 2004.
- (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 2004.
- (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**

14. If, after receiving a report from a State Contracting Government under sub-clause 11(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 cumulative debit recorded in the Register exceeds 20 % of the average annual diversion determined under paragraph 9(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**

15. (1) In conducting a special audit under clause 14, the Independent Audit Group must consider:
- (a) data on diversions and annual diversion targets recorded on the 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 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 14.

### **Declaration that diversion cap has been exceeded**

16. If the Commission receives a report under sub-clause 15(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**

17. (1) The Government of a State referred to in sub-clause 16(a) must report to the next Ministerial Council after a declaration is made under that sub-clause, 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 Register are brought back into balance with the cap; and
  - (c) the period within the relevant model referred to in clause 9 predicts that the cumulative diversions recorded in the 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 17(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 Register are brought back into balance with the cap, until the Commission revokes a declaration pursuant to sub-clause 17(3).
- (3) When the Commission is satisfied that a State in respect of which a declaration has been made under paragraph 16(a) has brought the cumulative diversions recorded in the 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.

## Schedule 1

### Designated River Valleys

1. New South Wales

The New South Wales portion of the Border Rivers.

The New South Wales portion of the following river valleys

Moonie, Big Warrambool, the Culgoa/Birrie/Bokhara/Narran water supply system, Warrego, Paroo.

Gwydir.

Namoi.

The Macquarie/Castlereagh/Bogan water supply system.

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

Lachlan.

Murrumbidgee.

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 Condamine/Balonne water supply system.

The portion of the Border Rivers in Queensland.

The portion of the Moonie in Queensland.

The portion of the Warrego in Queensland.

The portion of the Paroo in Queensland.

3. Victoria

The Goulburn/Broken/Loddon water supply system.

Campaspe

The Wimmera/Mallee water supply system.

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

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.

All other uses of water from the Murray within South Australia.

5. In this Schedule, "Border Rivers" has the same meaning as in the Border Rivers Agreement between New South Wales and Queensland.

## **Schedule 2**

### **River Valleys**

1. New South Wales

The portion of the Border Rivers in New South Wales.

The portion of the Moonie in New South Wales.

The portion of the Big Warrambool in New South Wales.

The portion of the Culgoa/Birrie/Bokhara/Narran water supply system in New South Wales.

The portion of the Warrego in New South Wales.

The portion of the Paroo in New South Wales.

Gwydir.

Namoi.

The Macquarie/Castlereagh/Bogan water supply system.

The Barwon/Upper Darling water supply system.

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

Lachlan.

Murrumbidgee.

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 Condamine/Balonne water supply system.

The portion of the Border Rivers in Queensland.

The portion of the Moonie in Queensland.

The portion of the Warrego in Queensland.

The portion of the Paroo in Queensland.

3. Victoria

Kiewa.

Ovens.

Goulburn.

Broken.

Campaspe.

Loddon.

Wimmera/Mallee

The Victorian portion of the Murray Valley.

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.

All other uses of water from the Murray within South Australia.

5. In this Schedule, "Border Rivers" has the same meaning as in the Border Rivers Agreement between New South Wales and Queensland.