Question: NRM 01

Division/Agency: Natural Resource Management
Topic: Regional Investment Plans
Hansard Page: 125

Senator Siewert asked:

Senator SIEWERT—On what criteria are you assessing them?
Mr Smith—I do not think I have the detail but we can certainly provide that. Each evaluation has its own terms of reference and each one is turned specifically to the needs of that evaluation.

Answer:

Each of the ten national evaluations has it own terms of reference, which was approved by the Natural Heritage Ministerial Board during 2004-05. The terms of reference for each national evaluation are **attached** for the consideration of the Senate Rural and Regional Affairs and Transport Legislation Committee. The Evaluations are:

1. Biodiversity outcomes of regional investment;
2. Significant invasive species (weeds) outcomes of regional investment;
3. Current governance arrangements to support regional investment;
4. Salinity outcomes of regional investment;
5. Sustainable agriculture outcomes of regional investment;
6. Coastal, estuarine and marine outcomes of regional investment;
7. The impact of the national natural resource management (NRM) facilitator network;
8. The effectiveness of bilateral agreements between the Australian Government and state/territory governments for the regional component of the extension or the Natural Heritage Trust;
9. the Australian Government Envirofund; and
10. National Investment Stream of the Natural Heritage Trust.

Each evaluation is oversighted by a Steering Committee comprising Australian and State Government officials, regional body representatives and subject matter experts. Significant progress has been made towards the finalisation of eight of the evaluations. These eight evaluations are expected to be completed by December 2005. The Coastal, Estuarine and Marine outcomes of Regional Investment evaluation and the Impact of the National Natural Resource Management Facilitator Network evaluation, are expected to be completed by April and June 2006, respectively.

[NRM 01 attachment - not included. Available from the committee secretariat on request.]

Question: NRM 02

Division/Agency: Natural Resource Management
Topic: National Market -based Instruments Pilot Program review
Hansard Page: 127

Senator Siewert asked:

Is that review publicly available?

Answer:

A copy of the National Market-based Instruments Pilot Program review is attached for the consideration of the Senate Rural and Regional Affairs and Transport Legislation Committee.

[NRM 02 attachment - not included. Available from the committee secretariat on request.]

Question: NRM 03

Division/Agency: Natural Resource Management
Topic: Rangelands
Hansard Page: 127

Senator Siewert asked:

Can you tell me how much money has been allocated across Australia to rangelands? …I am particularly interested in Western Australia. But I would be interested to know the level of investment in rangelands across the board.

Answer:

For the Natural Resource Management regions classified as predominantly Rangelands across Australia the following Australian Government funds has been approved to 20 November 2005:

- Approximately $113 million under the regional component of the Natural Heritage Trust from 2002-03 to 2007-08; and
- Approximately $1 million under the National Action Plan for Salinity and Water Quality from 2000-01 to 2007-08.

Rangelands constitute 623 million hectares of the Australian mainland. The boundary for Australian Rangelands does not correspond to the natural resource management

regional boundaries used for the delivering the National Action Plan for Salinity and Water Quality and the regional component of the Natural Heritage Trust.

Thirteen of the fifty-six Natural Resource Management regions have greater than 75 per cent of their area classified as Rangelands. These thirteen natural resource management regions represent 95 per cent of the total area of Rangelands across Australia. All projects in these thirteen regions that have been allocated funds though the National Action Plan for Salinity and Water Quality or through the regional component of the Natural Heritage Trust, have been included in this response.

In Western Australia, the Rangelands Natural Resource Management region has, to 20 November 2005, approved;

- Approximately $15 million through the regional component of the Natural Heritage Trust; and
- $511,040 to the Ord region under the National Action Plan for Salinity and Water Quality.

The Ord is a priority region under the National Action Plan for Salinity and Water Quality. It is a cross-border region between Western Australian Rangelands Natural Resource Management region and the Northern Territory Natural Resource Management region and is classified as 99.7 per cent Rangeland.

Question: NRM 04

Division/Agency: Natural Resource Management
Topic: Murray-Darling Basin Flows and Diversions
Hansard Page: 129

Senator Heffernan asked:

I would be grateful if you could supply the committee with some information on annual flows, peak flows, peak diversions (within the Murray-Darling Basin) - whatever you think would be useful.

Answer:

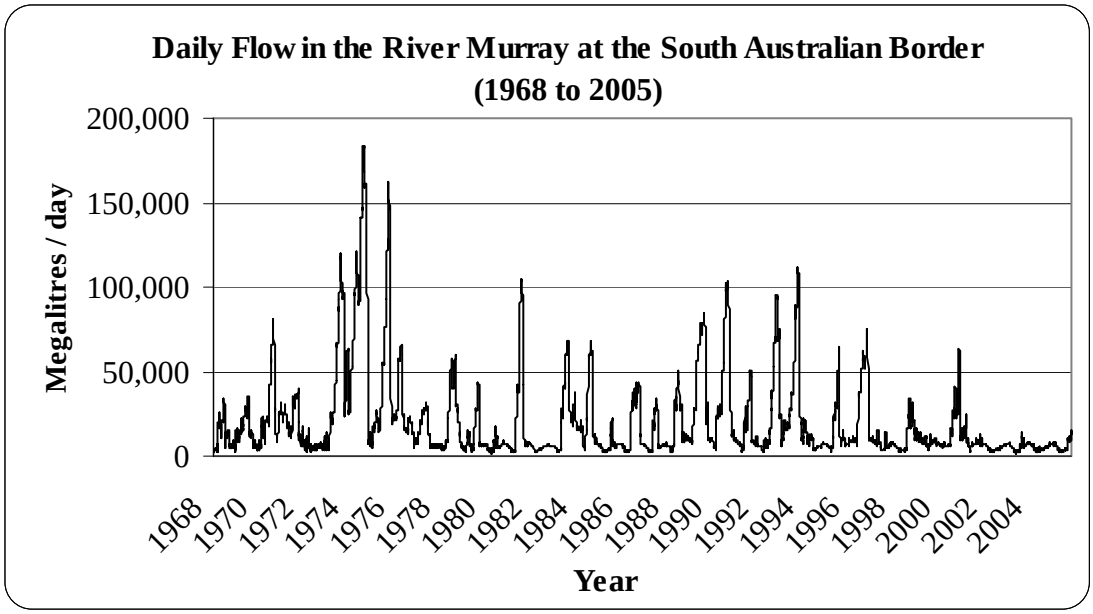
The run-off of water into streams in the Murray-Darling Basin averages 23,850 gigalitres[1] (GL) per year[2]. Another 1,196 GL is on average transferred from the Snowy River Catchment into the Murray-Darling Basin annually[3]. Of the surface

References
[1] One gigalitre = one billion litres.
[2] National Land and Water Audit, 2000.
[3] Average inter-basin transfers from modelled output from Snowy Hydro Limited and historical data from Wimmera-Mallee Water.

water available in streams, an average of 11,576 GL is diverted for consumptive purposes each year[4].

Stream flows within the Murray-Darling Basin show a substantial amount of variation from year to year. For example, Figure 1 illustrates the daily flow of the River Murray at the South Australian border from 1968 to 2005[5] (the period when gauging stations have been installed). It shows numerous peaks greater than 50,000 megalitres/day coinciding with flood events, interspersed with extended periods of low and moderate flow. Modelled natural flows over the same period (not shown) illustrate even more variability, demonstrating how the various dams and weirs have had the effect of smoothing out some of the natural fluctuations in flow.

Figure 1



Stream flows in the Darling River also show a substantial amount of variation from year to year. Figure 2 illustrates the daily flow of the Darling River at Bourke Town from 1968 to 2005[6].

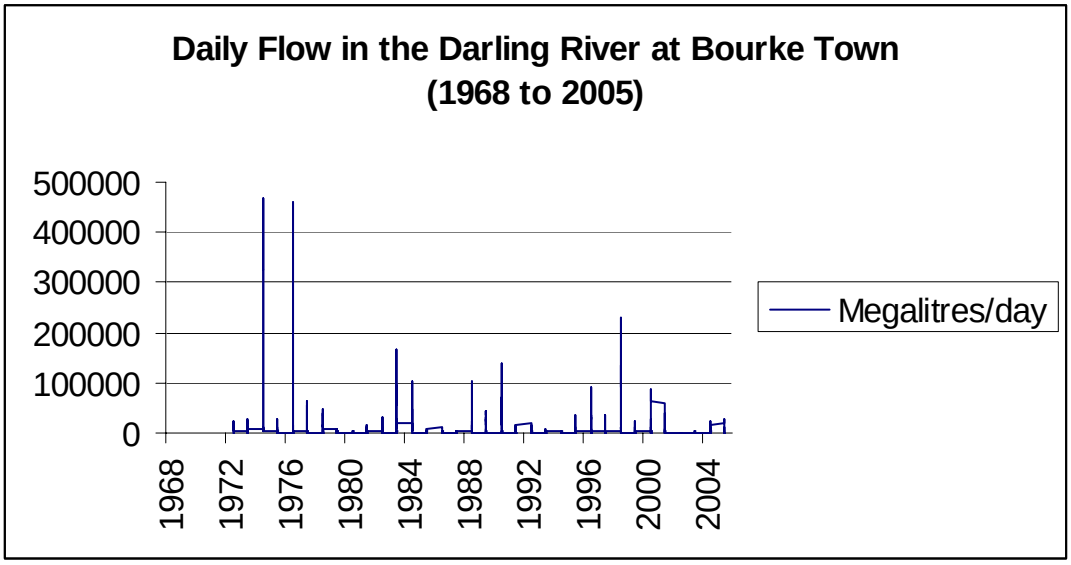
[4] Murray-Darling Basin Water Resources Fact Sheet, Murray-Darling Basin Commission Website - average surface water use uses Cap figures from annual Water Audit Monitoring Reports beginning in 1997/98, and average surface water use over five years 1997/98 to 2001/02 where Cap figures not available.

References

[5] Data provided by the Murray-Darling Basin Commission. This represents the period when daily records of river flows have been reliably recorded.

[6] Data provided by Department of Natural Resources (NSW) Daily River Report on the internet at www.waterinfo.nsw.gov.au/drr/index.html.

Figure 2



Diversions of water in the Murray-Darling Basin may vary substantially between years depending on the prevailing climatic conditions and associated inflows. Figure 3 illustrates Basin diversions between 1983/84 and 2003/04[7]. It shows that diversions have varied by as much as 4,800 GL between years (1996/97 vs. 2002/03) and that there have been relatively low levels of diversions in the last two years, coinciding with the recent drought.

Diversions of water from the Murray-Darling Basin in Queensland between 1983/84 and 2003/04[8] are illustrated in Figure 4. This shows that while there is some variability from year to year, there is a general trend of increasing extractions. In 2003/04, diversions in Queensland peaked at 815 GL[9], representing about 9% of all Basin diversions for that year.

References

[7] Water Audit Monitoring Report 2003/04, Report of the Murray-Darling Basin Commission on the Cap on Diversions, June 2005.

[8] Water Audit Monitoring Report 2003/04.

[9] Water Audit Monitoring Report 2003/04.

Figure 3

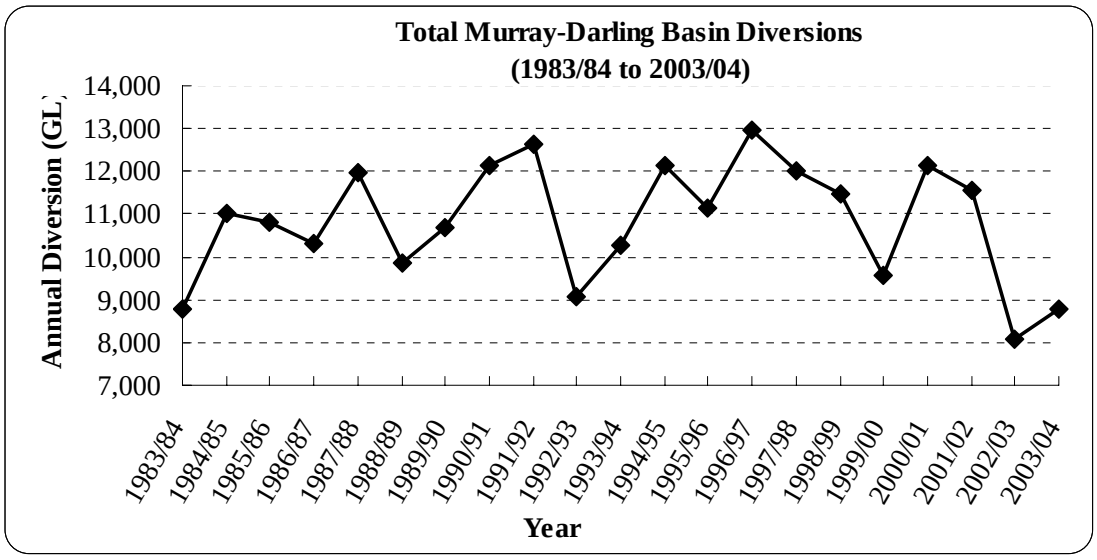


Figure 4