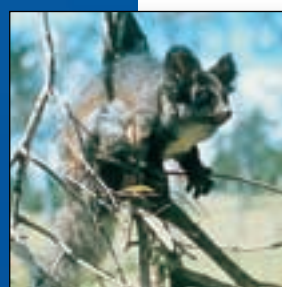
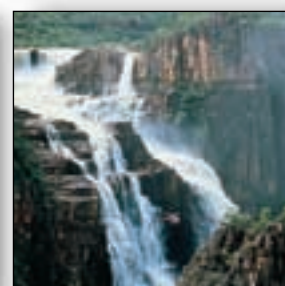
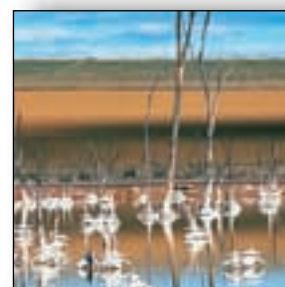




Environment Expenditure Local Government

Australia

2002-03



Environment Expenditure

Local Government

Australia

2002–03

Dennis Trewin
Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

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INTRODUCTION

BACKGROUND

This publication presents estimates of expenditures and revenues related to environment protection and natural resource management by local government authorities of Australia. The information is collected using an adaptation of an international framework known as the European System for the Collection of Economic Information on the Environment (SERIEE), which was developed in 1994 by the European Statistical Office (Eurostat).

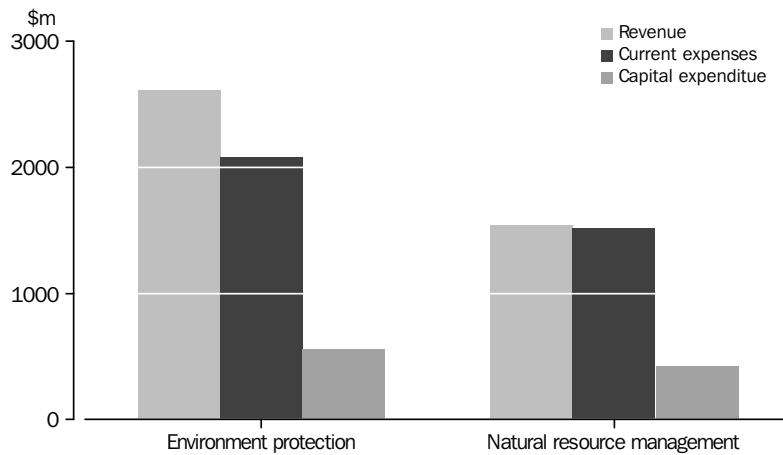
The collection was developed in response to requests by local governments, local government associations and others for national information on local government financial transactions related to managing the environment and natural resources. Such information is not available in a detailed form in Public Finance Statistics.

The estimates presented are useful to policy makers in state and Commonwealth governments, to local government associations, to local councils themselves as well as to any other parties interested in management of the environment by local government authorities. The estimates collected from 1997–98 until 2000–01, and in 2002–03 demonstrate that local government is a significant player in managing the nation's environment and natural resources.

This is the fifth time this survey has been conducted in Australia. The ABS welcomes feedback from readers regarding the usefulness, range and quality of the data presented and explanations provided. Please send any comments to the Director, Environment and Energy Business Statistics Centre, Australian Bureau of Statistics, GPO Box 66, Hobart, TAS 7001.

ENVIRONMENT
TRANSACTIONS

1.1 LOCAL GOVERNMENT ENVIRONMENT TRANSACTIONS—2002-03



Environment protection

Environment protection activities are those that prevent, reduce or eliminate pressures on the environment arising from social and economic activities. They also cover activities aimed at repairing or restoring damage to the environment after it has occurred.

- Local government received over \$2.6b in revenue for environment protection activities. This amounted to 13% of total revenue for councils in Australia and was mainly revenue from rates (\$2.1b).
- Queensland received the most revenue (\$1b) of all states for environment protection activities.
- Environment protection expenditure was over \$2.6b, which comprised just over \$2.1b in current expenditure and \$558m in capital expenditure.
- There was a revenue shortfall of \$28m, which was 83% less than the shortfall in 2000-01 as councils move towards balancing revenue and expenditure for environment protection.
- New South Wales had the highest level of environment protection expenditure, with current expenditure of \$839m and capital expenditure of \$193m.

Natural resource management

Natural resource management activities include the management, allocation and efficient use of natural resources (trees, land, water, quarrying materials). Also included are activities associated with the recreational use of the environment, such as the management of parks, beaches and reserves.

- Over \$1.5b was received by councils for natural resource management activities. This amounted to 8% of councils' total revenue.
- Queensland has the highest level of natural resource management revenue (\$940m) and expenditure (\$542m of current expenditure and \$149m of capital expenditure).

Natural resource management continued

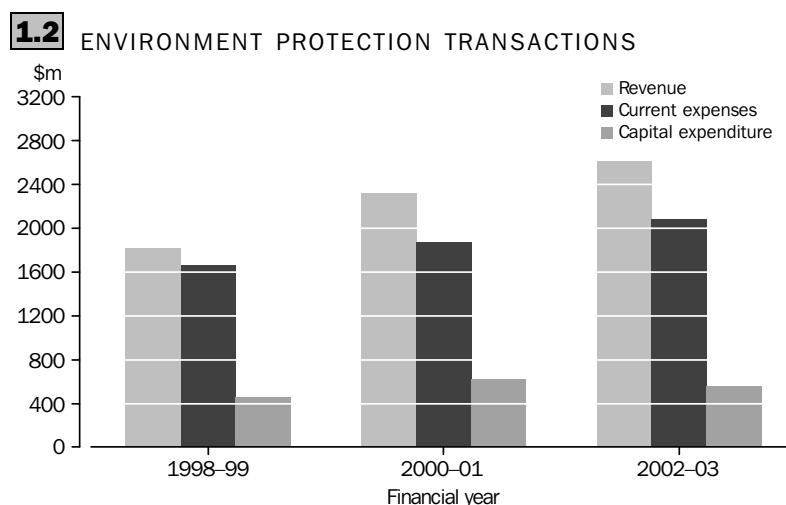
- Natural resource management current expenditure (\$1.5b) and natural resource management capital expenditure (\$422m) were 8% and 9% of councils' total current and capital expenditure respectively.
- The revenue shortfall for natural resource management (\$396m) was significantly higher than for environment protection activities. This was a 9% decrease from the 2000–01 natural resource management revenue shortfall of \$433m.

Other

- Medium sized councils (resident population of 10,000–39,999) spent more per capita on environment protection activities (\$121 of current expenditure and \$37 of capital expenditure) than small (population of less than 10,000) or large councils (population greater than 40,000). Small councils spent more per capita on natural resource management activities (\$115 of current expenditure and \$31 of capital expenditure) than medium sized or large councils.
- Small and medium sized councils had greater expenditure than revenue for both environment protection and natural resource management activities while large councils had greater expenditure than revenue for natural resource management activities.
- State governments contributed \$105m to local government for environment protection activities and \$46m for natural resource management activities. Commonwealth government contributed \$29m to local government for environment protection activities and \$11m for natural resource management activities. The bulk of government funding was for waste water management activities (\$70m or 53% of government contributed environment protection funding) and water supply activities (\$33m or 58% of natural resource management funding).

Time series

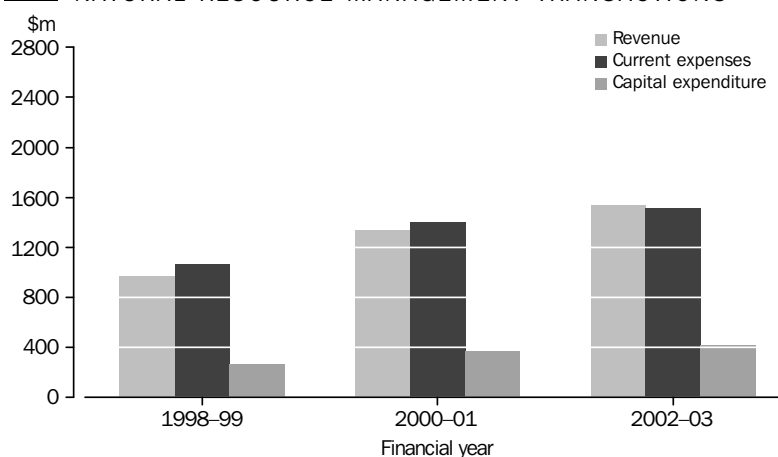
Graphs 1.2 and 1.3 and table 1.4 show the environment protection and natural resource management revenue and expenditure for the financial years, 1998–99, 2000–01 and 2002–03.



Time series continued

The time series for environment protection demonstrates that councils are maintaining the relativity between revenue and current expenses, whereby revenue exceeds current expenditure. Revenue and current expenses increased 12% and 11% respectively between 2000–01 and 2002–03. A 16% decrease in capital expenditure for waste water, from \$447m to \$376m, was reflected in a 9% decrease in total capital expenditure for environment protection.

1.3 NATURAL RESOURCE MANAGEMENT TRANSACTIONS



The time series for natural resource management reflects a move towards balancing current expenditure with revenue. However, depreciation was included in the 1998–99 expenses, but excluded for the later years. Between 2000–01 and 2002–03, revenue increased by 15% (from \$1.3b to \$1.5b) whereas current expenditure increased by just over half that rate (from \$1.4b to 1.5b). Capital expenditure increased 14%, from \$370m to \$422m, mainly as a result of a \$25m increase in capital expenditure each for water supply and land management.

1.4 FINANCIAL TRANSACTIONS (a)(b), By account

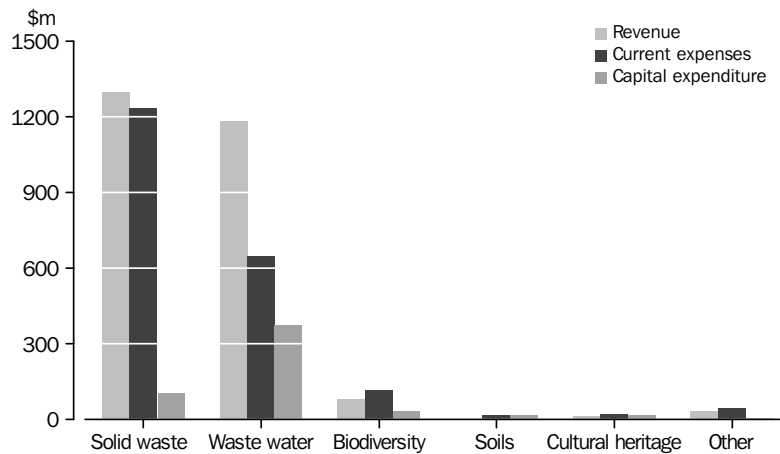
	<i>Environmental protection</i>	<i>Natural resource management</i>
	\$m	\$m
.....		
1998–99		
Revenue		
Rates from household and industry	1 639	866
Government funding	138	38
Other	37	63
<i>Total</i>	<i>1 813</i>	<i>966</i>
Current expenses		
Wages and salaries	380	399
Operational expenses(c)	1 286	664
<i>Total</i>	<i>1 665</i>	<i>1 063</i>
Capital expenditure		
Net acquisitions	150	102
Capital works	311	166
<i>Total</i>	<i>461</i>	<i>268</i>
.....		
2000–01		
Revenue		
Rates from household and industry	1 967	1 079
Government funding	169	62
Other	191	197
<i>Total</i>	<i>2 327</i>	<i>1 338</i>
Current expenses		
Wages and salaries	401	491
Operational expenses(c)	1 474	910
<i>Total</i>	<i>1 875</i>	<i>1 401</i>
Capital expenditure		
Net acquisitions	195	99
Capital works	422	271
<i>Total</i>	<i>616</i>	<i>370</i>
.....		
2002–03		
Revenue		
Rates from household and industry	2 096	1 309
Government funding	133	57
Other	386	173
<i>Total</i>	<i>2 614</i>	<i>1 538</i>
Current expenses		
Wages and salaries	455	581
Operational expenses(c)	1 630	931
<i>Total</i>	<i>2 084</i>	<i>1 512</i>
Capital expenditure		
Net acquisitions	262	193
Capital works	296	229
<i>Total</i>	<i>558</i>	<i>422</i>

-
- (a) Caution is advised when comparing between years due to changes in the survey questionnaire design.
- (b) Where figures have been rounded, discrepancies may occur within totals.
- (c) Depreciation is included for 1998–99 only.

ENVIRONMENT
PROTECTION
TRANSACTIONS

Council revenue for environment protection activities was over \$2.6b (13% of councils' total revenue). Current expenditure for environment protection, mainly wages, salaries and payments to contractors, accounted for \$2.1b (12% of councils' total current expenditure). Capital expenditure on new assets for environment protection amounted to \$558m, (12% of councils' total capital expenditure). The majority of environment protection revenue and expenditure was for solid waste and waste water management activities (95% of environment protection revenue, 90% of environment protection current expenses and 86% of environment protection capital expenditure).

2.1 ENVIRONMENT PROTECTION—2002–03



Revenue

Revenue for environment protection activities in 2002–03 was \$2.6b, an increase of 12% on the 2000–01 figure. Just over 80%, or \$2b, of all environment protection revenue was from rates collection.

Councils collected \$1b in revenue from rates for each of the categories of solid waste management activities and waste water management.

State and Commonwealth government funding of environment protection activities contributed 5% (\$133m) of total environment protection revenue. This was a decrease of \$36m (21%) from 2000–01.

The majority of government funding was provided for waste water management and conservation of biodiversity and habitat.

Expenditure

Total environment protection current expenditure was \$2b, an 11% increase on the 2000–01 figure. Operational expenditure comprised the majority of current expenditure for environment protection (58% or \$1.2b).

Expenditure continued

Current expenditure was primarily for solid waste management (\$1.2b) and waste water management (\$645m).

Over 54% of total current expenditure for solid waste management activities was payments to contractors (\$661m). Wages and salaries for solid waste management amounted to \$176m.

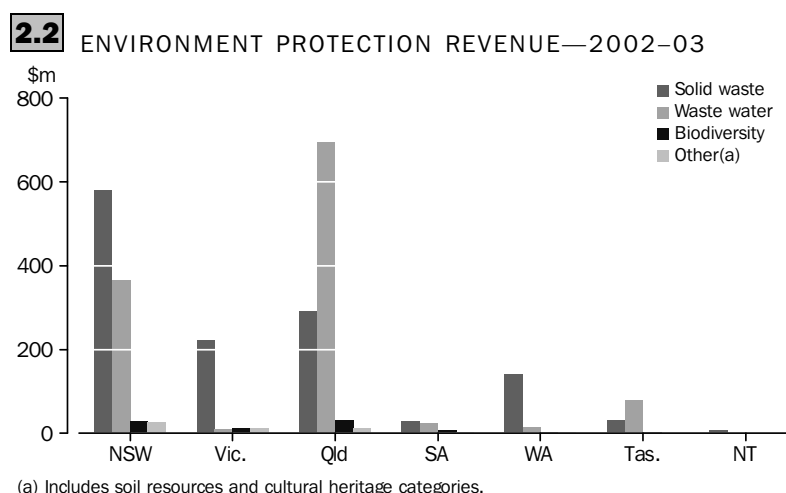
Expenditure on materials of \$205m was the largest current environment expenditure for waste water and represented a 4% increase on 2000–01. Other significant current expenditure for waste water management included wages and salaries (\$189m) and other expenditure (\$142m). Current expenditure on conservation of biodiversity and habitat was \$118m, 6% of total environment protection expenditure in 2002–03.

Payments to government for environment protection activities were \$56m. Payments to government for solid waste management contributed \$40m, or 71% of total government payments for environment protection.

Environment protection capital expenditure was \$558m, a decrease of 9% on 2000–01. Nearly 67% of capital expenditure on environment protection was attributable to waste water management activities.

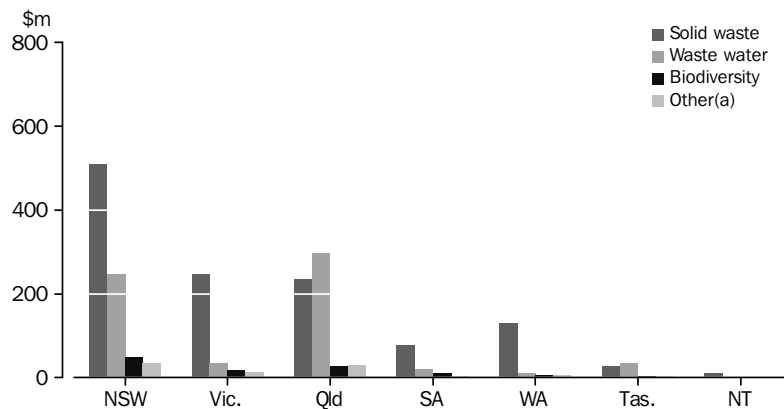
State estimates

Local governments in Australia do not always have the same responsibilities, and this is reflected in the varying levels of revenue and expenditure between states. For example, Queensland and Tasmanian councils tend to have responsibility for sewage treatment. In other states, a combination of councils and other state agencies have this responsibility. Sewage treatment is capital intensive, and depreciation is a significant expense item. As depreciation expense is excluded from the survey for 2002–03, survey revenue will significantly exceed survey expenses.



State estimates
continued

2.3 ENVIRONMENT PROTECTION CURRENT EXPENDITURE—2002-03



(a) Includes soil resources and cultural heritage categories.

Revenue for environment protection was greatest in Queensland and New South Wales. These two states comprised 77% of total revenue for environment protection activities, and also had the highest expenditure (68% of total current environment protection expenditure for Australia).

Queensland councils received \$1b in total revenue for environment protection, which was the most received by any state. Queensland also had the largest environment protection capital expenditure (\$238m). New South Wales exceeded Queensland in environment current expenditure, recording \$839m.

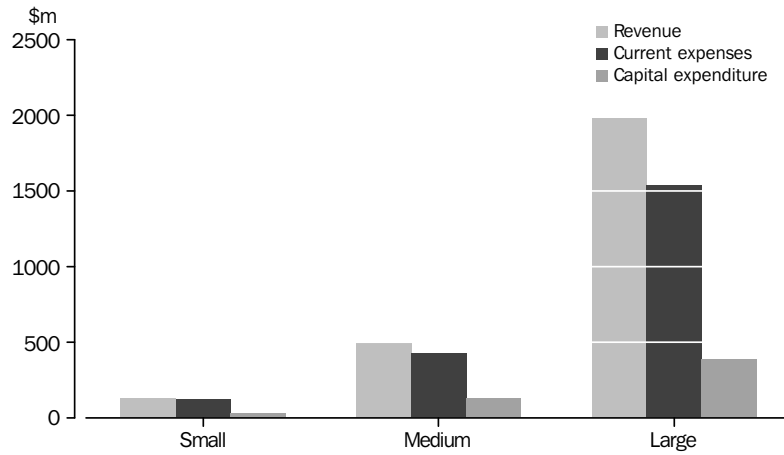
Queensland had the largest revenue per capita (\$277), mainly from waste water revenue (\$187 per capita). Tasmania had the second highest per capita revenue (\$233). South Australian councils received the least revenue per capita (\$40) for environment protection.

Queensland had the largest per capita environment protection current expenditure (\$158). Tasmania had the second highest per capita current expenditure (\$146) and the largest per capita capital expenditure (\$66). The Northern Territory spent the least per capita on environment protection current expenditure (\$56) and capital expenditure (\$1).

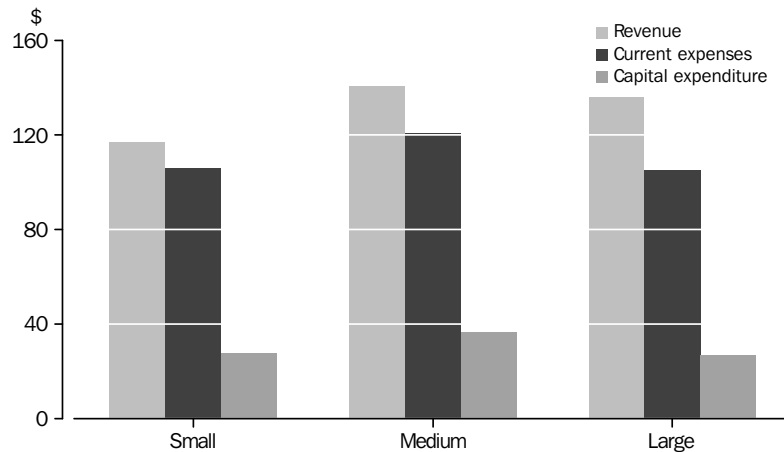
Solid waste management was the dominant environment protection activity in all states except Tasmania and Queensland. While Tasmanian and Queensland councils also had significant solid waste responsibilities, waste water management and water protection activities were the dominant environment protection activities undertaken by councils in these two states.

Council size

2.4 ENVIRONMENT PROTECTION EXPENDITURE, By council size—2002–03



2.5 ENVIRONMENT PROTECTION PER CAPITA, By council size—2002–03



Graph 2.4 and Table 2.8 show that councils with a large resident population (greater than 40,000) received \$2b, or 76% of total revenue for environment protection revenue for 2002–03. Medium sized councils received \$500m, representing 19%, and councils with small populations received \$134m, or 5%.

The large sized councils serviced 76% of the survey population, medium sized councils 18% and small councils 6%. See paragraph 18 in the Explanatory Notes for the classification of council sizes.

Graph 2.5 shows that, on a per capita basis, medium sized councils received more revenue, and spent more, on environment protection activities than other councils.

2.6 ENVIRONMENT PROTECTION (a), By category—2002–03

	Waste water	Solid waste	Biodiversity and habitat	Soil resources	Cultural heritage	Other	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Revenue							
Rates from household and industry	1 008.0	1 013.7	45.0	*1.1	0.9	27.4	2 096.1
Government funding							
Specific subsidies	16.8	8.9	23.5	^ 1.3	3.9	4.7	59.1
Investment grants	53.0	4.1	6.7	*0.7	6.2	2.9	73.6
Other revenue	104.3	272.0	5.6	0.4	2.7	0.7	385.6
<i>Total</i>	<i>1 182.1</i>	<i>1 298.8</i>	<i>80.8</i>	<i>^ 3.5</i>	<i>13.7</i>	<i>35.6</i>	<i>2 614.4</i>
Current expenses							
Wages and salaries	188.9	176.2	49.7	5.7	8.6	25.5	454.5
Operational expenditure							
Contractors	102.6	660.6	26.6	6.8	8.1	7.1	811.9
Government payments	6.4	40.0	8.9	—	^ 0.1	*0.9	56.3
Materials	204.8	112.8	19.1	4.0	3.1	5.7	349.5
Other expenses	142.1	244.4	13.4	2.3	2.8	7.0	412.1
<i>Total</i>	<i>644.8</i>	<i>1 234.1</i>	<i>117.7</i>	<i>18.8</i>	<i>22.7</i>	<i>46.3</i>	<i>2 084.4</i>
Capital expenditure							
Net acquisitions	187.7	49.9	15.8	*0.8	5.0	3.1	262.3
Contracted payments	107.5	43.4	9.4	*0.9	9.3	*1.8	172.4
Own account work	81.2	^ 11.3	9.7	14.0	4.4	2.9	123.5
<i>Total</i>	<i>376.4</i>	<i>104.6</i>	<i>34.9</i>	<i>15.8</i>	<i>18.6</i>	<i>7.8</i>	<i>558.1</i>

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) Where figures have been rounded, discrepancies may occur within totals.

2.7 ENVIRONMENT PROTECTION, By state and category—2002–03

	Waste water	Solid waste	Biodiversity and habitat	Soil resources	Cultural heritage	Other	Total
REVENUE (\$ m)							
NSW	363.2	579.6	28.4	*2.5	5.2	17.6	996.6
Vic.	8.9	221.6	11.2	0.1	1.6	9.1	252.5
Qld	694.0	291.7	30.2	0.3	5.0	7.0	1 028.2
SA	24.1	27.7	6.3	*0.5	0.7	1.0	60.4
WA	**12.9	141.5	^1.8	**0.2	*0.9	*0.6	157.9
Tas.	78.7	28.7	^2.2	—	—	0.2	110.0
NT	0.2	7.9	0.6	—	0.2	—	9.0
Aust.	1 182.1	1 298.8	80.8	^3.5	13.7	35.6	2 614.4

	REVENUE PER CAPITA (\$)						
NSW	55	87	4	—	1	3	150
Vic.	2	46	2	—	—	2	52
Qld	187	79	8	—	1	2	277
SA	16	18	4	—	—	1	40
WA	**7	73	^1	—	—	—	82
Tas.	167	61	^5	—	—	1	233
NT	1	40	3	—	1	—	45
Aust.	60	66	4	—	1	2	133

	CURRENT EXPENSES (\$ m)						
NSW	247.2	509.0	48.8	4.9	7.4	22.1	839.4
Vic.	34.7	248.4	18.8	1.1	6.6	4.7	314.3
Qld	295.8	232.9	28.2	10.3	3.8	14.5	585.5
SA	21.2	77.3	9.7	^1.2	1.8	2.0	113.2
WA	*10.2	129.7	6.5	**1.0	^2.4	*2.3	152.0
Tas.	35.1	27.8	^4.5	0.4	0.5	0.7	68.9
NT	0.8	9.1	1.2	—	0.1	—	11.1
Aust.	644.8	1 234.1	117.7	18.8	22.7	46.3	2 084.4

	CURRENT EXPENSES PER CAPITA (\$)						
NSW	37	77	7	1	1	3	127
Vic.	7	51	4	—	1	1	65
Qld	80	63	8	3	1	4	158
SA	14	51	6	^1	1	1	75
WA	*5	67	3	**1	^1	*1	79
Tas.	74	59	^9	1	1	2	146
NT	4	46	6	—	—	—	56
Aust.	33	63	6	1	1	2	106

	CAPITAL EXPENDITURE (\$ m)						
NSW	132.6	39.0	14.1	^0.7	1.5	5.3	193.1
Vic.	20.0	16.7	3.9	^0.2	8.1	0.4	49.2
Qld	176.7	30.2	10.0	14.8	4.8	*1.5	237.9
SA	18.0	^2.2	^3.4	*0.1	2.1	0.5	26.4
WA	*4.9	^10.7	^2.7	—	*2.1	—	^20.4
Tas.	24.2	5.8	0.9	—	^0.1	0.1	31.1
NT	—	—	0.1	—	—	—	0.1
Aust.	376.4	104.6	34.9	15.8	18.6	7.8	558.1

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

2.7 ENVIRONMENT PROTECTION, By state and category—2002–03 *continued*

	Waste water	Solid waste	Biodiversity and habitat	Soil resources	Cultural heritage	Other	Total
CAPITAL EXPENDITURE PER CAPITA (\$)							
NSW	20	6	2	—	—	1	29
Vic.	4	3	1	—	2	—	10
Qld	48	8	3	4	1	—	64
SA	12	^1	^2	—	1	—	17
WA	*3	^6	^1	—	*1	—	^11
Tas.	51	12	2	—	—	—	66
NT	—	—	—	—	—	—	1
Aust.	19	5	2	1	1	—	28

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution * estimate has a relative standard error of 25% to 50% and should be used with caution
— nil or rounded to zero (including null cells)

2.8 ENVIRONMENT PROTECTION(a), Breakdown by size of council—2002–03

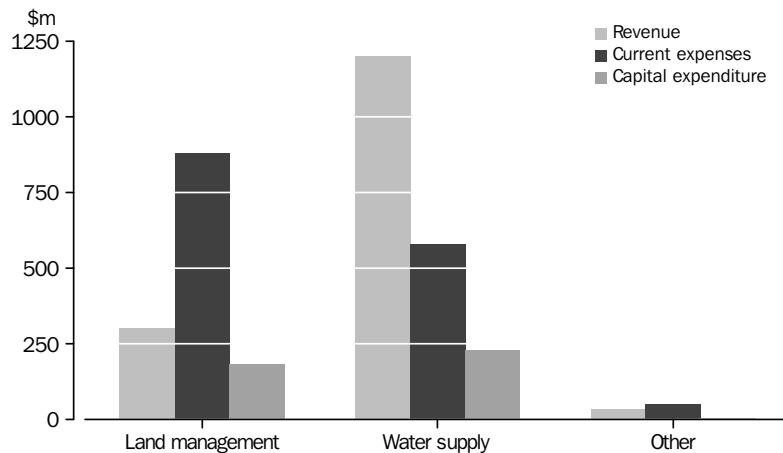
	Waste water	Solid waste	Biodiversity and habitat	Soil resources	Cultural heritage	Other	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
REVENUE							
Small	68.9	56.7	^6.2	na	na	^1.8	133.6
Medium	^224.7	256.1	^10.5	*1.7	4.2	^2.3	499.6
Large	888.4	986.0	64.1	1.8	9.4	31.6	1 981.3
Total	1 182.1	1 298.8	80.8	^3.5	13.7	35.6	2 614.4
CURRENT EXPENSES							
Small	43.9	59.9	12.3	na	na	*4.4	120.5
Medium	^139.8	249.5	22.2	^3.1	^5.7	^6.7	426.9
Large	461.1	924.7	83.3	15.8	17.0	35.2	1 537.0
Total	644.8	1 234.1	117.7	18.8	22.7	46.3	2 084.4
CAPITAL EXPENDITURE							
Small	23.3	^6.2	**1.2	na	na	^1.7	32.4
Medium	^96.3	^24.1	*3.5	**1.7	^5.8	**0.8	^132.3
Large	256.8	74.3	30.1	14.1	12.8	5.3	393.4
Total	376.4	104.6	34.9	15.8	18.6	7.8	558.1

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution na not available
* estimate has a relative standard error of 25% to 50% and should be used with caution (a) Small councils have population sizes less than 10,000, medium councils 10,000–39,999 and large councils greater than 40,000.
** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

NATURAL RESOURCE
MANAGEMENT
TRANSACTIONS

In 2002–03, councils received over \$1.5b (8% of councils' total revenue) for natural resource management. The majority of councils' resource management revenue came from water supply activities (78% of natural resource management revenue or \$1.2b). Current expenditure was \$1.5b (8% of councils' total current expenditure) and capital expenditure on resource management was \$422m (9% of councils' total capital expenditure). Total expenditure on resource management exceeded revenue by \$396m. Current expenditure on land management activities accounted for \$880m and water supply accounted for \$580m, which was 58% and 38% respectively of total resource management current expenditure. Water supply accounted for 55% (\$232m) of capital expenditure on natural resource management and land management accounted for 44% (\$184m).

3.1 NATURAL RESOURCE MANAGEMENT—2002–03



Revenue

Natural resource management revenue increased by 15% to \$1.5b between 2000–01 and 2002–03. Rates collection accounted for \$1.3b, which was 85% of all natural resource management revenue.

State and Commonwealth governments provided \$57m, or 4% of revenue for resource management. More information about Intergovernmental Transfers can be found in Chapter 4.

Expenditure

Total current expenditure on natural resource management increased by 8% to just over \$1.5b between 2000–01 and 2002–03. Operational expenditure (comprising payments to contractors, payments to government and materials) accounted for the majority of current expenditure for natural resource management (\$931m or 65%).

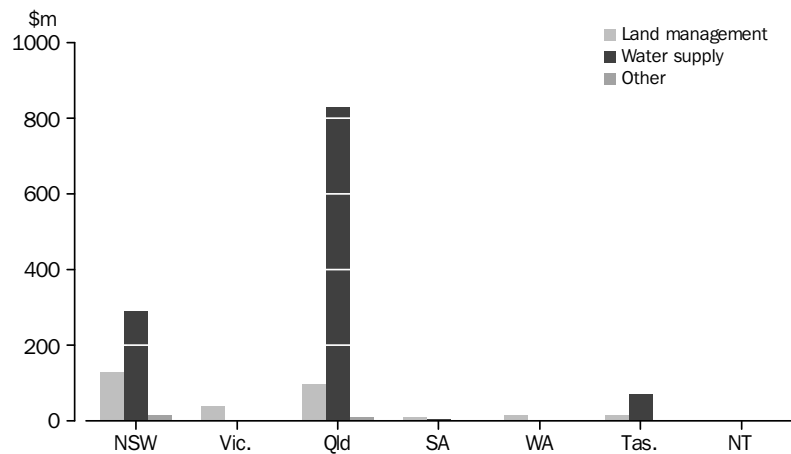
Expenditure continued

Total capital expenditure increased by 14% to \$422m from 2000–01 to 2000–03. Capital expenditure was highest for water supply activities, which accounted for \$232m, or 55% of the total capital expenditure for natural resource management.

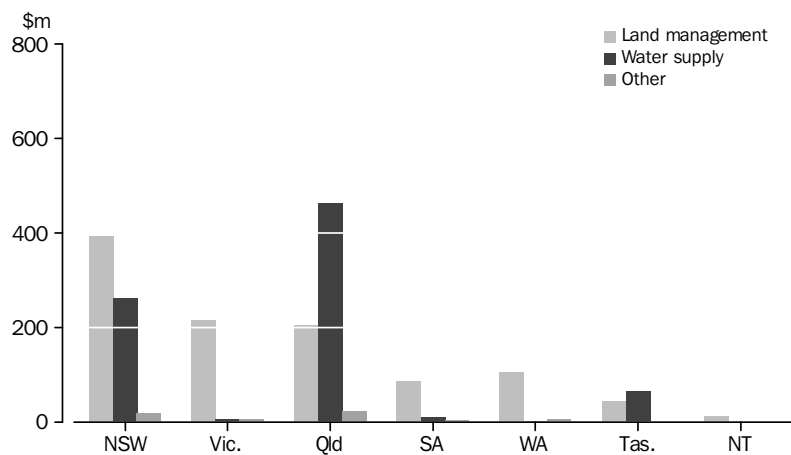
Capital and current expenditure on land management activities exceeded revenue for land management by \$760m. The majority of land management expenditure is funded from other areas of councils' budgets.

State estimates

3.2 NATURAL RESOURCE MANAGEMENT REVENUE—2002–03



3.3 NATURAL RESOURCE MANAGEMENT EXPENDITURE—2002–03



Graphs 3.2 and 3.3 and table 3.7 show that revenue and expenditure for natural resource management were greatest for Queensland and New South Wales. Queensland councils' revenue for natural resource management was \$940m, 61% of Australian councils' total revenue for natural resource management. In Queensland, councils supply water services to households and industry, whereas in some other states, water boards have this responsibility. Such institutional arrangements are a key factor behind the Queensland dominance of revenue for natural resource management.

State estimates
continued

Queensland had the highest natural resource management current expenditure, \$542m, which was 12% higher than 2000–01. New South Wales councils' capital expenditure on natural resource management was the highest of any state at \$181m. Queensland councils' capital expenditure was \$149m.

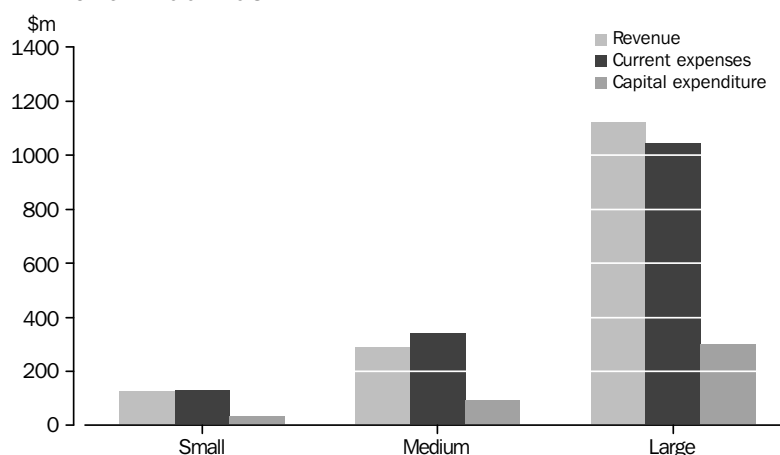
Queensland and Tasmania had the highest per capita revenue, current expenditure and capital expenditure for natural resource management. Queensland had the highest per capita revenue of \$253, whilst Tasmania had the highest per capita current expenditure and per capita capital expenditure of \$189 and \$46 respectively.

Water supply and land management were the main sources of revenue for all states. Queensland councils received 88% (\$832m) and Tasmanian councils 81% (\$72m) of their total resource management revenue from water supply. Revenue for land management activities accounted for 89% (\$38m) of Victorian and 86% (\$14m) of Western Australian councils' total natural resource management revenue.

Water supply was the dominant natural resource management activity undertaken by Queensland and Tasmanian councils, accounting for 64% (\$346m) and 62% (\$56m) of their current expenditure respectively. Land management was the dominant natural resource activity for the rest of the states.

Council size

3.4 NATURAL RESOURCE MANAGEMENT TRANSACTIONS, By council size—2002–03



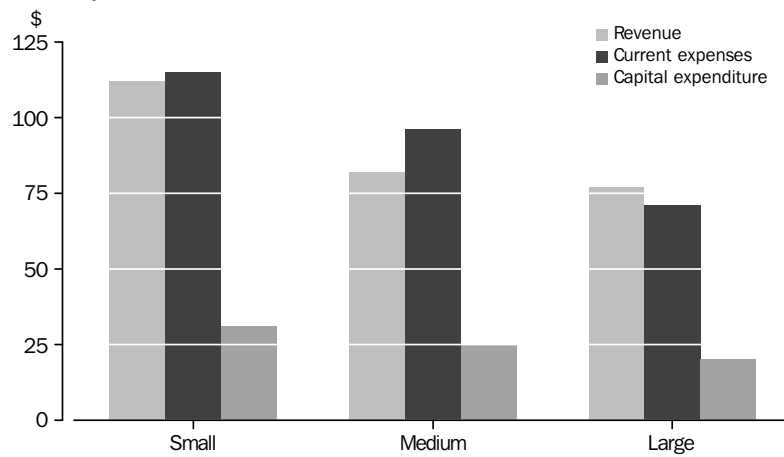
Graph 3.4 and table 3.8 show that councils with large populations received 73% (\$1.1b) of total natural resource management revenue for 2002–03. Medium sized councils received 19% (\$291m) and councils with small populations received 8% (\$127m).

Councils in all size groups spent less on water supply than they received in revenue. In contrast, land management revenue was significantly less than expenditure for councils in all size groups. Small councils land management revenue covered only 26% of total expenditure, medium sized councils' revenue covered 22% and large councils' revenue covered 30% of expenditure.

Council size continued

For councils with small populations, 55% of the total natural resource expenditure was used for water supply, including a large capital expenditure component. Land management activities made up the bulk of natural resource expenditure for large councils. They accounted for \$800m (60%) of the total natural resource management expenditure by councils with large populations. Medium-sized councils' expenditure was evenly split between water supply and land management activities, although 80% of their revenue was received for water supply activities.

3.5 NATURAL RESOURCE MANAGEMENT TRANSACTIONS PER CAPITA, By council size—2002–03



Graph 3.5 shows natural resource management revenue and expenditure on a per capita basis by council size. On a per capita basis, small councils received more and spent more on natural resource management activities than other councils. Less per capita revenue was received, and less per capita expenditure was incurred, by large councils for natural resource management activities. This reflects the fact that the smaller councils tend to be more likely to have responsibility for water supply.

3.6 NATURAL RESOURCE MANAGEMENT (a), By category—2002–03

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>
	\$m	\$m	\$m	\$m
Revenue				
Rates from household and industry	1 048.3	233.1	^ 27.8	1 309.1
Government funding				
Specific subsidies	*13.9	5.4	1.1	^ 20.4
Investment grants	19.1	14.6	**2.6	36.2
Other	119.9	51.7	1.1	172.7
<i>Total</i>	<i>1 201.2</i>	<i>304.7</i>	<i>32.6</i>	<i>1 538.5</i>
Current expenses				
Wages and salaries	134.8	430.9	15.2	580.9
Operational expenses				
Contractors	59.9	172.1	17.6	249.5
Government payments	^ 72.4	5.3	^ 0.1	77.9
Materials	223.2	163.4	^ 11.3	397.9
Other	89.9	108.4	7.3	205.6
<i>Total</i>	<i>580.2</i>	<i>880.2</i>	<i>51.4</i>	<i>1 511.8</i>
Capital expenditure				
Net acquisitions	125.1	65.2	3.2	193.4
Own account work	57.0	47.9	*2.0	106.8
Contracted payments	49.9	71.2	^ 1.0	122.2
<i>Total</i>	<i>232.0</i>	<i>184.3</i>	<i>^ 6.2</i>	<i>422.4</i>

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Where figures have been rounded, discrepancies may occur within totals.

3.7

NATURAL RESOURCE MANAGEMENT(a), By state and category—2002–03

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>
REVENUE (\$ m)				
NSW	290.4	128.2	^ 14.9	433.5
Vic.	^ 1.7	38.1	^ 3.1	42.8
Qld	831.6	96.5	^ 11.8	939.9
SA	* 4.9	11.8	0.2	^ 16.9
WA	* 0.3	^ 14.0	** 1.8	^ 16.2
Tas.	71.7	15.6	* 0.8	88.2
NT	0.5	0.4	—	1.0
Aust.	1 201.2	304.7	32.6	1 538.5

	REVENUE PER CAPITA (\$)			
NSW	44	19	^ 2	65
Vic.	—	8	^ 1	9
Qld	224	26	^ 3	253
SA	* 3	8	—	^ 11
WA	—	^ 7	** 1	^ 8
Tas.	152	33	* 2	187
NT	3	2	—	5
Aust.	61	16	2	78

	CURRENT EXPENSES (\$ m)			
NSW	162.4	315.1	16.8	494.3
Vic.	4.2	182.9	4.7	191.8
Qld	346.2	174.1	22.1	542.4
SA	^ 8.3	77.9	^ 3.3	89.4
WA	^ 2.3	84.7	^ 3.6	90.6
Tas.	55.8	32.9	* 0.8	89.5
NT	1.1	12.6	0.2	13.8
Aust.	580.2	880.2	51.4	1 511.8

	CURRENT EXPENSES PER CAPITA (\$)			
NSW	24	47	3	75
Vic.	1	38	1	39
Qld	93	47	6	146
SA	^ 5	51	^ 2	59
WA	^ 1	44	^ 2	47
Tas.	118	70	* 2	189
NT	5	63	1	69
Aust.	30	45	3	77

	CAPITAL EXPENDITURE (\$ m)			
NSW	100.9	79.0	^ 1.6	181.5
Vic.	1.2	32.0	2.5	35.7
Qld	117.0	31.6	0.4	149.0
SA	1.5	8.8	** 0.4	10.7
WA	* 0.6	21.7	** 1.3	23.7
Tas.	10.7	10.2	—	21.0
NT	—	0.9	—	0.9
Aust.	232.0	184.3	^ 6.2	422.4

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Where figures have been rounded, discrepancies may occur within totals.

3.7 NATURAL RESOURCE MANAGEMENT(a), By state and category—2002–03 *continued*

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>
CAPITAL EXPENDITURE PER CAPITA (\$)				
NSW	15	12	—	27
Vic.	—	7	1	7
Qld	32	9	—	40
SA	1	6	—	7
WA	—	11	**1	12
Tas.	23	23	—	46
NT	—	4	—	4
Aust.	12	9	—	22

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Where figures have been rounded, discrepancies may occur within totals.

3.8

NATURAL RESOURCE MANAGEMENT(a), Breakdown by size of council—2002–03

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>
	\$m	\$m	\$m	\$m
REVENUE				
Small	100.0	^ 15.1	^ 11.9	126.9
Medium	233.5	46.2	^ 11.0	290.6
Large	867.7	243.4	9.8	1 120.9
<i>Total</i>	<i>1 201.2</i>	<i>304.7</i>	<i>32.6</i>	<i>1 538.5</i>
CURRENT EXPENSES				
Small	65.9	50.3	14.9	131.1
Medium	151.1	174.8	^ 13.0	338.9
Large	363.1	655.1	23.6	1 041.8
<i>Total</i>	<i>580.2</i>	<i>880.2</i>	<i>51.4</i>	<i>1 511.8</i>
CAPITAL EXPENDITURE				
Small	25.6	8.1	**1.8	35.5
Medium	^ 57.0	^ 31.8	*0.9	89.7
Large	149.3	144.4	3.5	297.2
<i>Total</i>	<i>232.0</i>	<i>184.3</i>	<i>^ 6.2</i>	<i>422.4</i>

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

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(a) Small councils have population sizes less than 10,000, medium councils 10,000–39,999 and large councils greater than 40,000.

TRANSFERS

Table 4.1 focusses on the specific subsidies and investment grants given to local government for environmental protection and natural resource management activities, and on the payments by local governments to state and Commonwealth governments for these activities.

Environment protection

Funding from other levels of government was a minor contributor to local government environment protection revenue. Government subsidies and grants for environment protection activities within local government accounted for just over 5% (\$133m of \$2.6b) of revenue. This was a decrease of \$36m (21%) from 2000–01.

In 2002–03, state subsidies and grants contributed 78% (\$104m) of government funding to local government for environment protection activities. This amount was divided between capital investment grants and specific subsidies for environment protection activities. The Commonwealth Government contributed \$10m of specific subsidies and \$19m of investment grants for environment protection activities.

Local government authorities paid other local, state or Commonwealth government agencies a total of \$56m or the equivalent of 42% of the funding that they received. These payments to other government authorities were mainly for solid waste, waste water, and conservation of biodiversity and habitat activities. Examples of these payments include waste management levies, environment protection agency licences for licences for landfills and water treatment facilities and precepts (fines for non-compliance with guidelines or standards).

Natural resource management

Funding from other levels of government was also a minor contributor to natural resource management revenue, contributing 4% (\$57m of \$1.5b). This was a decrease of \$5m (8%) from 2000–01. In 2002–03 the bulk of government funding for natural resource management activities was provided by state governments (\$46m or 81% of total government funding to local governments for these activities).

Local government authorities paid other local, state or Commonwealth agencies a total of \$78m, which represented 37% (\$21m) more than they received in government subsidies and grants. Examples of these payments include planning levies, purchase of water from water authorities and water analysis precepts.

4.1

INTERGOVERNMENT TRANSFERS (a), By account—2002–03

	<i>Environment protection</i>	<i>Natural resource management</i>
	\$m	\$m
.....		
FUNDING TO LOCAL GOVERNMENT		
Commonwealth funding		
Specific subsidies	9.9	2.4
Investment grants	18.8	^ 8.4
<i>Total</i>	<i>28.7</i>	<i>10.8</i>
State funding		
Specific subsidies	49.2	^ 18.0
Investment grants	54.8	27.8
<i>Total</i>	<i>104.0</i>	<i>45.9</i>
.....		
PAYMENTS BY LOCAL GOVERNMENT TO OTHER GOVERNMENT BODIES		
<i>Total</i>	<i>56.3</i>	<i>77.9</i>
.....		

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Where figures have been rounded, discrepancies may occur within totals.

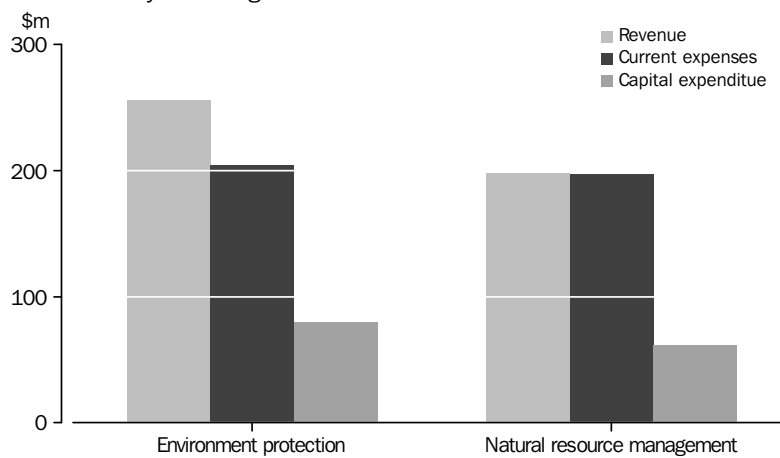
ENVIRONMENT
TRANSACTIONS

The Murray-Darling Basin Commission funded an expansion to the 2002–03 survey so that estimates could be produced at the Murray-Darling Basin level. This section presents estimates relating specifically to the Murray-Darling Basin.

The Murray-Darling Basin covers approximately one million square kilometres or 14% of Australia. With an annual run-off of 24,300 gigalitres, it accounts for 6% of total Australian run-off. Agricultural output from the Murray-Darling Basin is worth \$10b per year, which is around a third of Australian output, with cereal, beef, cotton, dairy, wool and sheep meat and grape production being the major agricultural industries.

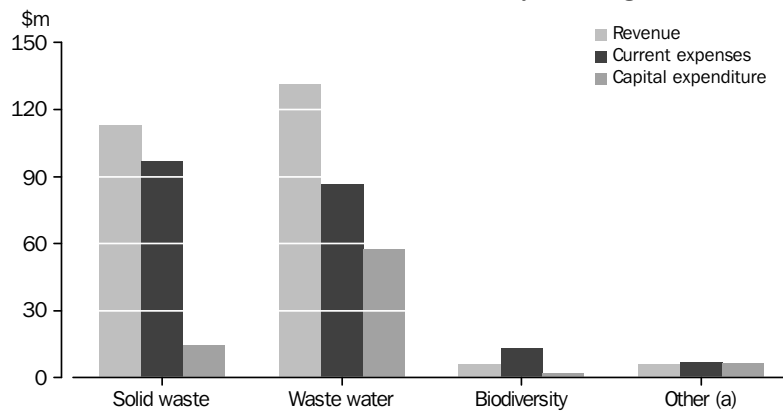
The Murray-Darling Basin comprises a quarter of the number of Australian local government areas, has 9% of the Australian population, and crosses 4 state boundaries.

5.1 LOCAL GOVERNMENT ENVIRONMENT TRANSACTIONS, Murray-Darling Basin—2002–03



Environment protection

5.2 ENVIRONMENT PROTECTION, Murray-Darling Basin—2002-03



(a) Includes soil resources and cultural heritage categories.

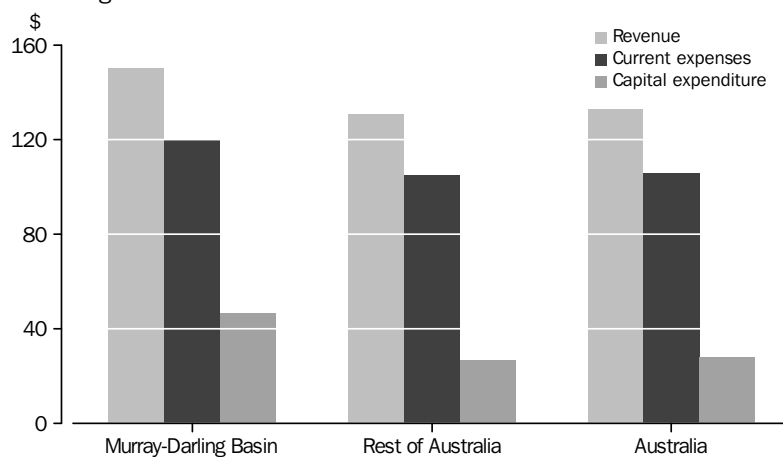
Local government authorities received \$256m in revenue for environment protection activities. This amounted to 11% of total revenue for councils in the Murray-Darling Basin and was mainly from rates (\$200m).

Just over half (\$131m) of all revenue for environment protection activities was for waste water management.

Environment protection expenditure was \$284m, made up of \$204m in current expenditure and \$80m in capital expenditure. This was 10% of councils' total current expenditure, and 14% of councils' total capital expenditure.

Waste water management activities represented 51% (\$144m) of the total expenditure including \$58m, 72% of capital works expenditure. Solid waste management activities accounted for 39% (\$111m) of the total expenditure for environment protection.

5.3 ENVIRONMENT PROTECTION TRANSACTIONS PER CAPITA, By region—2002-03

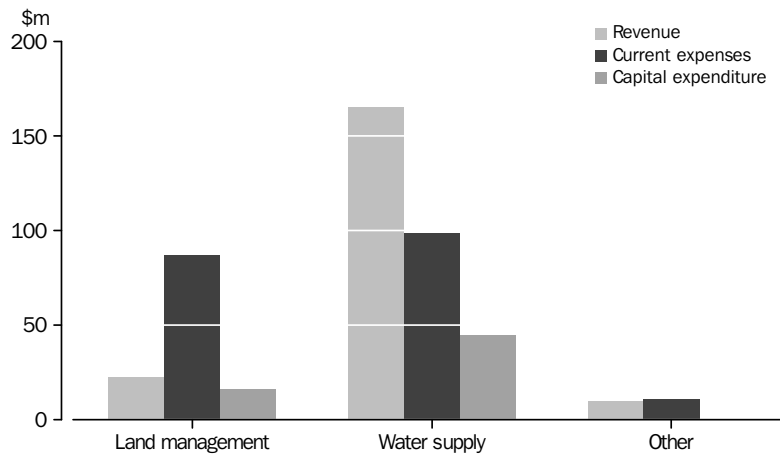


*Environment protection
continued*

Graph 5.3 shows that, relative to the rest of Australia, councils in the Murray-Darling Basin receive and spend more per capita on environment protection activities. Revenue for the Murray-Darling Basin averaged \$150 per capita, compared with \$131 for the rest of Australia. Similarly, per capita current expenditure amounted to \$120 per capita for the Murray-Darling Basin councils, compared with \$105 for the rest of Australia. (see Table 5.9).

*Natural resource
management*

5.4 NATURAL RESOURCE MANAGEMENT, Murray-Darling Basin—2002-03



Over \$198m was received by Murray-Darling Basin councils for natural resource management activities, which amounted to 8% of councils' total revenue.

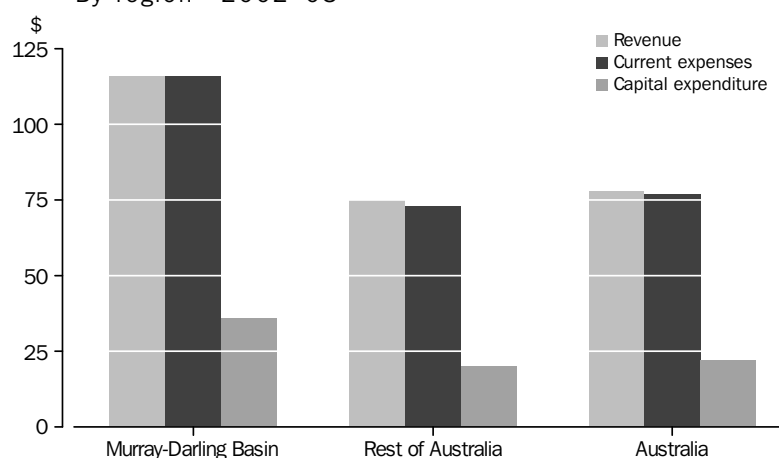
Natural resource management current expenditure (\$197m) and capital expenditure (\$61m) were 9% and 11% respectively of the councils' total current and capital expenditure.

The shortfall in revenue for natural resource management (\$60m) was more than double that for environment protection.

Water supply was the dominant natural resource management activity in the Murray-Darling Basin. It accounted for 83% (\$165m) of the revenue, just over half (\$99m) of the current expenditure and 73% (\$45m) of the capital expenditure. For Australia as a whole, water supply accounted for 38% of natural resource management current expenditure, and 55% of natural resource management capital expenditure.

Natural resource
management continued

5.5 NATURAL RESOURCE MANAGEMENT TRANSACTIONS PER CAPITA,
By region—2002–03



Graph 5.5 shows that, on a per capita basis, council revenue and expenditure on natural resource management activities was significantly higher for the Murray-Darling Basin than for the rest of Australia. Per capita revenue for councils in the Murray-Darling Basin averaged \$116 (compared with \$75 for the rest of Australia), and per capita current expenses was \$116 (compared with \$73 for the rest of Australia). Per capita capital expenditure in the Murray-Darling Basin was also significantly higher than the rest of Australia (Table 5.9).

Size

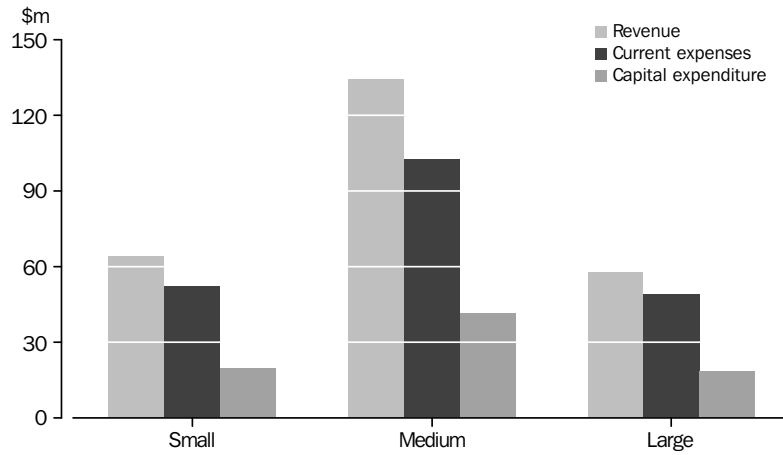
Of the local government areas in the Murray-Darling Basin, 64% are small, 32% are medium size councils and 4% are large councils. The medium sized councils received just over half of the total revenue and spent just over half of the total expenditure for environment protection activities. Similarly, nearly half of the total revenue and expenditure on natural resource management was by medium sized councils. Expenditure for environment protection and natural resource management activities exceeded revenue for all council groupings in the Murray-Darling Basin.

Murray-Darling Basin councils represent 31% of the small councils, 28% of the medium sized councils, and 4% of the large councils in Australia.

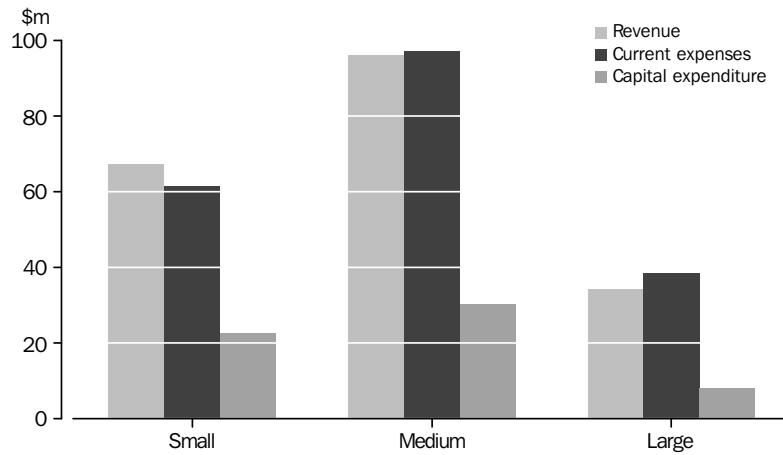
When compared with all small councils in Australia, the small councils of the Murray-Darling Basin contributed 43% (\$52m) to the total national current expenditure on environment protection and 47% (\$61m) to the total national current expenditure for natural resource management.

Size continued

5.6 ENVIRONMENT PROTECTION TRANSACTIONS, Murray-Darling Basin—By council size—2002-03



5.7 NATURAL RESOURCE MANAGEMENT TRANSACTIONS, Murray-Darling Basin—By council size—2002-03



5.8 FINANCIAL TRANSACTIONS (a), By account—Murray-Darling Basin—2002–03

	<i>Environmental protection</i>	<i>Natural resource management</i>
	\$m	\$m
Revenue		
Rates from household and industry	200	174
Government funding	17	11
Other	40	13
<i>Total</i>	<i>256</i>	<i>198</i>
Current expenses		
Wages and salaries	54	70
Operational expenses	150	128
<i>Total</i>	<i>204</i>	<i>197</i>
Capital expenditure		
Net acquisitions	31	23
Capital works	49	38
<i>Total</i>	<i>80</i>	<i>61</i>

(a) Where figures have been rounded, discrepancies may occur within totals.

5.9 ENVIRONMENT TRANSACTIONS (a), By account—2002–03

	<i>Environmental protection</i>	<i>Natural resource management</i>
.....		
REVENUE (\$ m)		
Murray-Darling Basin	256.0	198.2
Rest of Australia	2 358.4	1 340.3
Australia	2 614.4	1 538.5
.....		
REVENUE PER CAPITA (\$)		
Murray-Darling Basin	150	116
Rest of Australia	131	75
Australia	133	78
.....		
CURRENT EXPENSES (\$ m)		
Murray-Darling Basin	204.1	197.2
Rest of Australia	1 880.3	1 314.5
Australia	2 084.4	1 511.8
.....		
CURRENT EXPENSES PER CAPITA (\$)		
Murray-Darling Basin	120	116
Rest of Australia	105	73
Australia	106	77
.....		
CAPITAL EXPENDITURE (\$ m)		
Murray-Darling Basin	80.3	61.4
Rest of Australia	477.8	361.0
Australia	558.1	422.4
.....		
CAPITAL EXPENDITURE PER CAPITA (\$)		
Murray-Darling Basin	47	36
Rest of Australia	27	20
Australia	28	22

(a) Where figures have been rounded, discrepancies may occur within totals.

5.10 FINANCIAL TRANSACTIONS(a), Breakdown by size of council—2002–03

	<i>Revenue</i>	<i>Current expenses</i>	<i>Capital expenditure</i>
	\$m	\$m	\$m
.....			
ENVIRONMENT PROTECTION			
Murray-Darling Basin			
Small	64.3	52.2	19.6
Medium	134.1	102.6	41.9
Large	57.7	49.4	18.8
<i>Total</i>	<i>256.0</i>	<i>204.1</i>	<i>80.3</i>
Rest of Australia			
Small	69.3	68.3	^ 12.9
Medium	365.5	324.3	^ 90.3
Large	1 923.6	1 487.7	374.6
<i>Total</i>	<i>2 358.4</i>	<i>1 880.3</i>	<i>477.8</i>
Australia			
Small	133.6	120.5	32.4
Medium	499.6	426.9	^ 132.3
Large	1 981.3	1 537.0	393.4
<i>Total</i>	<i>2 614.4</i>	<i>2 084.4</i>	<i>558.1</i>
.....			
NATURAL RESOURCE MANAGEMENT			
Murray-Darling Basin			
Small	67.5	61.4	22.7
Medium	96.2	97.3	30.5
Large	34.5	38.5	8.2
<i>Total</i>	<i>198.2</i>	<i>197.2</i>	<i>61.4</i>
Rest of Australia			
Small	^ 59.4	69.7	^ 12.8
Medium	194.5	241.6	^ 59.2
Large	1 086.4	1 003.3	289.0
<i>Total</i>	<i>1 340.3</i>	<i>1 314.5</i>	<i>361.0</i>
Australia			
Small	126.9	131.1	35.5
Medium	290.6	338.9	89.7
Large	1 120.9	1 041.8	297.2
<i>Total</i>	<i>1 538.5</i>	<i>1 511.8</i>	<i>422.4</i>

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Small councils have population sizes less than 10,000, medium councils 10,000–39,999 and large councils greater than 40,000.

EXPLANATORY NOTES

FRAMEWORKS

1 The data in this publication are drawn from the ABS Local Government Environment and Natural Resources Survey, which was developed in the mid to late 1990s in response to calls from councils, local government associations and agencies and other interested parties for comprehensive information on the financial activities of local government authorities related to managing the environment and natural resources. While all local governments keep financial records of their activities, there has in the past been limited information available on the financial transactions related specifically to managing local environments and natural resources.

2 The survey is based on international guidelines on environmental accounting. These guidelines are contained in the United Nations System of Integrated Environmental and Economic Accounting (SEEA 1993). SEEA, which is currently being revised, proposes that countries use both physical and financial measures to analyse environment-economy interactions. The SEEA manual provides detailed guidelines on how environmental accounts can be compiled using both physical and financial measures, and how these data can be linked to better inform decision-making.

3 The Environment and Natural Resources Survey of local government collects only financial information, and was developed to be consistent with the financial accounting guidelines provided in SEEA. The survey also drew upon guidelines on measuring financial transactions related to environmental management contained in the European Statistical Agency's (Eurostat's) European System for the Collection of Economic Information on the Environment (known by the French acronym, SERIEE 1994). SERIEE proposes that relevant financial transactions can be grouped under two main headings, 'environmental protection', and 'natural resources management'. For each of these activities it is possible to compile a separate account of relevant financial transactions.

4 The main distinction between the 'environment protection' and 'natural resource management' accounts is that the environment protection account covers activities related specifically to protecting the environment from the harmful effects of socio-economic activities, by preventing, reducing or repairing damage where it occurs. The natural resource management account covers activities which involve using (and conserving) natural resources for social and economic purposes (such as providing drinking water and water for industrial purposes).

5 For the local government collection, these international guidelines were used for the following purposes:

- to help define the activities that are included in the survey,
- to ensure comprehensive coverage of relevant activities,
- to determine the types of financial information collected, and
- to avoid double-counting.

6 Use of these guidelines also ensures that information published from the local government collection is comparable between local governments in different states, between levels of government, and between the local government sector and other industry sectors. It also permits international comparisons.

ENVIRONMENT PROTECTION
EXPENDITURE ACCOUNT

7 The Environment Protection Expenditure Account is the most developed of the monetary accounts proposed by SEEA. It describes the activities occurring in an economy aimed at protecting the environment; that is, the cost of protecting the environment from damage from development and the cost of remediating damage after it has occurred.

8 Environment protection activities are classified into a number of categories based upon the UN Classification of Environmental Protection Activities, including:

- Waste water management and water protection
- Solid waste management
- Protection of biodiversity and habitat
- Protection of soil and groundwater
- Protection of ambient air and climate
- Other environmental protection activities.

9 For the local government survey, the ABS added a category of 'protecting cultural heritage' in response to requests from councils involved in piloting the survey for this information to be collected as a distinct category of activity. The activities covered by each of these categories are outlined in the Glossary.

10 In seeking to comprehensively measure economic transactions related to these categories of activity, the environment protection account focuses upon identifying and measuring three distinct types of economic activity:

- the purchase or use of environment protection products and services,
- the supply of the environment protection products and services, and
- the financing of environment protection products and services.

11 To obtain this information in relation to local government requires detailed measures of councils' current expenses (such as wages and salaries, payments to contractors, materials and fuels, etc.) related to environmental protection services or products for each category of activity. Information is also required on councils' capital expenditure on fixed assets (such as machinery and equipment) needed to undertake these activities. Information was also collected on revenue received for supplying such services in order to measure the extent to which local governments supply environment protection services. In addition, information was collected on how much money local government received both from other levels of government, from businesses and from households, to finance its activities in this area.

12 The survey showed that councils are major suppliers of services related to waste water (sewage) and solid waste management. They are often — with the exception of some metropolitan councils — the only provider of these services. For these environment protection activities it is often possible to recover some or all of the costs of providing the service, mainly in the form of rates paid by households and businesses.

13 Other environmental protection activities, such as protecting biodiversity and habitat, or soil and groundwater, are typically carried out at a net cost to councils, that is, expenditure usually exceeds revenue in these areas of activity. Revenue for such activities comes from a range of sources, including subsidies and grants from state and Commonwealth governments earmarked for environmental protection activities and other areas of council budgets not related to environmental protection.

14 The concepts and methodologies used to estimate environment protection expenditure for Australia as a whole, and for local government, are discussed in more detail in *Environment Protection Expenditure, Australia* (cat.no.4603.0).

NATURAL RESOURCE
MANAGEMENT ACCOUNT

15 The natural resource management account describes the extraction of natural resources and the expenditure on prolonging the use of a resource through improvements in resource efficiency. SERIEE proposes three main categories of natural resource management (the activities covered by each of these categories are outlined in the Glossary):

- Water supply (inland water)
- Land management
- Other resource management.

16 Councils often have a dual role in the management of natural resources. For example, many councils are involved in supplying water for use by householders while at the same time restrictions are imposed to limit that usage. Land is developed for expansion of townships and for industrialisation while controls are placed on the use of land taking into account economic, social and environmental considerations. Management decisions by councils on such issues as the rate at which resources like water and land are used for socio-economic purposes, and the locations from which such resources are drawn, can have a significant impact on the local environment.

METHODOLOGY

17 The Local Government Environment and Natural Resources Survey is conducted under the Census and Statistics Act 1905 using a mail-out questionnaire on environment protection and natural resources management.

18 Approximately two thirds of the total number of local government authorities, not including Aboriginal regional councils, which existed in October 2003, were selected in the 2002–03 survey. The sample was representative of councils in all states, of councils with large, medium and small populations, and of councils in urban, provincial metropolitan and rural locations. For the purposes of this survey, the councils were deemed to be small if they had a population of less than 10,000, medium sized if they had a population of between 10,000 and 39,999 and large if their population was greater than 40,000.

19 The 2002–03 survey included all the local government councils which had more than 33% of their area in the Murray-Darling Basin.

20 The estimation process used was number raised estimation. In this publication, 'sampling variability' of the estimates is measured by the relative standard error (RSE) which is obtained by expressing the standard error (SE) as a percentage of the estimate to which it refers.

21 The majority of aggregated data presented in the results have a relative standard error of less than 15%. Most of the totals presented have a relative standard error of less than 10%. Relative standard errors for the state level estimates are sometimes high because of the smaller sample of councils contributing to the estimates. Estimates that have an estimated relative standard error between 10% and 25% are annotated with the symbol '^'. These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with an RSE between 25% and 50% are annotated with the symbol '*', indicating that the estimate should be used with caution as it is subject to sampling variability too high for most practical purposes. Estimates with an RSE greater than 50% are annotated with the symbol '**', indicating that the sampling variability causes the estimate to be considered too unreliable for general use. Actual RSEs for all estimates are available on request.

22 Implementation by councils of Australian Accounting Standard 27 has resulted in a change in the accounting systems used by local governments from cash accounting to accrual accounting. This means that estimates of the proportion of total council transactions related to environment and natural resource management presented in the summary of findings section of this publication are not directly comparable with the proportions presented in the earlier edition of this publication (*Environment*

METHODOLOGY *continued*

Expenditure, Local Government, Experimental Estimates, Australia: 1997–98). The change to accrual based accounting may also have influenced some of the estimates presented for 1998–99.

23 Between the 1998–99 and 1999–2000 collection years some changes were made to the survey form. The redesigned form was intended to reduce the burden of the survey on some of the councils. Many of the questions asked previously were combined into fewer questions, and depreciation was dropped entirely from the survey. The change in the form design may have impacted on the number of transactions recorded by councils.

24 Per capita figures are based on the state population figures (estimated residential population as at June 2002). These figures were derived from *Regional Population Growth, Australia and New Zealand* (cat.no.3218.0).

FUTURE DIRECTIONS AND
ADDITIONAL INFORMATION

25 The collection of information on local government environment-related transactions was initially a collaborative effort with the National Office of Local Government, University of Canberra and the Australian Bureau of Statistics, as well as numerous local government councils that voluntarily participated in piloting the survey between 1996 and 1999.

26 An aim of this collection is to contribute to the development by local governments of accounting tools which may assist with improved management of local environments and natural resources. The estimates measure and demonstrate the significant financial contribution being made each year by the local government sector to the wider effort by all Australian governments aimed at protecting the environment and managing natural resources sustainably. These statistics also contribute to the development of more detailed environment protection expenditure information for Australia as a whole.

27 Limited additional data may be available from the collection. Inquiries about data services can be made to David Brereton, Director, Environment and Energy Business Statistics Centre, on Hobart 03 6222 5804. There may be a charge for the provision of additional information.

ABBREVIATIONS

\$b	billion (thousand million) dollars
\$m	million dollars
ABS	Australian Bureau of Statistics
Aust.	Australia
cat. no.	Catalogue number
NSW	New South Wales
Qld	Queensland
RSE	relative standard error
SA	South Australia
SE	standard error
Tas.	Tasmania
Vic.	Victoria
WA	Western Australia

GLOSSARY

Biodiversity	<p>The variety of life forms on earth: the different plants, animals and micro-organisms, the genes they contain, and the ecosystems they form. It is usually considered at four levels:</p> <ul style="list-style-type: none">■ genetic diversity■ species diversity■ ecosystem diversity and■ community diversity.
Capital works	<p>Consists of payments to contractors for construction of fixed assets, and own-account construction expenditure. Excludes net acquisitions of plant, machinery, equipment and land.</p>
Environment protection	<p>All activities aimed at the prevention, reduction or elimination of pollution or any other degradation of the environment.</p> <p>An Australian interpretation of the UN's Classification of Environmental Protection Activities divides these activities into six main categories.</p> <ul style="list-style-type: none">■ Waste water management. Activities that correspond to sewerage operations and the reduction of waste elements reaching water bodies. Waste water reuse by council.■ Solid waste management. Landfill and solid operations by council and the implementation of programs to reduce the amount of materials entering the solid waste stream.■ Protection of soil and groundwater. Remediation of contaminated soils. Protection of existing soil and groundwater areas from contamination by wastes and degradation. Remediation of degraded (salinated, eroded) soils in crown land and national park regions.■ Conservation of biodiversity and habitat. Programs that focus on the preservation of natural species and habitat. Programs to re-establish native species back into the environment. The construction of barriers to halt damage from developments entering areas specified as having a value for biodiversity. Clean up and establishment of catchment zones for water bodies.■ Protection of cultural heritage. Establishment and maintenance of cultural heritage sites. Programs to encourage the implementation of cultural heritage preservation by business and householders.■ Other environmental protection. Includes any environmental protection activity not broken down in the above categories, noise and vibration control, education on environmental protection and measures to protect the environment from radiation.
Household sector	<p>The System of National Accounts (1993) defines a household to be 'a small group of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food'.</p>
Investment grants	<p>Unrequited payments received (usually from government) that are intended to finance acquisition of fixed assets for environmental purposes.</p>
Natural resource management	<p>All activities which manage natural resources and activities aimed at making more efficient use of natural resources. The categories of natural resource management are:</p> <ul style="list-style-type: none">■ Water supply and management. The supply and use of inland water stocks. Maintenance of quality and purification of water supply. Programs to encourage water conservation plans. Application of water restrictions.

Natural resource management <i>continued</i>	<ul style="list-style-type: none"> ■ Land management and development. The development by zoning of land resources. The management of recreational parks and sporting fields. Management of crown land not reserved for native biodiversity. The processing of development applications and associated costs. ■ Other resource management. The quarrying to provide raw materials for council works. Activities or programs aimed at developing alternative energy resources. Measures to reduce energy consumption.
Net acquisitions	Acquisitions less disposals of plant, machinery, equipment and land. Includes assets acquired under finance leases. Excludes payments to contractors for capital works, and own-account construction expenditure.
Rates from household and industry	Specific purpose rates, excluding general rates. Includes levies, fines and licences.
Specific subsidies	Government grants to local government which relate to their provision of specific environmental services and activities which are intended to allow the provision of goods and services at a reduced cost to the consumer.
Transfers	A transaction in which one business or organisation provides a good, service or asset to another business or organisation without receiving from the latter any good, service or asset in return.

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