

Environment Expenditure

Local Government

Australia

1999–2000

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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) 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 for 1997–98, 1998–99 and 1999–2000 demonstrate that local government is a significant player in managing the nation's environment and natural resources.

This is the third 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 Statistics Section, Australian Bureau of Statistics, Locked Bag 10, Belconnen, ACT 2616.

The results from the 2000–2001 survey are expected to be published in late 2002.

CHAPTER 1

SUMMARY OF FINDINGS

MAIN FINDINGS

- Local government authorities received almost \$2.3b of revenue for environment protection activities. This was mainly from rates (\$2.0b) and amounted to approximately 15% of total revenue for councils in Australia.
- Approximately 8% of total revenue or nearly \$1.3b received by councils was collected for natural resource management activities.
- Just under \$1.9b in current expenses and \$607m in capital expenditure was recorded for environment protection activities. Most environment protection activity was focused on solid waste management and waste water management.
- Approximately \$1.4b in current expenses and \$453m in capital expenditure contributed to natural resource management activities, mainly water supply and land management.
- There was a funding shortfall in environment protection revenue of \$232m, mainly in New South Wales (\$98m) and Victoria (\$131m).
- The funding gap for natural resource management was significantly higher than for environment protection activities (\$546m). The majority of land management expenses are funded from other areas of councils' budgets.
- Queensland received the most revenue (\$1.0b) and had the highest expenditure (\$635m for current expenses and \$291m for capital expenditure) for environment protection activities. It also spent the highest per capita on environment protection activities.
- Similarly, Queensland recorded the highest level of revenue (\$700m) and expenditure (\$554m on current expenses and \$159m on capital expenditure) for natural resource management. It also spent the highest per capita on natural resource management activities.
- Small councils spent the most per capita on environment protection and natural resource management activities. These councils were more likely to have responsibility for waste water management and water supply activities.

OVERVIEW OF RESULTS

Table 1.1 shows environment protection and natural resource management revenue and expenditure for the three financial years, 1997–98 to 1999–2000. Due to changes in accounting practices and survey questionnaire design comparison between years should be made with caution.

Councils collected nearly \$2.3b for environment protection activities and approximately \$1.3b for natural resource management in 1999–2000. These represented significant increases on 1998–99 (25% for environment protection and 32% for natural resource management), mainly due to increased rates from households and industry. This increase is believed to be partially attributed to more accurate reporting by councils in 1999–2000.

OVERVIEW OF RESULTS

continued

The majority of revenue was collected directly for environment protection purposes from rates within councils' jurisdictions (86% of revenue, or nearly \$2.0b). Similarly, rates collected for natural resource management accounted for 80% (\$1.0b) of revenue for this type of activity. Funding from other levels of government for environment related activity was a fairly minor contribution to revenue. Government subsidies and grants for environment protection and natural resource management activities within local government accounted for under 6% (\$128m for environment protection and \$75m for natural resource management) of total revenue for each of these activities.

Current expenses by local government amounted to \$1.9b for environment protection activities and \$1.4b for natural resource management in 1999–2000. This represents a 14% increase for environment protection activities compared with 1998–99, mainly due to increased operational expenses. Current expenses for natural resource management activities were up by 29%. As stated previously, comparison of expenditure between the years may not be directly comparable and should be treated with caution (see Explanatory Notes, paragraphs 21 and 22).

Operational expenses comprise the majority of current expenses for environment protection and for natural resource management activities (79% for environment protection and 65% for natural resource management). Operational expenses include such activities as payments to contractors, purchases of materials and other costs. Wages and salaries account for the remainder of current expenses.

Capital expenditure was measured to be over \$600m for environment protection and over \$450m for natural resource management. Capital expenditure is comprised of acquisitions, contracted payments and capitalised wages and salaries for council capital projects.

OVERVIEW OF RESULTS

*continued***1.1** FINANCIAL TRANSACTIONS(a), By account

	<i>Environment protection</i>	<i>Natural resource management</i>
	\$m	\$m
1997–98		
Revenue		
Rates from household and industry	1 631	796
Government funding	91	51
Other	98	107
<i>Total</i>	1 819	954
Current expenses		
Wages and salaries	434	425
Operational expenses	1 251	659
<i>Total</i>	1 685	1 084
Capital expenditure		
Net acquisitions	188	100
Other	285	197
<i>Total</i>	473	297
1998–99		
Revenue		
Rates from household and industry	1 639	866
Government funding	138	38
Other	37	63
<i>Total</i>	1 813	966
Current expenses		
Wages and salaries	380	399
Operational expenses	1 286	664
<i>Total</i>	1 665	1 063
Capital expenditure		
Net acquisitions	150	102
Other	311	166
<i>Total</i>	461	268
1999–2000		
Revenue		
Rates from household and industry	1 954	1 024
Government funding	128	75
Other	192	180
<i>Total</i>	2 274	1 278
Current expenses		
Wages and salaries	399	475
Operational expenses	1 500	895
<i>Total</i>	1 899	1 370
Capital expenditure		
Net acquisitions	197	*170
Other	410	283
<i>Total</i>	607	453

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

(a) Caution is advised when making comparisons between years, due to changes in accounting practices and survey questionnaire design.

Note: Where figures have been rounded, discrepancies may occur within totals.

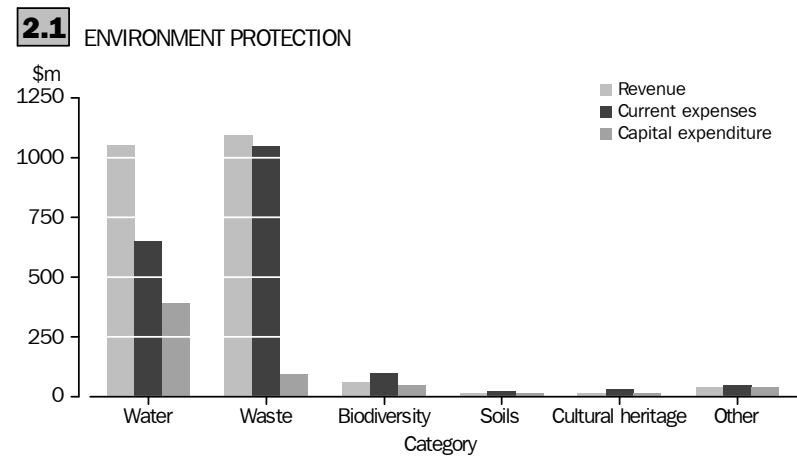
SUMMARY INDICATORS

Environment protection data cover activities 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. Graph 2.1 and table 2.1 show revenue and expenditure of councils by environment protection activity for 1999–2000.

Council revenue for environment protection activities was almost \$2.3b in 1999–2000. Current expenses for environment protection — mainly wages, salaries and payments to contractors — accounted for \$1.9b. Capital expenditure on new assets for environment protection amounted to \$607m.

The proportion of councils' revenue that is received and used by councils for environment protection purposes was about 15% of total council revenue. Similarly 13% of total current expenses and nearly 15% of total capital expenditure was for environment protection activities.

The majority of environment protection revenue and expenditure was for solid waste and waste water management activities (94% of environment protection revenue and just under 90% of environment protection expenditure). The remainder was spread across activities aimed at protection of biodiversity and conservation; soil resources; cultural heritage; and other environment protection activities.



REVENUE

Revenue for environment protection activities increased in the 1999–2000 financial year, from approximately \$1.8b in 1998–99 to \$2.3b. This increase was due mainly to a rise in rates paid by household and industry and a higher collection of other types of revenue. Nearly 86% (almost \$2.0b) of all environment protection revenue was from rates collection.

REVENUE *continued*

State and Commonwealth government funding of environment protection activities contributed 6% (\$128m) of total environment protection revenue. More information about government transfers can be found in Chapter 4.

Councils collected the most revenue from rates for solid waste management activities (\$1.0b or 46% of total environment protection revenue), followed by rates for waste water management (\$837m or 37%). Other revenue for waste water management (such as contributions from developers who provide infrastructure for waste water services when developing new areas) was the next most significant source of revenue (14% of total waste water revenue).

The majority of government funding was provided for waste water management and biodiversity and conservation activities. Government funding for the latter is largely attributed to the Natural Heritage Trust (NHT) administered by the Commonwealth Government. NHT funded activities included native vegetation and habitat restoration, catchment management, planning and biodiversity studies.

EXPENDITURE

There was an overall increase in environment protection expenditure of \$380m between the 1998–99 and the 1999–2000 financial years, rising from \$2.1b to \$2.5b. This increase was driven mainly by a rise in payments to contractors, materials and other types of expenditure.

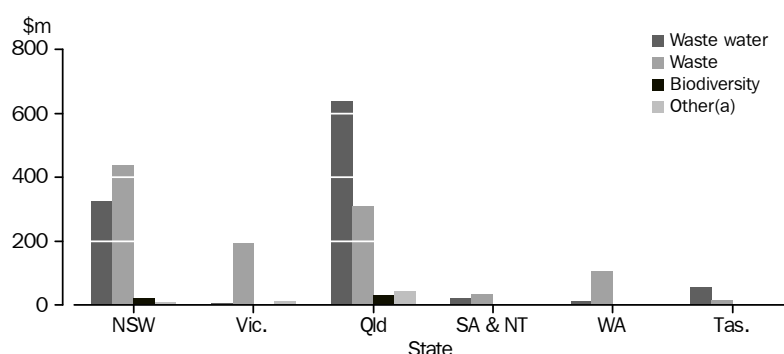
Current expenditure was primarily for solid waste (\$1.0b) and waste water management (\$0.6b). Solid waste management and waste water management activities amounted to 89% of total current expenditure on environment protection in 1999–2000. Nearly 65% of capital expenditure on environment protection was for waste water management activities.

Current expenses on biodiversity and conservation were 5% (\$98m) of total current expenditure on environment protection in 1999–2000.

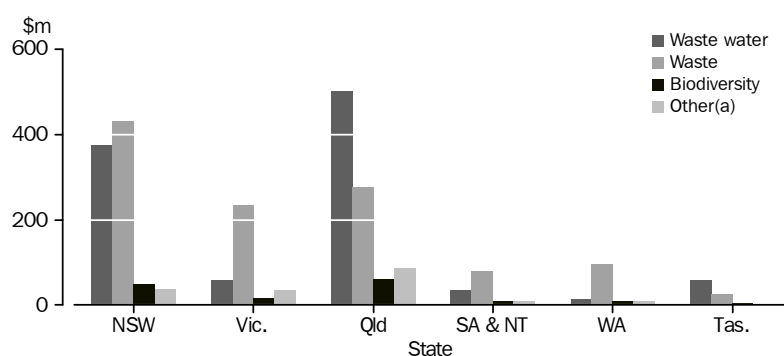
Nearly one third (32%) of total current expenses were payments to contractors for solid waste management activities (\$606m). Wages and salaries contributed about 21% of current expenses (mainly for waste water and solid waste management activities). Other significant current expense items included materials (\$182m) and other expenses (\$183m) for waste water management. Together they comprised 56% of total current expenses for waste water management, a much higher proportion of total current expenses than for other types of environment protection activities.

STATE ESTIMATES

Table 2.2 shows environment protection revenue and expenditure on a State basis by type of environment protection activity. Graph 2.2 shows that revenue for environment protection was greatest in Queensland and New South Wales. These two States comprised 80% of total revenue for environment protection activities. Similarly graph 2.3 shows that these States also had the highest expenditure (73% of total environment protection expenditure for Australia). Variation in both total and per capita figures reflects a variety of factors including varying responsibilities of councils between States. For example, in Queensland councils are responsible for sewage treatment whereas in some other States water boards have this responsibility.

STATE ESTIMATES *continued***2.2** ENVIRONMENT PROTECTION REVENUE

(a) Contains soil resources and cultural heritage categories.

2.3 ENVIRONMENT PROTECTION EXPENDITURE

(a) Contains soil resources and cultural heritage categories.

Queensland councils received the largest revenue per capita (\$286) and also the largest total revenue (\$1.0b). South Australian councils received the least per capita (\$32) for environment protection activities.

Queensland had the largest per capita expenditure (\$260) as well as the largest total expenditure (\$926m). Tasmania had the second highest per capita expenditure (\$191), and Western Australia spent the least per capita on environment protection activities (\$68).

Waste water management and water protection activities were the dominant environment protection activities undertaken by councils in Queensland and Tasmania. In this category, Queensland and Tasmanian councils had the largest revenue and expenditure per capita. These comparatively high figures reflect the fact that Queensland and Tasmanian councils tend to treat their own sewage. In the other States a combination of councils and other State agencies are responsible for sewerage infrastructure, sewage treatment and water protection.

Solid waste management was the dominant environment protection activity in all States and Territory except Tasmania and Queensland. New South Wales councils' solid waste management revenue comprised 40% (\$439m) of total solid waste management revenue for all States and their expenditure was 38% (\$432m) of total expenditure for all States. Queensland councils received the most revenue per capita (\$87), and had the highest per capita total expenditure (\$78) for solid waste management activities. South Australian

STATE ESTIMATES *continued*

councils had both the lowest per capita revenue (\$16) and expenditure (\$47) for solid waste management services.

Tasmania had the highest revenue per capita for biodiversity and habitat protection (\$9) followed by Queensland (\$8) and New South Wales (\$4). All other States received \$1 per head for biodiversity and habitat protection activities. Queensland councils spent the most on activities relating to biodiversity and conservation (\$62m or \$17 per capita), which includes a large capital component. Queensland councils also accounted for nearly three quarters of all expenditure on the protection of soil resources (\$27m).

BY COUNCIL SIZE

Table 2.3 shows that councils with a large population received 73% (\$1.7b) of total environment protection revenue for 1999–2000. Medium sized councils received 19% (\$437m) and councils with small populations received 8% (\$179m).

These amounts reflect the fact that large sized councils serviced 74% of the survey population, medium councils 19% and small councils 7% of the population. See paragraph 19 in the Explanatory Notes for the classification of council sizes.

Graph 2.4 shows that, on a per capita basis, small councils received the most revenue, and spent the most on environment protection activities. Large councils spent the least on a per capita basis. This probably reflects the fact that the smaller councils tend to have more responsibility for waste water management activities.

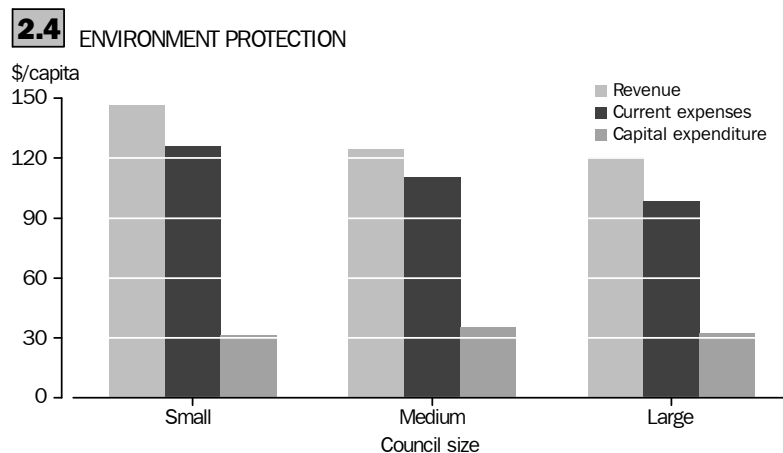


Table 2.3 also shows that the larger the council, the greater the proportion of council revenue and current expenses that are spent on environment protection activities. For example for small councils the proportion of environment protection related revenue is 9% of total revenue, whereas for large sized councils this proportion increases to 17% of total revenue received.

Smaller councils spent proportionately more (55%) on waste water management activities than the medium (43%) and large (40%) councils, and less on solid waste management services. This shows that the smaller, typically rural councils, generally have responsibility for treating sewage within their municipality. In many urban councils sewage is treated by water companies rather than the council but urban councils provide greater waste management services.

2.1

ENVIRONMENT PROTECTION, By category

	<i>Waste water</i>	<i>Solid waste</i>	<i>Biodiversity and conservation</i>	<i>Soil resources</i>	<i>Cultural heritage</i>	<i>Other</i>	<i>Total</i>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Revenue							
Rates from household and industry	836.5	1 048.4	24.3	11.3	0.8	33.1	1 954.3
Government funding							
Specific subsidies	15.6	5.8	24.6	2.6	3.0	1.8	53.6
Investment grants	53.0	*3.1	7.3	—	6.7	*3.9	74.1
Other revenue	145.6	36.2	5.9	0.4	*1.8	*1.7	191.6
<i>Total</i>	<i>1 050.7</i>	<i>1 093.6</i>	<i>62.2</i>	<i>14.3</i>	<i>12.4</i>	<i>40.4</i>	<i>2 273.6</i>
Current expenses							
Wages and salaries	166.3	155.2	40.9	5.6	*11.2	19.8	399.0
Operational expenses							
Contractors	106.6	605.7	23.9	11.1	12.7	*6.6	766.6
Government payments	**10.8	67.6	*4.8	**0.2	*1.1	10.0	94.5
Materials	181.9	103.7	19.2	5.7	2.4	**4.0	316.9
Other expenses	183.2	115.4	*8.8	2.1	5.1	7.0	321.6
<i>Total</i>	<i>648.8</i>	<i>1 047.6</i>	<i>97.5</i>	<i>24.7</i>	<i>32.6</i>	<i>47.4</i>	<i>1 898.6</i>
Capital expenditure							
Net acquisitions	111.1	45.4	31.9	**2.3	*6.2	0.5	197.4
Own account work	160.7	17.6	*7.7	7.9	*1.0	38.3	233.3
Contracted payments	122.0	32.7	10.0	2.7	8.3	*0.9	176.5
<i>Total</i>	<i>393.8</i>	<i>95.7</i>	<i>49.6</i>	<i>12.9</i>	<i>15.5</i>	<i>39.7</i>	<i>607.1</i>

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

— nil or rounded to zero (including null cells)

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

Note: Where figures have been rounded, discrepancies may occur within totals.

2.2**ENVIRONMENT PROTECTION, By State and category**

	Waste water	Solid waste	Biodiversity and conservation	Soil resources	Cultural heritage	Other	Total
REVENUE (\$m)							
NSW	324.2	439.0	23.1	*2.0	*2.6	3.4	794.3
Vic.	4.4	192.3	2.9	**0.1	7.4	*3.9	210.9
Qld	636.8	308.5	28.4	11.9	0.7	31.7	1 018.0
SA	20.7	*23.9	2.1	*0.2	0.4	*0.5	47.8
WA	*9.6	104.6	1.5	—	*0.8	*0.9	117.3
Tas.	54.1	15.9	4.2	*0.2	0.5	0.1	74.9
NT	*0.9	9.3	*0.1	—	—	—	10.4
Aust.	1 050.7	1 093.6	62.2	14.3	12.4	40.4	2 273.6
REVENUE PER CAPITA (\$)							
NSW	50	68	4	—	—	1	123
Vic.	1	40	1	—	2	1	44
Qld	179	87	8	3	—	7	286
SA	14	16	1	—	—	—	32
WA	5	56	1	—	—	1	62
Tas.	115	34	9	—	1	—	159
NT	6	63	1	—	—	—	70
Aust.	56	58	3	1	1	2	121
CURRENT EXPENSES (\$m)							
NSW	234.2	395.2	38.9	4.3	6.8	20.4	699.7
Vic.	40.0	216.2	13.3	1.7	18.2	*2.9	292.4
Qld	311.6	254.8	29.6	17.3	2.1	*19.8	635.2
SA	17.5	64.2	6.3	0.6	2.0	1.5	92.1
WA	10.6	85.1	5.7	*0.6	2.3	2.3	106.7
Tas.	32.8	23.1	3.3	*0.2	1.1	0.4	60.9
NT	2.2	9.0	0.4	—	—	—	11.8
Aust.	648.8	1 047.6	97.5	24.7	32.6	47.4	1 898.6
CURRENT EXPENSES PER CAPITA (\$)							
NSW	36	61	6	1	1	3	108
Vic.	8	45	3	—	4	1	61
Qld	87	72	8	5	1	6	178
SA	12	43	4	—	1	1	62
WA	6	45	3	—	1	1	57
Tas.	70	49	7	—	2	1	130
NT	15	61	3	—	—	—	80
Aust.	35	56	5	1	2	3	101

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— nil or rounded to zero (including null cells)

Note: Where figures have been rounded, discrepancies may occur within totals.

2.2**ENVIRONMENT PROTECTION, By State and category** *continued*

	Waste water	Solid waste	Biodiversity and conservation	Soil resources	Cultural heritage	Other	Total
CAPITAL EXPENDITURE (\$m)							
NSW	140.4	36.7	9.9	*0.1	*4.5	2.1	193.6
Vic.	19.2	17.7	3.1	**0.5	9.3	*0.1	49.9
Qld	189.6	22.4	32.1	10.0	*0.1	37.0	291.2
SA	13.7	*6.2	0.3	**2.3	**0.3	*0.2	22.9
WA	4.3	11.0	*3.1	—	*1.2	**0.4	20.0
Tas.	26.2	1.5	1.0	—	0.1	—	28.8
NT	*0.4	**0.2	0.1	—	—	—	*0.6
Aust.	393.8	95.7	49.6	12.9	15.5	39.7	607.1
CAPITAL EXPENDITURE PER CAPITA (\$)							
NSW	22	6	2	—	1	—	30
Vic.	4	4	1	—	2	—	11
Qld	53	6	9	3	—	10	82
SA	9	4	—	2	—	—	15
WA	2	6	2	—	1	—	11
Tas.	56	3	2	—	—	—	61
NT	3	1	—	—	—	—	4
Aust.	21	5	3	1	1	2	32

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— nil or rounded to zero (including null cells)

Note: Where figures have been rounded, discrepancies may occur within totals.

2.3

ENVIRONMENT PROTECTION, Breakdown by size of council(a)

	Waste water	Solid waste	Biodiversity and conservation	Soil resources	Cultural heritage	Other	Total	Proportion of council total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%
REVENUE								
Small	113.4	57.0	5.8	na	na	*3.2	179.3	8.6
Medium	206.6	212.1	10.4	0.5	6.0	*1.2	436.8	12.3
Large	730.7	824.5	46.0	13.8	6.4	36.1	1 657.5	16.8
Total	1 050.7	1 093.6	62.2	14.3	12.4	40.5	2 273.6	14.7
CURRENT EXPENSES								
Small	79.3	62.4	9.6	na	na	*2.4	153.8	7.1
Medium	133.4	209.6	16.5	2.7	10.8	**14.9	387.9	11.3
Large	436.1	775.5	71.4	22.0	21.8	30.0	1 356.8	15.4
Total	648.8	1 047.6	97.5	24.7	32.6	47.4	1 898.5	13.2
CAPITAL EXPENDITURE								
Small	26.4	6.9	**1.9	na	na	**3.3	38.4	4.1
Medium	88.8	23.4	*5.5	**2.3	*4.2	**0.6	124.9	18.2
Large	278.5	65.4	42.2	10.6	11.2	35.9	443.8	17.7
Total	393.8	95.7	49.6	12.9	15.5	39.7	607.1	14.7

na not available

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

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

Note: Where figures have been rounded, discrepancies may occur within totals.

CHAPTER 3

NATURAL RESOURCE MANAGEMENT

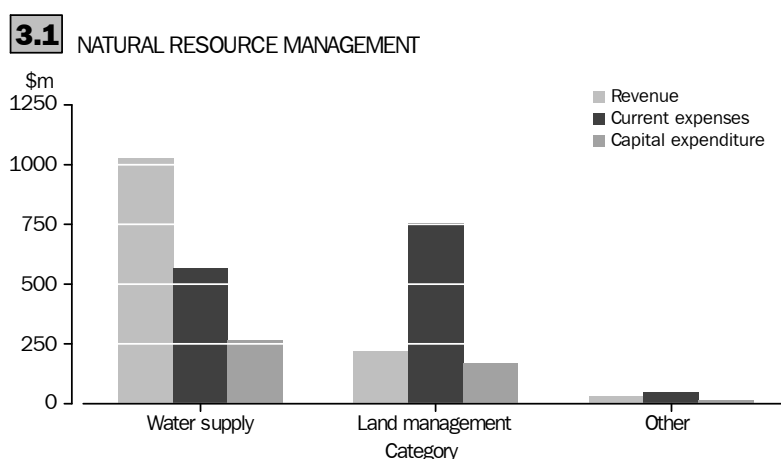
SUMMARY INDICATORS

Natural resource management activities include the management of natural assets (trees, land, water, minerals) and activities aimed at making more efficient use of these resources. Also included in this account are the activities associated with the recreational use of the environment, such as management of parks, beaches and reserves.

In 1999–2000 councils received almost \$1.3b for natural resource management activities, while current expenses were nearly \$1.4b and capital expenditure on resource management activities amounted to \$453m. Total expenditure on resource management exceeded revenue by \$546m. In the 1998–99 financial year, councils reported total natural resource management revenue of \$966m, current expenses of just over \$1.0b and capital expenditure of \$268m for natural resource management (ABS 2000).

The proportion of councils' total revenue that was received and used by councils for natural resource management is 8% of total revenue. Similarly 10% of total current and 11% of total capital expenditure was used for natural resource management activities.

Graph 3.1 shows natural resource management transactions by type of activity. The majority of councils' resource management revenue came from water supply activities (80% or \$1.0b) in 1999–2000. Revenue for land management activities was relatively small (\$220m or 17% of revenue for resource management). This was in contrast to the relatively large expenditure on these activities (\$924m).



REVENUE

Revenue increased in the 1999–2000 financial year, from \$966m to \$1.3b. This was driven mainly by a rise in rates from household and industry and a higher collection of other types of revenue for water supply activities. Rates collection accounted for 80% (just over \$1.0b) of all natural resource management revenue.

A further \$75m (6%) of funding was provided by the State and Commonwealth governments for resource management. More information about Intergovernmental

REVENUE *continued*

transfers can be found in Chapter 4. Other revenue accounted for 14% (\$180m) of total revenue. This came from sources such as contributions from developers, sale of materials (e.g. gravel from council quarries), fees for water connections, and water reading fees.

EXPENDITURE

Total expenditure on natural resource management increased from \$1.3b in 1998–99 to \$1.8b in 1999–2000 (a 37% increase) (ABS 2000). This rise was driven by a general increase in expenditure on materials, payments to contractors and own account capital expenditure.

Expenditure on materials accounted for the largest current expense item for water supply activities (\$237m or 42% of total current expenses for water supply activities). Wages and salaries was the largest expense item for land management activities (\$340m or 45% of total current expenses for land management activities).

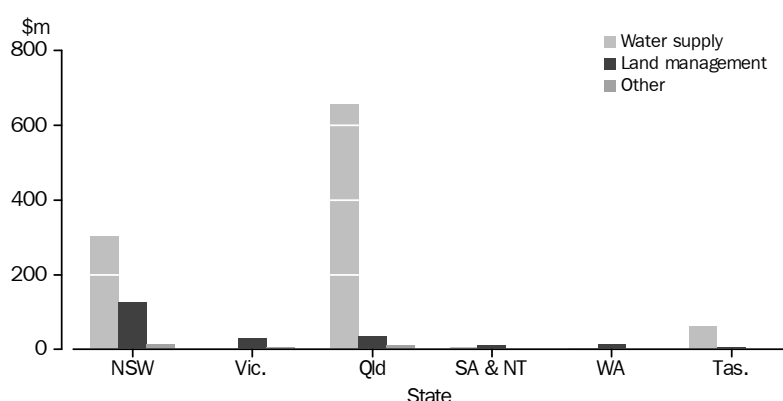
Contracting out of services was more prevalent for land management activities (21% of current expenses) compared with 9% of total water supply current expenses.

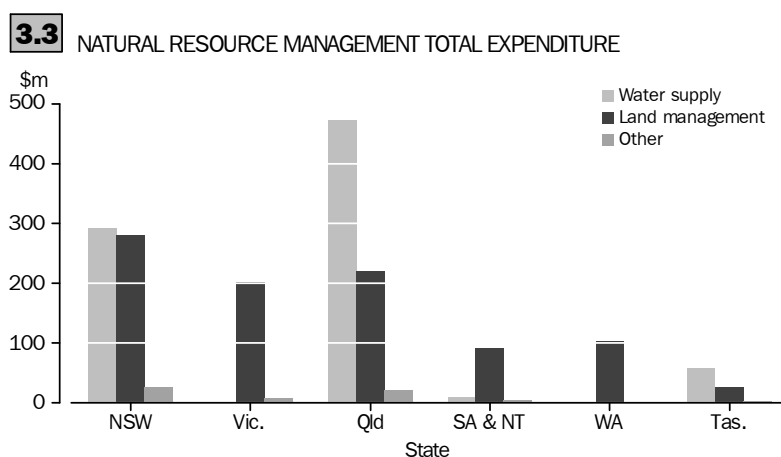
Capital expenditure was highest for water supply activities, which accounted for 59% (\$267m) of total capital expenditure for resource management. Own account work accounted for the largest proportion (42% or \$111m) of capital expenditure for water supply, the majority of water supply activities was undertaken by council staff rather than contracted out.

STATE ESTIMATES

Table 3.2, graphs 3.2 and 3.3 show that revenue and expenditure for natural resource management were greatest for Queensland and New South Wales. Variation in both total and per capita figures reflects a variety of factors including varying responsibilities of councils between States. For example, Queensland councils supply water services to households and industry, whereas in some other States, water boards have this responsibility.

3.2 NATURAL RESOURCE MANAGEMENT REVENUE



STATE ESTIMATES *continued*

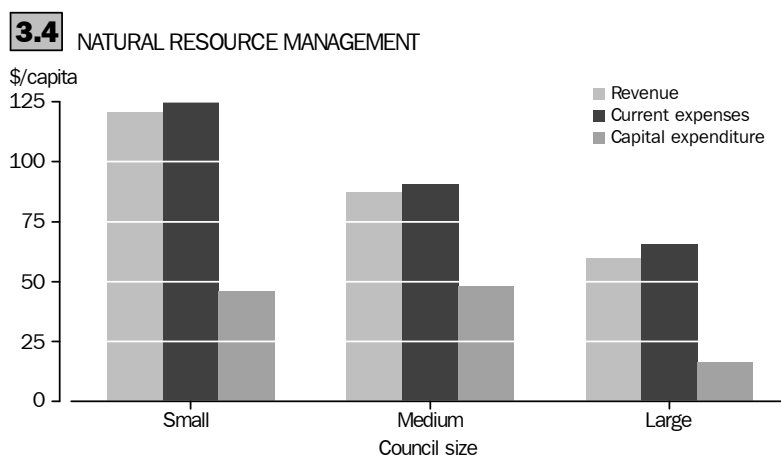
Queensland and Tasmanian councils had the largest total per capita expenditure on natural resource management activities (\$201 and \$184, respectively), largely due to their high per capita expenditure on water supply activities. Victoria spent the least per capita, a reflection of the fact that councils in this State have no responsibility for the provision of water supply services.

New South Wales, Victoria and Queensland accounted for 76% of total expenditure on land management activities. The Northern Territory and Queensland spent the most on a per capita basis (\$77 and \$62, respectively), with the least per capita being spent by New South Wales and Victoria. This is despite New South Wales receiving the highest revenue per capita for these activities.

BY COUNCIL SIZE

Table 3.3 shows that councils with large populations received 64% (\$823m) of total natural resource management revenue for 1999–2000. Medium sized councils received 24% (\$308m) and councils with a small population received 12% (\$147m). See paragraph 19 in the Explanatory Notes for the classification of council sizes.

On a per capita basis, however, small councils received the most revenue, and had the highest current expenditure on natural resource management activities. Significantly less per capita revenue and current expenditure was received and spent by large councils for natural resource management activities. This reflects the fact that the smaller (rural) councils are more likely to have responsibility for water supply activities.



BY COUNCIL SIZE *continued*

All sizes of councils received more in revenue for water supply than they spent providing the service to ratepayers. In contrast, revenue for land management activities covered only 17% of total expenditure on these activities for small and medium sized councils and about 27% for large councils. Further funding for land management activities is subsidised from other parts of councils' budgets.

For councils with small and medium sized populations, the majority of their total natural resource management expenditure was used for water supply activities (63% and 52% respectively), including a large capital expenditure component. In contrast, land management activity made up the bulk of natural resource management expenditure by large councils (\$656m or 58% of total natural resource management expenditure by large councils).

3.1**NATURAL RESOURCE MANAGEMENT, By category**

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>
	\$m	\$m	\$m	\$m
Revenue				
Rates from household and industry	855.9	147.0	*21.0	1 023.9
Government funding				
Specific subsidies	5.6	5.8	*0.4	11.8
Investment grants	**49.3	10.1	3.3	*62.7
Other	116.9	*56.3	*6.4	179.5
<i>Total</i>	<i>1 027.6</i>	<i>219.3</i>	<i>*31.0</i>	<i>1 277.9</i>
Current expenses				
Wages and salaries	123.9	339.5	11.8	475.2
Operational expenses				
Contractors	51.3	156.7	15.2	223.1
Government payments	*49.5	**3.4	**0.6	*53.6
Materials	236.8	164.5	14.7	416.1
Other expenses	107.2	89.4	*5.5	202.1
<i>Total</i>	<i>568.7</i>	<i>753.5</i>	<i>47.8</i>	<i>1 370.0</i>
Capital expenditure				
Net acquisitions	**100.7	58.6	**10.3	*169.6
Own account work	111.0	52.1	**0.8	163.9
Contracted payments	55.6	60.2	**3.3	119.1
<i>Total</i>	<i>*267.3</i>	<i>170.9</i>	<i>*14.4</i>	<i>452.6</i>

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

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

Note: Where figures have been rounded, discrepancies may occur within totals.

3.2**NATURAL RESOURCE MANAGEMENT, By State and category**

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>
REVENUE (\$m)				
NSW	303.1	127.2	*13.4	443.8
Vic.	*0.2	29.8	*6.6	36.6
Qld	655.9	34.6	*10.0	700.5
SA	**4.8	9.9	**0.4	15.1
WA	**2.4	12.7	*0.3	15.3
Tas.	60.6	4.4	*0.4	65.4
NT	0.6	0.7	—	1.3
<i>Aust.</i>	<i>1 027.6</i>	<i>219.3</i>	<i>*31.0</i>	<i>1 277.9</i>

REVENUE PER CAPITA (\$)				
NSW	47	20	2	69
Vic.	—	6	1	8
Qld	184	10	3	197
SA	3	7	—	10
WA	1	7	—	8
Tas.	129	10	1	139
NT	4	5	—	9
<i>Aust.</i>	<i>55</i>	<i>12</i>	<i>2</i>	<i>68</i>

CURRENT EXPENSES (\$m)				
NSW	159.9	236.7	*13.8	410.4
Vic.	0.5	158.1	6.8	165.4
Qld	349.9	184.0	20.1	553.9
SA	*8.1	68.4	2.5	79.0
WA	*1.8	74.7	1.8	78.3
Tas.	48.5	21.8	*2.2	72.6
NT	0.2	9.7	*0.5	10.4
<i>Aust.</i>	<i>568.7</i>	<i>753.5</i>	<i>47.8</i>	<i>1 370.0</i>

CURRENT EXPENSES PER CAPITA (\$)				
NSW	25	37	2	64
Vic.	—	33	1	35
Qld	98	52	6	156
SA	5	46	2	53
WA	1	40	1	42
Tas.	103	46	5	154
NT	1	66	4	71
<i>Aust.</i>	<i>30</i>	<i>40</i>	<i>3</i>	<i>73</i>

* estimate has a relative standard error of between 25% and 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)

Note: Where figures have been rounded, discrepancies may occur within totals.

3.2**NATURAL RESOURCE MANAGEMENT, By State and category** *continued*

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>
CAPITAL EXPENDITURE (\$m)				
NSW	*133.0	**44.9	**12.1	*190.0
Vic.	*0.2	43.0	**1.2	44.4
Qld	122.7	**37.0	—	159.8
SA	0.7	12.1	**0.7	13.4
WA	*0.5	28.6	—	29.1
Tas.	10.1	*3.7	**0.4	14.2
NT	—	1.6	—	**1.6
<i>Aust.</i>	<i>*267.3</i>	<i>170.9</i>	<i>*14.4</i>	<i>452.6</i>

CAPITAL EXPENDITURE PER CAPITA (\$)				
NSW	21	7	2	29
Vic.	—	9	—	9
Qld	34	10	—	45
SA	1	8	1	9
WA	—	15	—	16
Tas.	22	8	1	30
NT	—	11	—	11
<i>Aust.</i>	<i>14</i>	<i>9</i>	<i>1</i>	<i>24</i>

* estimate has a relative standard error of between 25% and 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)

Note: Where figures have been rounded, discrepancies may occur within totals.

3.3**NATURAL RESOURCE MANAGEMENT, Breakdown by size of council(a)**

	<i>Water supply</i>	<i>Land management</i>	<i>Other</i>	<i>Total</i>	<i>Proportion of council total</i>
	\$m	\$m	\$m	\$m	%
REVENUE					
Small	133.7	10.0	*3.7	147.4	7.1
Medium	254.4	34.2	**19.2	307.8	8.7
Large	639.6	175.0	8.2	822.8	8.3
<i>Total</i>	<i>1 027.6</i>	<i>219.3</i>	<i>*31.0</i>	<i>1 277.9</i>	<i>8.2</i>
CURRENT EXPENSES					
Small	84.5	55.1	12.7	152.4	7.0
Medium	137.3	163.3	*18.3	319.0	9.3
Large	346.9	535.0	16.7	898.6	10.2
<i>Total</i>	<i>568.7</i>	<i>753.5</i>	<i>47.8</i>	<i>1 370.0</i>	<i>9.5</i>
CAPITAL EXPENDITURE					
Small	*46.5	8.7	**0.9	*56.1	6.0
Medium	**114.7	41.6	**12.3	*168.6	24.6
Large	106.0	120.6	1.2	227.8	9.1
<i>Total</i>	<i>*267.3</i>	<i>170.9</i>	<i>*14.4</i>	<i>452.5</i>	<i>11.0</i>

* estimate has a relative standard error of between 25% and 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) Small councils have population size less than 10,000, medium councils 10,000–39,999 and large councils greater than 40,000.

CHAPTER 4

INTERGOVERNMENTAL TRANSFERS

INTRODUCTION

Table 4.1 focuses on the specific subsidies and investment grants given to local government for environment protection and natural resource management activities and on the payments by local governments to State and Commonwealth governments for similar activities.

Total Commonwealth and State government funding represented only 6% of revenue received by local government for both environment protection activities and natural resource management activities.

ENVIRONMENT PROTECTION

State subsidies and grants contributed 80% (\$102m) of government funding to local government for environment protection activities. The majority of State government funding for environment protection was in the form of capital grants (63% or \$64m), with the remaining 37% (\$40m) for specific subsidies for environment protection activities. A further \$38m of specific subsidies, and \$10m of investment grants was provided by the Commonwealth government for these activities.

Local government authorities paid other local, State or Commonwealth government agencies a total of \$95m or the equivalent of 74% of the funding that they received. These payments to other government authorities were mainly for solid waste, waste water and biodiversity and conservation activities. Examples of these payments include: waste management levies; environment protection agency licences for landfills; and water treatment facilities and precepts.

NATURAL RESOURCE MANAGEMENT

The bulk of government funding for natural resource management activities was also provided by State governments (93% of total government funding to local government for these activities, or \$70m).

The majority of this funding was in the form of investment grants (86% or \$60m), with the remaining 14% (\$10m) for specific subsidies for resource management activities. An additional \$5m was provided by the Commonwealth government in the form of subsidies (\$2m) and grants (\$3m).

Local government authorities paid other local, State or Commonwealth government agencies a total of \$54m dollars or the equivalent of 72% of the funding that they received. Examples of these payments include: planning levies; purchase of water from water authorities; water analysis and precepts.

NATURAL RESOURCE
MANAGEMENT *continued*

4.1 INTERGOVERNMENT TRANSFERS, By account

	<i>Environment protection</i>	<i>Natural resource management</i>
	\$m	\$m
.....		
FUNDING TO LOCAL GOVERNMENT		
Commonwealth		
Specific subsidies	15.8	1.8
Investment grants	10.1	3.2
Total	25.9	5.0
State		
Specific subsidies	37.9	10.0
Investment grants	64.0	59.6
Total	101.8	69.6
.....		
PAYMENTS BY LOCAL GOVERNMENT TO OTHER GOVERNMENT BODIES		
Local payments	94.5	53.6
.....		

Note: Where figures have been rounded, discrepancies
may occur within totals.

EXPLANATORY NOTES

INTERNATIONAL FRAMEWORKS

1 The ABS Environment and Natural Resources Survey was developed in the mid to late 1990s in response to calls from councils themselves, 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 Development of the Environment and Natural Resources Survey was 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 resource 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 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

INTERNATIONAL
FRAMEWORKS *continued*

ENVIRONMENT PROTECTION
EXPENDITURE ACCOUNT

government sector and other industry sectors. It also permits international comparisons.

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 landscape
- 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 products or services 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 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 habitats or protection of soil resources are typically carried out at a net cost to councils, that is, expenditure usually exceeds revenue in these activities. 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.

ENVIRONMENT PROTECTION EXPENDITURE ACCOUNT

continued

NATURAL RESOURCE MANAGEMENT ACCOUNT

METHODOLOGY

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).

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:

- 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.

17 The statistics presented in this publication are estimated from a survey of local councils, conducted under the *Census and Statistics Act 1905*. The survey is a mail out questionnaire on environment protection and natural resources management.

18 The survey was mailed to approximately half of the total number of local government authorities, not including Aboriginal regional councils, which existed in November 2000. The sample was representative of councils in all States, of councils with large, medium and small populations, and of councils in urban, provincial, fringe metropolitan and rural locations.

19 For the purpose 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.

20 The estimation process used the number raised estimator. The majority of aggregated data presented in the results have a standard error of less than 15%. Most of the totals presented have a standard error of less than 10%. Standard errors for the State level and council size estimates are sometimes high because of the smaller sample of councils contributing to the estimates. Estimates with a standard error of more than 25% have been marked with a *. Estimates with a standard error of more than 50% have been marked with a **. Estimates marked with either one or two stars should be used with caution. Some cells have been combined due to confidentiality and high standard errors.

21 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 overview of results section of this publication are not directly comparable with the proportions presented in the earliest edition of this publication (*Environment Expenditure, Local Government, Experimental Estimates, Australia: 1997–98*). The change to

METHODOLOGY *continued*

accrual based accounting may also have influenced some of the estimates presented for 1998–99.

22 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 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.

23 Per capita figures are based on council population figures (estimated residential population as at June 2000). These figures were derived from *Regional Population Growth, Australia and New Zealand* (Cat. no. 3218.0).

FUTURE DIRECTIONS AND
ADDITIONAL INFORMATION

24 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.

25 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. They also 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.

26 Limited additional data may be available from the collection. Inquiries about data services can be made to Bob Harrison, Director, Environment and Energy Statistics Section, on Canberra 02 6252 7369

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.
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> <p><i>Waste water management.</i> Activities that correspond to sewerage operations and the reduction of waste elements reaching water bodies. Waste water reuse by council.</p> <p><i>Solid waste management.</i> Landfill and solid waste operations by council and the implementation of programs to reduce the amount of materials entering the solid waste stream.</p> <p><i>Protection of soil resources.</i> Remediation of contaminated soils. Protection of existing soil contamination from wastes and degradation. Remediation of degraded (salinated, eroded) soils in crown land and national park regions.</p> <p><i>Conservation of biodiversity and habitat.</i> 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.</p> <p><i>Protection of cultural heritage.</i> Establishment and maintenance of cultural heritage sites. Programs to encourage the implementation of cultural heritage preservation by business and householders.</p> <p><i>Other environmental protection.</i> Includes any environmental protection activity not broken down in the above categories, air and climate protection, noise and vibration control, education on environmental protection and measures to protect the environment from radiation.</p>
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 capital payments received (usually from government) and 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> <p><i>Water supply and management.</i> 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.</p>

Natural Resource Management <i>continued</i>	<p><i>Land management and development.</i> The development of land resources by zoning. 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.</p> <p><i>Other resource management.</i> Quarrying to provide raw materials for council works. Activities or programs aimed at developing alternative energy resources. Measures to reduce energy consumption.</p>
Subsidies	Government grants to local governments 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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