

CHAPTER 15

SERVICES TO COMMUNITIES

WHAT IS INCLUDED IN THE SERVICES TO COMMUNITIES CATEGORY?

- 1 The Services to communities category comprises expenses on essential and support services generally provided to communities. It covers expenses on subsidies to electricity, water and sanitation providers and expenses on environmental protection services, planning and development, and administration and support of communities, including Indigenous communities. Superannuation for State government employees engaged in the provision of these services is also included. The category does not include expenses on irrigation or other industrial water use which are included in the Services to industry category.
- 2 The Northern Territory argued that Indigenous expenses for road, water and air transport, and remote housing should be included in this category because the drivers of these expenses were similar to the drivers of Indigenous community development expenses. We consider any disabilities arising from services provided to Indigenous people are best assessed in the same category as similar services to non-Indigenous people. This will facilitate a consistent treatment of the underlying cost drivers.
- 3 Expenses in this category were \$5.9 billion in 2008-09, which was 3.5 per cent of total State expenses. Table 15-1 shows the relative importance of expenses on the major groups of services in this category.
- 4 Table 15-2 shows that on average, expenses on services to communities grew from 3.0 per cent of total operating expenses in 2005-06 to 3.5 per cent in 2008-09.

Table 15-1 Services to communities category expenses, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Water, sanitation and protection of the environment (a)	392.8	549.8	488.4	567.2	289.5	39.1	20.7	152.3	2 499.8
Electricity and other energy (a)	109.7	153.5	136.4	158.4	80.8	10.9	5.8	42.5	698.1
Concessions (a)	122.9	172.1	152.9	177.5	90.6	12.2	6.5	47.7	782.3
Community development	238.8	334.2	296.9	344.7	175.9	23.8	12.6	92.5	1 519.4
Community amenities	66.8	93.5	83.1	96.5	49.2	6.7	3.5	25.9	425.2
Total (\$m)	931.0	1 303.1	1 157.6	1 344.3	686.1	92.7	49.0	360.9	5 924.7
Total (\$pc)	132.22	242.89	266.15	609.94	425.60	185.39	140.77	1 627.99	273.77
Proportion of State expenses (%)	1.8	3.3	3.1	7.0	5.1	2.1	1.4	9.0	3.5

(a) Concession data are not available from the ABS GFS data. The Commission has estimated concession and subsidy expenditure for water, sanitation and electricity using data from the States.

Source: Commission calculation using State provided data.

Table 15-2 Services to communities category expenses as a proportion of State expenses

	2005-06	2006-07	2007-08	2008-09
Total for category (\$m)	4 007.1	4 641.6	5 730.4	5 924.7
Total operating expenses (\$m)	134 969.0	146 359.0	157 538.0	171 074.5
Proportion of total operating expenses (%)	3.0	3.2	3.6	3.5

Source: Commission calculation using ABS GFS and State data.

What States do

5 Governments provide a wide range of services to communities. The average service delivery policies for each group are summarised below.

Water sanitation and protection of the environment subsidies other than concessions

6 State governments regulate and subsidise water and sewerage providers to ensure communities have access to services at a reasonable price and a nationally determined quality. They subsidise providers to assist with the cost of providing services in regions where full cost recovery is not viable. States also legislate on, regulate and manage natural resources and the environment in the interests of communities, guided by national policies.

7 For water and sewerage subsidies, policy differences exist between States in pricing, water industry structure, the treatment of capital payments and the valuation of assets. Nonetheless, most water providers fully cost recover in larger urban regions, consistent with National Water Initiative (NWI) requirements. As a result, water subsidies are generally only provided for smaller regional communities where water availability and/or quality are poor.

8 Environmental protection expenses include expenditure on developing and monitoring standards covering pollution and air quality, control and prevention of erosion of beaches and foreshores and research and development into pollution abatement programs and other

environmental programs. These are distinct from expenses on water and sanitation subsidies and concessions.

Electricity and other energy subsidies other than concessions

- 9 As with water and sanitation services, State governments regulate and subsidise electricity providers to ensure communities have access to services at a reasonable price and of a nationally determined level of quality. They subsidise providers to assist with the cost of providing services in regions where cost recovery is not viable.
- 10 Differences in State pricing and concession policies exist, affecting the level of subsidy provided. Nevertheless, on average, services in accessible, more densely populated regions are fully cost recovered. This is not the case in remote and very remote regions because:
 - communities in these regions are less likely to be connected to a major transmission network and costly generation alternatives are required, such as diesel generation; and
 - the customer base is smaller.

Concessions

- 11 State governments subsidise water, sewerage and electricity providers to provide concessions and rebates to customers, mainly Commonwealth pension and health care card holders.

Community development

- 12 Community development service expenses in mainly new or developing communities include expenses for: local government type health, education, culture and recreation facilities; regulation of land use; and administrative support and research. These services are provided by all States according to their own policies. In addition, the majority of States provide extra governance and management support for discrete Indigenous communities.

Community amenities

- 13 In all States, except the ACT, the provision of community amenities is usually the responsibility of local councils. The States occasionally assist with the provision of such amenities. The ACT government is responsible for all local government services and provides them to the entire ACT population.

What is the role of the Commonwealth Government?

- 14 The Commonwealth provides funding to the States for programs related to the services in this category. The payments and their treatment are shown in Table 15-3. The Commonwealth provides other payments to the States for water related purposes, energy and local government. Their treatment is shown in the Other services chapter and the Services to industry chapter.
- 15 The Commission's approach to the treatment of Commonwealth payments is set out in Chapter 5 of Volume 1. Reasons for the treatment of each Commonwealth payment are in the Adjusted budget chapter.

Table 15-3 Commonwealth payments to States relevant to the Services to communities category and their treatment

Payments affecting the relativities	Payments not affecting the relativities
National partnership payments	Other payments
Water for the future	Assistance for water sewerage — ACT
Renewable remote power generation	Improving water information
Commonwealth own-purpose expenses	
Community housing and infrastructure program (CHIP) — essential services component (estimated at 20 per cent of total CHIP funding)	

Source: Commonwealth of Australia *Budget Paper No 3, 2009-10*.

ASSESSMENT APPROACH

Overview

- 16 The assessment of State needs for this category has been very difficult. We could not develop a broad indicator that captured the disabilities adequately because of the wide range of services and the diverse nature of the factors affecting them. We have therefore made assessments for six expense types which are influenced by different drivers:
- subsidies to water and sanitation providers;
 - protection of the environment expenses;
 - subsidies to electricity and other energy providers;
 - subsidies to water and electricity providers to enable them to provide concessions for Commonwealth pension and health care hard holders;
 - community development expenses on support for communities, including discrete Indigenous communities; and
 - community amenities provided to the population at large.
- 17 States generally accepted it was necessary to break expenses into these components but they did not always agree on the drivers we identified for each.

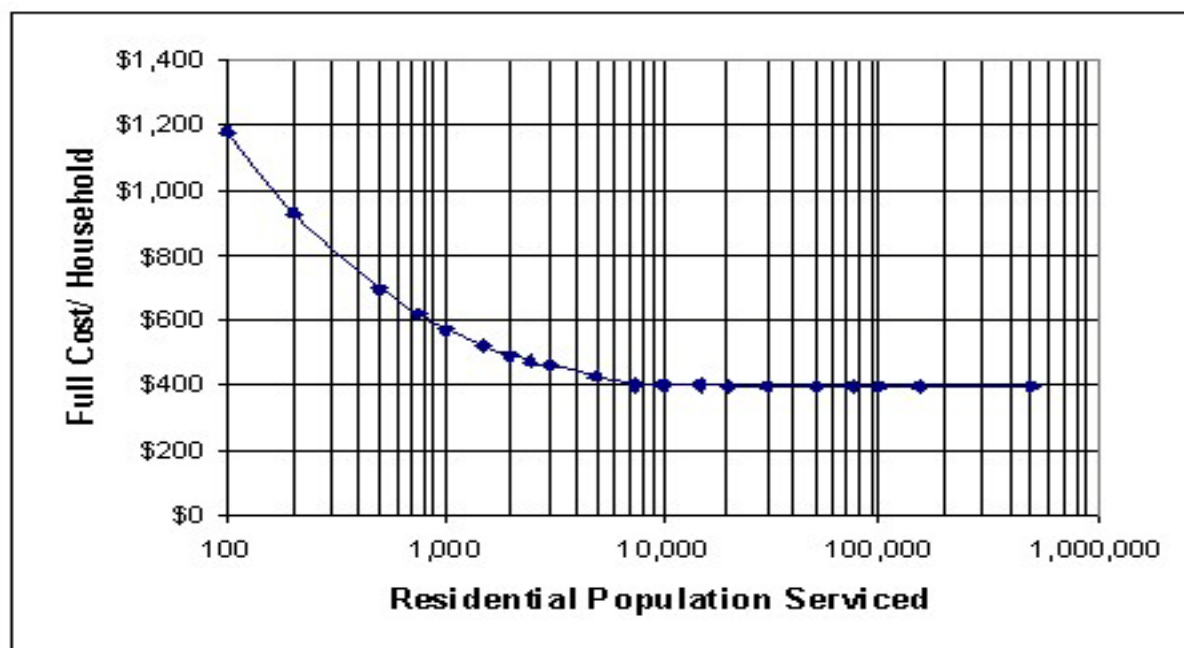
Factors affecting service use and cost

Water and sanitation subsidies

- 18 Average State policy suggests that States do not provide subsidies in highly accessible areas where water and sanitation providers can cost recover from their customers. However, they do in other areas where providers cannot fully recover their costs. High overhead costs of providing water in small communities, areas with low water availability and/or poor water quality and the characteristics of consumers can all result in the need for differential subsidies.

- Per capita overhead costs are higher in small and remote communities because the basic infrastructure and operating costs are spread across smaller populations. Populations in such communities are also declining, making cost recovery more difficult¹.
 - Water quality and availability affect the costs of providing services, with low water quality resulting in extensive treatment to meet the national drinking water standards and low availability often resulting in water being pumped from underground or transported long distances.
 - It is hard for service providers to cost recover from Indigenous communities.
- 19 In addition, State policies, such as capping the price of water below the full cost recovery level, also play a part in determining the size of subsidy provided. For example, Western Australia and South Australia ensure providers charge a uniform price regardless of their actual costs. Any deficit incurred by providers is therefore the responsibility of the States.
- 20 *Small communities*. Data provided by Queensland, Western Australia, South Australia, Tasmania and the Northern Territory supported the Commission's view that costs and subsidies increase as community size decrease. They also confirm that most States do not subsidise providers in highly accessible areas.
- 21 New South Wales, Victoria and the ACT provided data that we have not included in our analysis. The New South Wales data captured too few communities for us to be confident that they were representative of the general situation in New South Wales. The Victorian data were for schemes that could not be associated with individual communities and the ACT data refer only to communities in highly accessible areas in which most States cost recover.
- 22 Evidence provided by Queensland showed the costs per household of providing water in communities with a population greater than 10 000 are relatively stable and subsidies are not required (see Figure 15-1). It also provided subsidy data that indicated, on average, subsidies are larger in smaller local government areas (LGA) (Table 15-4).

¹ Queensland Department of Natural Resources and Mines, *Planning Guidelines for Water Supply and Sewerage*, Chapter 8, Remote and Small Community Issues. March 2005.

Figure 15-1 Annual cost per household of water supply by population in Queensland

Source: Queensland Treasury, 22 April 2009.

Table 15-4 Average subsidy per capita by LGA size, Queensland, 2008-09

LGA population	Subsidy \$pc
200 - 999	706.69
1 000 - 9 999	470.87
10 000 and over	41.79

Source: Queensland Treasury.

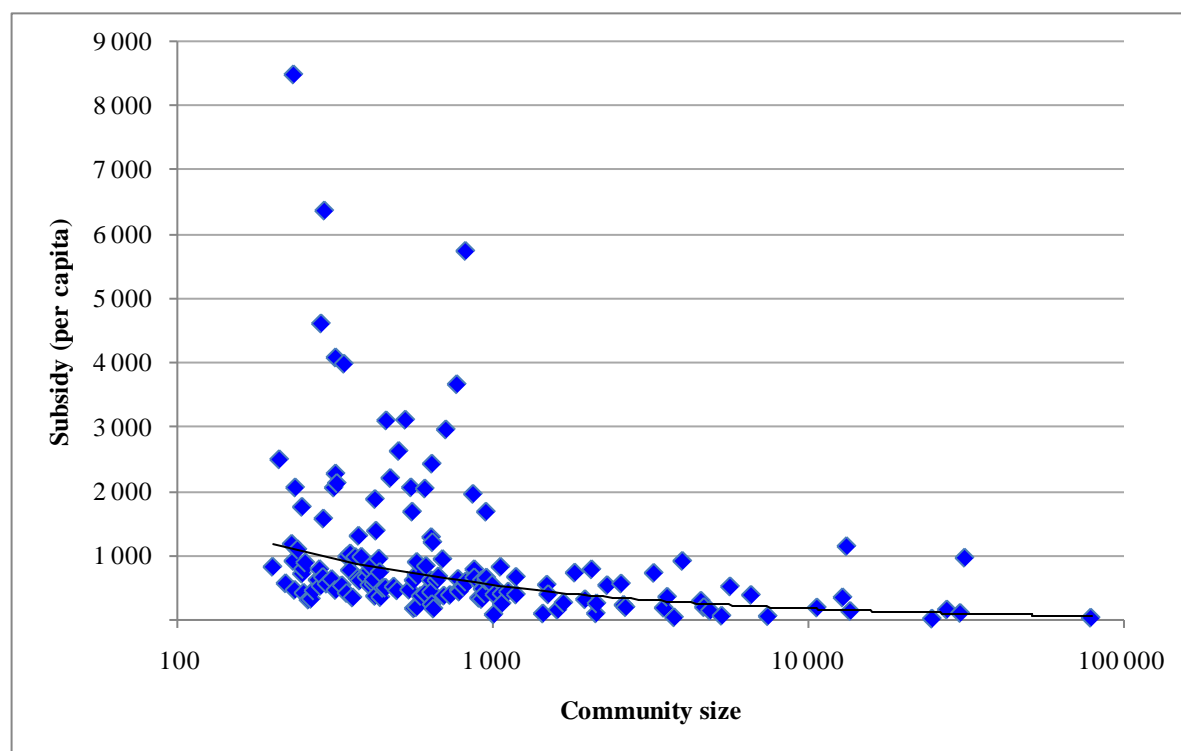
23 Western Australia and the Northern Territory provided data showing costs and subsidies are higher in small communities and in remote communities. The data also showed that costs and subsidies are greater and more variable in communities of less than 1000. Table 15-5 and Figure 15-2 show these data.

Table 15-5 Average subsidy and cost per capita by community size, Western Australia and the Northern Territory, 2007-08

	Northern Territory (a)		Western Australia		Combined	
	Subsidy \$pc	Cost \$pc	Subsidy \$pc	Cost \$pc	Subsidy \$pc	Cost \$pc
200 - 999	559.87	581.50	1 455.98	2 514.17	1 135.70	1 823.41
1 000 - 9 999	316.76	440.53	341.42	805.75	336.92	739.09
10 000 and over	18.85	324.32	294.03	709.22	266.08	670.12

(a) Northern Territory data for 2007-08 show negative subsidies for Darwin and Katherine, these data were not included. Alice Springs was the only community included in the 10 000 and over category.

Source: Western Australia and Northern Territory Treasuries.

Figure 15-2 Per capita subsidies to water providers, Northern Territory and Western Australia, 2007-08

Source: Western Australia and Northern Territory Treasuries.

- 24 South Australia provided cost and subsidy data by region. While the relationship between community size and subsidies could not be determined, the data show subsidies are larger outside metropolitan areas (Table 15-6).

Table 15-6 Average subsidy and cost by service region, South Australia, 2008-09

Service region	Subsidy	Cost
	\$m	\$m
Metro	6.9	708.8
Outer Metro	34.6	113.1
Eyre	57.9	29.1
Northern	33.1	94.8
Southeast	19.9	22.7

Source: South Australian Treasury.

- 25 Tasmania provided cost data by LGA which indicated that water supply is more costly in smaller areas (Table 15-7). It did not provide data on subsidies because, in Tasmania, subsidies to water and sanitation providers is a local government responsibility.

Table 15-7 Average costs per kilolitre (kL) water supplied, Tasmania, 2006-07 and 2007-08

LGA population	2006-07	2007-08
	\$kL	\$kL
Less than 10 000 (a)	1.41	1.60
10 000 and above (b)	1.04	1.14
Ratio (a/b)	1.36	1.40

Source: Tasmanian Treasury.

- 26 We concluded that community size is relevant to the amount of subsidy provided under average State policy. However, there were two problems.
- The definition of small communities.
 - The cost weights to apply to populations in small communities.
- 27 Queensland said that reticulated water services are provided to communities with a population greater than 50 and reticulated sewerage is provided to the majority of communities with more than 500. Queensland suggested that, if Urban Centres and Localities (UC/Ls) were used², the population in communities between 200 and 10 000 people would provide a suitable indicator of need.
- 28 Western Australia and the Northern Territory said that communities with populations less than 200 should be included. The Northern Territory noted that a quarter of communities provided reticulated services by Indigenous Essential Services were smaller than 200 and costs in communities of this size were high.
- 29 While we recognise that there are very small communities receiving reticulated water and sewerage services, we cannot reliably measure the population in them because UC/Ls are not defined for communities with less than 200 people. Therefore, the small communities we can recognise as requiring subsidies are limited by the available data.
- 30 Similarly data limitations made it difficult to calculate weights to apply to the populations in communities of different size. Table 15-8 shows the weights derived using Western Australia and Northern Territory data. They show very different relationships in each State, probably because they are calculated using data that are not comparable. As a result, the combined weights would be misleading.
- 31 Tasmania considered that an assessment based on a State's proportion of the population in each State residing in small communities would be sufficient to capture the relevant needs. The evidence in Table 15-5 shows that smaller communities received much larger subsidies than larger communities. Table 15-8 suggests larger weights for communities between 200 and 1000.

² UC/Ls are generally not defined for communities with a population less than 200.

Table 15-8 Subsidy weights by community size, Western Australia and the Northern Territory, 2007-08

	Northern Territory		Western Australia		Combined	
	Subsidy	Weight	Subsidy	Weight	Subsidy	Weight
	\$pc		\$pc		\$pc	
200 - 999	559.87	29.70	1 455.98	4.95	1 135.70	4.27
1 000 - 9 999	316.76	16.80	341.42	1.16	336.92	1.27
10 000 and over	18.85	1.00	294.03	1.00	266.08	1.00

Source: Commission calculation.

- 32 Water quality and availability. Table 15-9 summarises the available information on water availability and quality by drainage division. Figure 15-3 shows the drainage divisions. While data on water availability are up to date³, we were unable to find recent comprehensive national data on water quality. We have referred to data from the Macquarie Atlas used in the 2004 Review⁴.
- 33 The data suggest that there are wide variations between regions of Australia in terms of water availability and quality. For example, South Australia and Western Australia experience poorer water availability and quality than Tasmania and areas of Northern Australia.
- 34 Using the data, we can identify water availability at river basin⁵ and drainage division level and water quality at the drainage division level. We consider that the areas of relative disadvantage, in terms of water quality and availability are:
- North-East Coast (Queensland);
 - South-East Coast (New South Wales, Victoria and South Australia);
 - Murray-Darling (New South Wales, Victoria, Queensland, South Australia and the ACT);
 - South Australia Gulf (South Australia);
 - South-West Coast (Western Australia);
 - Indian Ocean (Western Australia);
 - Lake Eyre (Queensland, South Australia and Northern Territory);
 - Bulloo-Bancannia (Queensland) ; and
 - Western Plateau⁶ (Western Australia, South Australia and the Northern Territory).

³ Raupach, MR, Briggs PR, Harverd V, King EA, Paget M, Trudinger CM (2008), Australian Water Availability project (AWAP), CSIRO Marine and Atmospheric Research Component: Final Report for Phase, 3, CSIRO.

⁴ Macquarie Library, The Macquarie World Atlas 1994, pages 158-9. Originally sourced from Water 2000: A perspective on Australia's water resources to the year 2000, AGPS, 1983.

⁵ River basins are the catchment areas of major rivers draining to the sea. The 246 river basins covering all Australia form sub-basins of the drainage divisions.

Table 15-9 Water quality and availability, summary

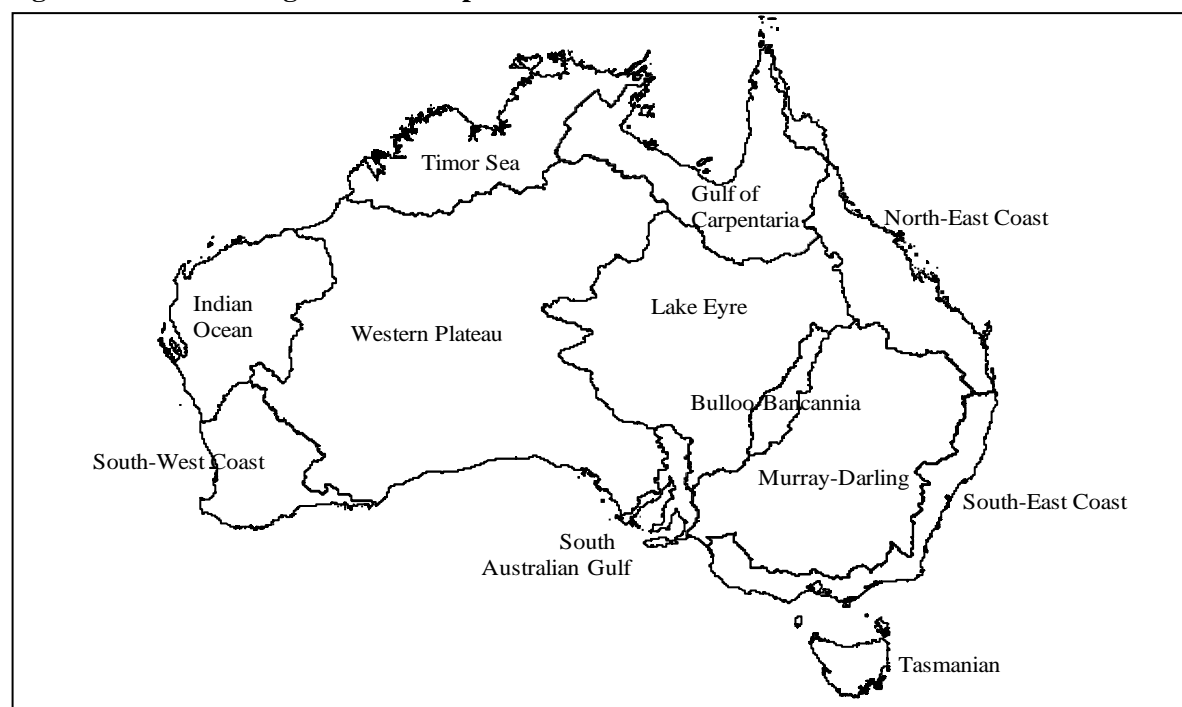
Drainage divisions	State(s)	Availability (a)				Quality (b)
		Surface water		Groundwater		Surface water
		GL	ML pc	GL	ML pc	GL
North-East Coast	Qld	57 955	16.41	15 613	4.42	10 - 100
South-East Coast	NSW, Vic, SA	12 933	1.26	17 769	1.73	100 - 500
Tasmanian	Tas	37 668	95.31	12 471	31.56	500 - >1000
Murray-Darling	NSW, Vic, Qld, SA, ACT	12 946	7.82	15 694	9.47	1 - 10
South Australian Gulf	SA	466	0.36	2 011	1.54	1 - 10
South-West Coast	WA	4 467	2.44	8 655	4.72	1 - 10
Indian Ocean	WA	16 577	186.19	14 728	165.42	1 - 10
Timor Sea	WA, NT	149 239	857.36	49 113	282.15	100 - 500
Gulf of Carpentaria	Qld, NT	115 584	2 169.58	40 882	767.37	100 - 500
Lake Eyre	Qld, SA, NT	21 172	532.61	22 403	563.58	1 - 10
Bulloo-Bancannia	Qld	870	1 078.94	1 577	1 956.39	1 - 10
Western Plateau	WA, SA, NT	56 041	919.64	45 069	739.59	unknown

Note: GL=gigalitre, ML=megalitre.

(a) 10 year annual average runoff (surface water) and deep drainage (groundwater).

(b) Expressed as the quantity of fresh surface water that contains less than 1000 milligrams per litre of dissolved solids. The measure that represents the majority of the basin has been noted.

Source: Availability data sourced from the CSIRO, *Australian Water Availability Project*, special data request. Quality data sourced from Macquarie Library, *The Macquarie World Atlas, 1994*, pages 158-9.

Figure 15-3 Drainage division map

Source: Map generated by Mapinfo using data file from Bureau of Meteorology.

⁶ While no data were available from the Macquarie Atlas on the quality of water in the Western Plateau, this division is considered to have low water quality because it is likely to have the same water quality as the surrounding divisions.

- 35 These findings corroborate our general understanding:
- there is low water quality and availability in the Murray-Darling and South-Australian Gulf drainage divisions;
 - while there are some water availability and quality issues in the northern part of Australia and in Tasmania, they are not as significant as in other parts of Australia; and
 - there are water quality issues across much of Western Australia.
- 36 Not all States agreed with these conclusions. Queensland was concerned about the reliability of the water availability and quality data. Queensland, Western Australia, Tasmania and the Northern Territory considered that drainage divisions were too broad to identify correctly the needs of relevant communities. Western Australia said average water availability measures ignore the impact of rainfall patterns (for example, steady throughout the year or one cyclone every three or four years). The Northern Territory said that neither water availability nor quality provided an adequate proxy for infrastructure or operational capacity or the associated disabilities. It said that the availability of water reflects the seasonal climate pattern and cited a Commonwealth Scientific and Industrial Research Organisation (CSIRO) project that noted Northern Australia could be considered annually water limited⁷. The Northern Territory also considered groundwater availability should have been included.
- 37 We acknowledge that the available data have significant limitations. They cannot provide for adjustment at the community level or seasonality. However, we are satisfied that this method captures, in broad terms, the regions affected by low water availability and quality. The exclusion of groundwater reflects its limited use in the provision of water services⁸.
- 38 However, there are no data that show the threshold beyond which additional subsidies are required to deal with low water availability and quality. Commission discussions with representatives of the National Water Commission, CSIRO and the Bureau of Meteorology (BoM) confirmed this.
- 39 Table 15-10 shows the average per capita subsidy in areas of good and poor water for the Northern Territory and Tasmania. These are the only two States for which we have such data. The standard policy across States appears to be to provide smaller subsidies to communities in areas of good water. Tasmania has a large proportion of such communities and, therefore, its policy of not providing subsidies to these communities dominates the standard. We note that, in the future, the Tasmanian Government intends to provide temporary subsidies to service providers (between 2009-10 and 2011-12).

⁷ CSIRO, *Northern Sustainable Yields project*, <http://www.csiro.au/partnerships/NASY.html> (accessed 28/09/09).

⁸ The Australian Bureau of Statistics noted that in 2004-05, 96 per cent of distributed water in Australia originated from surface water sources. *4610.0 Water Account 2004-05*.

Table 15-10 Per capita subsidies in adequate and poor water regions in the Northern Territory and Tasmania, 2007-08

	Northern Territory	Tasmania	Average
	\$pc	\$pc	\$pc
Adequate	408.33	0.00	24.70
Poor	574.04	-	574.04

Note: The average subsidy in adequate water areas is calculated using average per capita subsidies in the Northern Territory and Tasmania. In poor water areas, the Northern Territory average is used because Tasmania has no population residing in poor water areas.

Source: Northern Territory and Tasmanian Treasuries.

40 Table 15-11 shows the differences across States in the populations outside highly accessible areas in communities of different sizes in areas of adequate and poor water.

Table 15-11 State population outside highly accessible areas in regions of adequate and poor water by size of community, June 2008

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Adequate water regions									
200 to 999	0	0	9	3	0	32	0	14	58
1 000 to 10 000	0	0	16	10	0	71	0	39	136
Poor water regions									
200 to 999	131	88	91	53	48	0	0	8	419
1 000 to 10 000	620	327	367	112	117	0	0	5	1 547
Total	750	415	483	178	164	103	0	65	2 158

Source: ABS ERP data, June 2008.

- 41 Using these population and average subsidy data, we found that, applying average weights to small community populations (200 to 1000) in areas of good water was not material. Therefore we decided that population residing in small communities where water quality is of poor quality and/or availability was most important for an assessment.
- 42 *Pipelines.* Western Australia and South Australia argued that a major cost driver was distance from source. Pipelines were required to supply water to communities where there are no water sources at close proximity.
- 43 Western Australia provided the results of a regression analysis that indicate distance, remoteness and size are significant in explaining per capita subsidies in Western Australia.
- 44 Western Australia considered that an assessment could be constructed by assigning weights for distance from source, remoteness and population scale to each UC/L outside of highly accessible areas. It noted that approximations would need to be made for remoteness and distance from source for individual UC/Ls and suggested using the aggregate length of bulk piping in remote and non-remote areas.

- 45 We recognise that, in some communities, pipelines are the only option for domestic water supply and that they are costly to build and maintain. However, it is not clear that the provision of pipelines is to meet only domestic water needs. In many cases, these pipelines may have been established predominately for mining and industrial purposes whose expenses are not captured in this category. It is also possible that pipelines servicing many towns may be able to recover their costs.
- 46 Given concerns over the conceptual case and the difficulty in determining which communities are serviced by pipelines, we could not justify making an adjustment for pipelines.
- 47 *Indigeneity.* The Northern Territory argued needs associated with Indigenous water services would be better recognised if they were assessed with Indigenous community development expenses. It also noted that it provided water supply and sewerage services to its Indigenous residential customers at no cost, in recognition of their limited capacity to pay. It supported its case with evidence from recent studies in South Australia which suggested Indigenous people in remote Indigenous communities are more likely than non-Indigenous people living in the same areas to have lower incomes and little money to meet service provision expenses⁹.
- 48 The data in Table 15-12 suggest that cost recovery in Indigenous communities may be lower than in non-Indigenous communities. In the Northern Territory's view and that of the South Australian study, this is the result of incapacity to pay rather than a State specific policy.
- 49 We do not have enough information to decide categorically whether the low cost recovery in the Northern Territory reflects its policy or underlying need. Therefore, we could not justify an Indigenous cost weight in the water and sanitation subsidy assessment.

Table 15-12 Level of subsidisation of Indigenous communities in the Northern Territory and of predominately non-Indigenous communities of the same size in Western Australia, 2007-08

	Northern Territory	Western Australia
	%	%
200 - 499	96.63	67.42
500 - 999	95.78	53.19
1 000 - 10 000	95.14	42.37

Source: Western Australia and Northern Territory Treasuries.

- 50 *Location.* Western Australia and the Northern Territory argued that subsidies increase with remoteness. Western Australia noted that staffing, construction and maintenance costs are higher in remote areas. Its regression analysis also indicated that remoteness is a significant driver of per capita subsidies.
- 51 The Northern Territory indicated that costs per kilolitre (kL) of water supplied to communities of between 200 and 499 are 2.4 and 3.7 times higher in remote and very remote areas than in

⁹ M. Pearce, E. Willis, C McCarthy, B Wadham, F. Ryan. *Issues of Domestic Water Use in Four Remote Indigenous Communities in South Australia*, CRAH projects: SD136 and SD169.

moderately accessible areas. It suggested that, a differential factor for accessible and remote SARIA regions should be included.

- 52 The arguments and the data provided by Western Australia and the Northern Territory support the case for a location assessment. The Commission has accepted in other assessments that costs are higher in remote areas. Consequently, we accept the need for a regional location cost factor in the water subsidies assessment based on the service population for the assessment.
- 53 *The water and sanitation subsidy assessment.* While data limitations are significant, the Commission considered an EPC assessment was not appropriate because the evidence suggests needs relating to water and sanitation subsidies are large.
- 54 We considered whether an APC assessment would provide a suitable indicator of needs. However, advice from States and the National Water Commission indicated large policy differences between States affect subsidies. Therefore, we rejected an APC assessment.
- 55 Despite considerable efforts from the States to provide data, the data are far from complete or comprehensive. Important pieces of data, such as the importance of community size and water availability/quality in determining average State subsidies cannot be imputed. Also, water subsidies appear to be affected by many factors which cannot be captured in a simple assessment.
- 56 While we recognise that data limitations heavily constrain this assessment, we consider that a differential assessment which captures the broad features of policy in this area, suitably discounted, would improve the equalisation outcome.
- 57 We decided to recognise that, under the average policy, the smaller communities in poor water areas, outside highly accessible regions, are the most likely to receive subsidies and to drive State needs. We have built an assessment based on population living in communities in poor water areas outside highly accessible areas with populations of between 200 to 1000. We excluded the population in centres between 1000 and 10 000 because we could not derive sufficiently reliable weights. Therefore, the assessment includes only the population in each State for which the data suggested were most likely to receive the largest subsidies. We have not included additional allowances for distance from water sources or Indigeneity. While there may be a conceptual case for these drivers, we were unable to assess them. We have, however, applied a regional cost factor based upon the relevant population.
- 58 *Discounting water subsidy factor.* We are confident that the assessment will move GST revenue in the right direction. However, given the data deficiencies and the judgment involved in the assessment, our guidelines indicate a discount is warranted. Since the assessment is conservative, we consider a 25 per cent discount to be sufficient.
- 59 *Updating the assessment.* South Australia and the Northern Territory noted that the data being collected by the Bureau of Meteorology (BoM) will be more contemporaneous than data currently used in the assessment. South Australia supported giving the Commission the option of using these data when they become available.

- 60 We have been advised that data on water availability and quality will be available through the BoM Australian Water Resource Information System in September 2010. We have also noted that drainage division boundaries will change from those currently recognised in our assessment. Therefore, incorporating any new data would require some modification of the current assessment which we think should be investigated. However, whether that can be done will depend on the terms of reference for future updates.

Protection of the environment

- 61 South Australia and the Northern Territory said that protection of the environment expenses should be included in the water subsidy assessment because there is a relationship between sustainable water supply systems and expenditure on environmental protection. It considered the water factor to be a good proxy for this assessment.
- 62 A large proportion of protection of the environment expenses are not related to water and sanitation issues. These expenses cover regulation and amelioration of air pollution and beach erosion, the drivers of which are not related to those of water and sanitation subsidies. Therefore, we considered it appropriate to assess protection of the environment expenses separately from water and sanitation subsidies.
- 63 While some expenses may be related to water availability and quality issues, the majority of the expenses are not. Since we have no information on the drivers of them, we used State populations as the measure of need for service use. This was supported by New South Wales, Victoria and the ACT.

Electricity subsidies

- 64 Most States provide subsidies to electricity providers in regions where costs cannot be recovered due to diseconomies of scale and the unviable economic environment. These regions are generally not connected to a State's main transmission networks.
- 65 Queensland, Western Australia, South Australia, Tasmania and the Northern Territory supported an assessment of electricity subsidies based on a measure of remoteness. Western Australia and Tasmania said subsidies are generally provided to populations in very remote regions but Queensland and the Northern Territory said subsidies were also provided in remote regions.
- 66 Western Australia provided data showing electricity services located in remote and very remote regions outside the North West Interconnected System (NWIS) cost, on average, 68 per cent more than those connected to the NWIS. The Northern Territory also provided data showing electricity supply costs for Alice Springs and Tennant Creek (remote and very remote respectively) were 15 and 57 per cent greater than in Darwin. Queensland noted that it faces extra costs in building power generators in central regions and larger regional centres to service remote and very remote areas.
- 67 New South Wales and Victoria did not support a separate assessment of electricity subsidies. They considered the expenses were heavily policy influenced and supported an EPC

- assessment. New South Wales also said using remote population as a proxy ignored the role of policy in setting prices and determining how electricity is provided in remote communities.
- 68 An examination of evidence provided by States supported the conceptual case that subsidies are provided to cover the higher costs in areas not connected to the main transmission grid and that these communities are in remote and very remote regions. We consider the proportion of State population living in remote and very remote regions to provide a good proxy for relative State needs because most communities in these regions are not connected to main transmission networks.
- 69 We recognise that electricity subsidies are influenced by State policy but consider an assessment based on remote and very remote area population is policy neutral because it applies a broad population factor to average electricity expenses. We also do not consider that an EPC assessment would adequately recognise State need as evidenced by data provided to the Commission by States.
- 70 *Indigeneity.* The Northern Territory repeated the arguments it made in relation to water subsidies for electricity subsidies — the needs associated with Indigenous electricity services would be better recognised if they were assessed with Indigenous community development expenses and the costs of providing electricity services to Indigenous communities were greater than services provided to mainstream communities because of lower cost recovery.
- 71 Queensland provided details of an analysis that showed subsidies are not driven by the Indigenous status of the community rather the network to which they are connected. While Indigenous communities appear to receive higher subsidies, this is because the majority of them are connected to high cost schemes and reside in very remote areas.
- 72 As with water subsidies, while there may be a conceptual case, States were unable to provide sufficient data to support it or allow for an Indigenous cost weight to be measured.
- 73 *Small communities.* The Northern Territory argued that community size has a significant impact on electricity costs. It provided data to show that costs and subsidies increase as community size decreases in Indigenous communities. The same pattern was not evident for mainstream communities.
- 74 New South Wales and the Northern Territory were the only States to provide data that could be associated with community size. Data from New South Wales were limited and were not comparable with those from the Northern Territory.
- 75 Given that we do not have sufficient comparable data from States to determine the impact of remoteness and community size, we cannot make an assessment of the impact of community size on electricity subsidies.
- 76 *Location.* The Commission has accepted that costs, such as construction, maintenance and staffing, are higher in remote areas. Consequently, we have included a regional location cost factor in the electricity subsidies assessment based on the service population included in this assessment.

Concession subsidies for water and electricity

- 77 All States provide funding to water and electricity providers to provide concessions and rebates to users on low incomes.
- 78 The eligibility criteria and entitlements in each State differ. However, all States offer concessions to individuals with Commonwealth pension cards and the majority of States also offer concessions to Commonwealth health care card holders (see Table 15-13).

Table 15-13 State eligibility criteria for water and electricity concessions

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Water	PC	PC/HCC	PC	PC	PC/HCC	PC/HCC	PC/HCC	PC/HCC
Electricity	PC	PC/HCC	PC	PC/HCC	PC/HCC	PC/HCC	PC/HCC	PC/HCC

Notes: PC = Pension card, HCC = Health care card.

Source: State government and utility websites at December 2009.

- 79 The use of Commonwealth concession card holders to measure service use was supported by Queensland, Western Australia, South Australia, Tasmania and the Northern Territory. New South Wales and Victoria considered concession expenses to be heavily policy influenced and supported an EPC assessment. However, the data on Commonwealth pension and health care card holders shown in Table 15-14 provide a reliable and policy neutral measure of the relative need for States to incur expenses on subsidies that is consistent with the average State policy. Moreover, the measure attributes the same (average) level of subsidies to cardholders in all States.

Table 15-14 Proportion of population with pension and health care cards, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
	%	%	%	%	%	%	%	%	%
Population with pension and health care cards	24.35	25.22	23.18	19.99	28.26	31.68	13.97	20.34	24.14

Source: Centrelink, Department of Veterans Affairs and ABS ERP 31 December 2008.

Community development

- 80 States spend more in providing community development services in Indigenous communities. Table 15-15 shows Indigenous community development expenses per Indigenous person residing in discrete Indigenous communities and the other community development expenses per person not residing in discrete Indigenous communities. It shows a much greater per capita spending on Indigenous people residing in discrete Indigenous communities.
- 81 As a result, we consider an assessment should distinguish between services to discrete Indigenous communities and services to other communities. We based our assessment on the proportion of a State's population living in discrete Indigenous communities and the population living outside those communities. A weight of 36.7 was applied to the population living in discrete Indigenous communities in 2008-09. This is the ratio of per capita expenses on Indigenous communities (\$2 205) to per capita expenses on other communities (\$60).

Table 15-15 Per capita community development expense, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Indigenous community development expenses per person in discrete Indigenous communities	1 495	131 777	1 952	3 615	0	0	0	1 702	2 205
Other community development expenses per person not living in discrete Indigenous communities	14	101	6	206	56	11	73	350	60

Note: The high per capita value for Indigenous community development expenses in Victoria reflects the low number of Indigenous people living in discrete Indigenous communities (150) in that State.

Source: State Treasuries and ABS estimated resident population data 30 June 2006 and 30 June 2008.

82 We have defined discrete Indigenous communities to be:

- communities with a predominantly Indigenous population including town camps, discrete settlements and groups of settlements, remote out stations and pastoral excisions; and
- communities where services are not usually integrated with those of non-Indigenous communities in close proximity.

83 These communities are not necessarily physically isolated from broader communities. For example, Redfern is classified as a discrete Indigenous community.

84 The population in these discrete Indigenous communities is measured as the number of people in communities:

- included in the ABS Community Housing and Infrastructure Needs Survey;
- issued with a special Indigenous household Census form; or
- with more than 50 per cent of its population Indigenous.

85 Victoria, Queensland, Western Australia, South Australia, and Tasmania supported this approach.

86 The Northern Territory largely supported this approach but argued the financial assistance it provides to its regional shires included in this component should be assessed on an APC basis. It said the level of assistance it provided to local councils was necessary and significant because the large Indigenous population in the shires meant they had very low capacities to raise their own revenue. It viewed this situation as atypical.

87 Other States said the decision to support local councils was a State policy choice and the resulting expenses should not be assessed APC. We agree. These expenses have been assessed in the same manner as all other expenses in the component. This implies that all States are funded to provide the average level of assistance to their Indigenous communities.

88 New South Wales said the approach would not appropriately recognise the higher costs of providing services to its urban Indigenous populations. It preferred an assessment based on the Indigenous proportion of a State's population. However, Queensland said Indigenous

community development expenditures are usually directed to Indigenous communities in non-urban regions and that urban communities should be excluded.

- 89 Information received during State visits suggested Indigenous community development expenses may be directed to communities in urban and non-urban areas. We consider the assessment should therefore capture the relevant communities in all regions. An assessment based on the total Indigenous population of States would not be suitable because it would include Indigenous people living in predominately non-Indigenous communities and who do not appear to receive Indigenous community development services.
- 90 Western Australia, Tasmania and the Northern Territory said we should allow for the higher costs in certain types of communities (such as small, or isolated or inaccessible ones). However, they did not provide cost data to support their claims.
- 91 *Location*. The Commission has accepted that costs, such as construction, maintenance and staffing, are higher in remote areas. Consequently, we have included a regional location cost factor in the community development assessment based on the service population included in this assessment.

Community amenities

- 92 All States provide community amenities either directly or by funding local governments. There are no common policies in the provision and/or funding of these services across States. The Commission considers using State populations as the indicator of use of these services to be appropriate. All States supported this assessment.

Other factors affecting the cost of services

Location

- 93 We consider interstate location has an impact on the average costs of providing services in each State in this category. In particular, we consider there are differences between States in the cost of wages and non-wage related inputs.
- 94 Regional location is assessed for water and electricity subsidy and community development expenses, as discussed earlier.
- 95 These effects are assessed using the same methods for all services. Details of these methods are provided in the Location costs chapter.

Administrative scale

- 96 The Administrative scale expenses capture the costs of the minimum level of administration required to provide Services to communities. The estimation of those minimum scale affected costs is set out in the Administrative scale chapter.

Native title and land rights

- 97 Some of the State expenses included in the Services to communities category arise because of the Commonwealth's Native title and land rights legislation. Those acts impose unavoidable

costs on the States and the amount incurred varies significantly from State to State. While Native title and land rights expenses for this category are small, across all categories they are material. Details are in the Native title and land rights chapter.

THE ASSESSMENT METHOD

- 98 In assessing the expenses States would incur in providing national average levels of services for communities, the Commission has recognised the effects of interstate differences in population characteristics and other cost drivers. It has sub-divided the category expenses into two components for assessment purposes:
- service delivery expenses, which are affected by a water subsidy factor, an electricity subsidy factor, a concession factor, a community development factor, an EPC assessment of community amenity and protection of the environment expenses, and a location factor; and
 - other expenses, which are affected by administrative scale, and native title and land rights factors.
- 99 Table 15-16 sets out the category structure, the disabilities and the relative size of each component for 2008-09. The component weights have been adjusted annually in accordance with actual expenses.

Table 15-16 Category structure, Services to communities, 2008-09

Component	Component weight	Disability	Influence measured by disability
	%		
Service expenses	99.51	Protection of the environment	This is an EPC assessment because the Commission is not able to derive a reliable method of assessing environmental protection costs.
		Water subsidy	Recognises the impact of water quality, water availability, location and community size on general water subsidies.
		Electricity subsidy	Recognises the impact of population living in remote areas on general electricity subsidies.
		Concessions	Recognises the impact of concessions on States water and electricity subsidies.
		Community development	Recognises the higher cost of providing community development services in discrete Indigenous communities.
		Community amenities	This is an EPC assessment to recognise that there is no common policy across States.
		Location	Recognises the differences in the cost of providing labour and non-labour resources between States and to different areas within a State.
Other expenses	0.49	Administrative scale	Recognises the unavoidable costs each State incurs to provide the policy and administrative infrastructure necessary to provide the minimum unavoidable service, regardless of the size of the task.
		Native title and land rights	Recognises State costs of settling native title and land rights claims made under Australian Government legislation.

Source: Commission calculation.

Data issues

- 100 The expense data required to weight the water and electricity subsidy, concessions and protection of the environment factors are not available from the ABS GFS data. In addition, there have been concerns expressed about the reliability of the 4-digit GPC Indigenous community development expenses. These issues are discussed below.
- 101 *Protection of the environment.* Expenses on protection of the environment are included in the same 3-digit GPC as sewerage subsidy and concession expenses and cannot be separately identified by the ABS. Since we have not collected data on protection of the environment expenses from States for the 2010 Review, we used State data on water and sewerage subsidies and concessions to estimate that protection of the environment expenses comprised 50 per cent of the combined water supply and sanitation and protection of the environment GPCs.
- 102 We consider these data should be collected annually from States for future updates.
- 103 *Indigenous community development.* ABS 4-digit GPC expenses data on Indigenous community development are available but are not considered entirely reliable by the ABS. However, the data on these services provided by the States in response to a Commission data request suggested the ABS GFS data are reasonable. Moreover, there is a strong conceptual case that there are large differences in the costs of providing community development services to Indigenous and non-Indigenous communities and in the proportion of State populations living in Indigenous communities. As a result, an assessment would be material for a number of States and we consider including it improves the equalisation outcome.

Service delivery expenses

- 104 Service delivery expenses make up 99.5 per cent of the category. To recognise the diversity of the expenses, they have been divided into six assessments. Table 15-17 lists the six assessments and the proportion of the services delivery expenses they affect.

Table 15-17 Service delivery component assessments and their respective expense weights, 2008-09

Assessments	Expense weight %
Protection of the environment	25.16
Water subsidy	17.04
Electricity subsidy	11.78
Concessions	13.20
Community development	25.64
Community amenities	7.18

Source: Derived using State expenses and ABS GFS data.

- 105 State populations are used to measure use of protection of the environment services because other drivers of need could not be measured reliably and for community amenity services because there are no non-policy reasons for interstate differences in per capita expenses.

- 106 For the other four assessments, each State's assessed expenses are derived by adjusting its per capita share of the total expenses in the component because of the following influences.
- Community size, location, water quality and availability influence the level of water and sewerage subsidies.
 - Populations in remote and very remote regions affect the level of electricity subsidies.
 - Commonwealth pension and health care card holders drive the level of water and electricity concessions.
 - The number of people living in discrete Indigenous communities influence expenses on Indigenous community development services.
- 107 All service delivery expenses are adjusted to reflect the effects on costs of interstate differences in wages and other input costs. Water and electricity subsidy and community development expenses are also adjusted for regional differences in wage costs.
- 108 Table 15-18 shows the derivation of assessed expenses for the service delivery component.

Table 15-18 Services expenses component, Services to communities, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Service expenses (\$m) (a)	1 918.3	1 461.5	1 184.9	600.4	439.2	136.3	94.8	60.4	5 895.8
Combined protection of the environment and location	1.00224	0.99866	0.99721	1.00179	0.99822	0.99742	1.00510	1.00890	
Combined water subsidy and location	0.99529	0.97650	1.01177	1.04347	1.06899	0.83476	0.83491	1.18529	
Combined electricity subsidy and location	0.94009	0.88723	1.04700	1.21078	1.00438	0.91216	0.88218	2.96539	
Combined concessions and location	1.00239	1.00524	0.99339	0.97816	1.02151	1.03956	0.94595	0.98320	
Combined community development and location	0.96656	0.95028	1.00955	1.04245	0.97305	0.95280	0.95392	3.03080	
Combined community amenities and location	1.00064	0.99962	0.99920	1.00051	0.99949	0.99926	1.00145	1.00254	
Assessed expenses (\$m)	1 740.3	1 194.8	1 253.8	766.9	468.0	100.3	59.1	312.6	5 895.8

(a) Each State's per capita share of the total expenses.

Source: Commission calculation.

- 109 The derivation of each factor is outlined in the following sections.

Water subsidy

- 110 The water subsidy factor was calculated using the proportion of each State's population residing outside of highly accessible areas in small communities (200 to 1000) in areas of poor water quality and availability. A location factor is then applied comprising a regional location factor based on this population and the interstate location factor.

111 The derivation of the water subsidy factor is shown in Table 15-19. The factor has been discounted by 25 per cent because it uses incomplete information and datasets. Table 15-20 shows the derivation of the combined water subsidy and location factors.

Table 15-19 Derivation of water subsidy factors, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Relevant population ('000) (a)	130.8	88.3	91.2	53.2	47.8	0.0	0.0	7.9	419.2
Total population ('000) (b)	7 041.4	5 364.8	4 349.5	2 204.0	1 612.0	500.3	347.8	221.7	21 641.6
Proportion of total (%)	1.86	1.65	2.10	2.41	2.97	0.00	0.00	3.55	1.94
Factor (c)	0.95916	0.84971	1.08254	1.24540	1.53173	0.00000	0.00000	1.83413	
Discounted factor (d)	0.96937	0.88728	1.06191	1.18405	1.39880	0.25000	0.25000	1.62560	

(a) Population in small UC/Ls (200-1000) outside of highly accessible areas in areas of poor water quality and/or availability.

(b) ABS ERP 31 December 2008.

(c) Factor derived by dividing State proportion by Australian proportion. Factor has been rescaled.

(d) Factor discounted by 25 per cent for all States.

Source: Commission calculation.

Table 15-20 Derivation of the combined water subsidy and location factor, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
Water subsidy	0.96937	0.88728	1.06191	1.18405	1.39880	0.25000	0.25000	1.62560	1.00000
Location	1.03385	1.00135	1.03765	1.09254	1.03522	0.12372	0.12753	1.32362	1.00000
Combined	1.00218	0.88848	1.10189	1.29363	1.44807	0.03093	0.03188	2.15168	0.97025
Expense weight									0.1704
Combined and weighted (a)	0.99529	0.97650	1.01177	1.04347	1.06899	0.83476	0.83491	1.18529	1.00000

(a) Factor has been rescaled.

Source: Commission calculation.

Electricity subsidy

112 The electricity subsidy factor was calculated using the proportion of each State's population living in remote and very remote areas. Table 15-21 shows the calculation of those proportions and the resulting factors for 2008-09. A location factor is then applied comprising a regional location factor based on this population and the interstate location factor.

Table 15-22 shows the combined electricity and location factors.

Table 15-21 Derivation of the electricity subsidy factors, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Population in remote and very remote regions ('000) (a)	81.0	5.6	141.7	134.8	39.3	2.8	0.0	85.1	490.3
Total population ('000) (b)	7 041.4	5 364.8	4 349.5	2 204.0	1 612.0	500.3	347.8	221.7	21 641.6
Proportion of total (%)	1.15	0.10	3.26	6.12	2.44	0.55	0.00	38.39	2.27
Factor (c)	0.50799	0.04607	1.43761	2.69976	1.07704	0.24325	0.00000	16.94449	

(a) ABS ERP population at 30 June 2008, based on SARIA classification, including remote and very remote populations.

(b) ABS ERP 31 December 2008.

(c) Factor derived by dividing State proportion by Australian proportion.

Source: Commission calculation.

Table 15-22 Derivation of the combined electricity subsidy and location factors, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
Electricity subsidy	0.50799	0.04607	1.43761	2.69976	1.07704	0.24325	0.00000	16.94449	1.00000
Location	1.01344	0.97439	1.01914	1.08198	1.00859	1.09572	0.12757	1.09289	1.00000
Combined	0.51482	0.04489	1.46512	2.92109	1.08630	0.26654	0.00000	18.51843	0.95479
Expense weight									0.1178
Combined and weighted (a)	0.94009	0.88723	1.04700	1.21078	1.00438	0.91216	0.88218	2.96539	1.00000

(a) Factor has been rescaled.

Source: Commission calculation.

Concessions

113 The concessions factor was calculated using the proportion of each State's population who are Commonwealth pension and health care card holders. Table 15-23 shows the calculation of those proportions and the resulting factors for 2008-09. Table 15-24 shows the derivation of the combined concession and interstate location factors.

Table 15-23 Derivation of concessions factor, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Commonwealth pension card holders ('000) (a)	1 237.1	924.3	711.1	315.9	335.6	115.5	35.0	22.0	3 696.5
Commonwealth health care card holders ('000) (b)	477.4	428.8	297.0	124.8	120.0	43.0	13.6	23.1	1 527.6
Total card holders ('000)	1 714.5	1 353.0	1 008.1	440.7	455.6	158.5	48.6	45.1	5 224.1
Total population ('000) (c)	7 041.4	5 364.8	4 349.5	2 204.0	1 612.0	500.3	347.8	221.7	21 641.6
Proportion of total (%)	24.35	25.22	23.18	19.99	28.26	31.68	13.97	20.34	24.14
Factor (d)	1.00868	1.04481	0.96019	0.82832	1.17073	1.31249	0.57869	0.84262	

(a) Pensioner cards issued by Centrelink and the Department of Veterans Affairs.

(b) Health care cards issued by Centrelink.

(c) ABS ERP 31 December 2009.

(d) Factor derived by dividing State proportion by Australian proportion.

Source: Commission calculation.

Table 15-24 Derivation of the combined concessions and location factors, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
Concessions	1.00868	1.04481	0.96019	0.82832	1.17073	1.31249	0.57869	0.84262	1.00000
Location	1.00892	0.99468	0.98890	1.00710	0.99293	0.98974	1.02026	1.03537	1.00000
Combined	1.01768	1.03924	0.94953	0.83420	1.16244	1.29902	0.59041	0.87242	1.00043
Expense weight									0.1320
Combined and weighted (a)	1.00239	1.00524	0.99339	0.97816	1.02151	1.03956	0.94595	0.98320	1.00000

(a) Factor has been rescaled.
Source: Commission calculation.

Community development

114 The Community development factor was calculated by deriving weights for Indigenous and non-Indigenous communities based on the relative per capita expenses in each type of community, as shown in Table 15-25.

Table 15-25 Derivation of community development weights, 2008-09

	National average expense \$pc	Weight
Indigenous community development	2 204.71	36.7
Other community development	60.13	1.0

Source: State Treasuries and ABS.

115 These weights were then applied to the relevant populations, as shown in Table 15-26.

Table 15-26 Distribution of populations by community, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Indigenous population living in discrete Indigenous communities (a)	10.3	0.1	27.4	19.3	3.8	0.1	0.0	46.6	107.6
Population not living in discrete Indigenous communities	6 973.9	5 313.7	4 266.5	2 151.9	1 599.6	497.5	345.6	173.2	21 321.7
Total	6 984.2	5 313.8	4 293.9	2 171.2	1 603.4	497.5	345.6	219.8	21 429.4

(a) For a definition of a discrete Indigenous community see paragraph 84. ABS Indigenous ERP, 30 June 2006 were used to determine proportions applied to 31 December 2008 population.
Source: ABS ERP 30 June 2008.

116 Table 15-27 shows the derivation of the Community development factors for 2008-09. A location factor is then applied comprising a regional location factor based on the population living in discrete communities and the interstate location factor. Table 15-28 shows the derivation of the combined community development, and location factor.

Table 15-27 Derivation of the community development factors, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Weighted population ('000) (a)	7 351.6	5 319.1	5 270.6	2 859.1	1 738.8	500.3	345.6	1 882.8	25 267.9
Total population ('000) (b)	6 984.2	5 313.8	4 293.9	2 171.2	1 603.4	497.5	345.6	219.8	21 429.4
Proportion of total (%)	105.26	100.10	122.75	131.68	108.45	100.56	100.00	856.52	117.91
Factor (c)	0.89260	0.84882	1.04087	1.11666	0.91964	0.85276	0.84799	7.26317	

(a) Derived by multiplying the populations in Table 15-26 by the weights in Table 15-25.

(b) ABS ERP 31 December 2008.

(c) Factor derived by dividing State proportion by Australian proportion. Factor has been rescaled.

Source: Commission calculation.

Table 15-28 Derivation of the combined community development and location factors, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
Community development	0.89260	0.84882	1.04087	1.11666	0.91964	0.85276	0.84799	7.26317	1.00000
Location	0.99237	0.96740	1.01508	1.06321	0.99122	0.97464	0.98538	1.25087	1.00000
Combined	0.88579	0.82115	1.05657	1.18724	0.91156	0.83113	0.83559	9.08531	0.98171
Expense weight									0.2564
Combined and weighted (a)	0.96656	0.95028	1.00955	1.04245	0.97305	0.95280	0.95392	3.03080	1.00000

(a) Factor has been rescaled.

Source: Commission calculation.

Protection of the environment

117 Because drivers of needs could not be identified, these expenses have been assessed on the basis of State populations. Table 15-29 shows the derivation of the combined protection of the environment and interstate location factor.

Table 15-29 Derivation of the combined protection of the environment and location factors, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
Protection of the environment	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
Location	1.00892	0.99468	0.98890	1.00710	0.99293	0.98974	1.02026	1.03537	1.00000
Combined	1.00892	0.99468	0.98890	1.00710	0.99293	0.98974	1.02026	1.03537	1.00000
Expense weight									0.2516
Combined and weighted (a)	1.00224	0.99866	0.99721	1.00179	0.99822	0.99742	1.00510	1.00890	1.00000

(a) Factor has been rescaled.

Source: Commission calculation.

Community amenities

118 As no non-policy reasons for differences in the per capita quantity of community amenities services could be discerned, total State populations were adopted as the measure of use. Table 15-30 shows the combined community amenities and interstate location factor.

Table 15-30 Derivation of the combined community amenities and location factor, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
Community amenities	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
Location	1.00892	0.99468	0.98890	1.00710	0.99293	0.98974	1.02026	1.03537	1.00000
Combined	1.00892	0.99468	0.98890	1.00710	0.99293	0.98974	1.02026	1.03537	1.00000
Expense weight									0.0718
Combined and weighted (a)	1.00064	0.99962	0.99920	1.00051	0.99949	0.99926	1.00145	1.00254	1.00000

(a) Factor has been rescaled.
Source: Commission calculation.

Other expenses

Administrative scale affected expenses

119 The calculation of the assessed administrative scale affected expenses, as adjusted for the effects of interstate differences in wage costs, is shown in the Administrative scale chapter.

Native title and land rights

120 Native title and land rights expenses incurred in each State vary depending on the number of native title and land rights claims made and the compensation awarded in settling each one.

121 As discussed in the Native title and land rights chapter, these expenses are assessed on an actual per capita basis. Under this method, a State's actual expenses are assessed to be what it actually spends.

122 Table 15-31 illustrates the calculation of assessed expenses for the other expenses component.

Table 15-31 Other expenses component, Services to communities, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Administrative scale	3.4	3.3	3.3	3.4	3.3	3.2	2.6	3.6	26.3
Native title and land rights	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
Assessed expenses	3.4	3.3	3.3	3.4	3.3	3.2	2.6	6.2	28.9

Source: Commission calculation.

Bringing the category assessment together

123 Table 15-32 brings the assessed expenses for each component together to derive the total assessed expenses for each State for the category.

124 Table 15-33 summarises the category factors. It shows for each disability how the expenses per capita in each component and in total are affected by differences in State characteristics. Disability factors below one indicate a State is assessed to need to spend less than average. Disability factors above one indicate States are assessed to need to spend more than average.

Table 15-32 Assessed expenses, Services to communities, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Service expenses (\$m)	1 740.3	1 194.8	1 253.8	766.9	468.0	100.3	59.1	312.6	5 895.8
Other expenses (\$m)	3.4	3.3	3.3	3.4	3.3	3.2	2.6	6.2	28.9
Total (\$m)	1 743.7	1 198.2	1 257.1	770.3	471.3	103.6	61.7	318.8	5 924.7
Assessed expenses (\$pc)	247.64	223.34	289.03	349.48	292.37	206.99	177.41	1 438.23	273.77
Cost of service provision ratio	0.9046	0.8158	1.0557	1.2766	1.0680	0.7561	0.6480	5.2535	1.0000

Source: Commission calculation.

125 Table 15-32 and Table 15-33 show service expenses and the differences between the States in their need to provide subsidies for water and sewerage and electricity and community development services in discrete Indigenous communities.

Table 15-33 Category factor, Services to communities, 2008-09

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
Service expenses (component weight = 99.51 %)									
Combined protection of the environment and location	1.00224	0.99866	0.99721	1.00179	0.99822	0.99742	1.00510	1.00890	1.00000
Combined water subsidy and location	0.99529	0.97650	1.01177	1.04347	1.06899	0.83476	0.83491	1.18529	1.00000
Combined electricity subsidy and location	0.94009	0.88723	1.04700	1.21078	1.00438	0.91216	0.88218	2.96539	1.00000
Combined concessions and location	1.00239	1.00524	0.99339	0.97816	1.02151	1.03956	0.94595	0.98320	1.00000
Combined community development and location	0.96656	0.95028	1.00955	1.04245	0.97305	0.95280	0.95392	3.03080	1.00000
Combined community amenities and location	1.00064	0.99962	0.99920	1.00051	0.99949	0.99926	1.00145	1.00254	1.00000
Component factor	0.90722	0.81753	1.05812	1.27715	1.06565	0.73595	0.62351	5.17612	1.00000
A. Wgt'd comp factor	0.90279	0.81354	1.05296	1.27092	1.06045	0.73236	0.62047	5.15086	0.99512
Other expenses (component weight = 0.49 %)									
Administrative scale	0.40145	0.51197	0.62317	1.27063	1.69175	5.34113	6.20784	13.52704	1.00000
Native title and land rights	0.00716	0.00000	0.04341	0.00000	0.00000	0.00000	0.00000	96.54516	1.00000
Component factor	0.36581	0.46569	0.57076	1.15578	1.53884	4.85836	5.64672	21.03087	1.00000
B. Wgt'd comp factor	0.00179	0.00227	0.00279	0.00564	0.00751	0.02371	0.02756	0.10263	0.00488
Category factor									
[A+B]	0.90458	0.81582	1.05574	1.27656	1.06796	0.75607	0.64803	5.25349	1.00000

Source: Commission calculation.

WHAT IS THE IMPACT ON THE GST DISTRIBUTION?

126 Table 15-34 shows the extent to which the assessment for this category moves the recommended distribution of GST away from an equal per capita distribution. It shows New

South Wales, Victoria, Tasmania and the ACT are assessed as needing to spend less than the average per capita amount to deliver the services in this category. Queensland, Western Australia, South Australia and the Northern Territory are assessed as needing to spend more.

Table 15-34 Impact on the GST distribution of the Services to communities assessment

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
Dollars million	-178.6	-261.4	65.0	161.4	28.5	-32.9	-32.4	250.2	505.2
Dollars per capita	-25.04	-47.86	14.60	71.37	17.47	-65.16	-91.62	1105.17	22.94

Note: The difference from an equal per capita assessment was derived using 2006-07 to 2008-09 assessed expenses and 2009-10 GST.

Source: Commission calculation.

- 127 The main drivers of the redistribution differ between States. The redistribution for Queensland, Western Australia and the Northern Territory is mainly the result of the above average share of their populations residing in: discrete Indigenous communities; remote and very remote communities; and communities requiring water subsidies. This is slightly offset by these States' lower than average share of the population with concession cards.
- 128 The redistribution for South Australia arises because of its above average share of population residing in communities with greater need for water subsidies, remote and very remote regions and its above average share of population with concession cards. This is partially offset by its below average share of population living in discrete Indigenous communities.
- 129 For New South Wales, Victoria, Tasmania, and the Australian Capital Territory, the redistribution is mainly explained by their below average share of population living in remote regions and regions requiring greater water subsidies and below average share of population living in discrete Indigenous communities. This is slightly offset in New South Wales, Victoria and Tasmania by the above average share of population with concession cards.
- 130 Table 15-35 provides a summary of the major reasons the assessment moves the assessed State GST shares away from an equal per capita distribution.

Table 15-35 Reasons for difference from EPC – Services to communities

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Electricity subsidy factor	-105.9	-156.1	58.2	115.4	3.2	-11.5	-10.6	107.3	284.1
Community development factor	-52.1	-56.1	12.1	17.8	-8.9	-5.1	-3.6	95.9	125.9
Water subsidy factor	-10.9	-28.2	13.1	19.8	29.2	-17.3	-12.1	6.5	68.6
Location factor	18.8	-18.1	9.1	23.9	0.9	-20.2	-22.7	8.4	61.0
Concessions factor	1.1	7.6	-5.9	-11.8	9.3	5.2	-4.7	-0.9	23.3

Source: Commission calculation.

- 131 Table 15-36 provides a summary of the main reasons for changes between the recommended GST redistribution and the 2009 Update redistribution. The changes are mainly due to

changes in our methods, primarily in the assessment of water subsidies, the treatment of protection of the environment expenses and the assessment of electricity subsidies.

Table 15-36 Changes since the 2009 Update, Services to communities

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Shortening the review period	-10.1	-40.4	-0.3	22.4	11.8	-1.4	-3.9	21.9	56.1
Method changes	45.5	143.8	112.3	-113.3	-66.3	-29.6	-3.3	-89.2	301.6
State circumstances	-10.2	-20.2	4.1	16.1	3.2	-2.8	-2.5	12.4	35.7
Total	25.2	83.2	116.1	-74.8	-51.3	-33.9	-9.6	-54.8	224.4

Source: Commission calculation.

- 132 For the assessment of water and sanitation subsidies the major method changes are:
- only populations in small communities, outside highly accessible areas and in poor water regions are captured;
 - there are no additional weights for water quality, availability and by region; and
 - Indigenous expenses are included in this assessment and not assessed differentially from expenditure in non-Indigenous communities.
- 133 Protection of the environment expenses are now largely assessed EPC and only remote and very remote populations are captured in the assessment of electricity subsidies.
- 134 Growth in State expenses on services to communities over the review period was the main driver of changes in State circumstances. Expenses on electricity subsidies, community development and, to a lesser extent water and sanitation subsidies grew. This has led to a greater amount of GST revenue being redistributed to States who have greater populations residing in areas requiring water and electricity subsidies and greater proportions of their populations in discrete Indigenous communities; that is, Queensland, Western Australia, South Australia and the Northern Territory.

UPDATE PROCESS

- 135 We recommend that data used in these assessments be updated annually to ensure the relativities remain contemporary and consistent with the circumstances of the States. On this basis we expect the following to be updated:
- the expense weights based on State data on water, wastewater and electricity subsidies and concessions and protection of the environment expenses;
 - the water factor using populations in small communities;
 - the electricity factor using remote population data from the ABS; and
 - the concessions factor using pension concession and health care card holder numbers from FaCSIA and DVA.

- 136 We consider the discrete Indigenous community ERP data used to determine the community development factor should be fixed at June 2006 level because the data are not available annually and there is no reliable method available to estimate growth in this population group between census years.
- 137 We will refer to the relevant terms of reference when deciding how to use new data on water quality and availability.

SIMPLIFICATION

- 138 In the Services to communities category, simplification has been achieved by:
- assessing expenses in one rather than three categories (Water, sanitation and protection of the environment, Electricity and gas and Services to Indigenous communities);
 - reducing the number of components assessed because the redistributive impact was not material. In the 2004 Review, four components (general subsidies, concessions, economic development and regulation) were assessed in the Water, sanitation and protection of the environment and Electricity and gas categories. In the Services to Indigenous communities category, components were assessed for community governance and remote essential services;
 - not assessing category specific cost weights because of a lack of reliable and comparable data. In the 2004 Review, regional weights were applied in the Electricity and gas category. In the Services to Indigenous communities category, weights were also applied for community size and region; and
 - reducing the use of unreliable expense data and minimising adjustments to GFS data by not separately assessing 4-digit Indigenous GPCs for water, sanitation and electricity.
- 139 By doing so, the Commission has reduced the number of calculations required. Further, there is less reliance on data that do not meet the 2010 Review data quality standards.

FURTHER INFORMATION

- 140 Background material in support of this assessment is published on the Commission's website. That material includes the following documents, released for comment in the development of this assessment, together with State submissions responding to those documents:
- Staff discussion paper *2007/20-S Assessment of Services to communities for the 2010 Review*;
 - Staff discussion paper *2008/22-S Services to communities*;
 - Commission position paper *2009/04 Services to communities — Assessment of water subsidies*; and
 - *2010 Review Draft Report*.