



Commonwealth Grants Commission

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NATIONAL PARKS AND WILDLIFE SERVICES

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NATIONAL PARKS AND WILDLIFE SERVICES

The 1999 Review Assessment Approach

1. In the 1999 Review and subsequent updates, the National Parks and Wildlife Services (NPWS) category covered expenditure on the administration, regulation, support, provision and operation of national parks and wildlife services. The category also included expenditure on national estate matters such as historic houses and sites that are part of national parks and wildlife services as well as research into protecting flora and fauna.

2. The Commission excluded from the category specific purpose payments (SPPs) associated with:

- (i) the South West Tasmania Heritage Area program, because the allocation of such payments reflects needs; and
- (ii) the Management of World Heritage Properties (World Heritage Areas) program, also because the allocation of such payments reflects needs.

3. The assessment structure used for the category in the 2002 Update is summarised in Table 1.

4. Since the 1999 Review, user charges for National Parks and Wildlife Services have been assessed differentially by applying the economic environment factor from the Visitor Impact expenditure component assessment (discounted by 50 per cent), to the user charges standard.

National Parks and Wildlife Services and Roles of Government

5. The role of NPWS providers varies from State to State, but their core functions are:

- (i) the conservation, protection and enhancement of States' natural environments and of their cultural heritage; and
- (ii) the provision of a network of national parks and nature reserves for the use and enjoyment of State residents.

Table 1 ASSESSMENT STRUCTURE, 2002 UPDATE

Expenditure component	Component weight	Factors	Basis of calculation
Scale-affected expenditure	10.30	Input costs	General method with weights of 80% for wages, 2% for accommodation and 1% for electricity.
		Administrative scale	General method.
Aboriginal involvement in parks	4.98	Dispersion	General method.
		Input costs	General method with weights of 50% for wages, 2% for accommodation and 1% for electricity.
		Socio-demographic composition	Captures the relative impact of States indigenous populations on the cost of providing national parks and wildlife services.
Visitor impact	46.28	Dispersion	General method.
		Economic environment	Based on the estimated number of visitors.
		Input costs	General method with weights of 50% for wages, 2% for accommodation and 1% for electricity.
Conservation	36.33	Dispersion	General method.
		Input costs	General method with weights of 50% for wages, 2% for accommodation and 1% for electricity.
		Physical environment	Based on the number of species of flora and fauna, average of forest, woodlands biophysical regions and climatic zones, and per capita area of national parks.
		Urbanisation	Based on populations contiguous to national parks.
Isolation	0.53	Isolation	General method.
Land rights	1.35	Land rights	The additional costs in the Northern Territory arising from the Commonwealth <i>Aboriginal Land Rights (Northern Territory) Act 1976</i> .
Native title administration	0.23	Native title administration	Based on actual per capita expenditure over the last three years.

6. The roles and functions of service providers can be best illustrated by examples. For instance, the role of the New South Wales National Parks and Wildlife Service is to lead the community in the development of a system of ecologically sustainable and integrated landscape management that conserves nature and cultural heritage and has as its centrepiece the public reserve system. The functions of the New South Wales Service are:

- (i) to ensure the conservation of protected native animals and plants;
- (ii) to protect and manage Aboriginal sites, objects and places of special significance;
- (iii) to promote community awareness, understanding and appreciation of the conservation of nature and the State's cultural heritage;
- (iv) to investigate and acquire land for inclusion in a system of national parks and nature reserves to conserve a completed range of the natural environment of the State;
- (v) to manage historic places within the National Parks and Wildlife Services estate and to acquire historic places of significance;
- (vi) to manage these areas and culturally significant features for enjoyment and conservation; and
- (vii) to identify, protect and manage wilderness throughout the State.

7. Another example of the higher level roles of national park service providers is given by Parks Victoria. Its vision is to provide an outstanding parks and waterway system, protected and enhanced, for people, forever — and its stated objectives are:

- (i) to conserve, protect and enhance environmental and cultural assets;
- (ii) to responsibly meet the needs of its customers for quality information;
- (iii) to contribute to the social and economic well being of Victorians; and
- (iv) to provide excellence and innovation in park management.

8. The Commonwealth, through its SPPs under the South West Tasmania Heritage Area program, provides for the ongoing management and conservation and capital expenditure for the Tasmanian World Heritage areas. It advises and implements policies and programs for the management and upkeep of World Heritage properties, and establishes best-practice management for those properties. The Commonwealth also has responsibility for the management and operation of national parks within Commonwealth Territories — like Uluru and Kakadu in the Northern Territory, and Booderee in the Jervis Bay Territory.

Main Issues and Options for the Assessment

9. The present scope and structure of the assessment appears to capture the range of services provided and most of the likely cost differences affecting service delivery. It recognises both the conservation and recreation purpose of national parks and most of the relevant cost disabilities — including scale affected costs, the size of the conservation task, the impact of visitors and Aboriginal involvement, and other minor cost impacts. States are keen to have the component weights and a number of key disability factors reviewed and for a consistent definition of national parks to be used in all factor calculations.

10. Thus, staff propose to recommend to that Commission that the existing scope of the category (as indicated in Discussion Paper CGC 2001/12, *Scope and Structure of the Standard Budget*), the existing treatment of continuing SPPs, and the structure used in the 1999 Review be retained. We also propose to recommend that the International Union for the Conservation of Nature (IUCN) definition of national parks (Category II)¹ be used when possible in all factor calculations. This is because:

- (i) it represents the latest, commonly agreed industry standard; and
- (ii) it is the best and most consistent measure of national parks across States.

11. We have considered State arguments relating to possible changes in:

- (i) the component weights, particularly the Conservation component which South Australia argued should be larger;
- (ii) the socio-demographic composition factor in the Aboriginal Involvement in Parks component, because there are concerns over the additional costs that Indigenous people impose and the accuracy of the Aboriginal population count;
- (iii) the economic environment factor in the Visitor Impact component and User Charges assessment, because there are concerns over the adequacy of the data and the different methods used to compile it;
- (iv) the physical environment factor in the Conservation component, because there are concerns that the cost relationships and data are out of date;
- (v) the urbanisation factor in the Conservation component, because there are concerns that the cost impact on parks of contiguous populations are not correctly captured;

¹ Category II — National Park: Protected Area managed mainly for ecosystem conservation and recreation. Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for this and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

- (vi) cross border and national capital allowances for the ACT, which do not at present exist; and
- (vii) the dispersion factor, which should possibly reflect the dispersion of parks rather than populations.

12. The rest of this Discussion Paper sets out the arguments and staff views on these issues at this stage of the Review. It also seeks additional evidence to help us better evaluate State claims.

COMPONENT WEIGHTS

13. In its workplace discussions, South Australia argued that conservation costs of national parks and wildlife service providers are greater than the costs of visitor impact on parks, and that this should be reflected in the Commission's NPWS assessment. On the basis of gross expenditure data quoted at those workplace discussions, it is estimated that the Conservation component weight would be about 44 per cent (currently set at 36.33 per cent) and the Visitor Impact component weight would be about 38 per cent (currently set at 46.28 per cent).

14. During the workplace discussions in Victoria, the Commission was told that in the Dandenong Ranges National Park, a Park which offers a large range of recreational activities in close proximity to Melbourne, more than 50 per cent of the budget was spent on visitor management. However, the ranger there advised that this split would differ by location and park focus.

15. We seek cost data from the States to assist in revising these standard component weights.

THE ABORIGINAL INVOLVEMENT IN PARKS COMPONENT — SOCIO-DEMOGRAPHIC COMPOSITION

16. In the 1999 Review and subsequent updates, the Commission assessed a socio-demographic composition factor in the Aboriginal Involvement in Parks component, as well as factors for input costs and dispersion disabilities. The purpose of this assessment was to recognise how the Indigenous population affected States' expenditure on NPWS. It recognised that the overall Indigenous population in a State had a small impact on park expenses and that the presence in and around national parks of Indigenous people pursuing a customary lifestyle had a larger impact because of their close cultural association with the land and environment. These influences were reflected in the socio-demographic composition factor which was calculated as the weighted average of two sub-factors — one based on the total Indigenous population in each State (weighted by 30 per cent), and the other on the remote Indigenous population in each State (weighted by 70 per cent). The weights were largely judgement based.

17. The data used to calculate the socio-demographic composition factor were from the 1996 Census, disaggregated using the Rural, Remote and Metropolitan Area (RRMA) classification. The factor has remained unchanged since the 1999 Review.

State Views

18. The ACT argued that this factor should be removed because it:

- (i) did not accurately reflect the cost or demand influences associated with Aboriginal involvement in the provision of NPWS; and
- (ii) resulted in double-counting of the remote Indigenous population.

19. South Australia suggested that the Commission review the data used for the socio-demographic composition factor in this component as it generated an implausible result for Tasmania. No other State commented.

Issues

20. There are two key issues concerning the socio-demographic composition factor assessment in this component — what additional costs do the different Indigenous populations impose, and are the Aboriginal population data sufficiently accurate.

Options for Assessment

21. Staff are not inclined to recommend that the socio-demographic composition factor be removed from the Aboriginal Involvement In Parks component. We have some evidence that where Indigenous people have a close association with a park, are pursuing a traditional life style or are involved in the management, there is a cost impact. However, we have little evidence to show that Indigenous people in general have a cost impact on national parks which differs from that of the non-Indigenous population. Thus, we require further information which will allow us to identify the cost impacts more accurately. Can States provide information which will assist us to better assess the cost impacts on service provision of overall State Indigenous populations and Indigenous populations with an association with a park? We will look at using Indigenous population within a certain distance of a Park rather than simply the remote Indigenous population.

22. The socio-demographic composition factor has been recalculated using 2001 Census data. Tables 2, 3 and 4 show the changes in the total Indigenous population, remote Indigenous population and socio-demographic composition factor for each State, the latter using the current cost weight settings.

Table 2 TOTAL INDIGENOUS POPULATION AND FACTORS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1996 Census ^(a)	108 930	22 046	103 794	55 409	21 233	14 928	2 884	51 127	380 350
2001 Census ^(b)	135 319	27 928	126 035	66 069	25 620	17 442	3 941	57 550	459 904
Increase (No.)	26 389	5 882	22 241	10 660	4 387	2 514	1 057	6 423	79 554
Increase (%)	24.2	26.7	21.4	19.2	20.7	16.8	36.7	12.6	20.9
1996 Factor	0.84605	0.23301	1.49265	1.51690	0.68962	1.50030	0.45108	13.50418	1.00000
2001 Factor	0.86733	0.24532	1.46877	1.46835	0.71646	1.56236	0.51900	12.18865	1.00000

(a) Based on experimental estimates of Indigenous populations from the 1996 Census.

(b) Based on the estimated resident Indigenous population at 30 June 2001.

Source: 1996 and 2001 Censuses of Population and Housing.

Table 3 REMOTE INDIGENOUS POPULATION AND FACTORS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1996 Census ^(a)	11 643	343	29 591	29 028	4 473	203	0	41 313	116 594
2001 Census ^(b)	7 311	57	26 397	26 210	5 172	537	0	41 203	106 887
Difference	-4 332	-286	-3 194	-2 818	699	334	0	-110	-9 707
1996 Factor	0.29499	0.01182	1.38822	2.59234	0.47388	0.06670	0.00000	35.59742	1.00000
2001 Factor	0.20339	0.00217	1.29255	2.51189	0.62243	0.20729	0.00000	35.68397	1.00000

(a) Population by RRMA classification.

(b) Population by ARIA+ classification — based on 'remote Australia' and 'very remote Australia' counts.

Source: 1996 and 2001 Censuses of Population and Housing.

23. Table 4 shows considerable differences between the 2002 Update factors and those based on the 2001 Census data, for all States except the Northern Territory. We suspect that much of these differences is due to the new definition of remoteness used by the ABS in the 2001 Census — that is, based on the Accessibility / Remoteness Index of Australia (ARIA+) — but changes in the rate of Indigenous self-identification may also be influencing the result.

24. We are consulting the ABS about its new remote Indigenous population counts. We plan to use the ARIA+ approach to the definition of remote areas as we believe it will produce a superior result to that of the RRMA classification. The reasons for this are set out in Discussion Paper CGC 2002/21, *Socio-demographic Composition*.

Table 4 ILLUSTRATIVE SOCIO-DEMOGRAPHIC COMPOSITION FACTORS^(a)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1996 Census									
Total Indigenous factor weighted by 0.3	0.25382	0.06990	0.44780	0.45507	0.20688	0.45009	0.13532	4.05125	0.30000
Remote Indigenous factor weighted by 0.7	0.20649	0.00828	0.97176	1.81464	0.33171	0.04669	0.00000	24.91819	0.70000
Overall factor	0.46031	0.07818	1.41955	2.26970	0.53860	0.49678	0.13532	28.96945	1.00000
2001 Census									
Total Indigenous factor weighted by 0.3	0.26020	0.07360	0.44063	0.44051	0.21494	0.46871	0.15570	3.65660	0.30000
Remote Indigenous factor weighted by 0.7	0.14237	0.00152	0.90479	1.75832	0.43570	0.14510	0.00000	24.97878	0.70000
Overall factor	0.40257	0.07512	1.34542	2.19883	0.65064	0.61381	0.15570	28.63537	1.00000

(a) Illustrative because factors are based on existing 30 and 70 per cent cost weights.

Source: Commonwealth Grants Commission, and ABS Census data.

VISITOR IMPACT COMPONENT — ECONOMIC ENVIRONMENT

25. In the 1999 Review and subsequent updates, the Commission assessed an economic environment factor in the Visitor Impact component, as well as factors for input costs and dispersion disabilities. The economic environment factor was intended to capture the impact of visitors on the operating costs parks. It was measured using the estimated number of visitors to all terrestrial national parks and reserves. In the 1999 Review and the 2000 Update, the Commission used 1997-98 data to calculate the factor because of poor data quality for earlier years. However, in later years, additional data were included as they became available.

26. Since the 2001 Update, States have provided visitor numbers separately (where possible) for each type of protected area, using the World Conservation Union (IUCN) management categories as contained in the Collaborative Australian Protected Areas Database (CAPAD)² 1999. Thus, a more consistent data set has been produced.

27. Table 5 shows the number of national park visitors estimated by States over the last five years. Only data for the last three years were used in the calculation of the 2002 Update factors because data for the earlier years were deemed unreliable.

² The CAPAD is a database containing information on all statutory protected areas in Australia, including their IUCN (World Conservation Union) category. Environment Australia has accepted responsibility for the maintenance of CAPAD with the co-operation of State agencies.

Table 5 STATE ESTIMATES OF VISITOR NUMBERS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	'000	'000	'000	'000	'000	'000	'000	'000
1996-97				6 417	4 000	2 306	1 525	2 985
1997-98	21 157	14 468	12 500	8 094	4 575 ^(a)	2 638 ^(a)	1 484	2 920
1998-99	22 589	13 473	17 611	7 168	3 530	2 049	2 196	2 616
1999-2000	23 496	13 920	18 062	8 895	3 802	2 570	2 152	2 759
2000-01	23 642	13 920 ^(b)	18 675	9 720	3 747	2 541	2 140	2 693

(a) Estimated using the percentage change in visitor numbers based on States that supplied data for 1996-97 and 1997-98.

(b) No 2000-01 data were provided by Victoria. The 1999-2000 data were used.

Source: State Data Returns.

28. The method used to derive the economic environment factors in the 2002 Update, as set out in Table 6, was to:

- (i) calculate per capita visitor numbers for each State and Australia, for 1998-99, 1999-2000 and 2000-01;
- (ii) average these per capita visitor numbers for all States and Australia, over the three years; and
- (iii) divide the average per capita visitor numbers for each State by the Australian average per capita visitor numbers.

State Views

29. Victoria suggested that information published in jurisdictions' Annual Reports be used to determine the number of visitors to national parks in the assessment of the economic environment factor.

30. South Australia argued that a comprehensive and consistent definition of National Park should be used throughout this assessment. It also observed that the National Parks and Wildlife South Australia (NPWSA) agency considered that South Australia's methods of estimating visitor numbers was more accurate and conservative than that used by other States. It argued that States use different methods to count park visitors and the estimates are not consistent. More specifically, a State which uses less conservative estimation techniques is at present rewarded with a bigger disability factor and hence a larger grant share. Thus, South Australia proposed that the assessment of an economic environment factor be continued, but that the factor be discounted to reflect the influences arising from different collection and estimation methods.

Table 6 PER CAPITA VISITOR NUMBERS AND ECONOMIC ENVIRONMENT FACTORS, 2002 UPDATE

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1998-99 per capita visitor numbers	3.55	2.88	5.06	3.89	2.37	4.35	7.12	13.67	3.78
1999-2000 per capita visitor numbers	3.65	2.94	5.11	4.75	2.54	5.46	6.94	14.21	3.97
2000-01 per capita visitor numbers	3.64	2.90	5.19	5.12	2.50	5.40	6.85	13.71	4.00
Average per capita visitor numbers	3.61	2.90	5.12	4.59	2.47	5.07	6.97	13.86	3.92
Economic environment factor	0.92224	0.74152	1.30679	1.17086	0.63049	1.29427	1.77860	3.53904	1.00000

Issues

31. The key issue is the quality of the data used to calculate the economic environment factor in this component. More specifically, what needs to be considered is:

- (i) whether the classification of protected areas, based on IUCN management categories, provides a suitable framework on which to base estimates of visitor numbers;
- (ii) whether alternatives to the IUCN framework exist which could be used to derive better quality visitation data; and
- (iii) if the IUCN management categories provide a suitable framework on which to base estimates of visitation, whether the resulting factor needs adjustment to correct for policy contamination because States use different methods to estimate visitor numbers.

Options for Assessment

32. It is unlikely that the use of Annual Reports for each jurisdiction will produce a consistent data set of visitor numbers because different definitions of 'national park' are used. In addition, a number of States do not publish visitor numbers in their Annual Reports. As a result, we are not inclined to proceed with Victoria's suggestion.

33. Many different classifications of protected areas are used throughout Australia. At a meeting of all States in 1994, however, it was agreed that all would:

- (i) adopt the IUCN definitions of protected areas; and
- (ii) use the IUCN six level system for describing protected areas.

34. Decisions about which land areas meet the IUCN definition of protected area, and which category they belong to, are the responsibility of each State. While some inconsistencies in the use of management categories continue between jurisdictions, the IUCN system provides the most convenient framework for compilation of statistics and comparison of protected areas between States.

35. Since States were asked to use the IUCN framework three years ago, visitor numbers data appear to be more consistent and less volatile year by year.

36. South Australia does seem to use a conservative technique to count park visitor numbers, but it is not obvious how an adjustment might be made for this. At present, no information is available on how States prepare their data for the Commission. Staff now seek such information and propose to make a recommendation to the Commission about whether it will be necessary to make any adjustments to the data after this information is received.

37. In the meantime, subject to the outcome of the November Conference, staff are inclined to recommend that the existing assessment method be continued, with data sourced from States' data returns according to the IUCN framework. It is likely that better quality data are being collected under the IUCN framework and the assessment can be based on five years of more consistent data.

USER CHARGES — ECONOMIC ENVIRONMENT

38. In the 1999 Review and subsequent updates, user charges for this category comprised visitor entry fees, camping fees, publication sales and use of recreation facilities, national park leases and licenses, and fauna permits and licences. These user charges were differentially assessed using the economic environment factor discounted by 50 per cent, to adjust for the impact on the user charges capacity arising from difficulties associated with monitoring entry to park and also collection costs.

39. No States commented on the assessment of NPWS user charges. Subject to any discussion at the November Conference, staff propose to recommend that the present assessment approach be continued.

THE CONSERVATION COMPONENT — PHYSICAL ENVIRONMENT

40. In the 1999 Review and subsequent updates, the Commission assessed physical environment and urbanisation factors in the Conservation component, as well as factors for input costs and dispersion disabilities.

41. The physical environment factor was intended to measure the size and importance of the conservation task, calculated as a cost weighted average of four separate sub-factors based on:

- (i) the number of flora species;
- (ii) the number of fauna species with a weight of 2 applied to protected species;
- (iii) the average number of forest and wood alliances, bio-physical regions and climatic zones; and
- (iv) the per capita area of national parks and reserves.

The cost weights used to derive the physical environment factor were assessed by judgment to be 35 per cent for the flora and fauna sub-factors, 20 per cent for the alliances/regions/zones sub-factor, and 10 per cent for the national park area sub-factor.

42. The flora and fauna sub-factors used data from 1992 and 1998 respectively. Data on forest alliances, biophysical regions and climatic zones were sourced from the publications *Australian Biophysical Regions, 1975* and *Conservation of Major Plant Communities in Australia, 1974*.

43. The per capita area of national parks was intended to provide a broad measure of the scope of the conservation task in each jurisdiction. These data were originally sourced from State Yearbooks but as some of these are no longer published, the Commission used CAPAD 1999 data in the 2001 Update to obtain the proportion of land area protected in each State, excluding the area of Commonwealth parks. The data are summarised in Table 7.

State Views

44. Victoria proposed that more current and accurate data should be used to determine the number of flora and fauna species, such as *A Census of Vascular Plants of Victoria*. It also proposed that a cost weight be included in the physical environment factor for the additional costs of treating salinity in national parks.

45. The ACT sought the removal of the biophysical regions element from the physical environment factor as it did not reflect cost or demand influences associated with the provision of national parks and wildlife services.

Table 7 AREA OF NATIONAL PARKS AND CONSERVATION RESERVES

	Total land area (hectares)	National parks and nature reserves (hectares)	Proportion of national parks and nature reserves (per cent)
New South Wales	80 131 050	4 953 217	6.2
Victoria	22 748 664	3 377 568	14.8
Queensland	172 694 961	6 705 658	3.9
Western Australia	252 519 317	15 915 081	6.3
South Australia	98 378 946	21 124 574	21.5
Tasmania	6 833 791	2 050 777	30.0
Australian Capital Territory	236 227	123 032	52.1
Northern Territory	134 781 603	3 012 590	2.2
AUSTRALIA	768 324 559	57 262 497	7.5

Source: CAPAD 1999.

Issues

46. The key issues concerning the physical environment factor are:
- (i) whether the four sub-factors assessed capture States' differential needs for conservation of parks and wildlife;
 - (ii) if the basic assessment method is sound, whether the data used to calculate the four sub-factors can be updated; and
 - (iii) whether the cost weights, assessed by judgement in the 1999 Review, remain appropriate for the coming review.

Options for Assessment

47. Commission staff have looked at the publication suggested by Victoria for the flora and fauna sub-factors, but found that the data are appreciably different from that used in the 1999 Review and are not available for other States. Other publications on flora and fauna have also been considered, but without success. The CSIRO *List of Australian Vertebrates – A Reference with Conservation Status*, published in 1998 and used in the 1999 Review, has not been updated. If States can suggest data sources which can be used to update the flora and fauna lists used in the 1999 Review, on a consistent basis for all States, it would be appreciated. Data are also requested on the relative costs of conserving protected species of fauna compared with the costs of conserving non-protected species of fauna, so that the weight applied to protected species can be revisited.

48. These seems to be some merit in the argument that this factor should account for additional costs of treating salinity in national parks. States are needed to provide evidence of unavoidable extra costs incurred by service providers in treating salinity in national parks and of the size of the problem for them before a final decision on this issue is made.

49. The removal of biophysical regions from the assessment would eliminate an important perspective on the costs of the overall conservation task. Combined with forest alliances and climatic zones, biophysical regions add completeness to the assessment's coverage. Commission staff are not inclined to recommend the removal of this element from the physical environment assessment, but will consider adjusting the weights applied to the sub-factors. Again, assistance of States is requested in providing data on the relative importance of the four conservation cost drivers assessed in the physical environment factor — to assist in assessing the weights which will be used to combine the sub-factors in the 2004 Review.

50. In summary, staff are inclined to recommend to the Commission that the assessment of the four sub-disabilities which measure States' needs in conserving their flora and fauna species, their bio-physical regions and the extent of their national parks in general, should be continued, perhaps with the addition of a salinity cost factor. Refinements to the cost weights used in the current assessment will, however, be considered.

51. New data from CAPAD should be available in a few months time and will be used to calculate an updated factor. However, if no alternative up-to-date sources of the other data can be found, the existing data will continue to be used.

THE CONSERVATION COMPONENT — URBANISATION

52. In the 1999 Review and subsequent updates, the Commission assessed an urbanisation factor in the Conservation component based on the relative size of populations contiguous to national parks in each State. The factor was included to measure the indirect costs associated with the populations contiguous to national parks who were not direct users of parks. Contiguous populations were measured using the total population 0-10 kilometres and half the population 10-15 kilometres from national parks.

53. In the 2001 Update, the Commission used a Public Sector Mapping Agency (PSMA) data set on gazetted national parks used in the 1999 Review to calculate the urbanisation factor. It did not accept that areas covered by the National Capital Open Space Scheme (NCOSS) in the ACT were equivalent to gazetted national parks.

State Views

54. Victoria argued that the urbanisation disability should be abolished. Alternatively, it argued that the size of national parks should be considered when determining the radius of influence, rather than applying a set kilometre radius to all

national parks. It argued that a large park often has higher environmental values which are more under threat by contiguous populations. The management task is larger in such cases. It proposed that the radius for a large park such as the Dandenong Ranges should be 35 to 50 kilometres, the distance that its visitors travelled.

55. Queensland supported the Commission's judgement that States should provide evidence of the additional per capita costs attributed to conservation resulting from populations contiguous to national parks. In the absence of such costs, it argued the urbanisation factor should be discontinued. It submitted that the redistribution due to the conservation component in this category, which is strongly driven by the urbanisation factor and largely benefits New South Wales, is too large. Nevertheless, it supported the Commission's proposal to use the IUCN definition of National Parks.

56. Queensland suggested that an empirical model be used to calculate urbanisation factors and that the model should be consistent with the method for assessing dispersion factors, and weighted to reflect that proportion of costs identified by States for conservation where populations are adjacent to national parks. Such a model could continue to be used irrespective of issues regarding the definition of a national park.

57. South Australia argued that the adoption of the IUCN Category II definition would not overcome the problem of comparability of definitions between States. Due to inconsistencies in nomenclature between States, it proposed that the Commission base its definition of a 'National Park' on areas dedicated by gazettal/legislation for conservation purposes. It contended that if those data prove to be unreliable or unusable, there may be no option but to adopt a measure using all management categories of IUCN classified areas.

58. Tasmania expressed concerns that the urbanisation factor could be significantly influenced by State policy and should be removed. It observed that its activity in relation to the conservation of flora and fauna was expanding beyond the boundary of national parks, and increasingly being undertaken in conjunction with non-government organisations and individuals. It argued that a change in State government policy in relation to designating areas as national parks could significantly influence the Commission's current assessment.

59. The ACT argued that as part of the urbanisation calculations, based on populations contiguous to national parks, the assessment should:

- (i) reflect the adoption of the IUCN National Parks definition given that it represents the latest industry standard, the best measure of national parks between States, and would be consistent with the use of IUCN as the basis for calculating the physical environment factor in the Conservation component and the economic environment factor in the Visitor Impact component;
- (ii) include all National Capital Open Space Scheme (NCOSS) land as the basis of the urbanisation factor calculations, as these areas are subject to significant planning and management constraints and large areas of NCOSS land are IUCN defined National Parks; and

- (iii) retain the current urbanisation model.

Issues

60. A number of conceptual issues has been raised by States, ranging from abolition of the urbanisation factor to broad support for the Commission's approach. There are also repetitions of issues raised during the 2001 Update process, particularly concerning data.

61. The key issue is whether the factor reflects States' needs in terms of the additional indirect costs which States face in conservation associated with the urban development contiguous to national parks — the populations which have an impact are not necessarily direct users of parks, but those which are located along park boundaries.

Options for Assessment

62. Commission staff accept that there is a strong conceptual argument that additional unavoidable conservation costs are incurred by States when parks are located in urban areas. Such costs seem to relate to the density of the urban population living close to and around the parks — hence the present approach. It would be helpful if States demonstrated the relationship between conservation costs and populations contiguous to parks. At this stage, staff are not inclined to recommend to the Commission that the urbanisation factor be discontinued but would like some clearer evidence of the cost relationships.

63. If the present method continues to be used, the IUCN definition of National Parks (Category II) will be applied. On South Australia's argument, the use of gazetted / legislated national parks will not necessarily produce a more consistent database than the use of the IUCN framework.

64. There seems no reason to include NCOSS land data in the calculation of contiguous population. Discussions with the National Capital Authority during the 2001 Update suggested that the ACT can determine the status of land where it is not covered under the National Capital Plan (NCP). Therefore, there is no obvious reason why gazetting the NCOSS land as a national park would be inconsistent with the NCP.

CROSS BORDER AND SPECIAL CIRCUMSTANCES OF THE ACT

State Views

65. ***Cross border.*** The ACT proposed the assessment of a cross border factor to reflect the cost of controlling feral species originating from NSW (using the ACT's proposed modified general method). The ACT argued that it has had to incur costs in controlling feral animals and weed species originating in New South Wales. It claimed that

these species were previously eradicated or significantly reduced within the ACT as a result of intensive control programs. It is currently spending about \$130 000 per annum to prevent these species re-establishing themselves.

66. *National Capital.* The ACT argued that it faced additional costs in the production of a management plan for the Canberra Nature Park because:

- (i) the reserve system is very complex;
- (ii) the plan must find a balance between the conservation values of the park required by the National Capital Plan and recreation uses which meet community expectations;
- (iii) extensive consultation with the National Capital Authority (NCA) and the general public is required; and
- (iv) all works proposals must be approved by the NCA.

The ACT suggested that an allowance of \$0.5 million would reimburse it for national capital costs relating to the management (as opposed to the operating costs) of the Canberra Nature Park.

Options for Assessments

67. *Cross border.* All States face similar problems of controlling feral species and many of larger magnitudes than those of the ACT. It is also difficult to accept that the assessment of an allowance for the ACT would be sufficiently material. For these reasons, staff propose to recommend to the Commission that a cross border factor not be assessed.

68. *National Capital.* Staff think the ACT may have an argument in relation to the additional planning requirements it faces under the National Capital Plan and the NCA. Additional evidence will be required, however, to show that the whole of the annualised costs should be recognised as a disability.

ABORIGINAL INVOLVEMENT IN PARKS, VISITOR IMPACT AND CONSERVATION COMPONENTS — DISPERSION

State Views

69. In its workplace discussions, South Australia expressed concern that the general method for calculating dispersion failed to recognise that it is the relative dispersion of national parks, rather than population, that impacts on NPWS expenditure.

Issues and Options for Assessment

70. The Commission currently assesses dispersion factors for Primary Industry, and Mining Fuel and Energy, based on the distribution of employment in those industries. It also assesses dispersion in the Aboriginal Community Services category based on the dispersion of Indigenous population rather than total population.

71. Along similar lines, staff are inclined to agree with South Australia that dispersion costs in this category should be assessed according to the distribution of parks rather than population. This issue is also taken up in Discussion Paper CGC 2002/22 *Dispersion*.

SUMMARY OF PROPOSED CHANGES TO THE ASSESSMENT

72. In summary, staff propose to recommend to the Commission that the following changes be made to the NPWS assessment in the 2004 Review.

- (i) The International Union for the Conservation of Nature definition of national parks (Category II) be used where possible in all factor calculations.
- (ii) The component weights be reviewed to reflect what States are doing, particularly in providing conservation services and managing the impact of visitors to national parks.
- (iii) The socio-demographic composition factor in the Aboriginal Involvement in Parks component be changed to reflect new Indigenous population data and the new definition of remoteness.
- (iv) The urbanisation and physical environment factors in the Conservation component be recalculated using new data.
- (v) A national capital factor be introduced to recognise the cost impact of the NCA and the National Capital Plan on managements costs of the Canberra Nature Park.
- (vi) The dispersion factor be changed to reflect dispersion of parks and not people.

FURTHER DATA REQUIREMENTS

73. Table 8 sets out a list of further data we seek from States to assist in assessing National Parks and Wildlife Services in the 2004 Review.

Table 8 NATIONAL PARKS AND WILDLIFE SERVICES, FURTHER DATA REQUIREMENTS FOR THE 2004 REVIEW

Component	Factor	Data Requirement
All	Na	Data from the States on the relative costs of services provided in this category — especially conservation, services to visitors to parks and services concerning Indigenous involvement in parks — to assist in setting standard component weights.
Visitor Impact	Economic environment	Information on methods used by States to count visitors.
Conservation	Physical environment	Data sources which could be used to update the flora and fauna lists assessed in the 1999 Review, on a consistent basis for all States.
Conservation	Physical environment	Data on the relative costs of conserving protected species of fauna compared to the costs of conserving non-protected species of fauna.
Conservation	Physical environment	Evidence of unavoidable extra costs incurred by service providers in treating salinity in national parks and of the size of the problem.
Conservation	Physical environment	Data on the relative costs of conserving flora, fauna, biophysical regions and climatic zones, and the areas of national parks in general.
Conservation	Physical environment	Data on the relative costs of conserving protected and non-protected species of fauna.
Conservation	Urbanisation	Information from States to demonstrate the relationship between conservation costs and populations contiguous to parks.