

Vote 33

Water Affairs and Forestry

Amount to be appropriated	R3 558 509 000
Statutory appropriations	-
Responsible Minister	Minister of Water Affairs and Forestry
Administering Department	Department of Water Affairs and Forestry
Accounting Officer	Director-General of Water Affairs and Forestry

Aim

The aim of the Department of Water Affairs and Forestry is to ensure the availability and supply of water on a national level to ensure the equitable and efficient provision of water services at local level and to promote the development of forestry.

Key objectives and programme

Access to clean, safe water and sanitation services is essential for a healthy population and a growing economy. Water is a limited resource, and its use is essential for ensuring sustainable social, economic and environmental benefits for all. The key objectives of the Department of Water Affairs and Forestry cover its three major functional areas of work – water resource management, water services and forestry. These objectives relate to the policy, strategy and regulatory work undertaken at the head office at national level and to the direct delivery of services at the regional level.

In corporate services, the Department has prioritised the departmental transformation process. While it still manages a substantial water resource infrastructure, the Department is restructuring to position itself as the institution for policy development, regulation, monitoring and support on national water resource management. This includes the possible establishment of a National Water Utility in terms of the White Paper on National Water Policy.

The Department has a similar position in water services. Over the next four years it will largely phase out direct investment interventions to support water services authorities in providing basic water services (potable water and sanitation) to people without access to such services since the basic service backlog will have been substantially addressed. It is also transferring water services schemes, which it currently operates, to appropriate water services institutions, in consultation with the relevant water services authorities.

As a national forestry institution, the Department has prioritised the sustainable management of South Africa's indigenous and commercial forestry resources over the medium term. It will complete the leasing of government commercial forests to private operators to promote investment, employment, competition and black empowerment. The Department has established a Forest Land Management Unit to manage the leases of commercial plantations transferred to private operators. It is developing management systems for community plantations and intends to devolve these to community control wherever possible.

These key objectives are met through the activities of the following eight programmes:

- *Administration* provides financial, human resource, information and management services and support; as well as general departmental administration.
- *Water Resource Assessment* monitors the availability and quality of surface and underground water resources, and provides information services and technical support.

- *Integrated Water Resource Planning* assesses water needs and determines the optimal development of water resources and produces the national water resource strategy.
- *Water Resource Development* designs and constructs water schemes and relevant projects.
- *Regional Implementation* manages water programmes and operates water schemes, and is responsible for the establishment of infrastructure for water and sanitation.
- *Integrated Water Resource Management* is responsible for policy development, regulation, facilitation and monitoring to ensure the equitable allocation, beneficial use and sustainability of water resources.
- *Water Services* supports the provision of sustainable and affordable water and sanitation services through policy development, regulation, coordination, support, facilitation, evaluation and monitoring.
- *Forestry* promotes the optimal development of conservation, commercial, industrial and community forestry and regulates the forestry sector.

Strategic overview and key policy developments: 1998/99 – 2004/05

The policy developments over the last four years have transformed the Department from being only a creator, owner and operator of water resource infrastructure and a forest manager to that of an institution providing water services as well as performing the policy and regulatory functions in the three fundamental areas. Consequently, it is transferring commercial forestry functions to the private sector and community-owned structures. The focus of the *Water Services* programme is shifting to provide support to local government in performing their functions as water service authorities. This includes the transfer of departmental water service schemes to local governments, as well as the continued provision of basic water services infrastructure (as a conditional grant to local government), technical assistance and other support.

In terms of the Water Services Act (108 of 1997), the Department has published norms and standards for the provision, operational efficiency and economic viability of water services and the quality of water. Norms and standards in respect of tariffs have also been published to ensure the viability of water services, provide for affordable tariffs and to promote water demand management. Regulatory frameworks for model contracts, and guidance in respect of water services in general will soon be published. Strategy was put in place to ensure the provision of free basic water to all South Africans. An integrated inter-departmental approach to sanitation under the leadership of the Department of Water Affairs and Forestry has already been approved. It is running an awareness campaign aimed at combating cholera, with the cooperation of the Department of Health.

The Department will continue to implement the National Water Act (36 of 1998), in particular the establishment of new catchment management agencies and water user associations. The determination of the basic needs and ecological reserve has been initiated and a system to classify water resources to determine the levels of protection to apply is being developed. The registration of water use is under way, which will provide the basis for the allocation of the resource. These initiatives, the conservation of national resources and cooperative utilisation of shared regional resources will be guided by the National Water Resource Strategy.

Expenditure estimates

Table 33.1: Water Affairs and Forestry

Programme	Expenditure outcome					Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted	Revised			
R thousand	1998/99	1999/00	2000/01	2001/02		2002/03	2003/04	2004/05
1 Administration	147 306	182 965	190 265	209 868	207 380	220 804	222 650	235 091
2 Water Resource Assessment	52 344	58 621	62 440	85 283	83 547	92 232	104 575	116 656
3 Integrated Water Resource Planning	40 455	36 146	39 451	60 260	51 374	51 523	55 747	58 722
4 Water Resource Development	224 499	302 935	325 655	360 201	345 038	242 328	243 293	247 049
5 Regional Implementation	1 935 649	1 613 893	1 941 934	2 235 534	2 022 314	2 415 228	2 701 810	2 134 832
6 Integrated Water Resource Management	49 328	68 930	77 562	86 477	80 633	94 106	105 102	111 775
7 Water Services	54 027	61 809	63 084	65 895	64 699	69 953	70 386	74 361
8 Forestry	361 058	350 998	341 226	414 923	420 456	372 335	323 989	316 072
Total	2 864 666	2 676 297	3 041 617	3 518 441	3 275 441	3 558 509	3 827 552	3 294 558
Change to 2001 Budget Estimate				239 411	(3 589)	452 293	518 599	

Economic classification

Current	772 543	764 255	817 141	2 343 795	2 326 656	2 312 277	2 461 585	2 108 217
Personnel	239 549	228 436	299 649	362 405	351 579	535 867	512 503	520 618
Transfer payments	306 075	284 144	221 991	1 229 107	1 217 960	1 104 024	1 305 460	960 667
Other current	226 919	251 675	295 501	752 283	757 117	672 386	643 622	626 932
Capital	2 092 123	1 912 042	2 224 476	1 174 646	948 785	1 246 232	1 365 967	1 186 341
Transfer payments	742 536	909 031	1 177 122	139 274	119 958	26 968	31 268	32 720
Acquisition of capital assets	1 349 587	1 003 011	1 047 354	1 035 372	828 827	1 219 264	1 334 699	1 153 621
Total	2 864 666	2 676 297	3 041 617	3 518 441	3 275 441	3 558 509	3 827 552	3 294 558

Standard items of expenditure

Personnel	305 688	304 533	378 516	452 811	432 702	608 245	583 257	579 654
Administrative	83 749	96 176	123 805	120 014	132 737	161 203	140 553	145 623
Inventories	51 534	66 090	72 129	65 050	87 635	92 278	89 641	65 151
Equipment	56 476	60 615	58 938	55 703	63 416	62 767	59 073	51 932
Land and buildings	8 988	3 732	7 778	3 192	3 614	6 866	6 178	5 362
Professional and special services	1 304 508	946 989	997 364	1 453 035	1 202 818	1 495 378	1 611 342	1 452 653
Transfer payments	1 048 611	1 193 175	1 399 113	1 368 381	1 351 918	1 130 992	1 336 728	993 387
Miscellaneous	5 112	4 987	3 974	255	601	780	780	796
Total	2 864 666	2 676 297	3 041 617	3 518 441	3 275 441	3 558 509	3 827 552	3 294 558

Expenditure trends

Between 1998/99 and 2001/02, the budget for the Department of Water Affairs and Forestry grew by an average of 7,1 per cent a year, with *Integrated Water Resource Management*, *Water Resource Development*, *Water Resource Assessment* and *Integrated Water Resource Planning* growing by a combined annual average of over 17,0 per cent a year, reflecting the importance attached to the sound management of the country's water resources.

Although the Department's budget will grow by a further 7,6 per cent by 2003/04, the estimated budget falls in 2004/05 as decisions about the special allocation for poverty relief for that year have not been made pending an investigation of the allocation. Excluding these allocations from 2001/02, the Department's budget would reflect growth at an annual average of 1,6 per cent over the medium term.

The provision of funds from the poverty relief allocation includes R330 million in both 2002/03 and 2003/04 for the Working for Water subprogramme, and R20 million in 2002/03 for sanitation projects.

Of the eight programmes, *Regional Implementation* dominates spending, accounting for about 68 per cent of total expenditure over the medium term. This programme is made up primarily of two large transfers used to support the construction of water provision infrastructure, and for augmenting the Water Trading Account. The income from, and costs of, some elements of water supply activities are channelled through this account.

The allocation to *Forestry* falls by an average of 8,7 per cent a year over the medium term as state owned forestry assets are restructured. In 2002/03 the Industrial Plantations Trading Account will also cease to operate, and the costs of managing state owned forestry enterprises will be brought onto the budget.

Changes to the 2001 Budget increase allocations for 2002/03 by R452 million and for 2003/04 by R519 million. Additional allocations provide for continued forestry activities due to delays in restructuring, infrastructure allocations for rural water supply and sanitation, loan repayments in terms of international agreements and improved departmental financial management and legal and administrative services.

The nature of the Department's functions, and the large proportion of its work, which involves subsidising the water supply function of local government and the operations of regional bulk water suppliers means that expenditure is heavily biased towards providing professional and special services and transfer payments. Professional and special services consume 42,7 per cent of the budget over the medium term, and transfer payments consume a further 32,4 per cent.

Departmental receipts

Receipts are mainly from the sale of water, and are paid into the Water Trading Account. Other receipts are the repayment of loans to water boards, irrigation boards and local governments, interest on these loans, and miscellaneous income and revenue from the sale of wood and wood products. The total value of loans outstanding is estimated at R231,3 million.

Income from the sale of forestry products is estimated at R49,0 million for 2001/02, with the decrease in projected annual income from this source resulting from the restructuring of forestry assets. The Department anticipates that total receipts will amount to R70,3 million in 2001/02 rising to R77,9 million in 2002/03, R80,6 million in 2003/04 and R83,9 million in 2004/05.

Income from water sales on the Water Trading Account is estimated at R1,7 billion in 2001/02, R1,8 billion in 2002/03, R1,7 billion in each of 2003/04 and 2004/05.

Table 33.2: Departmental receipts

	Revenue outcome				Medium-term revenue estimate		
	Audited	Audited	Preliminary	Adjusted			
R thousand	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Non-tax revenue	47 995	33 775	29 669	49 034	43 879	44 854	46 443
Property income							
- Interest	32 278	21 580	19 268	33 329	24 376	24 726	25 658
Sales of goods and services	15 717	12 195	10 401	15 705	19 503	20 128	20 785
Financial transactions (recovery of loans and advances)	22 974	34 515	41 099	21 291	33 999	35 699	37 484
<i>Of which</i>							
- Loans	18 602	30 477	31 151	20 692	27 880	29 274	30 738
- Other accounts payable	4 372	4 038	9 948	599	6 119	6 425	6 746
Total departmental receipts	70 969	68 290	70 768	70 325	77 878	80 553	83 927

Programme 1: Administration

Administration provides for the management of the Department, including policy formulation by the Minister and senior management; rendering centralised administrative, legal and office support services; managing departmental personnel and financial administration; determining working methods and procedures; and exercising control through its head office and regional offices.

Expenditure estimates

Table 33.3: Administration

Subprogramme	Expenditure outcome				Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted			
R thousand	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Minister ¹	682	498	666	617	654	690	724
Management	8 144	7 845	9 587	12 273	12 536	12 802	13 532
Corporate Services	99 659	113 084	120 799	138 193	148 719	150 153	158 251
Information Services	38 821	61 538	59 213	58 785	58 895	59 005	62 584
Total	147 306	182 965	190 265	209 868	220 804	222 650	235 091
Change to 2001 Budget Estimate				7 110	14 600	13 000	

¹ Payable as from 1 April 2001. Salary: R493 320. Car allowance: R123 331.

Economic classification

Current	127 605	163 034	175 978	199 281	210 705	213 165	223 690
Personnel	62 477	68 356	75 365	93 334	91 776	95 312	100 568
Transfer payments	-	-	-	-	-	-	-
Other current	65 128	94 678	100 613	105 947	118 929	117 853	123 122
Capital	19 701	19 931	14 287	10 587	10 099	9 485	11 401
Transfer payments	-	-	-	-	-	-	-
Acquisition of capital assets	19 701	19 931	14 287	10 587	10 099	9 485	11 401
Total	147 306	182 965	190 265	209 868	220 804	222 650	235 091

R thousand	Expenditure outcome				Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted	2002/03	2003/04	2004/05
	1998/99	1999/00	outcome				
			2000/01	2001/02			
Standard items of expenditure							
Personnel	62 477	68 356	75 365	93 334	91 776	95 312	100 568
Administrative	20 217	27 348	30 328	33 286	33 632	33 553	35 605
Inventories	4 556	5 151	5 126	4 551	4 940	4 985	5 289
Equipment	19 701	19 931	13 865	10 587	10 099	9 485	11 401
Land and buildings	149	–	–	–	2 500	2 500	2 500
Professional and special services	38 962	60 810	63 939	67 855	77 077	76 035	78 932
Transfer payments	–	–	–	–	–	–	–
Miscellaneous	1 244	1 369	1 642	255	780	780	796
Total	147 306	182 965	190 265	209 868	220 804	222 650	235 091

Expenditure trends

The allocation to *Administration* increases 3,9 per cent a year over the medium term, having grown by an average of 12,5 per cent a year between 1998/99 and 2001/02. The bulk of the increase is because of the increase in the Department's audit costs, reflected in the increase in the Corporate Services subprogramme and the professional and special services line item.

Programme 2: Water Resource Assessment

The *Water Resource Assessment* programme assesses the quantity and quality of South Africa's surface and underground water resources, and provides information and technical support for their sustainable development and use.

The subprogrammes are: Management; Hydrology and Geohydrology, which are responsible for assessing the availability and quality of surface water and groundwater, respectively; Water Quality Services, which assesses water quality; Geomatics, which provides and manages maps and other spatial data; Social and Ecological Studies researches the social impact of water resource development; and Resource Information Management provides the information necessary for the protection and sustainable use of water resources.

Expenditure estimates

Table 33.4: Water Resource Assessment

Subprogramme	Expenditure outcome				Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted	2002/03	2003/04	2004/05
	1998/99	1999/00	outcome				
			2000/01	2001/02			
Management	396	402	584	17 195	1 627	1 298	1 364
Hydrology	14 685	17 318	17 599	21 068	20 977	23 464	24 932
Geohydrology	10 309	10 208	10 704	13 713	15 129	17 612	19 324
Water Quality Services	15 232	17 335	19 250	16 796	20 966	24 176	26 471
Geomatics	10 050	10 770	10 076	13 564	12 768	13 659	14 571
Social and Ecological Studies	1 672	2 588	4 227	2 947	5 992	7 563	8 686
Resource Information Management	–	–	–	–	14 773	16 803	21 308
Total	52 344	58 621	62 440	85 283	92 232	104 575	116 656
Change to 2001 Budget Estimate				12 415	17 851	17 681	

R thousand	Expenditure outcome				Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted			
	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Economic classification							
Current	48 003	53 072	57 238	79 378	84 279	97 131	108 780
Personnel	28 285	28 848	31 414	40 909	43 299	44 493	47 062
Transfer payments	–	–	–	–	–	–	–
Other current	19 718	24 224	25 824	38 469	40 980	52 638	61 718
Capital	4 341	5 549	5 202	5 905	7 953	7 444	7 876
Transfer payments	–	–	–	–	–	–	–
Acquisition of capital assets	4 341	5 549	5 202	5 905	7 953	7 444	7 876
Total	52 344	58 621	62 440	85 283	92 232	104 575	116 656

Standard items of expenditure

Personnel	28 285	28 848	31 414	40 909	43 299	44 493	47 062
Administrative	4 458	4 608	6 343	7 124	7 917	7 587	8 213
Inventories	1 737	1 885	1 777	2 101	2 981	2 626	2 796
Equipment	4 341	5 549	5 202	5 905	7 953	7 444	7 876
Land and buildings	–	–	–	–	–	–	–
Professional and special services	13 088	17 277	17 474	29 244	30 082	42 425	50 709
Transfer payments	–	–	–	–	–	–	–
Miscellaneous	435	454	230	–	–	–	–
Total	52 344	58 621	62 440	85 283	92 232	104 575	116 656

Policy developments

Water Resource Assessment plays a key role in supporting the water resource management of the Department and other role-players. Its information supports the planning and development of infrastructure, flood management activities, and the assessment of the viability of water schemes.

The assessment of factors that affect water resources, their sustainability and their social impact, is essential in terms of the National Water Act (36 of 1998). *Water Resource Assessment* collects information on a range of characteristics that are linked to the sustainability of water resource use and its impact on society. Existing water resource information systems fall short of the requirements for measuring sustainability, as this is an additional function in terms of the National Water Act, and is being addressed through the establishment of the Resource Information Management subprogramme in 2002/03.

Once information systems have been developed, the Department will be able to help to assess the implementation of the conservation provisions of the Act by reporting on the status and use of water resources and identifying areas where there are unsustainable practices.

Expenditure trends

The allocation to the programme increases by an average of 11 per cent a year over the medium term as a result of the Department's taking on additional tasks associated with the implementation of the National Water Act.

Personnel spending consumes 43 per cent of the budget over the medium term, while professional and special services, consumes about 39 per cent. The latter expenditure covers systems development costs, which are also partially accounted for under the budget for *Administration*.

Key outputs, indicators and targets

Water Resource Assessment

Subprogramme	Output	Output measure/indicator	Target
Hydrology	Information on availability of surface water	Availability of information on surface water	90% availability of flow data from 1 400 gauging stations and reservoirs by 2003
	Information on flooding	Availability of information for planning and developing water schemes Scope of flood management information	Hydrological data on client server platform by 2003, remaining data available on request 100% coverage of Orange-Vaal River system and major international river systems
Geohydrology	Data on quantity and quality of groundwater	Provision of information on groundwater quantity, distribution and quality	30% of distribution data and 10% of information on groundwater quality per year
Water Quality Services	Information on water quality for basic human needs	Assess quality of water for human use	Information available to assess all new applications for licences
Geomatics	Information on dams	Number of surveys on deformation of large dams	20 sedimentation surveys 45 deflection surveys of large dams
	Survey information	Provision of data needed to delineate forests	Data available on request
	Spatial information	Provision of spatial data	Maps and spatial data available on request
Social and Ecological Services	Environmental impact assessments (EIA) and social impact assessments (SIA)	EIAs for departmental water development schemes Provide SIAs for departmental water development schemes	EIAs for all new water development schemes (approximately 5 per year) SIAs for all new water development schemes (approximately 5 per year)
	Environmental impact management	Guidelines on how to ameliorate environmental impact and rehabilitate water development schemes	Guidelines completed by 2003
	Dam management	Management plans for state dams	5 management plans per year
	Resource Information Management	Environmental sustainability of water resources Classify water resources	Preliminary determinations of the size of reserves Water Resources Classification System published

The *Water Resource Assessment* programme's key achievements include the development of a system for managing water use licences and registration. A critical aspect of the project is the need for a secure system, based on sound financial principles, which will facilitate cost-recovery for water use on a national basis. The system will eventually be a 'water use ATM', enabling water users to pay their accounts, apply for and register for water use, transfer water from one property to another, and obtain certified statements for outstanding charges. It will also provide information on national water use, which is essential for planning and developing South Africa's water resources.

Other achievements include:

- The publication of a policy on the recreational use of state dams, together with a support system for evaluating applications for the use of state dams in this way
- The completion of 28 dam zoning plans, all of which have been formally approved
- The finalisation of a manual on conducting environmental impact assessments of water resource development projects
- The compilation of the 'Standard Environmental Management and Rehabilitation Specification Manual' for the Department's construction sites, together with the development of environmental awareness courses for construction workers at government water works.

Programme 3: Integrated Water Resource Planning

Integrated Water Resource Planning aims to provide planning support for implementing the National Water Act, focusing on policy options which affect the future availability of water resources for sustainable social and economic development. Apart from the management function, there are three subprogrammes:

- Strategic Water Resource Planning develops the National Water Resource Strategy and associated policies and strategies for water resource management, provides general planning services, and ensures planning liaison with other sectors and government organs.
- National Water Resource Planning determines the availability of water resources, projects future water requirements, and proposes methods to reconcile needs with supplies.
- Planning of Water Resource Projects investigates management and development solutions for bulk supply problems, and recommends measures to be taken in the public interest.

Expenditure estimates

Table 33.5: Integrated Water Resource Planning

Subprogramme	Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate		
	Audited	Audited	Preliminary outcome		2002/03	2003/04	2004/05
R thousand	1998/99	1999/00	2000/01	2001/02			
Management	450	581	538	645	1 316	1 366	1 448
Strategic Water Resource Planning	6 114	3 745	3 096	28 771	14 703	15 050	16 088
National Water Resource Planning	33 891	31 820	35 817	30 844	21 556	23 909	24 864
Planning of Water Resource Projects	–	–	–	–	13 948	15 422	16 322
Total	40 455	36 146	39 451	60 260	51 523	55 747	58 722
Change to 2001 Budget Estimate				13 235	4 137	2 500	

Economic classification

	6 102	4 275	3 535	5 650	15 847	16 244	17 356
Current							
Personnel	1 466	1 528	1 732	3 132	3 956	4 135	4 368
Transfer payments	–	–	–	–	–	–	–
Other current	4 636	2 747	1 803	2 518	11 891	12 109	12 988
Capital	34 353	31 871	35 916	54 610	35 676	39 503	41 366
Transfer payments	–	–	–	14 500	–	–	–
Acquisition of capital assets	34 353	31 871	35 916	40 110	35 676	39 503	41 366
Total	40 455	36 146	39 451	60 260	51 523	55 747	58 722

Standard items of expenditure

Personnel	6 139	5 948	6 094	9 729	10 452	10 974	11 467
Administrative	1 081	1 072	942	1 434	1 609	1 609	1 649
Inventories	28	66	20	256	276	276	292
Equipment	646	159	164	368	376	376	398
Land and buildings	–	–	–	–	–	–	–
Professional and special services	32 464	28 810	32 181	33 973	38 810	42 512	44 916
Transfer payments	–	–	–	14 500	–	–	–
Miscellaneous	97	91	50	–	–	–	–
Total	40 455	36 146	39 451	60 260	51 523	55 747	58 722

Policy developments

The structure of the programme has been changed to facilitate the establishment of the Planning of Water Resource Projects subprogramme, reflecting the Department's growing emphasis on the need to develop long-term plans for adequate water supplies.

Expenditure trends

A once-off allocation of R15,5 million was made to this programme in the 2001 Adjusted Estimates in order to provide for the repairs required after floods in 2000. Excluding this

allocation, the budget for the programme grew by 3,4 per cent a year between 1998/99 and 2001/02. This rate of growth accelerates to 9,5 per cent a year over the medium term to provide for increased capacity to plan for South Africa's water needs.

The creation of the Planning of Water Resource Projects subprogramme means that the allocation of funding between subprogrammes is restructured over the medium term.

Key outputs, indicators and targets

Integrated Water Resource Planning

Subprogramme	Output	Output measure/indicator	Target
Management	Policy advice to the Minister on water-sharing agreements with SADC states	Contribution to deliberations with neighbouring states on international water sharing arrangements	On request
Strategic Water Resource Planning	The National Water Resource Strategy	Draft strategy and public consultations	July 2002
	Implement National Water Act	Prioritisation of activities for implementation of Act	By 2003
		Progress against priorities reported to management	High quality reports
		Funding possibilities for implementation investigated	Proposals by April 2003
	Services to the National Disaster Management Centre	Response to requests from National Disaster Management Centre	Quality inputs delivered timeously
	Advice on implementing United Nations Convention on Combating Desertification	Contributions as specified by Department of Environmental Affairs and Tourism	Quality inputs delivered timeously
National Water Resource Planning	Information	Availability of National Water Resource Strategy data	Data provided timeously
		Data required in terms of the National Water Act	Data on catchments requiring licensing
		Data on water in systems governed by sharing agreements with neighbouring countries	Progress with various basin studies
		Quality information to allow decisions on the development of water resource infrastructure	Various pre-feasibility and feasibility studies
Planning of Water Resource Projects	Optimal solutions to bulk water supply needs	Quality information on key issues relevant to the selection of a bulk water supply solution	Completion of studies

The Ministers' Committee on the Budget accepted a financing model for the construction of the Skuifraam Dam which uses a special purpose vehicle to raise funding from the capital markets.

During 2001/02, the Tukhela Water Project feasibility study was completed, as was the study for raising the Flag Boshielo Dam. A study on the possibility of a scheme in the Lower Orange River commenced, in collaboration with Namibian agencies, and the Department assisted the National Disaster Management Centre to coordinate the repair of damage from the March 2000 floods.

Programme 4: Water Resource Development

Water Resource Development provides for the establishment of water schemes in accordance with approved priorities. Apart from a management function, there are seven subprogrammes:

- Construction of Projects implements and coordinates construction and maintenance projects, and is also responsible for constructing works for other departments where these contribute to achieving the Department's aims. Functions include safeguarding dams against failure, the completion of works previously erected, relieving distress resulting from disasters caused by water or water supply, and providing specialised advisory services.
- Civil Design is responsible for the specification and design of safe and efficient structures for the storage or supply of water, and for providing a professional dam surveillance service for all state owned dams.

- Mechanical/Electrical Engineering is responsible for the specification and design of mechanical and electrical installations required for storing and supplying water and provides advisory and maintenance services to all regions and to Water Boards.
- Dam Safety Control is responsible for monitoring the safety of dams.
- Welfare and Recreation provides facilities to employees on schemes under construction.
- Capital Augmentation provides for capital equipment and the augmentation of the capital account.
- International Projects participates in construction projects in accordance with the provisions of treaties with neighbouring states.

Expenditure estimates

Table 33.6: Water Resource Development

Subprogramme	Expenditure outcome				Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted			
R thousand	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Management	467	885	874	1 074	626	647	685
Construction of Projects	179 938	212 472	217 190	210 848	188 158	188 019	188 510
Civil Design	15 930	18 804	18 302	22 359	22 000	23 000	24 480
Mechanical/Electrical Engineering	14 805	19 400	18 327	19 912	22 271	21 882	23 093
Dam Safety Control	1 527	1 475	1 420	2 210	2 103	2 500	2 856
Welfare and Recreation	49	47	49	52	52	52	55
Capital Augmentation	1 969	2 800	5 000	2 500	2 500	2 500	2 500
International Projects	9 814	47 052	64 493	101 246	4 618	4 693	4 870
Total	224 499	302 935	325 655	360 201	242 328	243 293	247 049
Change to 2001 Budget Estimate				1 230	(104 309)	(110 297)	
Economic classification							
Current	1 549	1 445	1 419	8 286	6 654	7 126	7 654
Personnel	936	1 003	1 088	7 673	3 326	3 459	3 664
Transfer payments	–	–	–	–	200	539	783
Other current	613	442	331	613	3 128	3 128	3 207
Capital	222 950	301 490	324 236	351 915	235 674	236 167	239 395
Transfer payments	11 716	48 975	68 164	102 153	2 500	2 500	2 500
Acquisition of capital assets	211 234	252 515	256 072	249 762	233 174	233 667	236 895
Total	224 499	302 935	325 655	360 201	242 328	243 293	247 049
Standard items of expenditure							
Personnel	50 527	56 901	66 402	81 322	69 208	67 374	55 601
Administrative	9 301	10 660	14 415	10 596	15 180	14 708	12 813
Inventories	19 440	41 922	45 860	35 044	52 889	50 972	25 339
Equipment	14 670	17 751	22 530	20 284	24 164	23 119	12 692
Land and buildings	8 077	3 450	6 984	2 684	846	873	686
Professional and special services	109 975	122 482	100 919	108 118	77 341	83 208	136 635
Transfer payments	11 716	48 975	68 164	102 153	2 700	3 039	3 283
Miscellaneous	793	794	381	–	–	–	–
Total	224 499	302 935	325 655	360 201	242 328	243 293	247 049

Policy developments

The *Water Resource Development* programme strives to implement approved schemes in the most cost-effective way. Over time the emphasis has shifted to upgrading and maintaining existing infrastructure, and prioritising smaller community schemes. Projects are built under this

programme and, once completed, transferred to the *Regional Implementation* programme for operation and maintenance. Different funding mechanisms, such as public-private partnerships, are being examined in the context of efficient water resource development.

The Skuifraam Scheme to address the high risk of water supply failure faced by the greater Cape Town area was approved in August 2000. In December 2001, agreement was reached to proceed with the scheme in partnership with the Cape Town Metro Council and the Trans-Caledon Tunnel Authority. The Department of Water Affairs and Forestry is currently negotiating implementation arrangements.

Expenditure trends

Although the budget for this programme appears to decline by an annual average of nearly 12 per cent a year over the medium term, part of this fall is accounted for by the transfer of the costs and allocation for the Maguga Dam project with Swaziland from the International Projects subprogramme to the *Regional Implementation* programme. Taking this into account, the programme budget declines more slowly between 2001/02 and 2004/05.

Given the nature of the *Water Resource Development* programme, a very high proportion of expenditure is consumed by Construction of Projects (77,1 per cent over the medium term) and capital (97,1 per cent over the medium term).

Key outputs, indicators and targets

Water Resource Development

Subprogramme	Output	Output measure/indicator	Target
Construction of Projects	Safeguarding of dams	The completion of structures on time and within budget	Damani Dam, Tapane Dam and Ntenetyana Dam 100% complete
	Geotechnical advice	Supply of machines for, and advice, on drilling	Machines available more than 80% of the time
	Construction schemes	Schemes complete on time and within budget	Nondoni complete relocation Xikundu Commission Hluhluwe II complete Mooi Mgeni schemes 90% complete Injaka complete
Civil Design	Management of civil design processes and provision of advice	Processes managed and advice provided as per the strategic business plan	Reach targets defined in the strategic business plan
Mechanical/ Electrical Engineering	Design and implement projects, and provide advice	Projects designed and implemented, and advice provided, as per the strategic business plan	Reach targets defined in the strategic business plan
Dam Safety Control	Administer dam safety legislation	Turnaround time on licence applications	Response to licence applications within 1 month
Capital Augmentation	Augment supply of equipment in the equipment pool	Availability of equipment	Minimise complaints about availability of equipment
International Projects	Joint operations system for Driekoppies and Maguga Dam	Water delivery in accordance with approved schedule	Deliver water as per approved schedule

Mechanical and electrical design activities have shifted from designing new water supply schemes to maintaining and upgrading existing schemes, including Reconstruction and Development Programme projects mainly in the Northern Province and Mpumalanga. Repair work to flood damaged installations in the Northern Province and Mpumalanga is nearing completion.

Other achievements, particularly of the International Projects subprogramme, include a new interim donor assistance policy and related procedures, and facilitating the establishment of a new donor assistance coordinating committee. *Water Resource Development* also assumed

responsibility for managing the Department's financial commitments to the Komati Basin Authority, and monitored and advised on the plan for the Maguga Dam in Swaziland.

Programme 5: Regional Implementation

Regional Implementation provides services, functions and financial support to ensure that the management of water resources is effective and efficient, and promotes and manages the maintenance of water services infrastructure. It also provides direct support to local government initiatives to supply water and sanitation services. Programme objectives are realised through 12 subprogrammes:

- Management is responsible for managing the programme and for providing corporate support services to the regions.
- Regional Coordination ensures a uniform approach to the implementation of policy.
- Survey Services provides data on existing water resources by means of topographical and hydrographical surveys and geodetic observation of structure movements.
- Hydrometry determines the quality and quantity of water available for utilisation.
- Water Drilling Services provides a drilling service to explore and determine the potential of ground water resources for specialised drilling operations and for developing boreholes.
- Geotechnical Drilling Services provides services for the planning and design of structures.
- Geotechnical Services assesses underground water resources and identifies borehole sites.
- Advisory Services provides advice to statutory bodies on managing, establishing and utilising water works.
- Regional Water Services Planning facilitates the planning of water and sanitation services.
- Implementation of Water Services Projects provides for the implementation of community water supply and sanitation projects.
- Sustainable Development and Management undertakes community development, trains communities for water supply and sanitation projects, facilitates the transfer of water schemes to other spheres of Government, and monitors water service institutions.
- Operations of Water Resources provides for the augmentation of the Water Trading Account.

Expenditure estimates

Table 33.7: Regional Implementation

Subprogramme	Expenditure outcome				Adjusted appropriation	Medium-term expenditure estimate		
	Audited	Audited	Preliminary outcome					
R thousand	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	
Management	66 794	32 352	36 743	405 415	221 991	205 374	168 223	
Regional Coordination	2 299	4 412	3 226	4 843	4 635	4 908	5 149	
Survey Services	8 316	9 770	10 883	13 159	12 718	11 129	11 301	
Hydrometry	39 433	42 039	62 666	80 779	57 820	47 586	49 942	
Water Drilling Services	17 748	19 744	21 491	20 877	18 196	21 121	22 397	
Geotechnical Drilling Services	6 294	7 387	6 548	6 729	5 520	7 007	7 412	
Geotechnical Services	6 620	9 234	10 889	12 822	19 558	13 537	15 087	
Advisory Services	2 117	3 460	3 845	4 136	4 889	4 699	4 957	
Regional Water Services Planning	41 047	11 342	22 463	52 247	76 453	67 952	70 897	
Implementation of Water Services Projects	1 016 447	625 938	725 278	657 211	884 099	1 011 812	817 554	
Sustainable Development and Management	8 711	8 932	10 471	11 826	14 679	10 918	11 496	
Operations of Water Resources	719 823	839 283	1 027 431	965 490	1 094 670	1 295 767	950 417	
Total	1 935 649	1 613 893	1 941 934	2 235 534	2 415 228	2 701 810	2 134 832	
Change to 2001 Budget Estimate				126 120	369 176	471 122		

R thousand	Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate		
	Audited	Audited	Preliminary outcome		2002/03	2003/04	2004/05
	1998/99	1999/00	2000/01	2001/02			
Economic classification							
Current	169 307	115 798	140 723	1 519 992	1 495 312	1 669 071	1 295 336
Personnel	94 926	64 113	72 472	96 686	114 028	117 886	122 281
Transfer payments	-	-	-	965 490	1 094 670	1 295 767	950 417
Other current	74 381	51 685	68 251	457 816	286 614	255 418	222 638
Capital	1 766 342	1 498 095	1 801 211	715 542	919 916	1 032 739	839 496
Transfer payments	719 823	839 283	1 073 431	-	-	-	-
Acquisition of capital assets	1 046 519	658 812	727 780	715 542	919 916	1 032 739	839 496
Total	1 935 649	1 613 893	1 941 934	2 235 534	2 415 228	2 701 810	2 134 832

Standard items of expenditure

Personnel	105 960	77 894	81 663	105 203	114 028	117 886	122 281
Administrative	37 646	35 636	47 954	41 419	46 494	28 949	31 623
Inventories	21 293	12 094	13 816	11 950	9 806	10 194	11 007
Equipment	13 196	12 197	13 643	13 736	11 729	10 788	11 336
Land and buildings	725	282	593	508	281	263	278
Professional and special services	1 035 264	635 267	710 162	1 097 228	1 138 220	1 237 963	1 007 890
Transfer payments	719 823	839 283	1 073 431	965 490	1 094 670	1 295 767	950 417
Miscellaneous	1 742	1 240	672	-	-	-	-
Total	1 935 649	1 613 893	1 941 934	2 235 534	2 415 228	2 701 810	2 134 832

Policy developments

The persistent non-payment for water services in the Department's rural schemes has resulted in a shortfall in the Water Trading Account. However, since the majority of rural consumers use less than 6 000 litres per household per month, cost and equity considerations mean that direct cost recovery is not sought from users of public standpipes. Collection is, however, still sought from those with house connections and higher levels of consumption.

The Department gives continued support to the development of new infrastructure, the refurbishment of schemes, physical and feasibility planning, and capacity-building for schemes which will be transferred to local government or other water providers. Particular attention is paid to capacity-building at local government level.

Boreholes have been constructed and refurbished to limit the spread of cholera and prevent future outbreaks, and, as a temporary measure, portable tanks have been delivered to communities. While project prioritisation is done in close coordination with the integrated development processes of local government, special attention is paid to areas affected by cholera, and the Department has also accelerated the sanitation components of its capital projects.

Expenditure trends

Discounting the impact of the transfer of the allocation for the Maguga Dam project, as well as the fact that there is no special poverty relief allocation in 2004/05, the allocation for *Regional Implementation* grows by an annual average of 4,9 per cent a year over the medium term. The poverty relief allocation for 2004/05 will be considered in the light of an evaluation of the allocation and associated projects.

The Implementation of Water Services Projects and Operations of Water Resources subprogrammes account for 83,5 per cent of total estimated expenditure over the medium term.

Key outputs, indicators and targets

Regional Implementation

Subprogramme	Output	Output measure/ indicator	Target
Management	Strategic guidance and support to all functions in a region	Well guided regional offices	One strategic plan per region reviewed annually
Regional Coordination	Updated and accurate database	Quality of financial information	Maintain quality of financial information
Survey Services	Specialised surveys	Number of surveys	300 surveys per year
Hydrometry	Provide a hydrological data information system	Number of sets of data collected and processed	1 700 sets of data
		Number of gauging stations monitored	810 gauging stations monitored
Water Drilling Services	Establish ground water database and provide exploration drilling	Number of boreholes drilled.	300 bore-holes per year
Geotechnical Drilling Services	Data on geological formations to improve knowledge on water supply	Number of sites drilled	180 sites per year drilled at 14 000 meters
Geotechnical Services	Information database on underground water resources	Number of bore holes sited, sites assessed for licensing, and maps compiled	Per year: 480 production bore holes 74 sites 12 maps
Regional Water Services Planning	Coordinated implementation of water services projects	Number of Water Services Development Plans developed and evaluated for municipalities	380 plans per year
Implementation of Water Services Projects	Bulk water supply, reservoirs, reticulation and standpipes	Number of implemented projects	500 projects serving 1,3 million people per year
	Improved health standards	Sanitation facilities and health awareness programmes	Complete 13% of sanitation backlog in 2002/03
Sustainable Development and Management	Local government and communities able to operate and maintain projects	Training provided	180 local authorities and 600 communities per year
		Schemes transferred to local government	10 schemes per year
Operations of Water Resources	Augmentation of Water Trading Account	Payments made to trading account	Reduced deficit in trading account

Since 1994, more than 7 million people have been provided with a basic supply of water, at an average once-off cost of about R642 per person. Based on the current trend, more than 8 million people will have received water services before April 2003.

Construction has been completed on 354 water supply projects creating 414 000 temporary jobs. Sixty water schemes have been transferred to local governments or communities.

Health and hygiene education benefited 420 000 and, between 1997 and 2002, 24 pilot projects provided a total of 52 300 toilets. Cabinet has approved a 10-year programme for the elimination of the sanitation backlog.

There has been significant progress in establishing catchment management agencies, with the first Board to be established in 2002/3, and proposals for a further four Boards scheduled to be reviewed by April 2003. These agencies will play an important role in the execution of policy on water resource management. Registration of water users to establish a client base is progressing, and approximately 90 per cent of water users have already been registered. This will have a positive impact on future revenue collection.

Programme 6: Integrated Water Resource Management

Integrated Water Resource Management promotes the equitable allocation, beneficial use and sustainability (in terms of both quantity and quality) of water resources on an integrated basis through policy development, regulation, facilitation, institutional support and development and monitoring. Apart from a management function, there are five subprogrammes:

- Water Quality Management ensures the integrated sustainable management of the water quality of the water resources of South Africa.
- Catchments Management supports the establishment of Water Management Institutions through regional offices and coordinates the establishment of catchment management strategies.
- Working for Water promotes strategies for controlling alien vegetation.
- Water Utilisation promotes and supports equitable water use allocation and efficient, beneficial and sustainable distribution and utilisation of water resources. It grants financial assistance to statutory bodies to promote equitable access to waterworks for emerging farmers.
- Water Conservation develops and drives demand management strategies.

Expenditure estimates

Table 33.8: Integrated Water Resource Management

Subprogramme	Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate		
	Audited	Audited	Preliminary outcome		2002/03	2003/04	2004/05
R thousand	1998/99	1999/00	2000/01	2001/02			
Management	603	627	694	700	678	699	740
Water Quality Management	11 228	14 775	16 360	22 644	22 411	23 016	24 827
Catchments Management	395	3 339	3 150	4 757	6 006	7 646	8 588
Working for Water	15 237	14 877	15 988	9 783	11 650	12 772	12 356
Water Utilisation	18 980	26 813	32 606	35 677	38 142	42 659	44 950
Water Conservation	2 885	8 499	8 764	12 916	15 219	18 310	20 314
Total	49 328	68 930	77 562	86 477	94 106	105 102	111 775
Change to 2001 Budget Estimate				(550)	6 338	5 593	

Economic classification

	35 355	45 684	50 415	55 473	64 591	71 231	71 954
Current							
Personnel	10 607	11 977	15 917	18 315	20 683	21 957	23 271
Transfer payments	–	–	–	–	–	–	–
Other current	24 748	33 707	34 498	37 158	43 908	49 274	48 683
Capital	13 973	23 246	27 147	31 004	29 515	33 871	39 821
Transfer payments	9 946	15 200	21 468	21 468	24 468	28 768	30 220
Acquisition of capital assets	4 027	8 046	5 679	9 536	5 047	5 103	9 601
Total	49 328	68 930	77 562	86 477	94 106	105 102	111 775

Standard items of expenditure

Personnel	10 627	12 877	15 917	19 958	20 683	21 957	23 271
Administrative	2 814	4 541	4 798	5 445	5 620	6 015	6 496
Inventories	643	973	1 160	1 218	1 290	1 350	1 483
Equipment	1 444	3 007	1 116	893	1 047	1 103	1 243
Land and buildings	36	–	125	–	350	385	393
Professional and special services	23 689	32 079	32 869	37 495	40 648	45 524	48 669
Transfer payments	9 946	15 200	21 468	21 468	24 468	28 768	30 220
Miscellaneous	129	253	109	–	–	–	–
Total	49 328	68 930	77 562	86 477	94 106	105 102	111 775

Policy developments

Water Management Institutions are being set up in accordance with the National Water Act in order to ensure the prudent and effective use of water in the areas for which they have responsibility in accordance with the wishes of the communities which live there. These institutions are required by the Act to begin the process of developing a management strategy for the catchment area for which they are responsible. The Department has set up a variety of

programmes to ensure that the independent Water Management Institutions are able to fulfil their functions.

Water conservation and demand management strategies are being developed, as are policies on the reallocation of water through a process of compulsory licensing in support of poverty eradication, and on the coordination of support to emerging farmers, pricing for waste discharges, and the eradication of alien vegetation.

Other policies being developed include those aimed at empowering rural women, at improving public participation in decisions regarding water resources management, and at managing the transfer of state assets to Water User Associations and other Water Management Institutions.

Expenditure trends

Between 1998/99 and 2001/02, the programme budget grew at an annual average of over 20 per cent as the subprogrammes were established and began to function. The programme continues to grow over the medium term, but at an average of less than 9 per cent a year.

The bulk of programme expenditure is consumed by the Water Utilisation, Water Quality Management and Water Conservation subprogrammes, with Water Conservation growing at an annual average of more than 16 per cent a year over the medium term.

Over 70 per cent of expenditure over the medium term is consumed by professional and special services and transfer payments.

Key outputs, indicators and targets

Integrated Water Resource Management

Subprogramme	Output	Output measure/ Indicator	Target
Water Quality Management	Policies and procedures to ensure water quality in South Africa	Capacity of personnel to implement policies and procedures Improvement in authorisation and control mechanisms	140 staff members receive formal training by March 2002 Authorisations backlog removed in 2003/04 Licence applications turned around in 6 weeks Audit of water quality in mandated regions in 2003/04
Catchments Management	Management of Catchment Agencies	Agencies established Catchment management strategies	5 established by 2005 Strategies in 3 water management areas by 2004
	Equity of access to water	Guidelines on empowerment of rural poor and black women in water resource management	Participation of designated groups in participatory processes improved by 50% Institutions representative of demographics Emerging farmers organised into institutions
	Establish, regulate and support for new Water User Associations	Transform Irrigation Boards to Water User Associations Training in integrated water resource management	All boards become associations in 2002/03 200 associations established 900 training days to various trainees 5% of personnel budget spent on training
Working for Water	Improved water security, biodiversity and agricultural potential	Hectares cleared of alien vegetation Research published Jo- creation	624 000 hectares cleared by March 2003 30 journal papers published 20 000 temporary jobs: more than 50% for women, 2% for disabled

Subprogramme	Output	Output measure/ Indicator	Target
Water Utilisation	Equitable allocation of water	Capacity created to assess allocations in accordance with legislation	Authority to assess licence applications delegated to all regions by 2004/05
		Implementation of the Department's raw water pricing strategy	Water resource management charges introduced by April 2002
		Financial assistance to emerging farmers of designated groups	500 farmers per year gain access to irrigated agriculture by 2004/05
Water Conservation	Water conservation and water demand management strategies and policies, and improved efficiency of the use of water	Sectoral strategies	Finalised by June 2002
		Water conservation promoted to the public	2020 programme in 50% of schools by 2005 Programme reaches 10 million people by 2005
		Efficient use of water	100 water management and services institutions submit action plans by 2005 Water conservation and demand management strategies in 2 Catchment Management Strategies
		Number of case studies published	Finalise Protocol on New Water Resources Development in 2002/3 Publish results of 20 case studies by 2004

This year has seen a number of achievements in the management of water resources in South Africa and the implementation of the National Water Act.

In 2001/02, one proposal for the establishment of a Catchment Management Agency was made to the Department, and 20 Water User Associations' constitutions were approved and a further 10 processed. More than 20 applications for the establishment of new Water User Associations have been received, and, out of a total of 297 Irrigation Boards, 291 are transforming into Water User Associations. The other six are being dis-established as they were not in operation.

Other key achievements include:

- Developing conservation and demand management strategies for the industrial, agricultural and domestic sectors
- Registering significant abstractive uses of raw water for the proper management of scarce water resources, and for the implementation of the national pricing strategy as promulgated in 1999
- Developing the licensing system for abstraction and effluent discharge
- Introducing the new raw water pricing strategy on government water schemes and developing a pricing strategy for waste discharges
- Developing strategies to deal with the impact on water quality of mining and industrial developments, and dense settlements and an environmental assessment tool
- Creating 20 000 work opportunities through the Working for Water programme and developing strategies to provide general and financial support to small scale and emerging farmers

Programme 7: Water Services

Water Services aims to ensure effective, sustainable and affordable water and sanitation services to all people of South Africa through policy development, planning, support and monitoring. Apart from the management function, there are five subprogrammes:

- Macro Planning and Information Systems Support provides macro and water services development planning and information support.
- Intervention and Operations Support manages the regulatory process and the development of policy and regulations for sustainable operation of water services.
- Local Institutional Development Support provides capacity-building support for water service institutions, as well as grants to promote longer-term financial independence. It monitors the performance of Water Boards and provides technical support to Water Services Institutions to ensure sustainable water services projects.

- Project Development Support develops policies and strategies and provides project management support for implementing water services capital projects.
- Policy Coordination and Communication Support assists with communicating policy.

Expenditure estimates

Table 33.9: Water Services

Subprogramme	Expenditure outcome				Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted	2002/03	2003/04	2004/05
	1998/99	1999/00	outcome				
R thousand							
Management	4 133	1 986	2 390	3 263	3 233	3 262	3 458
Macro Planning and Information Systems Support	26 983	24 414	20 499	21 227	22 035	21 725	23 062
Intervention and Operations Support	4 408	9 039	6 783	11 294	11 192	11 292	11 972
Local Institutional Development Support	6 887	14 264	22 600	16 551	20 451	20 549	21 548
Project Development Support	10 868	11 375	10 130	11 419	11 319	11 417	12 105
Policy Coordination and Communication Support	748	731	682	2 141	1 723	2 141	2 216
Total	54 027	61 809	63 084	65 895	69 953	70 386	74 361
Change to 2001 Budget Estimate				875	4 500	(1 000)	

Economic classification

Current	25 805	31 547	48 191	63 961	69 172	69 605	73 502
Personnel	5 889	7 904	9 757	11 629	11 574	12 076	12 741
Transfer payments	–	2 683	3 900	4 000	9 153	9 153	9 466
Other current	19 916	20 960	34 534	48 332	48 445	48 376	51 295
Capital	28 222	30 262	14 893	1 934	781	781	859
Transfer payments	1 051	5 573	14 059	1 153	–	–	–
Acquisition of capital assets	27 171	24 689	834	781	781	781	859
Total	54 027	61 809	63 084	65 895	69 953	70 386	74 361

Standard items of expenditure

Personnel	6 710	9 002	9 757	11 629	11 574	12 076	12 741
Administrative	2 312	2 586	3 106	3 591	3 777	3 820	4 094
Inventories	123	267	325	369	369	369	396
Equipment	237	423	834	781	781	781	859
Land and buildings	–	–	–	–	–	–	–
Professional and special services	43 502	41 151	31 028	44 372	44 299	44 187	46 805
Transfer payments	1 051	8 256	17 959	5 153	9 153	9 153	9 466
Miscellaneous	92	124	75	–	–	–	–
Total	54 027	61 809	63 084	65 895	69 953	70 386	74 361

Policy developments

Water Services is assisting in the development of policies and strategies to help local government meet the national commitment to provide free basic services to all while ensuring that the supply of water is sustainable.

Further policy developments are geared towards developing a regulatory framework to support the drafting of water services development plans. These plans will link with local government's integrated development plans, and with the review of the role of Water Boards and their institutional structure and arrangements.

An asset register was developed to identify the infrastructure of pre-1994 departmental schemes. Based on this register, various transfers have been made to local government and other service

providers. Cost recovery programmes are being developed, and a management improvement system has been initiated for these schemes.

Expenditure trends

The budget for *Water Services* grows at an average of 4,1 per cent a year over the medium term, having grown by over 6,8 per cent a year between 1998/99 and 2001/02. There has been substantial reprioritisation between subprogrammes to enhance effectiveness.

Key outputs, indicators and targets

Water Services

Subprogramme	Output	Output measure/ indicator	Target
Management	Strategic direction to sector	Policies developed Sanitation implementation strategy	Develop and update National Water Services Policy Roll-out over 5 years
Macro Planning and Information Systems Support	Water Services Development Plans (WSDP)	Process facilitated in local sphere User-friendly WSDP guides and manuals	284 local governments over 5 years, prioritising the 13 development nodes WSDP guidelines WSDP monitoring system WSDP decision support system
Intervention and Operations Support	Provide assistance to water institutions	Guides on tariff regulations, cost recovery, free water, standards and quality, operating procedures, operation and maintenance, support and transfer of assets	5 simple documents produced annually and distributed widely
Local Institutional Development Support	Sustainable water schemes	Capacity-building and training for local government Financial assistance to local government and water institutions	Appraise all Water Boards Water Boards financially independent by April 2005
Project Development Support	Support the provision of basic services policy	Number of people provided with basic water services Number of people provided with sanitation	1 million people each year 1,8 million people per year
Policy Coordination and Communication Support	Support for coordinating policy development	Documents on rural water supply and sanitation programme, and implications of the Water Services Act	Documents developed according to clients' needs

In 1994, it was estimated that 12 million rural people did not have an appropriate supply of water. Since then over 7 million people have benefited from the Department of Water Affairs and Forestry's programme.

By January 2002, all 6 metropolitan areas, 30 of 47 district councils, and 28 of 231 local councils had initiated Water Services Development Plans, while the remainder were using pre-2001 plans. Model contracts have been developed to serve as guidelines to local authorities and the framework for the transfer of water schemes to local government is in place. Alternative delivery mechanisms will be implemented for the capital programme, including involving non-governmental organisations, and using emerging contractors and labour-intensive techniques.

Municipalities have been provided with numerous aids for implementing the Free Basic Water policy. Nationally, 130 workshops have been held, and provincial support units have been established. Twenty-five million people live in areas in which the policy is in place.

A White Paper on sanitation was published and a sanitation strategy is now being implemented. The third annual round of appraisals of Water Boards has started.

A capacity-building and training strategy has been developed and is being implemented.

Programme 8: Forestry

The *Forestry* programme aims to promote the optimal development of conservation, commercial and community uses of forestry assets through policy development, regulation, facilitation,

evaluation and monitoring. The effective management of state forest timber production areas is also a key objective of *Forestry* programme.

- Forestry Policy ensures sustainable development of the forestry sector through policy development, monitoring of implementation, resource databases, research contracts and international liaison.
- Indigenous Forest Management ensures the conservation, optimal utilisation and scientific management of state forest conservation areas, and participates in related conservation matters.
- Community Forestry provides services to communities to manage tree resources, including community woodlots, and supports of community tree planting and tree usage schemes.
- Industrial Forestry manages, maintains and operates industrial plantations.
- Forestry Regulation oversees the implementation of the National Forests Act (84 of 1998) and the National Veld and Forest Fire Act (101 of 1998), all legislative matters and oversees the lease of the forestry land.

Expenditure estimates

Table 33.10: Forestry

Subprogramme	Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate		
	Audited 1998/99	Audited 1999/00	Preliminary outcome 2000/01		2001/02	2002/03	2003/04
R thousand							
Management	682	462	564	671	650	669	708
Forestry Policy	11 840	8 549	8 217	12 820	9 839	9 952	10 323
Indigenous Forest Management	17 111	28 840	33 174	63 000	61 679	62 813	66 547
Community Forestry	25 350	31 686	81 180	78 815	73 128	75 551	80 094
Industrial Forestry	306 075	281 461	218 091	259 617	222 035	170 000	153 000
Forestry Regulation	–	–	–	–	5 004	5 004	5 400
Total	361 058	350 998	341 226	414 923	372 335	323 989	316 072
Change to 2001 Budget Estimate				78 976	140 000	120 000	

Economic classification

Current	358 817	349 400	339 642	411 774	365 717	318 012	309 945
Personnel	34 963	44 707	91 904	90 727	247 225	213 185	206 663
Transfer payments	306 075	281 461	218 091	259 617	1	1	1
Other current	17 779	23 232	29 647	61 430	118 491	104 826	103 281
Capital	2 241	1 598	1 584	3 149	6 618	5 977	6 127
Transfer payments	–	–	–	–	–	–	–
Acquisition of capital assets	2 241	1 598	1 584	3 149	6 618	5 977	6 127
Total	361 058	350 998	341 226	414 923	372 335	323 989	316 072

Standard items of expenditure

Personnel	34 963	44 707	91 904	90 727	247 225	213 185	206 663
Administrative	5 920	9 725	15 919	17 119	46 974	44 312	45 130
Inventories	3 714	3 732	4 045	9 561	19 727	18 869	18 549
Equipment	2 241	1 598	1 584	3 149	6 618	5 977	6 127
Land and buildings	1	–	76	–	2 889	2 157	1 505
Professional and special services	7 564	9 113	8 792	34 750	48 901	39 488	38 097
Transfer payments	306 075	281 461	218 091	259 617	1	1	1
Miscellaneous	580	662	815	–	–	–	–
Total	361 058	350 998	341 226	414 923	372 335	323 989	316 072

Policy developments

Departmental policy aims to transfer commercial forestry operations to private and communal operators, and, where appropriate, to facilitate alternative land uses. The restructuring of these assets is taking place in cooperation with the Department of Public Enterprises, the South African Forestry Company Ltd, (Safcol) and, in some cases, the Department of Environmental Affairs and Tourism.

In the longer term, one of the Department of Water Affairs and Forestry's key responsibilities will be to regulate the management of forests by various role-players through the National Forests Act and the National Veld and Forest Fire Act. The Department has established a Directorate of Forestry Regulation that will be responsible for implementing the Acts and their regulations and for overseeing leased land.

The Department is consolidating the management of all indigenous forests by transferring these to the appropriate conservation agencies, and is involved in a process to finalise this with other role-players in the sector.

Expenditure trends

Baseline medium-term estimates increased by R140 million in 2002/03 and R120 million in 2003/04 to continue to finance the maintenance of state forests because of delays in the restructuring process. Even with these allocations and their carry-through costs in 2004/05, the programme budget falls by an average of 8,7 per cent a year over the medium term, having grown by 4,7 per cent a year between 1998/99 and 2001/02.

The dramatic decline in transfer payments, and the rise in personnel expenditure, reflects the decision to incorporate staff at industrial plantations into formal departmental budgeting until the relevant assets are restructured.

Key outputs, indicators and targets

Forestry

Subprogramme	Output	Output measure/indicator	Target
Forestry Policy	Regulation of the sector	Criteria, indicators and standards for sustainable forestry formulated	Agreement with role-players on criteria, indicators and standards
Indigenous Forest Management	Well run, sustainable indigenous forestry	Participatory forest management policy, programme and guidelines developed and implemented.	Forestry assets transferred as appropriate All indigenous forests management to incorporate broad community participation
Community Forestry	Improved quality of life of people in rural and urban areas	Rural and urban greening interventions	Reach all citizens through Arbour Week and rural and urban greening
Industrial Forestry	Manage commercial forest assets	Success of commercial activities	Effective management of assets and staff, transferring them where appropriate
Forestry Regulation	Systems and mechanisms in place for implementation of legislation	Fire danger rating system piloted and system for guiding its revision designed	Guidelines established for formation of fire protection areas

The Department is moving away from providing an operational forestry function towards policy and regulation. Policy and regulatory divisions have been established. Significant progress has been made in transferring part of the commercial forestry function to other agencies. Excellent progress has also been made in improving the management of all indigenous forests, actively involving local communities. The transfer of the management of indigenous forests to other agencies is also being actively explored.

Trading accounts

Water Trading Account

The Water Trading Account funds the implementation of catchment management activities; manages, operates and maintains government water schemes; and operates water services. Bulk and reticulated water has been supplied to more than 12,2 million people through the operation and maintenance of 353 schemes, the bulk of which were inherited from the former homeland administrations. Heavy rain interrupted these services during February and March 2000. Flood repair works are still in progress, and it is anticipated that the programme should be completed by April 2004 despite its being hampered by the high level of some rivers.

The persistent shortfall in the Water Trading Account will end when water service schemes are transferred to local governments and water services providers. Those which do not take transfer will be billed for services provided to their residents. The programme for transfer will be promulgated in the Division of Revenue Act in 2002, and will be prepared in consultation with the National Treasury, the Department of Provincial and Local Government and South African Local Government Association. The intention is to complete the transfer of all schemes whose activities are managed through the account in 2005/06.

The implementation of the national water pricing strategy will further improve the Water Trading Account. New tariff structures in some areas are already resulting in full cost recovery, confirming that, at least in areas of deep rural poverty, the level of recoveries is not always directly related to the level of the tariff charged.

Table 33.11: Summary of revenue and expenditure for the Water Trading Account

	Revenue/Expenditure outcome				Medium-term expenditure estimate		
	Audited	Audited	Preliminary	Adjusted			
	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
R thousand							
Revenue							
Current revenue	1 457 556	1 559 728	1 624 489	1 695 820	1 838 601	1 675 825	1 713 401
<i>Tax revenue</i>	1 447 929	1 549 426	1 603 638	1 670 128	1 806 023	1 639 930	1 672 749
<i>Non-tax revenue</i>	9 627	10 302	20 851	25 692	32 578	35 895	40 652
Capital revenue	-	-	38	-	-	-	-
Grants received	719 823	839 283	1 027 431	951 240	1 094 670	1 295 767	950 417
Total Revenue	2 177 379	2 399 011	2 651 958	2 647 060	2 933 271	2 971 592	2 663 818
Expenditure							
Current expenditure	1 167 869	1 240 722	1 438 840	1 410 611	1 450 472	1 617 696	1 393 266
<i>Remuneration of employees</i>	531 163	555 008	595 605	623 680	618 397	608 505	591 377
<i>Other goods and services</i>	509 925	551 639	731 782	687 650	730 153	896 747	682 780
<i>Interest</i>	-	-	-	-	-	-	-
<i>Current transfers</i>	126 781	134 075	111 453	99 281	101 922	112 444	119 109
Capital expenditure	1 009 510	1 158 289	1 213 118	1 236 449	1 482 799	1 353 896	1 270 552
<i>Acquisition of fixed capital assets</i>	960 610	1 098 149	1 146 659	1 172 276	1 337 766	1 178 231	1 074 174
<i>Capital transfers</i>	48 900	60 140	66 459	64 173	145 033	175 665	196 378
Net lending	-	-	-	-	-	-	-
<i>Loans extended</i>	-	-	-	-	-	-	-
<i>Loans repaid</i>	-	-	-	-	-	-	-
Total Expenditure	2 177 379	2 399 011	2 651 958	2 647 060	2 933 271	2 971 592	2 663 818
Surplus/(Deficit)	-	-	-	-	-	-	-

Equipment Trading Account

The Equipment Trading Account provides equipment for the construction and maintenance of government water schemes.

Table 33.12: Summary of revenue and expenditure for the Equipment Trading Account

R thousand	Revenue/Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate		
	Audited	Audited	Preliminary outcome		2002/03	2003/04	2004/05
	1998/99	1999/00	2000/01				
Revenue							
Current revenue	36 828	42 087	43 319	44 636	46 975	48 384	49 835
<i>Tax revenue</i>	-	-	-	-	-	-	-
<i>Non-tax revenue</i>	36 828	42 087	43 319	44 636	46 975	48 384	49 835
Capital revenue	2 727	938	1 885	2 858	2 102	2 402	2 615
Grants received	1 969	2 800	5 000	2 500	2 500	2 500	2 500
Total Revenue	41 524	45 825	50 204	49 994	51 577	53 286	54 950
Expenditure							
Current expenditure	3 878	2 149	5 849	6 761	7 964	8 203	8 449
<i>Remuneration of employees</i>	-	-	-	-	-	-	-
<i>Other goods and services</i>	3 878	2 149	5 849	6 761	7 964	8 203	8 449
<i>Interest</i>	-	-	-	-	-	-	-
<i>Current transfers</i>	-	-	-	-	-	-	-
Capital expenditure	32 950	39 938	37 470	37 875	39 011	40 181	41 386
<i>Acquisition of fixed capital assets</i>	32 950	39 938	37 470	37 875	39 011	40 181	41 386
<i>Capital transfers</i>	-	-	-	-	-	-	-
Net lending	-	-	-	-	-	-	-
<i>Loans extended</i>	-	-	-	-	-	-	-
<i>Loans repaid</i>	-	-	-	-	-	-	-
Total Expenditure	36 828	42 087	43 319	44 636	46 975	48 384	49 835
Surplus/(Deficit)	4 696	3 738	6 885	5 358	4 602	4 902	5 115

Public entities reporting to the Minister

Komati River Basin Water Authority

The Komati River Basin project is a joint development between South Africa and Swaziland in terms of the Treaty on the Development and Utilisation of the Water Resources of the Komati River Basin, ratified in 1992. The purpose of the project is to provide irrigated water for agriculture in the valley, and to improve the productivity and development potential of the area. In terms of the treaty, a special purpose vehicle, the Komati River Basin Water Authority, is charged with managing and financing the project.

Trans-Caledon Tunnel Authority

The Trans-Caledon Tunnel Authority was established in 1986 to fund all costs incurred in the water delivery component of the Lesotho Highlands Water Project. The project aims to augment water supply to the Vaal system and to generate hydro-electric power in Lesotho.

The Lesotho Highlands Water Commission, on which both governments are represented, monitors the administrative, technical and financial activities of the Lesotho Highlands Development Authority. Following revisions to the protocol governing the implementation of the project, new

governance arrangements are being introduced to improve operational efficiency. In terms of its revised establishment agreement, the Lesotho Highlands Development Authority may be required to perform additional responsibilities in areas not related to the water project.

In 2001/2 the Authority assisted Umgeni Water with the management of its treasury function and is providing support to the Skuifraam project in the Western Cape. No grants are made to the Authority as it is funded from income on tariffs levied on the sale of water and loans. Income in 2001/2 was estimated to be about R1,1 billion.

Water Boards

The Water Boards were established as water authorities that report to the Minister of Water Affairs and Forestry. The Department appraises the Boards' annual reports, business plans, and policy statements every year. These Boards manage water resources within their catchment areas and supply potable water to residents at cost-effective prices. The Boards include:

Water Boards

Albany Coast Water Board	Amatola Water Board	Bloem Water
Bushbuckridge Water Board	Ikangala Water	Kalahari East Water Board
Kalahari West Water Board	Lepelle Northern Water	Magalies Water
Mhlathuze Water	Namakwa Water	North West Water Supply Authority
Overberg Water	Pelladrift Water	Rand Water
Sedibeng Water	Umgeni Water	

Transfers in 2001/02 are estimated at R107,7million. Over the medium term, transfers are expected to total R106,4 million in 2002/03, R103,5 million in 2003/04 and R102,5 million in 2004/05.

Water Research Commission

The Water Research Commission's terms of reference are to promote coordination, communication and cooperation in the field of water research; establish water research needs and priorities from a national perspective; fund research; and promote the effective transfer, dissemination and application of research findings. No grants are made to the Commission, as its work is funded by a levy on water users. The income of the Water Research Commission in 2001/2 was estimated to be R94,3 million.

Annexure

Vote 33: Water Affairs and Forestry

Table 33.13: Summary of expenditure trends and estimates per programme

Table 33.14: Summary of expenditure trends and estimates per economic classification

Table 33.15: Summary of expenditure trends and estimates per standard item

Table 33.16: Summary of transfers and subsidies per programme

Table 33.17: Summary of personnel numbers and costs

Table 33.18: Summary of expenditure on training

Table 33.19: Summary of information and communications technology expenditure

Table 33.20: Summary of conditional grants to local government (municipalities)

Table 33.13: Summary of expenditure trends and estimates per programme

	Expenditure outcome			Main appropriation	Adjustments appropriation			Revised estimate	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Rollovers from 2000/01	Other adjustments	Adjusted appropriation		Current	Capital	Total	2003/04	2004/05
	1998/99	1999/00	2000/01										
R thousand	1998/99	1999/00	2000/01	2001/02			2002/03			2003/04	2004/05		
1 Administration	147 306	182 965	190 265	202 758	-	7 110	209 868	207 380	210 705	10 099	220 804	222 650	235 091
2 Water Resource Assessment	52 344	58 621	62 440	72 868	-	12 415	85 283	83 547	84 279	7 953	92 232	104 575	116 656
3 Integrated Water Resource Planning	40 455	36 146	39 451	47 025	15 500	(2 265)	60 260	51 374	15 847	35 676	51 523	55 747	58 722
4 Water Resource Development	224 499	302 935	325 655	358 971	-	1 230	360 201	345 038	6 654	235 674	242 328	243 293	247 049
5 Regional Implementation	1 935 649	1 613 893	1 941 934	2 109 414	47 550	78 570	2 235 534	2 022 314	1 495 312	919 916	2 415 228	2 701 810	2 134 832
6 Integrated Water Resource Management	49 328	68 930	77 562	87 027	1 700	(2 250)	86 477	80 633	64 591	29 515	94 106	105 102	111 775
7 Water Services	54 027	61 809	63 084	65 020	-	875	65 895	64 699	69 172	781	69 953	70 386	74 361
8 Forestry	361 058	350 998	341 226	335 947	71 381	7 595	414 923	420 456	365 717	6 618	372 335	323 989	316 072
Total	2 864 666	2 676 297	3 041 617	3 279 030	136 131	103 280	3 518 441	3 275 441	2 312 277	1 246 232	3 558 509	3 827 552	3 294 558
Change to 2001 Budget Estimate							239 411	(3 589)			452 293	518 599	

Table 33.14: Summary of expenditure trends and estimates per economic classification

	Expenditure outcome			Main appropriation	Adjustments appropriation			Revised estimate	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Rollovers from 2000/01	Other adjustments 2001/02	Adjusted appropriation		Current	Capital	Total	2003/04	2004/05
	1998/99	1999/00	2000/01					2002/03					
R thousand													
Current	772 543	764 255	817 141	1 953 090	118 575	272 130	2 343 795	2 326 656	2 312 277	-	2 312 277	2 461 585	2 108 217
Personnel	239 549	228 436	299 649	332 297	-	30 108	362 405	351 579	535 867	-	535 867	512 503	520 618
Salaries and wages	163 211	160 658	220 052	245 951	-	22 249	268 200	260 202	401 010	-	401 010	383 555	391 033
Other	76 338	67 778	79 597	86 346	-	7 859	94 205	91 377	134 857	-	134 857	128 948	129 585
Transfer payments	306 075	284 144	221 991	1 238 985	114 775	(124 653)	1 229 107	1 217 960	1 104 024	-	1 104 024	1 305 460	960 667
Subsidies to business enterprises	-	-	-	-	-	-	-	-	200	-	200	539	783
Other levels of government													
social security funds	-	-	-	-	-	-	-	-	-	-	-	-	-
universities and technikons	-	-	-	-	-	-	-	-	-	-	-	-	-
extra-budgetary institutions	306 075	284 144	221 991	1 238 985	114 775	(124 653)	1 229 107	1 217 960	1 103 824	-	1 103 824	1 304 921	959 884
provincial government	-	-	-	-	-	-	-	-	-	-	-	-	-
local government	-	-	-	-	-	-	-	-	-	-	-	-	-
Households and non-profit institutions	-	-	-	-	-	-	-	-	-	-	-	-	-
Foreign countries and international credit institutions	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	226 919	251 675	295 501	381 808	3 800	366 675	752 283	757 117	672 386	-	672 386	643 622	626 932
Capital	2 092 123	1 912 042	2 224 476	1 325 940	17 556	(168 850)	1 174 646	948 785	-	1 246 232	1 246 232	1 365 967	1 186 341
Transfer payments	742 536	909 031	1 177 122	124 774	14 500	-	139 274	119 958	-	26 968	26 968	31 268	32 720
Other levels of government	-	-	-	-	-	-	-	-	-	-	-	-	-
Other capital transfers	742 536	909 031	1 177 122	124 774	14 500	-	139 274	119 958	-	26 968	26 968	31 268	32 720
Movable capital	90 089	108 400	105 187	95 037	-	692	95 729	92 483	-	121 191	121 191	109 968	77 517
Motor vehicles (transport)	11 861	3 012	-	-	-	-	-	-	-	-	-	-	-
Equipment - Computers	12 163	20 154	16 385	16 175	-	-	16 175	15 977	-	18 180	18 180	17 531	20 138
Equipment - Other office equipment	4 283	2 351	2 930	4 365	-	542	4 907	4 776	-	4 576	4 576	4 987	5 374
Other	61 782	82 883	85 872	74 497	-	150	74 647	71 730	-	98 435	98 435	87 450	52 005
Fixed capital	1 259 498	894 611	942 167	1 106 129	3 056	(169 542)	939 643	736 344	-	1 098 073	1 098 073	1 224 731	1 076 104
Land	635	87	6 995	2 684	-	-	2 684	1 704	-	846	846	873	686
Buildings	4 677	215	-	-	-	-	-	-	-	-	-	-	-
Infrastructure	1 254 186	894 309	935 172	1 103 445	3 056	(169 542)	936 959	734 640	-	1 097 227	1 097 227	1 223 858	1 075 418
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2 864 666	2 676 297	3 041 617	3 279 030	136 131	103 280	3 518 441	3 275 441	2 312 277	1 246 232	3 558 509	3 827 552	3 294 558

Table 33.15: Summary of expenditure trends and estimates per standard item

	Expenditure outcome			Main appropriation	Adjustments appropriation			Revised estimate	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Rollovers from 2000/01	Other adjustments	Adjusted appropriation		Current	Capital	Total		
	1998/99	1999/00	2000/01	2001/02			2002/03			2003/04	2004/05		
R thousand													
Personnel	305 688	304 533	378 516	422 703	–	30 108	452 811	432 702	529 766	78 479	608 245	583 257	579 654
Administrative	83 749	96 176	123 805	121 637	–	(1 623)	120 014	132 737	143 429	17 774	161 203	140 553	145 623
Inventories	51 534	66 090	72 129	62 002	–	3 048	65 050	87 635	35 381	56 897	92 278	89 641	65 151
Equipment	56 476	60 615	58 938	55 011	–	692	55 703	63 416	–	62 767	62 767	59 073	51 932
Land and buildings	8 988	3 732	7 778	3 095	–	97	3 192	3 614	5 871	995	6 866	6 178	5 362
Professional and special services	1 304 508	946 989	997 364	1 250 568	6 856	195 611	1 453 035	1 202 818	493 026	1 002 352	1 495 378	1 611 342	1 452 653
Transfer payments	1 048 611	1 193 175	1 399 113	1 363 759	129 275	(124 653)	1 368 381	1 351 918	1 104 024	26 968	1 130 992	1 336 728	993 387
Miscellaneous	5 112	4 987	3 974	255	–	–	255	601	780	–	780	780	796
Total	2 864 666	2 676 297	3 041 617	3 279 030	136 131	103 280	3 518 441	3 275 441	2 312 277	1 246 232	3 558 509	3 827 552	3 294 558

Table 33.16: Summary of transfers and subsidies per programme

	Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Current	Capital	Total		
	1998/99	1999/00	2000/01		2001/02	2002/03		2003/04	2004/05
R thousand									
3 Integrated Water Resource Planning	-	-	-	14 500	-	-	-	-	-
Strategic Water Resource Planning									
Flood Damages	-	-	-	14 500	-	-	-	-	-
4 Water Resource Development	11 716	48 975	68 164	102 153	200	2 500	2 700	3 039	3 283
Dam Safety Control									
Dam safety subsidies	-	-	-	-	200	-	200	539	783
Capital Augmentation									
Equipment Trading Account	1 969	2 800	5 000	2 500	-	2 500	2 500	2 500	2 500
International Projects									
Neighbouring States	9 747	46 175	63 164	99 653	-	-	-	-	-
5 Regional Implementation	719 823	839 283	1 073 431	965 490	1 094 670	-	1 094 670	1 295 767	950 417
Operations of Water Resources									
Augmentation of the Water Trading Account	719 823	839 283	1 073 431	965 490	1 094 670	-	1 094 670	1 295 767	950 417
6 Integrated Water Resource Management	9 946	15 200	21 468	21 468	-	24 468	24 468	28 768	30 220
Water Utilisation									
Financial Assistance to Statutory Bodies	9 946	15 200	21 468	21 468	-	24 468	24 468	28 768	30 220
7 Water Services	1 051	8 256	17 959	5 153	9 153	-	9 153	9 153	9 466
Local Institutional Development Support									
Seed Funding	1 051	8 256	17 959	5 153	9 153	-	9 153	9 153	9 466
8 Forestry	306 075	281 461	218 091	259 617	1	-	1	1	1
Industrial Forestry									
Augmentation of the Industrial Plantations Trading Account	306 075	281 461	218 091	259 617	1	-	1	1	1
Total	1 048 611	1 193 175	1 399 113	1 368 381	1 104 024	26 968	1 130 992	1 336 728	993 387

Table 33.17: Summary of personnel numbers and costs¹

Personnel numbers	1998/99	1999/00	2000/01	2001/02	2002/03
1 Administration	622	650	730	772	772
2 Water Resource Assessment	263	266	319	319	340
3 Integrated Water Resource Planning	34	33	49	49	43
4 Water Resource Development	1 955	1 946	2 075	2 019	1 727
5 Regional Implementation	1 343	1 045	1 326	1 518	1 572
6 Integrated Water Resource Management	61	74	97	118	122
7 Water Services	37	54	76	74	74
8 Forestry	731	935	1 978	1 843	4 893
Total	5 046	5 003	6 650	6 712	9 543
Total personnel cost (R thousand)	305 688	304 533	378 516	452 811	608 245
Unit cost (R thousand)	60.6	60.9	56.9	67.5	63.7

¹ Full-time equivalent

Table 33.18: Summary of expenditure on training

	Expenditure outcome		Adjusted appropriation	Medium-term expenditure estimate		
	Audited	Preliminary outcome		2002/03	2003/04	2004/05
	1999/00	2000/01	2001/02			
R thousand						
1 Administration	14 809	19 300	19 701	2 208	2 226	2 351
2 Water Resource Assessment	-	-	-	922	1 045	1 166
3 Integrated Water Resource Planning	-	-	-	665	557	587
4 Water Resource Development	-	-	-	2 423	2 432	2 470
5 Regional Implementation	-	-	-	24 002	27 018	21 348
6 Integrated Water Resource Management	-	-	-	941	1 051	1 117
7 Water Services	-	-	-	699	704	743
8 Forestry	-	-	-	3 723	3 239	3 160
Total	14 809	19 300	19 701	35 583	38 272	32 942

Table 33.19: Summary of information and communications technology expenditure

R thousand	Adjusted	Medium-term expenditure estimate			
	appropriation	2001/02	2002/03	2003/04	2004/05
1 Administration	58 697	70 534	76 426	78 904	
Technology	5 857	6 897	6 353	7 919	
Hardware	3 454	3 708	3 719	4 550	
Software and licences	2 373	3 150	2 534	3 265	
Audio-visual equipment	30	39	100	104	
Systems	–	–	–	–	
IT services	52 840	63 637	70 073	70 985	
Consulting	2 000	2 000	2 000	2 000	
Outsourcing	50 840	61 637	68 073	68 985	
2 Water Resource Assessment	14 885	25 010	25 850	26 395	
Technology	3 210	4 680	4 100	3 790	
Hardware	2 300	2 800	3 100	3 590	
Software and licences	910	1 880	1 000	200	
Audio-visual equipment	–	–	–	–	
Systems	–	–	–	–	
IT services	11 675	20 330	21 750	22 605	
Consulting	6 125	13 780	13 420	13 565	
Outsourcing	5 550	6 550	8 330	9 040	
3 Integrated Water Resource Planning	235	235	235	245	
Technology	235	235	235	245	
Hardware	100	111	141	151	
Software and licences	48	37	47	47	
Audio-visual equipment	60	60	20	20	
Systems	27	27	27	27	
IT services	–	–	–	–	
Consulting	–	–	–	–	
Outsourcing	–	–	–	–	

R thousand	Adjusted	Medium-term expenditure estimate		
	appropriation	2001/02	2002/03	2003/04
4 Water Resource Development	1 152	1 100	1 008	1 024
Technology	1 102	1 047	952	965
Hardware	325	590	471	483
Software and licences	767	452	471	472
Audio-visual equipment	10	5	10	10
Systems	-	-	-	-
IT services	50	53	56	59
Consulting	-	-	-	-
Outsourcing	50	53	56	59
5 Regional Implementation	5 066	6 075	5 806	4 602
Technology	3 813	4 407	3 988	2 582
Hardware	2 793	2 266	2 458	1 800
Software and licences	746	1 186	778	609
Audio-visual equipment	171	605	202	73
Systems	103	350	550	100
IT services	1 253	1 668	1 818	2 020
Consulting	353	668	618	520
Outsourcing	900	1 000	1 200	1 500
6 Integrated Water Resource Management	755	1 242	1 031	1 002
Technology	725	1 112	901	822
Hardware	525	870	694	653
Software and licences	114	173	127	131
Audio-visual equipment	61	45	63	19
Systems	25	24	17	19
IT services	30	130	130	180
Consulting	30	130	130	180
Outsourcing	-	-	-	-

R thousand	Adjusted	Medium-term expenditure estimate		
	appropriation	2001/02	2002/03	2003/04
7 Water Services	1 773	1 726	1 787	1 862
Technology	781	796	812	842
Hardware	442	580	650	47
Software and licences	50	-	100	200
Audio-visual equipment	172	70	-	295
Systems	117	146	62	300
IT services	992	930	975	1 020
Consulting	992	930	975	1 020
Outsourcing	-	-	-	-
8 Forestry	905	1 151	1 061	1 096
Technology	905	1 151	1 061	1 096
Hardware	865	1 141	1 051	1 086
Software and licences	40	10	10	10
Audio-visual equipment	-	-	-	-
Systems	-	-	-	-
IT services	-	-	-	-
Consulting	-	-	-	-
Outsourcing	-	-	-	-
Total	83 468	107 073	113 204	115 130

Table 33.20: Summary of conditional grants to local government (municipalities)¹

R thousand	Expenditure outcome			Adjusted appropriation	Medium-term expenditure estimate		
	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
5 Regional Implementation							
Implementation of Water Services Projects	1 016 447	625 938	725 278	757 211	884 099	1 011 812	817 554
Operation of Water Resources	654 986	727 254	826 122	660 271	699 687	776 436	768 334
7 Water Services							
Local Institutional Development Support	1 051	5 573	2 901	1 153	-	-	-
Total	1 672 484	1 358 765	1 554 301	1 418 635	1 583 786	1 788 248	1 585 888

¹ Detail provided in the Division of Revenue Act, 2002.