

## FINAL PROJECT DOCUMENT

### 1. IDENTIFIERS:

**PROJECT NUMBER:** ZA-GE-35923  
**PROJECT NAME:** South Africa: Cape Peninsula Biodiversity Conservation  
**DURATION:** 5 years  
**IMPLEMENTING AGENCY:** World Bank  
**EXECUTING AGENCY:** National Parks Board and WWF-SA  
**REQUESTING COUNTRY OR COUNTRIES:** South Africa  
**ELIGIBILITY:** Ratified CBD November 2, 1995  
**GEF FOCAL AREA:** Biodiversity  
**GEF PROGRAMMING FRAMEWORK:** Arid, Mountain and Coastal OPs

**2. SUMMARY:** The project's objectives are to: (i) establish and effectively manage the new Cape Peninsula National Park for an initial period while it achieves financial sustainability; (ii) expand NGO and community-based conservation activities around the park and in other biodiversity-rich parts of the Cape Floral Kingdom; and (iii) prepare the first comprehensive biodiversity conservation strategy for the entire Cape Floral Kingdom. In the national park itself, the GEF funds will accelerate the eradication of alien invasive plant species, expand environmental awareness and education programs, strengthen fire and visitor control, extend and strengthen current coastal and marine conservation efforts and upgrade biodiversity monitoring and evaluation systems.

### 3. COSTS AND FINANCING (MILLION US):

<b>GEF:</b>	-Project:	US\$12.3 million
	- PDF:	US\$ 0.1 million
	Subtotal GEF:	US\$12.4 million
<b>CO-FINANCING:</b>	-IA:	none
	-Other International:	US\$ 1.0 million (France)
	-Government:	US\$77.9 million
	-Private	
<b>TOTAL PROJECT COST:</b>		US\$91.2 million

### 4. ASSOCIATED FINANCING (MILLION US\$)

N/A

### 5. OPERATIONAL FOCAL POINT

#### ENDORSEMENT:

**NAME:** Dr. Francois Hanekom  
**ORGANIZATION:** Department of Environmental Affairs and Tourism

**Title:** Acting Director General

**Date:** 02/19/97

### 6. IA CONTACT:

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## Block 1: Project Description

### 1. Project development objectives (see Annex 1 for key performance indicators):

To ensure rehabilitation and sustainable protection of the globally significant flora, and related fauna, of the Cape Peninsula including surrounding marine ecosystems, and to initiate conservation planning and conservation activities for the entire Cape Floral Kingdom.

#### Background

South Africa ranks as the third most biologically diverse country in the world. It is the only country in the world to have within its borders an entire plant kingdom: the Cape Floral Kingdom. This area has the highest recorded species diversity for any similar sized temperate or tropical region in the world. The Department of Environmental Affairs and Tourism (DEAT) of South Africa has characterized this area as "the world's 'hottest hotspot' of global conservation concern."

Within the Cape Floral Kingdom, the Cape Peninsula (see map on p. 15) occupies a key position. This small area of 471 km<sup>2</sup> contains 2,285 native plant species, over a quarter of those found in the Cape Floral Kingdom and more than those found in the entire British Isles. Of these plant species, 105 are endemic and 141 are threatened. The primary vegetation, covering 92% of the area, is the Cape Fynbos (cf. "fine bush"). Several faunal groups also exhibit exceptionally high levels of species richness and endemism. For terrestrial invertebrates, the degree of endemism is extraordinary when compared to adjacent regions with similar vegetation types. The Cape Peninsula is one of four "Endemic Bird Areas" recognized in South Africa by Birdlife International (formerly the International Council for Bird Preservation).

About 60% of the Cape Peninsula, covering 291 km<sup>2</sup> has been awarded some protection from development under the Environment Conservation Act No. 73 of 1989. This area, called the Cape Peninsula Protected Natural Environment (CPPNE, see annex 11) has mostly public ownership (80%) at national, provincial, regional and municipal authority levels. Its management is extremely fragmented, with 14 different public bodies involved. The rest of CPPNE belongs to 174 private landowners of whom 90 own 1 ha or less each. The private land is generally located on the fringes of the public areas, and do not critically fragment the integrity of the conservation area. Priority will be given to contract larger land holdings into the park to ensure compatible conservation management. Even if this process would be slow or less than successful, critical biodiversity values would be safeguarded by the inclusion of public lands in the park.

The terrestrial biodiversity of the Cape Peninsula is threatened, however, by alien invasive species (particularly *Acacia cyclops*) introduced with the best of intentions to South Africa generations ago, that if nothing is done will spread and subdue the natural vegetation almost entirely unless effectively controlled. A study in 1994 showed that 33% of the natural vegetation on the entire peninsula was lightly invaded by alien species (canopy cover < 25%) and about 11% is densely invaded (> 25%). The rate of infestation varies considerably depending on soil fertility, rainfall, altitude, fire frequency and differences in reproductive and dispersal ability of each alien species. It is therefore difficult to model the spread in a laissez-faire scenario. Based on aerial photo interpretations, experts have modeled infestation using various declining spread rates, showing that the current infestation may reach 70-90% of the area in about 20 years. This is not the baseline scenario, as there is a clear domestic commitment to assign resources to alien vegetation control also in the absence of external funding. This is not expected to be sufficient to effectively eliminate the problem, however, and at the end of the project period a significant part of the infested areas, particularly the dense stands, would remain. (See annex 4).

The cost of vegetation control rises quickly with the density of the stand; from about \$90 per hectare (initial clearing) for a lightly infested stand to about \$1,200 for a heavily infested hectare. There is also the threat of urban expansion unless regulated by granting the areas the highest possible legal protection as a national park, and the threat of excessive visitor use of limited areas unless properly managed.

In 1993, World Wide Fund for Nature-South Africa (WWF-SA) established a conservation trust fund, the Table Mountain Fund (TMF), to mobilize community support for conservation of the Cape Peninsula and to finance small-scale NGO and

community-managed conservation initiatives in and around the CPPNE. These NGO initiatives complement and fill gaps in the inadequate conservation efforts of the public authorities. To date, WWF-SA has raised over R8 million (nearly \$2 million) for the TMF. Its annual net incomes of about \$100,000 finances several new and highly cost-effective biodiversity conservation initiatives in the CPPNE and on adjoining privately-owned land each year. These have focused on invasive species control, environmental emergency response and environmental education. WWF-SA has also initiated a land acquisition program on the Cape. Since 1993, land with a total market value of \$6 - \$14 million has been purchased by, or donated to, WWF-SA for conservation purposes.

The Peninsula's marine environment is influenced on one side by the Atlantic Ocean and on the other side by the Indian Ocean. Species diversity and endemism reflect the heterogeneity of oceanic conditions, particularly so at the "mixing area" of Cape Point. Biotic components are diverse, ranging from microorganisms to large mammals, and in spring, several species of whale gather in the waters of False Bay. Waters off the Cape Peninsula are additionally abundant in several species of fish, providing a primary source of income for many local fishing communities, and sport for recreational anglers. The Cape Peninsula is rich in marine species endemic to southern Africa. For example, all 24 species of resident rockpool fish that occur there are endemic to southern Africa. Of the 259 continental-shelf fish species which occur around the Peninsula, almost 90% are endemic to southern Africa.

There are currently seven Marine Protected Areas (MPAs) on the Cape Peninsula. Only two of these are offering effective protection for marine life: The Miller's Point Marine Reserve and the Kalk Bay Marine Reserve. Three of the remaining ones are designated for the protection of the commercially important West Coast Rock Lobster, while exploitation of other marine species is permitted. The last two MPAs protect marine invertebrates, while allowing other types of exploitation. Limited budgets make patrolling infrequent and enforcement is rare with the exception of Abalone and Rock Lobster which receive more active protection. Chemical pollution is not generally a problem at this stage, but False Bay north of the proposed marine zone of the park has increasing chemical concentrations that should be a cause of concern for the park in the future. Sewage is treated and is not considered an urgent problem, but raw sewage is sometimes spilled accidentally into the sea. With a rapidly increasing urban population, the potential for sewage and stormwater pollution exists, and will need to be addressed in the future. International shipping is intensive in the Cape Peninsula area. From 1985 to 1990, 17 small oil spills occurred in or just outside False Bay. However, South Africa is relatively well equipped to handle such occurrences, and even provides technical assistance to other countries in Southern Africa with regard to oil spill containment. Overexploitation is likely to affect primarily the West Coast Rock Lobster, Abalone, Alikreukel and some linefish species of which some are endemic to southern Africa. There are indications of decreasing stocks of these species. While the root causes of these problems will lie outside of the boundaries of the future national park, the consolidation of marine protection under unified management, and with the support of the highest legal protection, would provide additional strength in the dialogue with external stakeholders.

In response to the global importance of, and serious environmental threats to, the Cape Peninsula, the Government of South Africa has declared the Cape one of its top conservation priorities. It has decided to upgrade the CPPNE's conservation status to that of a National park and to unify its management under the South African National Parks (SANP). The transfer of most public land to SANP management is expected to be completed by early 1998 and the new national park will then come into being.

### Summary of Project Components

In order to achieve its sustainable development and global environment objectives of better conserving and sustainably using the unique biodiversity of the Cape Peninsula and the Cape Floral Kingdom, this project will: (i) facilitate the establishment and strengthen initial management of a new Cape Peninsula National Park, the area of which roughly corresponds to the current CPPNE; (ii) expand NGO-managed community-based conservation activities in support of the new national park and throughout the Cape Floral Kingdom by supplementing the capital resources of the Table Mountain Fund; and (iii) support the preparation of the first comprehensive conservation strategy for the entire Cape Floral Kingdom.

2. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

The South African National Parks is the designated manager of the project's terrestrial and marine conservation component, for which the largest portion of GEF funds (\$6.3 million) are requested. These funds will co-finance a six-year program of urgently needed conservation activities in the new national park that will have significant global benefits and that would otherwise not be undertaken. These activities will include: (i) accelerated clearing of invasive alien species (particularly acacia and pine trees) and annual follow-up maintenance using labor-intensive techniques to facilitate natural regeneration of indigenous species; (ii) environmental education to enhance the public's understanding of the unique biodiversity assets contained in the area and appropriate behaviors in support of its maintenance; (iii) enhanced fire management that can reduce the incidence of wildfires and contain them, while simulating nature's own renewal process in a controlled manner; (iv) improved tourist infrastructure and information to minimize environmental pressure by directing visitors to well-maintained pathways and gateways which prevent erosion and excessive trampling of the vegetation; (v) capacity building among contract labor that will be engaged in the activities mentioned above; (vi) a pilot-type marine protection program that will build upon the existing but incomplete and poorly enforced Marine Protected Areas system, and prepare the ground for extending their coverage and enforcing new and effective regulation in a future phase; and (vii) a knowledge management component comprising monitoring and evaluation (M&E) to track the performance of the project, consolidation and development of an Environmental Information System (EIS) for the Cape Peninsula, and applied conservation studies program that will allow data gathering necessary for the effective management of the national park. Studies of the urban interface will be undertaken in collaboration with municipal authorities to determine suitable boundaries, appropriate land use planning and regulations for buffer zones surrounding the park. The program proposed for alien plant eradication is based on: (a) about 20 year research by the University of Cape Town; (b) several year experience acquired under the working for Water Program in the Western Cape Province as well as by NGOs in the Cape Peninsula Area. The main lesson learned is the amazingly rapid re-establishment of the natural ecosystem once alien plants are cleared and re-infestation avoided through regular maintenance.

The NGO-managed community conservation program in the Cape Region is the second proposed recipient of GEF funds. A \$5 million GEF contribution to the Table Mountain Fund is requested for this purpose. These funds would supplement the \$2 million cash contributions and over \$6 million in land purchases and donations that WWF-SA has already mobilized in support of conservation of the Cape Peninsula and the Cape Floral Kingdom. and would facilitate a major expansion in community conservation involvement and field activities. The fact that the Table Mountain Fund is already operational means that much of the initial costs of establishing a fund and deciding on appropriate administrative and allocative mechanisms are already taken. The fund will be overseen and allocations determined by six trustees, representing the three founders: SANP, WWF-SA and the Cape Peninsula National Park Committee, representing a variety of stakeholders.

The fund will pursue two objectives: the first will be "... the conservation of the biological diversity of the Cape Peninsula and its adjacent marine systems", as already being implemented through the \$2 million domestic contributions. The second and new objective of the expanded fund with the GEF contribution will be the conservation of the broader CFK and its adjacent marine systems. Income generated by the GEF contribution will fund only activities that have global environmental benefits including NGO-implemented alien plant eradication and further maintenance in areas outside the national park as well as in the overall CFK; strengthening of existing small reserves via NGOs and promotion of conservation activities in the farming communities; visitor management reviews aiming at minimizing environmental pressure; conservation studies; and environmental education programs. Only GEF funds will be eligible for financing conservation activities in the broader CFK, as domestic contributions have been made on the premise of an exclusive focus on the Cape Peninsula.

The third GEF component will consist of studies and consultations to help define a biodiversity conservation strategy for the broader Cape Floral Kingdom (CFK), involving a large number of stakeholders (\$1 million). Priority conservation areas in the Agulhas Plain, De Hoop and the West Coast Biosphere Reserve have already been identified. This process will identify the main stakeholders and ensure their participation, identify specific "champions" for tasks to be done,

identify information gaps, prioritize and commission conservation planning work to close these gaps, develop a strategic action plan and explore funding possibilities for the future.

Overall costs of and financing plan for the project are summarized below. Baseline component costs will be financed from domestic resources (the "DOM" column), including SANP central subsidies, provincial and local government contributions, revenue from admission fees and tourism venture royalty, NGO land purchases and domestic donations. "CoF" signifies foreign co-financing in the GEF alternative. GEF funding of \$12.3 million is requested for the balance of the incremental cost of this alternative. The high cost per unit area for the new park should be seen in the perspective of its impressive visitor statistics. Cape Good Hope is expected to receive about 750,000 visitors in 1997, growing to almost 1.4 million in the year 2003. Similarly, Boulders penguin park is expected to attract more than 0.5 million visitors in 1997, growing to about 0.9 million in 2003. Based on both growing numbers and rising fees, total admission income, in the order of \$1.2 million in 1997, is expected to grow to about \$6.4 million in 2003.

Component	Category	Cost Incl. Contingencies (US\$M)			% of Total
		DOM	GEF	CoF	
Baseline National Park management costs	capital expenditure	9.7	0.0	0.0	48
	staff, overhead & loan servicing	34.0	0.0	0.0	
	Sub-total	43.7	0.0	0.0	
Terrestrial conservation activities	alien eradication,	6.8	4.1	0.4	36
	fire management,	3.5	0.3	0.0	
	environmental education	1.0	0.3	0.2	
	paths and gateways	3.7	0.5	0.2	
	capacity building	1.8	0.0	0.2	
	knowledge management	0.8	0.8	0.0	
	road maintenance	3.8	0.0	0.0	
	Boulder maintenance	4.3	0.0	0.0	
Sub-total	25.7	6.0	1.0		
Marine conservation	Feasibility studies	0.4	0.3	0.0	1
NGO-implemented conservation activities	Table Mountain Fund	8.0	5.0	0.0	14
CFK Strategy		0.1	1.0	0.0	1
Total		77.9	12.3	1.0	100

3. Global and national benefits: The main global benefit will be the rehabilitation and maintenance of a unique floristic area, with more than two thousand plant species, of which more than one hundred are endemic and several are seriously threatened. There will also be benefits from the conservation of the associated fauna and marine ecosystems, as well as from the dissemination of the results from applied studies on alternative alien species eradication control techniques, visitor management methods and environmental information systems. More specifically, the addition of GEF support will: (a) accelerate the alien species eradication program, thereby significantly lowering the risk of further native species loss and reducing the overall cost of alien plant control by more quickly eradicating existing stands; (b) increase emergency response capacity and therefore reduce losses of rare and threatened terrestrial and marine species from oil spills and fires; (c) initiate planning for more effective marine biodiversity conservation; (d) mobilize a larger and more effective community-based program for conservation on the Cape Peninsula, which will increase the effectiveness of alien species eradication efforts in the park by organizing complementary NGO eradication efforts in adjacent areas, and; (e) initiate comprehensive strategic planning for the entire CFK, which would otherwise not happen due to scarcity of resources.

More effective conservation will also directly benefit hundreds of thousands of foreign and local visitors every year, who will be able to enjoy the enhanced indigenous flora and fauna. Local communities will also benefit from employment opportunities, primarily in labor-intensive alien species clearing operations, fire management and path maintenance

works. The project will fund the training of local entrepreneurs from disadvantaged communities to take on contract work for the Park and skills acquired in that process are expected to be used in the diversified Cape Town labor market as well as in the overall Western Cape Province. In addition to its direct employment benefits, the new national park will indirectly create many labor employment opportunities as a result of the increased stream of tourists to the area. A growing service industry will provide lodging, food, drinks, guided tours, souvenirs and so on for the visitors. Fuelwood harvesting related to alien plant eradication will benefit disadvantaged communities but only on a few sites close to roads while in most cases eradicated plants will have to be burnt on the spot because of difficult topography. Wood use for carpentry activities would be exceptional because of the bushy, low timber value of eradicated plants. Park management will also make concerted efforts to market its recreational values to communities that previously have not had access to it. This will broaden the constituency supporting biodiversity conservation in South Africa from a privileged elite into a broad mass movement encompassing also disadvantaged groups. Finally, as pointed out by the STAP reviewer, in an international context, the lessons learned from eradication of alien invasive species could be valuable in the search for cost-effective interventions: "The effort to eliminate invasive species is particularly innovative. This aspect of the project deserves particular attention, monitoring and evaluation, for the purpose of drawing technical and managerial lessons."

4. Institutional and implementation arrangements:

Implementation period: FY98-FY04 plus Table Mountain Fund-financed activities in perpetuity

Executing agencies: SANP and WWF-SA

Project coordination: SANP's Cape Peninsula National Park Management

Project oversight (policy guidance, etc.): Cape Peninsula National Park Committee, Table Mountain Fund Trustees

Accounting, financial reporting and auditing arrangements: As defined by Article IV (Financial Conditions) in the respective Grants Agreements.

The institutions involved are internationally known for their competence in their respective areas of responsibility. The overall management of the Cape Peninsula National Park will be in the hands of the South African National Parks. This organization is headed by a Board of Trustees with 18 members appointed by the Minister of Environment Affairs and Tourism. SANP derives its powers from the National Parks Act, No. 57 of 1976. Once a cadastral entity has been proclaimed as national park in terms of the act, all other conservation and land use planning legislation ceases to apply. The management, decision-making and regulation of all activities within such proclaimed areas is solely the preserve of the SANP. Hence, there is no conflict of influence with the Provincial Conservation Agency. In areas outside the park, land use planning and conservation are in the realm of the Province, including provincial and local government, a division of responsibility enshrined in the South African constitution. Hence, agreement on buffer zone management will have to be reached in talks between the SANP and provincial and local authorities.

Long-term contracting into the park of private landowners is an ambition of the future park management, and would be done in terms of Clause 2B (1)(b) of the National Parks Act. Acquisition of land for the purpose of a park is governed by Section 3 in the same act. There are, however, no immediate plans to buy land for the extension of the park, merely to contract private land into the park. The Bank would not finance purchase or leasing, but would review its consistency with Bank policy. The new park will fall under the SANP Director Operations South, and the locally resident administrative staff will comprise some 35 members, lead by a project coordinator. Park management will engage NGOs in the execution of some of the conservation work.

Legislation governing the management of marine protected areas is contained in the Sea-Shore Act, No. 21 of 1935 and the Sea Fisheries Act, No. 58 of 1973. Once a national park has been declared, however, neither of these acts will apply (clause 30 of the National Parks Act). Hence, new regulation will need to be developed.

Legislation governing a proclaimed protected natural environment, such as the current Cape Peninsula Protected Natural Environment (CPPNE) is in the Environmental Conservation Act, No. 73 of 1989. A constitutional provision delegates the powers of the act in terms of Sections 16 and 17 to the provinces. Therefore, the jurisdiction over the CPPNE currently rests with the Provincial Conservation Agency (Cape Nature Conservation, CNC). In the future management of this area, this legislation will be replaced by the National Parks Act.

As for the Table Mountain Fund (which is the historical name that does not reflect the planned extension to address conservation in all of CFK), its rules of operation are defined in the Trust Deed, and its objectives are anchored in Article 4 of the National Parks Act, as referenced above. The utilization of net income from the Table Mountain Fund will be administered by a six person Board of Trustees, nominated by the SANP, the Cape Peninsula National Park Committee, and WWF-SA. The duties of the Trustees are regulated by the Trust Deed, anchored in the provisions of the Trust Property Control Act, No. 57 of 1988. The objectives of the Trust cannot be changed without the agreement of GEF. WWF-SA is the coordinator for domestic fundraising and expects to contribute a total of about eight to ten million Rand (most of which is already secured) to the joint Trust, and to assist the Trustees with technical and other expertise needed to fulfill the Trust's objectives. Management and administration of such funds has been the core business of WWF-SA since it was established in 1968.

The Trustees will be assisted by one full-time Fund Conservation Coordinator, a professionally qualified conservationist with at least five years of experience, and a Table Mountain Fund Assistant. Administrative costs are expected to be less than 20% of the real returns from the fund investments. Approval of project proposals will be administratively handled by the Fund Conservation Coordinator with an already established Project Approval Group (PAG) as an advisory body. For the purposes of this Trust Fund, the PAG will be augmented with two representatives of the Cape Peninsula NGO community. SANP's senior officer will sign off on all project approvals, to ensure full compatibility between the SANP activities and the activities of the TF. The Coordinator will manage the projects financially, while supervision of the projects' implementation is given to the senior officer of the SANP. Evaluation will be done by the Coordinator, who will report to the Trustees. Their annual report will be vetted by the Cape Peninsula National Park Committee and WWF-SA's Environmental Education Committee and Conservation Advisory Committee. Attention will also be given to disseminate lessons learned to all interested and affected parties throughout the life of a project.

The investment policy of the Fund is guided by the need to: (a) provide adequate liquidity for the ease of disbursement; (b) preserve the capital of the Fund; and (c) provide capital appreciation and adequate income to finance conservation work for decades to come. More specifically, the return objectives are 7.5% net of domestic inflation per annum, and the investment mandate is 50% OECD countries and 50% South African assets in a balanced portfolio containing 50% equity, 30% fixed income assets, and 20% cash. Further guidelines for deviation ranges, credit, liquidity and currency risk, and eligible investment instruments will be specified in the Operational Manual for the TF. Financial fund management will be carried out by an independent, professional financial management company selected after competitive bidding following industry standards. The returns from the fund would not be subject to taxation under the Income Tax Act No. 58 of 1962.

Strategic planning for the Cape Floral Kingdom will consist of work in four specific areas: (a) terrestrial biodiversity; (b) marine biodiversity and coastal zone management; (c) institutional, legal and policy framework; and (d) financial, economic and social analysis. The preparation of the plan will be supervised by a Steering Committee chaired by Minister Meiring (Finance and Environment Minister for the Western Cape). Day-to-day activities will be coordinated by a full-time coordinator assisted by a small secretariat. Specific studies will be carried out by individual consultants and consulting firms in accordance with the World Bank's procurement guidelines.

#### Monitoring and evaluation arrangements:

The framework for M&E and performance indicators is laid out in annex 1. The Borrower Implementation Plan contains further detail. A full-time staff will be designated "Manager, M&E and Evaluation" and will be supported by a GIS/IS specialist. There will be supervision missions twice per year, and a mid-term review engaging external expertise.

### Block 2: Project Rationale

5. CAS objective(s) supported by the project

Document number and date of latest CAS discussion:

There is no formal CAS for South Africa. However, the MoP for the Industrial Competitiveness and Job Creation Project (No. P-7050-SA) dated April 16, 1997 contains a section outlining "... the strategic focus of [the Bank's] program for the next twelve months." The Board discussed this

document on May 29, 1997. A full-fledged CAS is in the making.

The Bank's strategic focus for assistance to South Africa in the next twelve months identifies four priority areas where the Bank can contribute: growth and macroeconomic stability, poverty alleviation, capacity building and regional issues. The project relates well to the first three; The project will contribute to economic growth through increased tourism in the Cape region; disadvantaged communities will benefit from direct employment opportunities (some 500 people p.a.) inside the Park, but also from indirect activities generated by increasing tourism; and resources are ear-marked for the training of small-scale entrepreneurs.

*GEF Operational Strategy/Program Objective addressed by the project:* The proposed project is consistent with the GEF Operational Strategy for Biodiversity, especially support for in-situ conservation and protected areas under the Operational Programs for Arid and Semi-Arid Ecosystems, Mountains and Coastal and Marine Ecosystems. The Cape Floral Kingdom is recognized as globally important for plant species richness and extraordinary endemism and is one of the 200 Global Eco-regions identified by WWF. The coastal and marine ecosystems around the Cape Peninsula and along the De Hoop coast have been identified as priority areas for protection by the IUCN Global Representative System of Marine Protected Areas study. The marine ecosystems provide important breeding and feeding habitats for migratory species such as penguins, seals and whales.

The project is a national priority and responds to COP guidance by promoting conservation and sustainable use of biodiversity in mountain, semi-arid and marine ecosystems, both through extending and strengthening the protected area systems and by initiating conservation planning in the broader Cape Floral Kingdom. It promotes the conservation of endemic species and supports a program to address alien species invasion and habitat restoration. It specifically addresses COP3 guidance by building capacity and partnerships for conservation; involving local communities, including providing economic incentives and employment opportunities that will address rural poverty; promoting innovative financial mechanisms to address recurrent costs of conservation that involve local government, NGOs and the private sector; and by encouraging intersectoral cooperation in land use planning. By strengthening the involvement of local communities and building strategic partnerships between NGOs, government agencies, local government and the private sector, the Project will build a broader constituency for conservation in South Africa. The project also meets the objectives of other international conventions, by addressing the conservation needs of migratory species.

6. Main sector issues and Government strategy:

The Government's biodiversity conservation strategy must be seen against the particular socio-economic background of the country. RSA urgently needs to address pressing issue of social services and infrastructure targeted to improve the quality of life for disadvantaged communities. The Green Paper *Towards an Environmental Policy for South Africa* states as its first objective: "To effect planned and measurable shifts in budgetary and resource allocations for environment to achieve the goal of people-driven, sustainable resource management and the redress of past inequalities." Hence, public funding for conservation purposes is set to decline. As a result, South African National Parks will in the short to medium term be faced with insufficient financial resources to counter the threats against the globally significant biodiversity on the Cape Peninsula.

The South African government has recently finalized a White Paper on a Biodiversity Strategy, which according to domestic environmental expertise, clearly supports the selection of the Cape Peninsula as a national top priority for conservation measures. While public funding to the new national park is foreseen for another four years ahead, competing domestic priorities are increasingly strong and subsidies are clearly expected to decline. Some of the shortfall will be countered by the private sector, such as the mobilization of almost \$2 million in contributions to the Table Mountain Fund. Nevertheless, this leaves a financial shortfall on the account of biodiversity conservation in South Africa.

7. Sector issues to be addressed by the project and strategic choices:

The globally significant biodiversity is threatened by a number of factors, including invasive alien species, uncontrolled fires, urban encroachment generally in the form of high-end development, and excessive visitor pressure in delicate areas. The marine environment is threatened by over-exploitation of certain species and increasing pollution threats. In order to effectively address these threats, immediate action is needed. Further delays will substantially increase the cost of clearing alien species, and also increase the risk of irreversible biodiversity loss.

Previously in South Africa, biodiversity conservation was to a large extent for the benefit of a privileged elite. The new SANP management is dedicated to change both perception and practice by active outreach activities into disadvantaged communities. These will be offered employment opportunities, environmental education and enhanced access to the park. A component of the manual clearance operations will be to train independent entrepreneurs that can establish small companies doing contract work for the SANP. Commercialization of indigenous species propagation will be investigated. Maintenance of the indigenous flora will need to continue indefinitely beyond the project's first phase of six years. Furthermore, with likely extensions of similar programs in other areas of the Cape Floral Kingdom, there will be a vast demand for the skills acquired during the Cape Peninsula phase.

With regard to the Fund, its justification rests on a number of considerations. First, by being a fund in perpetuity, it safeguards the long-term maintenance of biodiversity conservation. Initial clearing of invasive alien species must be followed every year with maintenance work to prevent re-infestation. Second, the TF allows NGOs to implement conservation activities (clearance of alien invasive species, environmental education activities targeting disadvantaged communities, visitor management projects aiming at minimizing environmental pressure, studies of species of special concern and so on). Hence, it contributes to the empowerment of an important sector of civil society. Third, the TF will allow such activities to take place on private land adjacent to the Park, whereas the SANP resource can only be used within the confines of the Park, i.e. generally public land, but also private land contracted in to the National Park. Fourth, the Fund will allow conservation priorities to be addressed in the entire Cape Floral Kingdom, which significantly extends the scope of possible activities. Fifth, the TF will be managed in such a way as to provide representation for NGOs in the allocation of resources, which will contribute to the transparency of resource use for biodiversity conservation, and respond to clearly voiced concerns within the NGO community.

An explicit provision in the Trust Deed is that income originating from the capital provided by the GEF will only be applied insofar as it supports activities motivated by the achievement of global benefits. It cannot be used for the acquisition of land and buildings.

With an additional capital of \$5 million, expected to return about 7.5% p.a., the incremental resources, after allowance for both financial and administrative management costs, would be in the order of \$250,000 p.a. This can be compared with a track record of resource use of close to \$200,000 during the last three of years. It should be recalled that the Fund was launched only in 1993, and that it takes time to develop project proposals and experience in their implementation. It should also be recalled that the expanded Fund will have a wider geographic scope, covering the entire CFK. It is the assessment of the NGO community, which has been actively involved in the design of this project, that the increased funding would be on a level that can be effectively utilized. Examples of previous activities are clearance operations, footpath mapping, faunal research and the production of a thematic issue of *Biodiversity and Conservation*. The criteria for obtaining future funding are clearly defined in the Trust Deed, and have been arrived at through a broad consultation process involving NGOs.

8. Project alternatives considered and reasons for rejection;

The original proposal submitted by NPB/WWF-SA contained only a fund component. After thorough discussion about the financing needs of the project, it was agreed that a major component must be dedicated to the short-term eradication of invasive alien species that threaten some of the most valuable areas of the Cape Peninsula. Hence, a short-term investment program was added to the fund component.

Furthermore, the exclusive focus on the Cape Peninsula was revised, in order not to forego the opportunity to urgently address the needs of the entire Cape Floral Kingdom. Hence, a component that entails the shaping of a strategy for the entire CFK was added during the first two years of this project. Thereafter, it is foreseen that this component can lead to a project on its own.

At an early stage, the option of linking the eradication of alien invasive species component to the national Working for Water program was considered. The objective of this program is to enhance water yield, mostly for urban consumption. This would not be feasible, however, as only a small fraction (in the order of 2%) of Cape Town's water supply is derived from watersheds within the park area. The small dams in question are located on open mountain terrain, and not subject to significant interference of alien vegetation.

9. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

Bank-Financed: Industrial competitiveness and Job Creation Project (Board approved). Urban Infrastructure Project (under preparation). Other development agencies: Managing the Environment Locally (EU/Sweden/Norway) under Bank guidance.

10. Lessons learned and reflected in the project design:

This is the first GEF project in South Africa. It is, first of all, based on conservation experience acquired and lessons learned in that country, particularly on the alien plant eradication for rehabilitating natural "fynbos" ecosystems. Technologies and methods have been worked out through about 20 year applied research conducted by the University of Cape Town and several year implementation under the "Working for Water Program" mainly in the Western Cape Province as well as through experience acquired by environmental NGOs. Nevertheless; these technologies will have to be further improved and fine-tuned to the specificities and diversity of local systems. Hence the need for continued monitoring and enhanced knowledge management systems provided under the project.

Lessons have to be drawn to a large extent from other countries. The Bank's global review of biodiversity projects (*Mainstreaming Biodiversity in Development*, Nov. 1995) has shown that three of the most important facts for sustained success pertain to (i) the empowerment of local communities, indigenous people, NGOs and other stakeholders as partners in designing and implementing projects; (ii) the provision of financial sustainability including recurrent cost financing, and (iii) monitoring and evaluation of the project which provides the underpinning for adjustments in implementation. Hence, stakeholder involvement is already a feature of the preparations for this particular project. The prospects for financial sustainability of the Park have been studied, and the results point to plausible full cost-recovery to be achieved after the end of the project's duration. This is due to increasing numbers of visitors, higher admission fees and income from tourist ventures. Finally, an ambitious framework for M&E is already built into the Borrower Implementation Plan from May 1997, to ensure that information is fed back to management in a timely manner.

As for specific biodiversity projects of relevance, the *Mauritius Biodiversity Restoration Project* is of interest. Its objective are to (i) restore degraded small island habitats, eradicate alien species and propagating and reintroducing endemic species to these habitats, and (ii) strengthen management and monitoring capacity for biodiversity restoration. The main lessons learned from this successfully implemented project are that (a) responsibility for decision-making has been decentralized to lie close to implementation, which has allowed the project to run ahead of schedule, (b) that NGO involvement can be very effective, and (c) that the private sector can be positively engaged in conservation activities. In the case of the Cape Peninsula, these lessons are built in, as the decision-making responsibility will rest with staff posted in the Park area, NGOs will have a vital role in implementing several of the conservation activities, and the emergence of private contractors taking on conservation work will be actively supported.

Other relevant example is the *Seychelles Biodiversity Conservation and Marine Pollution Abatement Project*. The biodiversity component aims to restore and preserve a unique ecosystem in Aldabra, threatened by non-native species

introduced decades ago, especially feral goats. Furthermore, the aim is to protect sea turtles by defining and enforcing a sustainable offtake program. The main lessons from this project that have been incorporated are that: (i) a successful project needs a policy framework as support (which South Africa has through its Biodiversity Strategy); (ii) continuity in task management from the Bank's side is important in order to establish good personal links with counterparts and prevent loss of institutional memory (which has been observed in clear continuity in the staffing of Bank missions and frequent contacts with counterparts in between missions); (iii) full-time local capacity is necessary for implementation (which is certainly the case with half a dozen full-time staff dedicated to the creation and initial management of the new park); and (iv) that targeted training programs can be used to support implantation and motivate staff (which is already built into the Borrower Implementation Plan).

The project will also build on knowledge, lessons learned, possible collaboration and networking with biodiversity-related projects finance by other multi-lateral or bilateral agencies in South Africa as well as in the SADC sub-region.

TF management has been elaborated in close collaboration with WWF-SA, ENVGC, and Bank financial and procurement expertise, and builds on the Bank's experience with eleven GEF TFs, as summarized in Mikitin (1995) *Issues and Options in the Design of GEF Supported TFs for Biodiversity Conservation*. (ENV. Paper #011). A special Operational Manual for TF management has been prepared and found satisfactory.

Reflecting more broadly the experience of GEF biodiversity projects, the STAP reviewer commented (May 27, 1997) that the objectives are clear and appropriate in terms of global biodiversity significance and fit well within GEF Operational Guidelines. The institutions involved are also well known for their competence in their respective areas of responsibility. The marine component was found to be little developed in a previous version of the PCD, however. This has been remedied by including substantially more information in the Project Description (block 1); extending the description in Project Components; adding a note on legislation under Institutional Arrangements; adding information under GEF Strategy; and extending the treatment of the component in Appendix 1. The aspect of replicability has been highlighted in the section on Beneficiaries, and supported by a strong component for M&E and future applied studies on the efficiency of conservation methods. The reviewer also commented on the good prospects for sustainability of the project, and the description of the pillars for this long-term scenario has been improved in the section on institutional arrangements.

11. Indications of borrower commitment and ownership:

The original project proposal originates from the South African National Parks and WWF-SA, which developed the basic approach without any prior involvement of the Bank. Two seminars in Cape Town (January and April, 1997) have testified to the commitment of a large group of local stakeholders, several of whom have contributed to working papers of high quality, elaborating various aspects of the project. The idea of a National Park on the Cape Peninsula has also been endorsed by the GEF focal point in South Africa, Dr. F. Hanekom of the Department of Environmental Affairs and Tourism, and presented to the Bank through the Ministry of Finance. Furthermore, the commitment of local interests is convincingly shown by the fund of almost \$2 million that has already been mobilized in cash donations to the Table Mountain Fund, and additional land donations and sales for conservation purposes with a market value of at least \$6 million.

12. Value added of Bank support:

In spite of considerable domestic subsidies, the Park will not be able to fully sustain the immediate need for conservation expenditures in its formative years without external support. Domestic donations, while substantial, will not be sufficient to cover the significant and immediate needs of a conservation program on the Cape Peninsula and beyond in the CFK. Valuable experience can be gained though this project, on the basis of which the wider perspective of conservation of the entire Cape Floral Kingdom can be pursued, and indeed for the preservation of indigenous vegetation on a global scale.

**Block 3: Summary Project Assessments** (Detailed assessments are in the project file. See Annex 8)

13. Economic Assessment (see Annex 4):	<input type="checkbox"/> Cost-Benefit Analysis : NPV=US\$ N/A ERR= N/A	<input type="checkbox"/> Cost Effectiveness Analysis: N/A	<input checked="" type="checkbox"/> Other Incremental Cost Analysis
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Fiscal impact (for all projects):

The Cape Peninsula National Park is expected to become financially self-sustainable shortly after the project's main implementation period, thanks to rising income from admission fees and royalties from tourism ventures. Subsidies directly to the Park from central, provincial or local government are not expected to be needed at that time. This topic is addressed in detail in annex 12.

14. Financial Assessment (see Annex 5) See annex 12 for details.	NPV=US\$ N/A	FRR= N/A
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15. Technical Assessment :

There is already considerable experience in South Africa of invasive alien species clearing, particularly through the nationwide Working for Water Program. Nevertheless, further study of the relative efficiency of mechanical clearing, chemical treatment and biological control methods is needed, and a program for systematic evaluation of future activities is foreseen in this project.

16. Institutional Assessment:

a. Executing agencies: The South African National Parks is a reputable and well-established organization. It is currently undergoing a renewal process to meet the requirements of a new era in the nation's development. The project preparation team is confident that the considerable experience and resources of this institution will be well utilized in the new Cape Peninsula National Park.

b. Project management: The preparation team has been continuously impressed with the personal dedication of staff and the professional quality and timely delivery of work from the counterparts representing the project's future management. This applies both to the National Parks staff, and to the staff of WWF-SA. The institutional plan contained in the Borrower Implementation Plan is sound.

17. Social Assessment:

The park area is traditionally not utilized to a great extent by disadvantaged communities. Changing this implies improved transportation for disadvantaged communities, and organized efforts to introduce the area to new target groups. Price policies must be set in order not to bar such groups from entering, e.g. through special group rates and special initiatives to facilitate access. The recruitment of unskilled labor to undertake clearance in the park represents an important employment opportunity, but must be carefully designed in collaboration with local communities.

18. Environmental Assessment:	Environmental Category <input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C
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An environmental analysis has been undertaken by staff of the University of Cape Town, with completion in October, 1997. The results are summarized in annex 16 to this PAD. In brief, the overall finding is that "SANP is potentially able to: conserve biodiversity effectively, manage recreational uses of the proposed National Park adequately without degrading the natural environment; and contribute to capacity building of previously disadvantaged communities." Furthermore, SANP and WWF-SA are committed to developing and implementing an Environmental Management Plan within the next year to systematically control, manage and review their level of environmental performance.

There will be no involuntary resettlement as a result of the project.

19. Participatory Approach:	Identification/Preparation	Implementation	Operation
Beneficiaries/community groups (in particular disadvantaged communities)	IS + CON	IS + CON + COL	

Intermediary NGOs (about 40 different environmental groups involved)	IS + CON + COL	IS + CON + COL
Academic institutions (The University of Cape Town)	IS + CON	IS + CON
Local government (Provincial Government for the Western Cape, Cape Metropolitan Council, Cape Town Municipality, South Peninsula Municipality)	IS + CON + COL	IS + CON + COL
Other donors (French and Norwegian Cooperation)	IS + CON + COL	IS + CON + COL

Local groups and NGOs consulted: An open forum meeting with about 40 NGOs was held on January 30 in Cape Town, and another with about 10 representatives was held on May 8. Three elected NGO representatives were also present at workshops January 28-29 and April 28-29, when the main stakeholders met to advance the project design. The criteria for project eligibility under the Fund were elaborated in a consultative process involving 22 participants representing 14 different NGOs at a meeting called by WWF, and held on March 19, 1997. WWF-SA which is a major proponent of the project, is itself an NGO. Other active NGOs include the Botanical Society of SA, Mountain Club of South Africa, Wildlife and Environment Society of SA, Save the Mountain, SA Scout Association, guides' organizations, local environmental awareness groups, land owners' associations, and "Friends" groups representing specific geographical areas of the Cape Peninsula. SANP's section for Social Ecology has also carried out a survey among disadvantaged communities in urban areas surrounding the park. This type of activity will continue during the project's implementation.

20. Sustainability:

The project has essentially been driven by domestic interests and there can be no doubt about the continued commitment among local stakeholders. GEF will support a highly capable domestic organization led by SANP and WWF-SA. The quality of domestic staff and their organization is impressive. Once the up-front investments in conservation activities have been undertaken, maintenance work on the Cape Peninsula will be much less costly. For example, while the initial clearing of a lightly infested hectare is about \$90, the follow-up annual cost is about \$16 per hectare. Similarly, for a dense stand, the initial cost of clearing of about \$1,200 drops to about \$500 per hectare for annual follow-up and decreasing thereafter. As most areas are only lightly infested, the annual follow-up cost would be on the level of only one fifth to a quarter of the initial clearing investment. Plans for financial cost-recovery for the long-term have already been developed in projections carried out by the SANP. With the increasing numbers of tourists entering the Cape Town area, prospects are good for the Cape Peninsula area in the medium to long-run.

As for the sustainability of the NGO implemented activities and particularly CFK activities covering areas with little potential for financial cost recovery, the Fund will have an investment strategy that ensures a long-term stable flow of resources. This strategy provides for a mix of high growth and safe income investments with a clear restriction to maintain capital.

21. Critical Risks (see fourth column of Annex 1):

Project outputs to development objectives

Risk	Risk Rating	Risk Minimization Measure
(i) Alien plant removal could be insufficient to stop the on-going invasion	Low	Creation of a unified park management with sufficient financial resources and monitoring capacity.
(ii) Environmental education could fail to stimulate visitor demand and appropriate behavior	Low	Marketing of recreational services to multiple communities, follow-up surveys and regulation enforcement.
(iii) Fire management could fail to contain fires and controlled burning could face opposition.	Low	Use of a rapid response team combined with on-the-ground stand-by labor. Public information in advance of controlled burning.

(iv) Tourist infrastructure could fail to meet the increasing visitor pressure	Low	Improved pathways, clear signage, maps and patrolling.
(v) Capacity building could fail to result in viable independent firms	Low	Gradual increase in decentralized responsibility among entrepreneurs
(vi) The marine protection program could fail to gain public and political support	Moderate	Broad-based public debate and consultations will precede any proclamation
(vii) Results of M & E and conservation studies might not be internalized in management	Low	Management involvement in designing M&E and the screening of study proposals. Building on SANP's excellent track record in conservation.
(viii) Fund management could fail to deliver sufficient financial resources	Low	An investment strategy combining growth and safe income assets
(ix) An agreed strategy for the CFK could fail to emerge	Medium	All stakeholders will be invited to contribute and part of the ground work has already been carried out.

Project components to outputs		
Risk	Risk Rating	Risk Minimization Measure
(i) Alien plant removal could be hampered by disjointed management and ineffective follow-up	Low	Efforts to ratify the results of negotiations of land transfer to the new park under unified SANP management, and planning for annual follow-ups of clearing.
(ii) Environmental education facilities, staff and material could be inadequate	Low	Adequate staffing in project management and support from experienced academics, NGOs and volunteers
(iii) Fire management could fail to respond with flexibility to changing natural conditions	Low	Weather monitoring and adaptation of fire protection and burning schedules and manning
(iv) Tourist infrastructure could prove inadequate to cope with increasing numbers of visitors.	Low	Ensuring sufficient funds, training contractors and mobilizing NGO support.
(v) Capacity building of independent entrepreneurs could be in conflict with municipal labor interests	Moderate	Negotiations with municipal labor regarding out-sourcing.
(vi) The marine protection program could meet resistance	Moderate	Collaboration with current public authorities controlling MPAs and marine resources user groups.
(vii) Conservation studies could produce results that are not operational	Low	Careful screening of proposal through experienced WWF structure and park management.
(viii) Fund management could be ineffective	Low	Clear investment strategy and monitoring of performance.
(ix) Common strategy for the CFK could fail to emerge	Low	Broad-based consultations with all stakeholders.
Overall project risk rating	Low	Overall project planning and implementation can rest on strong domestic capacity and dedication
. Possible Controversial Aspects:		

The Park could be perceived as catering to the interests of a privileged elite of foreign and domestic visitors. The new park management will make considerable efforts to enhance access of disadvantaged communities, and provide them with much sought-after labor opportunities.

**Block 4: Main Grant Conditions**

23. Effectiveness Conditions: (i) that the Proclamation, establishing the Cape Peninsula national Park, incorporating the Core Areas (as defined in the Grants Agreement), has been published in the Gazette, in accordance with the provisions of the National Parks Act, and (ii) that WWF-SA has executed the Trust Deed.

24. Other: Agreement was reached during appraisal on the criteria, terms and conditions for the sub-projects to be financed by the TMF. These are reflected in the Operational Manual for the TMF.

**Block 5: Compliance with Bank Policies**

This project complies with all applicable Bank policies.

[The following exceptions to Bank policies are recommended for approval: . The project complies with all other applicable Bank policies.]

Task Manager: François Falloux

Country Manager: Pamela Cox

## LIST OF ANNEXES

- Annex 1: Project Design Summary
- Annex 2: Detailed Project Description
- Annex 3: Estimated Project Costs
- Annex 4: Incremental Cost Analysis
- Annex 5: Financial Summary
- Annex 6: Procurement and Disbursement Arrangements
- Annex 7: Project Processing Budget and Schedule
- Annex 8: Documents in the Project File
- Annex 9: Statement of Loans and Credits
- Annex 10: Country at a Glance
- Annex 11: Map of the Cape Peninsula
- Annex 12: The Financial Perspective for the Cape Peninsula National Park
- Annex 13: Capacity Building through the Training of Entrepreneurs and NGO's
- Annex 14: Rehabilitation and Restoration following Alien Vegetation Removal
- Annex 15: Strategic Plan and Investment Program for the Conservation of the Marine and Terrestrial Biodiversity of the Cape Floristic Region
- Annex 16: Environmental Analysis - Executive Summary

## Annex 1

### Project Design Summary

Narrative Summary	Key Performance Indicators <sup>1</sup>	Monitoring and Supervision	Critical Assumptions and Risks
<p><b>CAS Objective (No CAS available, but strategic focus for Bank's work in next twelve months utilized)</b></p> <p>Economic growth</p> <p>Poverty alleviation</p> <p>Capacity building</p> <p>GEF Operational Program</p>	<p>Tourism income to the Park</p> <p>Employment of labor from disadvantaged communities</p> <p>Training of contractors</p> <p>Long-term protection and sustainable use of biodiversity</p>	<p>Supervision missions twice per year and mid-term review year three with external panel of experts</p>	<p>(CAS Objective to Bank Mission)</p> <p>Political stability</p> <p>Labor market flexibility</p> <p>Entrepreneurial opportunities</p>
<p><b>Project Development Objectives for SANP</b></p> <p>1. Rehabilitate and maintain indigenous terrestrial flora and fauna on the Cape Peninsula and marine conservation in immediately surrounding areas.</p>	<p>No indigenous species added to the list of rare and/or threatened species (Red Data list). No additional plant species becoming extinct.</p> <p>All invasive alien seed bearing plants removed by year 6. All natural areas previously infested with invasive aliens in maintenance phase by year 6</p> <p>80% reduction of area burnt in uncontrolled wildfires by year 6.</p> <p>No infrastructural damage to private property outside the National Park</p> <p>Implementation of an agreed marine protection plan.</p>	<p>Reports from SANP, the Table Mountain Fund and NGOs. Supervision visits.</p>	<p>Exogenous political and economic events will not deter foreign and domestic visitors to come to the park.</p>

<sup>1</sup> Baseline and targeted values should be shown, with the latter divided into values expected at mid-term, end of project and full impact.

<p><b>Project Outputs for SANP</b></p> <p>(i) Removal of alien invasive plants</p> <p>(ii) Enhanced environmental awareness among visitors and the general public</p> <p>(iii) Controlled regeneration of natural vegetation through fire</p> <p>(iv) Well maintained and sign-posted tourist infrastructure</p> <p>(v) The emergence of entrepreneurs from disadvantaged groups capable of undertaking conservation work</p> <p>(vi) Determine the feasibility of establishing a marine component to the National Park</p> <p>(vii) Enhanced knowledge about rational management of flora and fauna on and around the Peninsula</p>	<p>(i) 2500 ha/year of land cleared of initial infestation of alien invasive species,</p> <p>(ii) Comprehensive visitor data maintained at controlled access points (including regular surveys). Seasonal visitor surveys of unmanned access points to the Park.</p> <p>(iii) At least 3% p.a. of total vegetation requiring a regular fire regime to be subject to controlled burning. By year 6, at least 20% of total vegetation requiring a regular fire regime to be subject to a controlled burning program.</p> <p>(iv) Increased visitor use of trails and gateways.</p> <p>(v) Share of conservation work cost out-sourced to entrepreneurs from the program reaching at least 50% by year 3 and remaining above this for the rest of the program.</p> <p>(vi) The proclamation of a marine national park surrounding the Cape Peninsula, if feasible, by year 5.</p> <p>(vii) M&amp;E, EIS and study results utilized by park management</p>	<p>(i) SANP reports, Table Mountain TF, NGO activity reports and site visits.</p> <p>(ii) Visitor statistics and survey reports.</p> <p>(iii) SANP fire records</p> <p>(iv) Visitor surveys.</p> <p>(v) SANP contract records.</p> <p>(vi) Public observance of regulations.</p> <p>(vii) Study reports and records of management decisions</p>	<p>(Outputs to Development Objectives)</p> <p>(i) There will be a unified, efficient national park authority implementing the conservation program on public land, and private land-owners will contract in.</p> <p>(ii) Exogenous events will not significantly influence visitor rates</p> <p>(iii) Weather conditions will not change significantly</p> <p>(iii) Controlled burning will be accepted by surrounding communities.</p> <p>(iv) Changes in visitor rates and composition will not overwhelm the park.</p> <p>(v) Conservation work will be an attractive option in the private market for trained entrepreneurs.</p> <p>(vi) Major pollution events will not threaten marine life.</p> <p>(vii) Management will have the resources to act on study proposals.</p>
<p><b>Project Components for SANP</b></p>			<p>(Components to Outputs)</p>

<p>(i) Invasive alien species eradication</p> <p>(ii) Environmental education</p> <p>(iii) Enhanced fire management</p> <p>(iv) Improved tourist infrastructure</p> <p>(v) Capacity building among contract labor</p> <p>(vi) Marine protection program</p> <p>(vii) Knowledge management</p>	<p>(i) Employment of contract labor reaching at least 400 new jobs created by year three.</p> <p>(ii) Development of 30 customized resource programs for target audiences in adjacent communities by year 3</p> <p>(iii) Engagement of stand-by fire fighting personnel.</p> <p>(iv) Contracting of labor sufficient to undertake improvement works</p> <p>(v) Training of independent contractors for alien clearing, recruited from adjacent disadvantaged communities; 30 in year 1, 20 in years 2 and 3</p> <p>(vi) Delineation and sign-posting of park, if feasible, achieved by year six.</p> <p>(vii) Contracted suppliers of M&amp;E system and consolidated EIS within one year. At least 8 adaptive research programs, focusing on project priorities, initiated by year two.</p>	<p>(i) Annual reports from the Park authority, the Table Mountain Fund and NGOs. Supervisory consultations with NGOs and labor engaged in the conservation efforts.</p> <p>(ii) As above plus beneficiary evaluations.</p> <p>(iii) SANP and contractors' fire records</p> <p>(iv) SANP annual reports and on-site visits</p> <p>(v) SANP records and interviews with entrepreneurs</p> <p>(vi) Legal documents. Public announcements.</p> <p>(vii) M&amp;E reports, EIS outputs, study proposals, decision records and study reports.</p>	<p>(i) Agreement is reached on establishing unified SANP management control over the park area.</p> <p>(iv) As for activities i &amp; ii.</p> <p>(v) No intervening labor disputes.</p> <p>(vi) Consensus on the desirability and boundaries of a marine national park.</p> <p>(vii) Sufficient interest among academics and NGOs, and funding from the TF.</p>
<p><b>Project Development Objectives for WWF</b></p> <p>1. Rehabilitate and maintain indigenous terrestrial flora and fauna on the Cape Peninsula and marine conservation in immediately surrounding areas.</p> <p>2. Development of a conservation strategy for the much larger Cape Floral Kingdom, of which the Cape Peninsula forms a part.</p>	<p>Agreed strategic and investment program for the CFK</p>	<p>Reports from SANP, the Table Mountain Fund and NGOs. Supervision visits.</p>	
<p><b>Project Outputs for WWF</b></p>			

<p>(i) Removal of alien invasive plants</p> <p>(ii) Enhanced environmental awareness among visitors and the general public</p> <p>(iii) Enhanced knowledge about rational management of flora and fauna on and around the Peninsula</p> <p>(iv) Long-term financial revenue stream that can support sustainable conservation activities</p> <p>(v) Political approval and funding of a strategic conservation plan.</p>	<p>(iii) M&amp;E, EIS and study results utilized by park management</p> <p>(iv) Real rate of net returns from the Trust Fund at least 7.5% on average</p> <p>(v) Presentation of a strategic plan and investment program for the CFK</p>	<p>(i) SANP reports, Table Mountain Fund/NGO activity reports and site visits.</p> <p>(iii) Study reports and records of management decisions</p> <p>(iv) Financial management report and comparative financial return data from financial press</p> <p>(v) Public strategic plan, records of approval and funding agreements.</p>	<p>(iii) Management will have the resources to act on study proposals</p> <p>(iv) Successful investment of the Trust Fund capital</p> <p>(v) External political events will not interfere with the finalization and implementation of the plan</p>
<p><b>Project Components for WWF</b></p> <p>(i) Invasive alien species eradication</p> <p>(ii) Environmental education</p> <p>(iii) Knowledge management</p> <p>(iv) Trust Fund management</p> <p>(v) Cape Floral Kingdom strategy development</p>	<p>(i) At least 5 NGOs (including volunteer alien clearing partnerships) involved by year two and onwards.</p> <p>(ii) Development of 30 customized resource programs for target audiences in adjacent communities by year 3</p> <p>(iv) Selection of financial manager before grant effectiveness.</p> <p>(v) Agreed strategic plan and investment program for the CFK identifying priority conservation areas and financing completed by the end</p>	<p>(i) Annual reports from the Park authority, the Table Mountain Fund and NGOs. Supervisory consultations with NGOs and labor engaged in the conservation efforts.</p> <p>(ii) As above plus beneficiary evaluations.</p> <p>(iii) M&amp;E reports, EIS outputs, study proposals, decision records and study reports.</p> <p>(iv) Annual audits</p> <p>(v) Strategy document. Meetings with main stakeholders during supervision.</p>	<p>(Components to Outputs)</p> <p>(i &amp; ii) Sustained NGO support for conservation activities. NGOs will compete in a non-contentious manner for contract funding.</p> <p>(iii) Sufficient interest among academics and NGOs, and funding from the TF.</p> <p>(v) Consensus emerges on priorities and funding requirements.</p>

	of year 2 after effectiveness.		
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## Annex 2

### Detailed Project Description

**Main Component 1** - \$76.4 million (total project cost, of which \$7.0 million is incremental) *Cape Peninsula National Park*. This component entails the creation and initial management of a new national park covering some 300 km<sup>2</sup> on the Cape Peninsula in order to protect its unique biodiversity. In addition to the core costs of park staff and basic capital investment, this component contains several separate activities to which GEF contributions are requested, as described below:

(i) *Invasive alien plant control program*. Alien plants currently pose the most severe threat for the continued existence of fynbos ecosystems in conserved areas. Consequently, this is also the area that is designated to receive the most funding of all conservation activities. An integrated approach, involving a combination of biological, mechanical and chemical control, applied with a cognizance of socio-economic issues, will reduce the deleterious effects of alien plants on the Cape Peninsula. This approach is based on: (a) about 20 year research carried out by the University of Cape Town; and (b) acquired experience and lessons learned during the past several years under the Working for Water Program as well as through NGO-implemented conservation activities. The objective of the six year program is to remove the entire initial infestation of woody, seed-bearing alien invasive plants from the Park. As explained in Annex 14, regeneration of the natural vegetation then occurs naturally, provided maintenance is effective. The total cost of this sub-component is \$11.3 million over six years, of which the incremental cost is about \$4.5 million.

After this labor-intensive program, providing up to about 500 employment opportunities per annum, has been completed, the Park will be in a maintenance phase; invasive species will otherwise regenerate and spread again. Maintenance of cleared areas will be initiated from year three. All cleared areas will be followed up every two years. Different methods will be tested.

Some of the activities under the NGO-implemented component (see Main Component 2) also belongs under this heading. The availability of Fund resources for such activities has several advantages. First, NGOs can operate on all private land whereas SANP is confined to public land or private land contracted in to the National Park. Second, NGOs can pursue activities also outside of the Peninsula, and begin to address the needs of the entire Cape Floral Kingdom. Third, by channeling resources through NGOs, and allowing NGOs to participate in the decision-making about resource allocations, a contribution is given to empowerment of such groups. Finally, the NGOs represent excellent linkages to disadvantaged communities, which can take advantage of increasing labor opportunities and associated training. It is not possible at this stage to give an estimate of the amount of money NGOs will spend on this activity, as the choice to pursue alternative actions is still open.

(ii) *Environmental education*. Special centers within the park would be upgraded in the GEF alternative, to better cater to the growing stream of tourists, as well as to target disadvantaged communities to participate on-site. There would also be outreach activities in surrounding communities. This is essential to change the current perception of the park as an area of "exclusion" to one of providing valuable services. The total cost is about \$1.5 million of which the incremental cost is about \$0.5 million.

(iii) *Fire control and management*. The Cape flora has evolved with fire and many species require fire to propagate. The role of fire in the maintenance or reduction of biodiversity in the fynbos is well documented. At the same time, fire can cause considerable damage to people and property adjoining natural and semi-natural areas. Fire thus poses a major dilemma for management of the Cape Peninsula in balancing policies calling for protection of various components of the natural environment on the one hand, and the need to protect people and property on the other. The

recent introduction of a contracted helicopter on standby during the fire season, for the northern part of the Cape Peninsula, has proven to be extremely cost-efficient for both controlled burning programs and wildfire control. The southern part of the Cape Peninsula however has inadequate fire protection and management. The contracting of a second helicopter on standby, in combination with standby labor groups, would maintain and enhance the fire control and management capacity in the Park. The total cost for the sub-component is \$3.8 million, of which the incremental cost is about \$0.3 million.

(iv) *Improved tourist infrastructure.* The park, because of its topography, urban nature and historically entrenched "right of free access" is, in part, an open system. A large number of informal and formal access points exist, most of which do not provide adequate information. It is considered that damage to the natural areas can often be attributed to ignorance. The creation of safe gateways to the Park, where educational/informational signage and interactive materials can be provided has long been required. Major gateways provide substantial eco-tourism benefits and consequently offer commercial opportunities. Minor gateways however will need to be constructed and infrastructure provided by Park management, with no financial returns. Furthermore, inappropriate, poorly aligned and inadequately constructed footpaths and roads and natural areas burnt too frequently are the primary causes of severe erosion problems on the Cape Peninsula. A number of critical areas have been clearly identified for a rehabilitation program. Footpath maintenance will be of particular significance, and will serve to focus environmental pressure to the areas best suited. The total cost is \$4.4 million, of which the incremental cost is about \$0.7 million.

(v) *Capacity building.* It is the intention to provide entrepreneurial training for promising contract laborers. This will build capacity among a corps of independent contractors who can later take on alien species clearing, footpath maintenance and other park-related tasks on a competitive basis. The total cost is \$2.0 million, of which the incremental cost is about \$0.2 million.

(vi) *Marine Protection Program.* Activities would include a study of the feasibility of incorporating the marine environment of the Cape Peninsula into the proposed National Park. This activity will concern the identification of appropriate boundaries and legal requirements. The proposed establishment of the marine park will require considerable public relations and media liaison in order to ensure that the general public are fully aware of the reason and need for the Park, and to be in a position to fully participate in the process. The long-term objectives of this component would be to maintain biodiversity and functional marine ecosystems by halting and reversing threats such as over exploitation of rock lobster, abalone, alikreukel and certain line fish species, and combat pollution via nutrient loading, sewage, industrial effluents, oil spills, and stormwater. Without GEF support, it would be unlikely that the Peninsula's marine environment would be incorporated into the terrestrial national park within the first five years of its establishment, given the high cost and complexity of its operation and development. The total cost is \$0.7 million, of which the incremental cost is about \$0.3 million.

Existing and proposed Environmental Education Centers and outreach programs will be provided with the capacity to include marine education components into their programs prior to the establishment of the marine park. A set of marine park regulations will be prepared for promulgation simultaneously with the Park's proclamation. The Marine Park's proclamation will be undertaken and funded by the South African National Parks. Finally, four specific research/monitoring activities have been identified; research into the social needs of communities that have an economic relationship with the marine environment; baseline data collection; monitoring programs; and applied marine research.

(vii) *Knowledge Management.* Evaluating the project and drawing lessons that can be of global use will require a carefully crafted M&E system, and extensive data gathering and analysis. The existing Environmental Information System (EIS) will be upgraded and consolidated. A focus for the studies is the resolution of management-derived questions. Park management have identified a number of key research issues which need to be addressed. These include: identification of legal mechanisms for securing conservation control of land; analysis of visitor use patterns; impacts of management actions on surface hydrology; cost-benefit analysis of alien plant control methods; restoration of transformed

habitats; identification of new bio-control agents; and a feasibility study for control of Himalayan Tahrs. There will also be studies on land use planning in the urban interface. The incremental cost for all these component is about \$1.6 million, of which \$0.8 million is incremental.

**Main Component 2: Table Mountain Fund (TMF)**- \$7 million capital (\$5 million are incremental GEF financing) and associated land donations/purchases for an estimated market value of at least \$6 million. The TMF will provide income in perpetuity to support the NGO-managed community conservation program with two objectives: the first will be the conservation of the biological diversity of the Cape Peninsula and its adjacent marine systems which are of global significance. The second objective will be to expand conservation efforts to the broader Cape Floral Kingdom, which was the highest recorded species diversity for any comparable sized temperate or tropical region in the world. These two objectives are mutually reinforcing as experience acquired and lessons learned in the Cape Peninsula are expected to benefit the broader CFK and vice versa.

The community conservation program will particularly include the following activities: (a) alien plant eradication outside the National Park with a special attention to community-owned and private land, having a strategic biodiversity value in terms of rare species, special habitat and geographic location in relation to existing protected areas; (b) promotion of conservation activities in rural and urban communities by for example facilitating the expansion of conservation farming with full maintenance of natural biodiversity; (c) environmental education and associated production of didactic materials targeted to rural and urban dwellers with a focus on disadvantaged communities; (d) conservation studies for expanding existing reserves or dealing with unforeseen emerging conservation problems; and (e) knowledge dissemination particularly related to lessons learned and best practices.

This component has been designed to build synergy with the establishment of the National park; and to ensure that conservation need, particularly at the community level will be met sustainably on the Cape Peninsula and broader CFK after the phase-out of this six-year project. Furthermore, it has the advantage of empowering the environmental NGO-community to influence decisions about resource allocation for conservation, and to openly compete in finding efficient ways of furthering the interests of biodiversity protection. Such NGOs already have an impressive track record of participatory implementation of conservation programs on the Cape Peninsula.

**Main Component 3: Strategic Planning for the CFK** (US\$1.1 million total cost of component, all incremental). This activity is deigned to take place in the first two years of the project. The aim is to design a comprehensive strategic conservation program that can attract its own funding. This process will identify the main stakeholders and ensure their participation, identify specific "champions" for tasks to be done, identify information gaps, prioritize and commission conservation planning work to close these gaps, develop a strategic action plan and explore funding possibilities for the future. Priority conservation areas in the Agulhas Plain, De Hoop and the West Coast Biosphere Reserve have already been identified. This strategic planning for the CFK is further described in Annex 15.

### Annex 3

#### Estimated Project Costs

<u>Project Component</u>	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----US \$ million-----		
National Park			
Staff, overhead & loan servicing	26.6	1.4	27.9
Capital investment	7.6	0.4	8.0
Terrestrial conservation			
Alien species program	6.5	2.8	9.3
Fire management	2.5	0.6	3.1
Environmental education	1.1	0.1	1.2
Paths & gateways	3.3	0.2	3.5
Road maintenance	3.0	0.2	3.1
Capacity building	1.6	0.1	1.7
Boulder maintenance	3.3	0.2	3.5
Knowledge management	0.9	0.2	1.1
Marine conservation	0.5	0.1	0.6
Table Mountain TF	12.4	0.7	13.0
CFK strategy	0.8	0.1	0.9
<b><u>Total Baseline Cost</u></b>	<b>70.2</b>	<b>6.9</b>	<b>77.1</b>
Physical Contingencies	7.0	0.8	7.8
Price Contingencies	5.6	0.6	6.3
<b><u>Total Project Cost</u></b>	<b>82.8</b>	<b>8.4</b>	<b>91.2</b>

Note: Some figures do not add up due to rounding

## Annex 4

### Incremental Cost Analysis

#### 1. Baseline Scenario

A realistic baseline scenario for the Cape Peninsula must be seen against the particular socio-economic background of the country. The Green Paper *Towards an Environmental Policy for South Africa* states as its first objective: "To effect planned and measurable shifts in budgetary and resource allocations for environment to achieve the goal of people-driven, sustainable resource management and the redress of past inequalities." The clear implication from a biodiversity point of view, is that RSA will urgently need to address issues of social services and infrastructure targeted to improve the quality of life for disadvantaged communities. Funding for conservation purposes must realistically be expected to decline.

The richness of the Cape Peninsula's biodiversity is already seriously threatened, however. On an area basis, more taxa are threatened in the Cape Peninsula than in any other region in the world. Amongst plants, 175 species are classified as red data taxa, whilst 362 taxa are considered threatened. Invasive alien plants, mostly Acacias and Pines, pose the most severe threat to the biodiversity of the Cape Peninsula. In fynbos where effects of invasion have been most severe, increasingly dense stands of alien plants suppress populations of indigenous species, and threaten their continued existence. As vegetation structure is altered, the functioning of natural systems is disrupted in many ways, including reduced stream flow and altered fire behavior. Because woody alien plants burn very intensely, the hydrological properties of soils are altered, occasionally contributing to flooding and erosion. Other significant threats to the biodiversity of the Cape Peninsula include: encroaching residential and industrial development; increased and uncontrolled use of the area for recreation; and over exploitation of resources, including marine species. Urban growth and related pollution of water bodies also threaten in the longer run to deplete the Cape Peninsula's marine biodiversity.

In a realistic baseline scenario, the new park will be created and would have resources of more than \$50 million for capital and operational expenditure over a six-year period. In addition, terrestrial conservation activities would have close to \$18 million over the same period to cover the costs of some alien species clearing, fire management and environmental education. While these resources are substantial, and represent a strong national commitment in the face of other pressing needs, they would be insufficient to stop and overturn the wave of invasive species that threaten the long-term survival of the indigenous vegetation. Furthermore, state funds could only be used within the National Park and not on private land (unless it has been contracted in to the National Park) that would be sources of further infestation, primarily of acacia and pine trees. Activities in the broader CFK would not be eligible for funding under the baseline alternative.

To be specific, an alien vegetation model accounting for both clearing and follow-up of stands classified according to density in three classes has been run to check the baseline scenario versus the GEF alternative. This scenario is based on the following assumptions: (i) \$6.8 million would be available; (ii) municipal labor will be used at prevailing wage rates and productivity levels; and (iii) the break-down of working areas (light, medium dense canopy cover) would be proportional to their shares of the original infestation. Under this baseline scenario, it would be possible to contain the further spread of alien vegetation and make limited inroads into previous infestation. Most of the infested areas would remain at the end of the project period, however.

This would form a core area that would continue to invade surrounding areas, and perpetuate the high cost of containment.

Marine conservation (in the order of \$0.4 million over six years) in areas surrounding the Peninsula would be confined to assist in the protection of a few commercially overexploited species, but would not allow effective enforcement of all the existing Marine Park Areas, nor strategic planning for an extended park and public information about the value of the marine ecosystems.

The baseline alternative would see some NGO-implemented conservation activities on the basis of the existing Table Mountain Fund. Available capital is expected to be in the order of \$2 million, providing about \$100,000 in net returns after financial management and administrative fees. This would fund some NGO-implemented activities in clearing invasive alien species, environmental education and studies, but would not match the need for conservation activities to protect biodiversity on the Cape Peninsula, and the capacity for implementation of a large, growing and well-motivated community of environmental NGOs.

Finally, there would be no resources at all in the baseline alternative to extend strategic biodiversity conservation planning to the entire Cape Floral Kingdom.

## 2. Global Environmental Objectives

The objectives of GEF assistance would be to:

(i) *Roll back the threat of invasive alien species* to allow the natural regeneration of indigenous species, protect the area from raging wildfires and recreate nature's own renewal process, extend the realm of effective conservation to surrounding marine areas, upgrade the capacity to provide environmental education, improve roads and paths to minimize erosion and enhance accessibility, upgrade the monitoring and study of biodiversity in this unique area. Assistance to a substantial investment program in the next six years will allow cost-effective action, as the cost of rehabilitation of the indigenous vegetation grows quickly over the years. Hence, delaying action now means higher cost in the future, and perhaps irreversible loss of some species. This component would be managed by the South African National Parks (SANP).

(ii) *Ensure the maintenance in perpetuity of biodiversity conservation* on the Cape Peninsula and beyond in the Cape Floral Kingdom, extending the reach of conservation activities to private land outside the National Park, and using NGOs as implementing agencies and decision-makers. This component would be funded by the Table Mountain Fund (TMF), lead by a Board of Trustees, representing the three founders: SANP, WWF-SA and the advisory and broadly recruited Cape Peninsula National Park Committee.

(iii) *Lay the strategic foundation for effective conservation of the Cape Floral Kingdom.* This work would be supported through the SANP, but would involve many other stakeholders in a broad, consultative process.

### 3. GEF Alternative

While the SANP and the TMF are two separate institutional vehicles, the major substantive elements of both programs would be similar: invasive alien vegetation removal, environmental education activities, rehabilitation and construction of footpaths that would reduce the currently disbursed environmental pressure, and environmental studies in support of better environmental management. The main activities are described in annex 2 of the PAD.

By financing the incremental cost of these activities for addressing global and regional biodiversity conservation priorities, GEF funding will complement substantial domestic resources channeled through the SANP, provincial and local government subsidies, contributions from visitors to the park, as well as domestic donations. Additional foreign co-financing is also expected as a result. GEF participation in the project has the potential to ensure the integrity of globally significant biodiversity assets

### 4. Incremental Costs

The matrix below summarizes the baseline and incremental expenditure during the six year project period. The **total requested GEF funding to \$12.3 million**. Out of this total, \$6.3 million would strengthen biodiversity conservation in the new Cape Peninsula park and adjacent marine areas, \$5 million represent the capital addition to the Table Mountain Fund, and \$1 million would go towards conservation planning for the Cape Floral Kingdom.

### Incremental Cost Matrix

Component	Cost Category	US\$ million	Domestic Benefit	Global Benefit
<b>Park management</b> (operational and capital expenditure)	Baseline	43.7	Maintenance of a tourist attraction, generation revenue and employment	
	GEF alternative	43.7	As above	As above.
	Increment	0		
<b>Terrestrial conservation activities</b> (alien species clearance, fire management, environmental education, tourism infrastructure, capacity building, knowledge management)	Baseline	25.7	Enhanced visitor attraction, fire protection and employment, increased awareness	Partial conservation of globally significant biodiversity
	GEF alternative	32.7	Employment opportunities, enhanced fire protection and increased awareness	Rapid rehabilitation and maintenance of globally significant flora, prevention of further species loss
	Increment	7.0		
<b>Marine conservation activities</b>	Baseline	0.4	Very limited protection of single species subject to over-exploitation	

	GEF alternative	0.7	Much enhanced protection of commercial species, but some immediate loss of income	Much enhanced protection of a species-rich marine ecosystem
	Increment	0.3		
<b>NGO-implemented conservation activities funded by the TMTF</b>	Baseline	8.0	Employment among disadvantaged groups, enhancement of landscape, NGO empowerment	Limited protection of globally significant flora
	GEF alternative	13.0	As above, but on a much larger scale	Protection of indigenous biodiversity also on private land and in the CFK outside the Cape Peninsula
	Increment	5.0		
<b>CFK Strategy</b>	Baseline	0.0		
	GEF Alternative	1.1	Limited visitor interests potentially protected	Definition of a strategy to conserve the CFK
	Increment	1.1		
<b>Total</b>	Baseline	77.8		
	GEF alternative	91.2		
	Total Increment	13.4		
	Of which co-financed	1.1		
	<b>GEF contribution</b>	<b>12.3</b>		

## Annex 5

### South Africa - Cape Peninsula Biodiversity Conservation Project

#### Financial Summary

Years Ending  
\$million

	Implementation Period						Post-project period	
	1998	1999	2000	2001	2002	2003	2004	2005
<b>Projects Costs</b>								
Investment Costs	16.5	1.9	1.4	0.9	0.9	1.1	0.5	0.0
Recurrent Costs	8.5	11.3	11.6	12.3	13.3	11.5	10.5	11.0
Total	24.9	13.2	13.0	13.3	14.2	12.6	11.0	11.0
<b>Financing Sources (% of total project costs)</b>								
GEF	12	22	10	1	2	2	0	0
Co-financiers	1	1	1	1	1	1	0	0
Local Government	10	18	18	17	15	0	0	0
Admission Fees	12	41	51	59	61	74	79	80
SANP (central)	2	4	0	0	0	0	0	0
TF investment GEF	22	0	0	0	0	0	0	0
TF investment domestic	35	0	0	0	0	0	0	0
Tourist ventures (royalty)	6	15	19	21	20	22	21	20
Total	100	100	100	100	100	100	100	100

Note: GEF will support SANP during a six-year implementation period. Thereafter the Table Mountain Fund will continue to generate returns in perpetuity, but investment proceeds have not been considered in the table above (only the one-time contribution to the TF) All figures do not add up due to rounding.

## Annex 6

### South Africa - Cape Peninsula Biodiversity Conservation Project Procurement and Disbursement Arrangements

**Table A: Project Costs by Procurement Arrangements**

(in US\$ million equivalent)

Expenditure Category	Procurement Method				Total Cost (including contingencies)
	ICB	NCB	Other	N.B.F	
<b>1. Works</b>					
Roads (1)				3.8	3.8
Office rehabilitation (1)				1.3	1.3
Foot paths & gateways (1)				4.7	4.7
Boulder investment (1)				1.3	1.3
Plant eradication (2)			3.2	6.6	9.9
Fire management (2)			0.2	3.6	3.8
Path maintenance (2)			0.6	3.8	4.3
<b>2. Goods</b>					
Vehicles				0.8	0.8
Radio equipment				1.6	1.6
Herbicides (3)	0.7			0.7	1.4
<b>3. Consultant Services (4)</b>					
M & E + EIS			0.5	0.8	1.3
Marine studies			0.3	0.4	0.7
Terrestrial studies			0.3		0.3
CFK strategy			1.0	0.1	1.1
<b>4. Miscellaneous</b>					
Trust Fund (5)			5.0	8.0	13.0
Environmental education (6)			0.5	1.0	1.5
Capacity building (6)				2.1	2.1
Boulder maintenance				4.3	4.3
Overhead, staff, loan servicing				34.0	34.0
<u>Total</u>	0.7	0.0	11.6	78.8	91.2

Note: N.B.F. = Not Bank-financed. All items under ICB (\$0.7 m.) and other (\$11.6 m.) are financed entirely by GEF.

Notes:

(1) These items will be financed by SANP, according to national procurement procedures which have been reviewed and considered fully satisfactory by Bank procurement staff.

- (2) Labor-intensive works related to these items will be contracted among disadvantaged communities, initially through individual contract by SANP (force account) in consultation with community leaders, as it is currently done. It is expected that micro-enterprises will emerge with performance under close monitoring. This would allow a progressive transition to local competition.
- (3) Herbicides will be procured under ICB according to three 2-year contacts. Special conditions including specifications, packaging and their disposal will be reviewed carefully before inviting bids.
- (4) Consultant services will be procured according to Bank guidelines (QCBS) with the exception of two studies (terrestrial and marine biodiversity) under the preparation of the CFK strategy. These studies, which will be managed by WWF-SA (an independent NGO selected in accordance with clauses 3.9 and 3.14 of the Bank's Guidelines for Selection and Employment of Consultants) will be contracted with the University of Cape Town, because of its unique expertise in this domain.
- (5) TF overall management will be the responsibility of WWF-SA which will contract a financial management firm. The selection of this firm has been carried out according to Bank guidelines (QCBS). This process is expected to be completed by the end of 1998. Services from NGOs will be financed out of TF income. Selection procedures are described in a detailed Operational Manual which has been prepared by WWF-SA, reviewed by Bank staff and found fully satisfactory.
- (6) These activities will be carried out directly by SANP as part of the educational program. Other activities of this nature will be managed by NGOs, and funded through TF income.

**Table B: Thresholds for Procurement Methods and Prior Review**

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review
<b>1. Works</b>			
Plant eradication	<\$20,000	Force account (up to \$million in total); initially local recruitment from disadvantaged communities, moving toward competition (three quotes).	
Fire management			
Path maintenance			
<b>2. Goods</b>			
Herbicides	>\$200,000	ICB	>\$200,000
<b>3. Services</b>			
M & E + EIS	>\$100,000	QCBS	>\$100,000 (firm)
Marine studies	>\$100,000	QCBS	>\$50,000 (indiv.)(1)
Terrestrial studies	>\$100,000	QCBS	as above
CFK strategy	>\$100,000	QCBS/sole source (2)	as above
<b>4. Miscellaneous</b>			
Trust Fund financial mngmt.		QCBS	All
<u>Total</u>			

Notes:

(1) Individuals may be hired under contracts of <\$100,000.

(2) The marine and terrestrial biodiversity studies (\$330,000 out of a total of \$1.1 million) under the CFK strategy program will be sole sourced, as only a single qualified consultant (University of Cape Town) has been identified, on the basis of unique qualifications in this particular field. Remaining contracts will be awarded under the procedures of QCBS. CFK strategy-related contracts will be awarded through WWF-SA, an NGO, in accordance with the World Bank's Guidelines for Selection and Employment of Consultants.

**Table C: Allocation of Grant Proceeds**

Expenditure Category	Amount in US\$ million	Financing Percentage
1. Table Mountain Fund capital (WWF-SA)	5.0	100%
2. Works (SANP)	4.0	100%
3. Goods (SANP)	0.7	100%
4. Consultant services WWF-SA	1	100%
SANP	1.1	
4. Operating costs	0.5	100%
<b>Total</b>	<b>12.3</b>	<b>100%</b>

*Use of statements of expenses (SOEs):*

Required for contracts of less than:

<u>Limit</u>	<u>Item</u>
\$250,000	Goods, equipment
\$100,000	Consulting firms
\$ 50,000	Individual consultants

*Special account:*

A special account will be established by SANP as per the GEF Grant Agreement with SANP. As for the grant being channeled through WWF-SA, a one-time transfer will be made for the \$5 million GEF contribution to the Table Mountain Fund while the disbursement for consultant services related to the CFK Strategic Action Plan will be made on the basis of contractual agreements.

## Annex 7

### Project Processing Budget and Schedule

A. Project Budget (US\$000)	<u>Planned</u> (At final PCD stage)	<u>Actual</u>
	273	273
B. Project Schedule	<u>Planned</u> (At final PCD stage)	<u>Actual</u>
Time taken to prepare the project (months)	6	
First Bank mission (identification)	<u>01/24/1997</u>	<u>01/24/1997</u>
Appraisal mission departure	<u>09/22/1997</u>	<u>09/22/1997</u>
Negotiations	<u>12/01/1997</u>	<u>12/10/1997</u>
Planned Date of Effectiveness	<u>04/15/1998</u>	<u>  /  /19  </u>

Prepared by: South African National Parks

Preparation assistance: A Project Development Facility Grant of \$85,000 has been awarded by GEF

Bank staff who worked on the project included: François Falloux (Lead Specialist for the Environment and Team Leader); Jan Bojö (Sr. Environmental Economist, incremental cost analysis and GEF processing); Elizabeth Adu (Principal Counsel), Agi Kiss (Sr. Ecologist, biodiversity); Cyprian Fisiy (Social Scientist, sociological aspects); Eric Guichard (Consultant, financial management), Caroline Lefevre (Task Assistant).

## Annex 8

### Documents in the Project File\*

#### A. Project Implementation Plan

Borrower Implementation Plan (September, 1997)  
Table Mountain Fund: Operational Manual (October, 1997)

#### B. Bank Staff Assessments

Identification Mission Report (February, 1997)  
Pre-appraisal Mission Report and aide-memoire (May, 1997)  
Appraisal Mission Report and aide-memoire (October, 1997)

#### C. Other

Working papers presented to stakeholder workshops in Cape Town in January , April and September 1997  
STAP Reviewer comments (May, 1997)  
Minutes of draft PCD review meeting (June, 1997)  
Minutes of Decision Meeting (September, 1997)  
Trust Deed for the Table Mountain Fund  
Minutes of Negotiations

\*Including electronic files.

Attachment IV  
CAS Annex A2  
Run Date: 7/31/97  
Date as of: 7/28/97

**South Africa - Bank Group Fact Sheet FY 1995-2001**  
**IBRD/IDA Lending Program, FY 1995-2001**

	1995			1996			1997			1998			1999			Planned <sup>a</sup>		
	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY95	FY96	FY97	
Commitments (US\$m)	0.0	0.0	46.0	0.0	400.0	30.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Sector (%) <sup>b</sup>																		
Multisector	0.0	0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Populn, Hlth & Nuin	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Urban Development	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0				
Lending Instrument (%)																		
Adjustment loans <sup>c</sup>																		
Specific investment loans and others	0.0	0.0	100.0	0.0	100.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0				
Disbursements (US\$m)																		
Adjustment loans <sup>c</sup>																		
Specific investment loans and others	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Repayments (US\$m)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Interest (US\$m)																		

a. Ranges that reflect the base-case (i.e., most likely) scenario. For IDA countries, planned commitments are not presented by FY but as a three-year range; the figures are shown in brackets. A footnote indicates if the pattern of IDA lending has unusual characteristics (e.g., a high degree of frontloading, backloading, or lumpiness). For blend countries, planned IBRD and IDA commitments are presented for each year as a combined total.

b. For future lending, rounded to nearest 0 or 5%. To convey the thrust of country strategy more clearly, staff may aggregate sectors.

c. Structural adjustment loans, sector adjustment loans, and debt service reduction loans.

Note: Disbursement data is updated at the end of the first week of the month.

# Status of Bank Group Operations in South Africa IBRD Loans and IDA Credits in the Operations Portfolio

Attachment VII  
CAS Annex A7  
Run Date: 7/31/97  
Date as of: 7/26/97

Project ID	Loan or Credit No.	Fiscal Year	Borrower	Purpose	Original amount in US\$ millions			Difference between expected and actual disbursements <sup>a</sup>	Last ARPP Supervision Rating <sup>b</sup>	Development Objectives	Implementation Progress
					IBRD	IDA	Cancellations Undisbursed				
Number of Closed Loans/Credits: 11											
<u>Active Loans</u>											
ZA-PE-4606	L41210	1997	GOVERNMENT	IND COMPET&JOB CREAT	46.00	0.00	0.00	46.00			
TOTAL					46.00	0.00	0.00	46.00	0.00		
Total disbursed (IBRD and IDA)					0.00	241.80	241.80	Total			
Of which repaid					0.00	241.80	241.80				
Total now held by IBRD and IDA					46.00	0.00	46.00				
Amount sold					0.00	162.56	162.56				
Of which repaid					0.00	162.56	162.56				
Total undisbursed					46.00	0.00	46.00				

a. Intended disbursement to date minus actual disbursements to date as projected at appraisal.  
 b. Following the FY94 Annual Review of Portfolio Performance (ARPP), a letter-based system was introduced (IS - highly satisfactory; S - satisfactory; U - unsatisfactory; IU - highly unsatisfactory). See *Projected Impairments in Project and Portfolio Performance Rating* (SecA194-901), August 23, 1994.

Note: Disbursement data is updated at the end of the first week of the month.

Attachment V  
 CAS Annex A2  
 Run Date: 7/21/97

South Africa - IFC and MIGA Program, FY95-97

Category	Yr1			Yr2	
	FY95	FY96	FY97	FY97	FY98
IFC approvals (US\$m)	35.3	10.6			0.0
Sector (%)					
Central & Construction	0.0	1.0	0.0		
Financial Services	1.0	1.0	0.0		
(blank)	0.0	0.0	0.0		
TOTAL	1.0	2.0	0.0		0.0
Investment instrument (%)					
Loans	0.0	34.0	0.0		0.0
Equity	90.0	33.0	0.0		0.0
Quasi-equity*	10.0	33.0	0.0		0.0
Other	0.0	0.0	0.0		0.0
TOTAL	100.0	100.0	0.0		0.0
MIGA guarantees (US\$m)	8.0	20.0	20.0		0.0
MIGA commitments (US\$m)	0.0	0.0	0.0		0.0

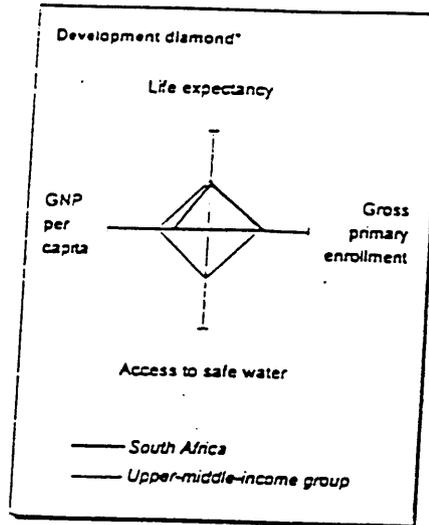
\* Includes quasi-equity types of both loan and equity instruments.

Annex 10  
Country at a Glance  
**South Africa at a glance**

8/5/97

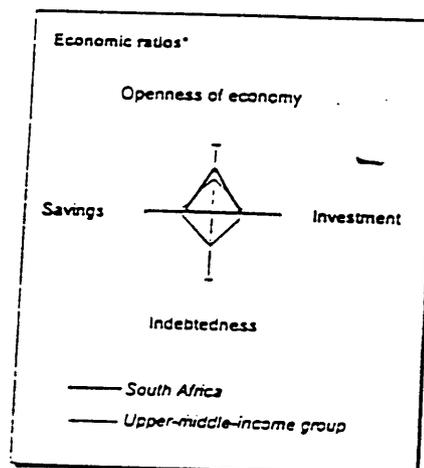
**POVERTY and SOCIAL**

	South Africa	Sub-Saharan Africa	Upper-middle-income
Population mid-1996 (millions)	42.4	600	479
GNP per capita 1996 (US\$)	3,140	490	4,540
GNP 1996 (billions US\$)	133.1	294	2,173
<b>Average annual growth, 1990-96</b>			
Population (%)	2.2	2.7	1.5
Labor force (%)	2.4	2.6	1.8
<b>Most recent estimates (latest year available since 1989)</b>			
Poverty: headcount index (% of population)	--	--	--
Urban population (% of total population)	51	31	73
Life expectancy at birth (years)	64	52	69
Infant mortality (per 1,000 live births)	50	92	35
Child malnutrition (% of children under 5)	--	--	--
Access to safe water (% of population)	--	47	86
Illiteracy (% of population age 15+)	18	43	13
Gross primary enrollment (% of school-age population)	117	72	107
Male	119	78	--
Female	115	65	--



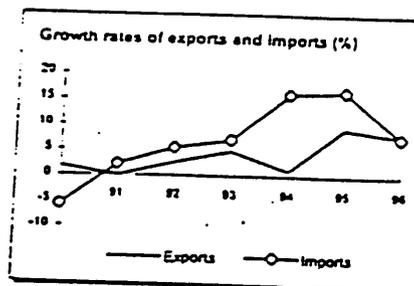
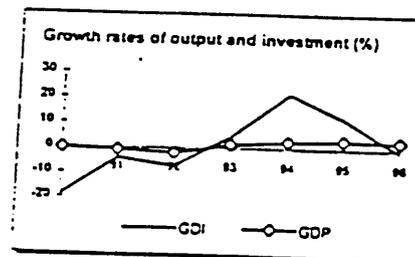
**KEY ECONOMIC RATIOS and LONG-TERM TRENDS**

	1975	1985	1995	1996	
GDP (billions US\$)	36.0	55.2	133.9	126.3	
Gross domestic investment/GDP	31.7	19.9	18.6	17.5	
Exports of goods and services/GDP	28.1	32.2	24.8	25.5	
Gross domestic savings/GDP	29.2	29.0	18.7	18.3	
Gross national savings/GDP	24.8	24.2	16.8	16.0	
Current account balance/GDP	-7.0	4.7	-2.1	--	
Interest payments/GDP	--	--	--	--	
Total debt/GDP	--	--	--	--	
Total debt service/exports	--	--	--	--	
Present value of debt/GDP	--	--	--	--	
Present value of debt/exports	--	--	--	--	
<b>(average annual growth)</b>					
GDP	2.5	1.1	3.4	3.1	--
GNP per capita	0.0	-0.9	1.0	0.8	--
Exports of goods and services	0.8	3.6	9.3	7.8	--



**STRUCTURE of the ECONOMY**

	1975	1985	1995	1996
<b>(% of GDP)</b>				
Agriculture	8.5	5.8	4.4	4.7
Industry	42.8	45.9	39.2	38.8
Manufacturing	23.7	23.1	24.3	23.8
Services	48.8	48.3	56.4	56.5
Private consumption	56.9	53.7	60.8	60.9
General government consumption	13.8	17.3	20.6	20.9
Imports of goods and services	30.5	23.2	24.7	25.7
<b>(average annual growth)</b>				
Agriculture	0.8	0.9	-14.9	25.8
Industry	2.1	0.2	4.2	0.6
Manufacturing	2.7	0.2	7.6	0.4
Services	3.1	1.5	3.7	2.8
Private consumption	3.4	1.9	4.7	3.8
General government consumption	4.4	2.6	0.3	5.0
Gross domestic investment	-1.8	-0.2	11.9	-1.0
Imports of goods and services	-1.2	6.3	16.6	7.5
Gross national product	2.5	1.4	3.3	3.0

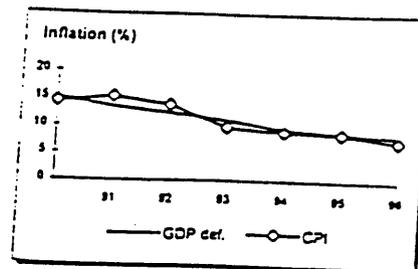


Note: 1995 data are preliminary estimates.

\* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

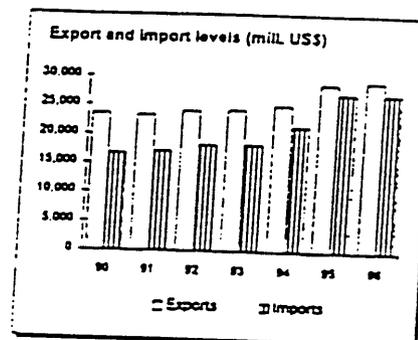
PRICES and GOVERNMENT FINANCE

	1975	1985	1995	1996
<b>Domestic prices</b>				
(% change)				
Consumer prices	13.5	16.3	8.7	7.4
Implicit GDP deflator	10.9	18.1	8.9	8.4
<b>Government finance</b>				
(% of GDP)				
Current revenue	25.9	29.5	31.3	24.9
Current budget balance	4.2	2.2	-2.5	-2.8
Overall surplus/deficit	-4.9	-3.3	-6.0	-5.3



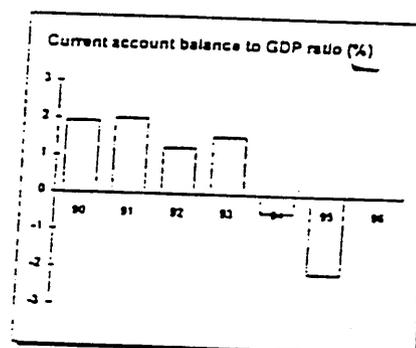
TRADE

(millions US\$)	1975	1985	1995	1996
<b>Total exports (fob)</b>	8,422	15,802	28,625	29,120
Commodity 1-Gold	3,433	6,940	6,214	6,120
n.a.				
Manufactures	..	..	..	..
<b>Total imports (cif)</b>	9,162	10,426	27,009	27,075
Food	..	..	..	..
Fuel and energy	..	..	..	..
Capital goods	..	..	..	..
Export price index (1987=100)	..	..	..	..
Import price index (1987=100)	..	..	..	..
Terms of trade (1987=100)	..	..	..	..



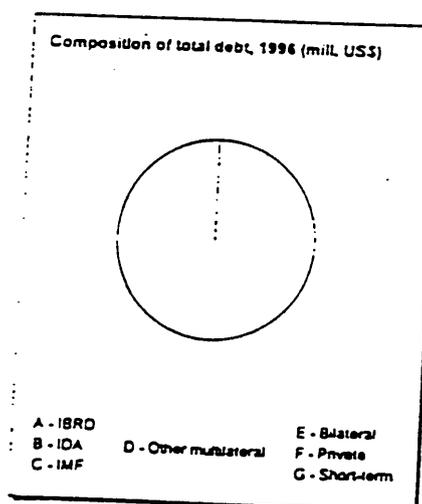
BALANCE of PAYMENTS

(millions US\$)	1975	1985	1995	1996
<b>Exports of goods and services</b>	9,548	17,703	33,070	33,414
<b>Imports of goods and services</b>	11,063	12,760	33,431	32,476
<b>Resource balance</b>	-1,515	4,943	-361	938
<b>Net income</b>	-1,116	-2,395	-2,476	..
<b>Net current transfers</b>	102	74	16	..
<b>Current account balance, before official capital transfers</b>	-2,529	2,622	-2,821	..
<b>Financing items (net)</b>	2,618	..	1,686	..
<b>Changes in net reserves</b>	-89	..	1,135	-1,878
<b>Memo:</b>				
Reserves including gold (mill. US\$)	2,978	1,897	4,301	2,203
Conversion rate (local/US\$)	0.7	2.2	3.6	4.3

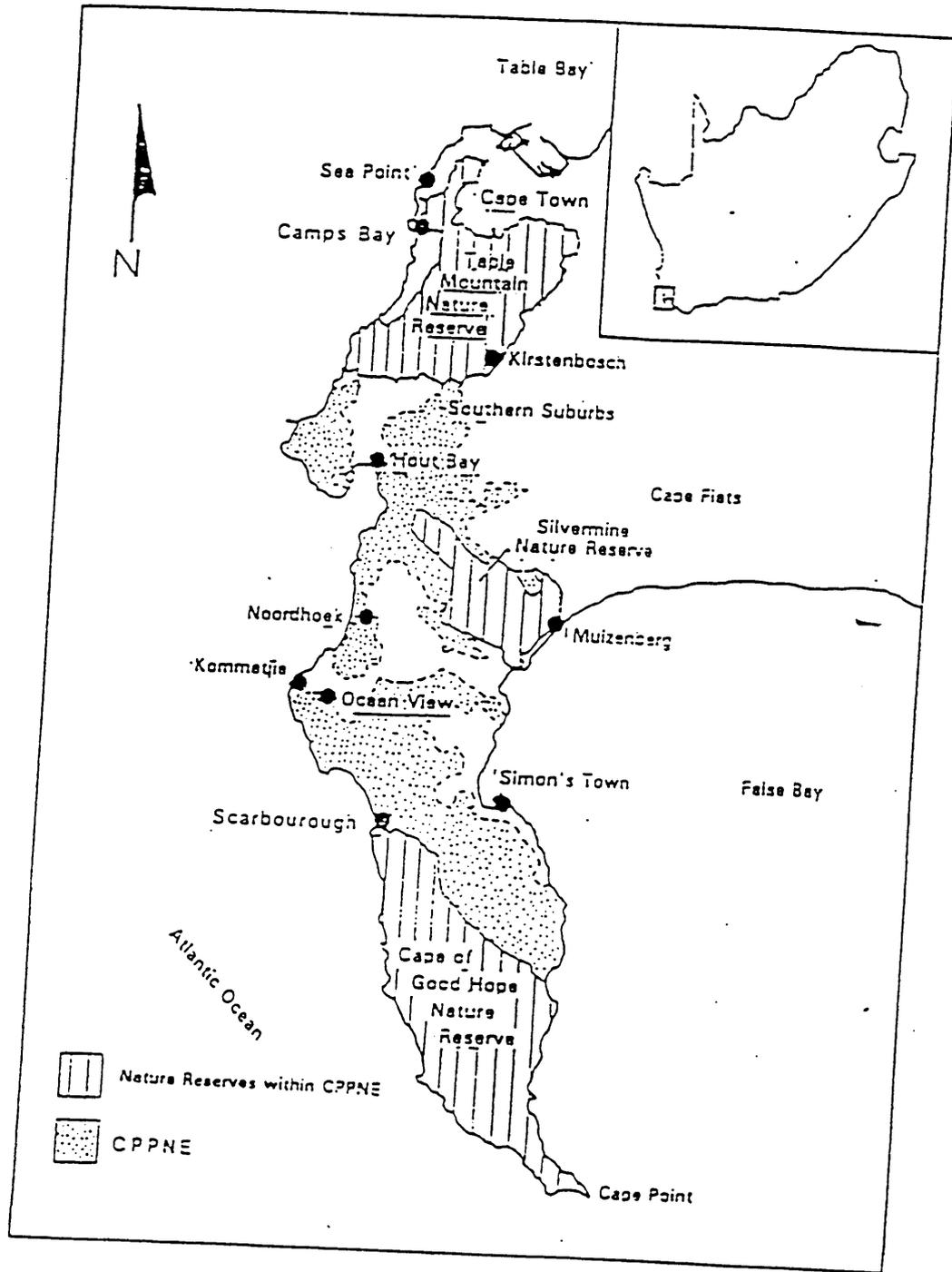


EXTERNAL DEBT and RESOURCE FLOWS

(millions US\$)	1975	1985	1995	1996
<b>Total debt outstanding and disbursed</b>	..	..	..	..
IBRD	..	..	..	..
IDA	..	..	..	..
<b>Total debt service</b>	..	..	..	..
IBRD	..	..	..	..
IDA	..	..	..	..
<b>Composition of net resource flows</b>				
Official grants	..	..	..	..
Official creditors	..	..	..	..
Private creditors	..	..	..	..
Foreign direct investment	185	-450	3	..
Portfolio equity	..	..	..	..
<b>World Bank program</b>				
Commitments	..	..	..	..
Disbursements	..	..	..	..
Principal repayments	..	..	..	..
Net flows	..	..	..	..
Interest payments	..	..	..	..
Net transfers	..	..	..	..



Annex 11



Map of the Cape Peninsula, shaded areas indicate the extent of the Cape Peninsula Protected Natural Environment (CPPNE) and the location of the three existing nature reserves. The national park will encompass all shaded portions. The Table Mountain Fund will ensure the exceptional biodiversity of this area is conserved in perpetuity.

## Annex 12

### The Financial Perspective for the Cape Peninsula National Park

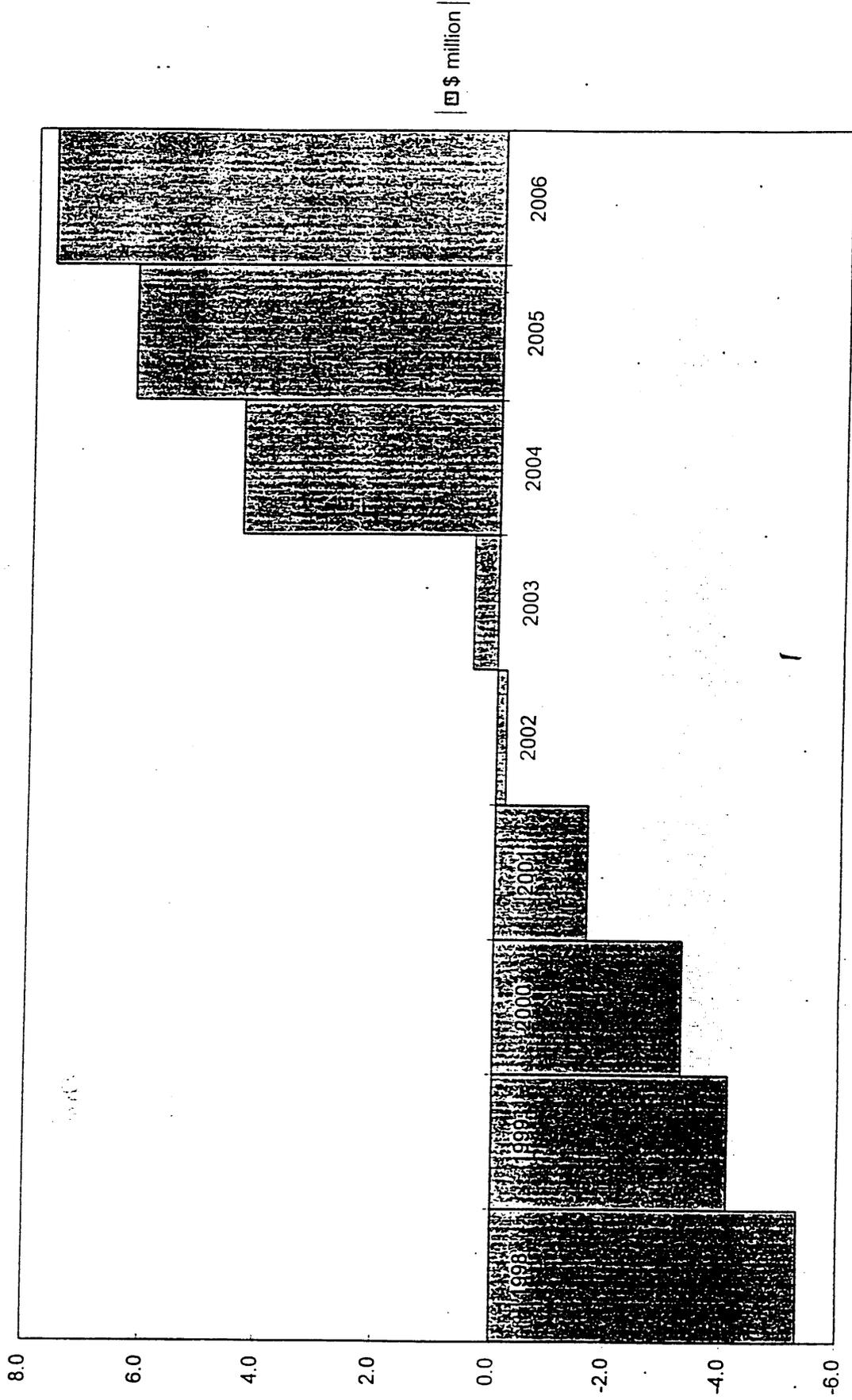
The Cape Peninsula National Park is in need of external support for the first few years of its existence, but has the potential of becoming financially sustainable a few years into the next century. These two points are brought out in chart 1 below, showing net cashflows for the park during 1998-2006. Achieving financial cost-recovery will take approximately six years, which is also the length of the project investment period that GEF will support.

The net cashflow measure shown is composed of operational revenue less operational costs, less capital costs, and less loan servicing costs. The revenue is composed of (a) declining public subsidies through local government and the South African National Parks, (b) increasing tourism admission fees, and (c) increasing revenues from tourism ventures. These ventures are operated by the private sector, but pay a share of turnover to the Park. Examples are the cable car operation, restaurants and curio shops. The trends and magnitude of these revenues are shown in chart 2 below.

While the area of the park is rather limited, about 30,000 hectares, the visitor statistics are increasingly impressive, and explain the high level of financial turnover. The southern end of the park around Cape of Good Hope is expected to receive about 750,000 visitors in 1997, growing to almost 1.4 million in the year 2003 (i.e. at the end of the project period). Similarly, Boulders penguin park is expected to attract more than 0.5 million visitors in 1997, growing to about 0.9 million in 2003. Based on both growing numbers and rising fees, total admission income, in the order of \$2 million in 1997, is expected to grow to more than \$10 million in 2003.

The revenue side must be contrasted with the high investment demand to firmly establish the park, and significant operational costs to provide a large number of visitors with a high-quality experience. Of particular interest with regard to investment is the program for eradication of alien species. The techniques used and considerations regarding re-infestation and rehabilitation of the flora are dealt with separately in annex x. In financial terms, the program requires heavy investment in the first few years, and long-term, but much less expensive follow-up for the long-term future. The investment profile is illustrated in chart 3 below. Its main feature is the drastic drop in cost after the first few years of clearing of the mature alien plants have taken place. Follow-up clearance is undertaken every two years, starting the second year after initial clearing of the land. This explains the particular shape of the follow-up cost curve. In conclusion, chart 3 underlines the need for investment support in the short run, while the long-term maintenance problems can be tackled with the increasing financial revenues from the park, supplemented by the income from the Trust Fund. The latter will also direct its funding to areas outside of the Cape Peninsula, elsewhere in the Cape Floral Kingdom.

### Cape Peninsula National Park: Net Cashflow



### Cape Peninsula National Park: Revenues

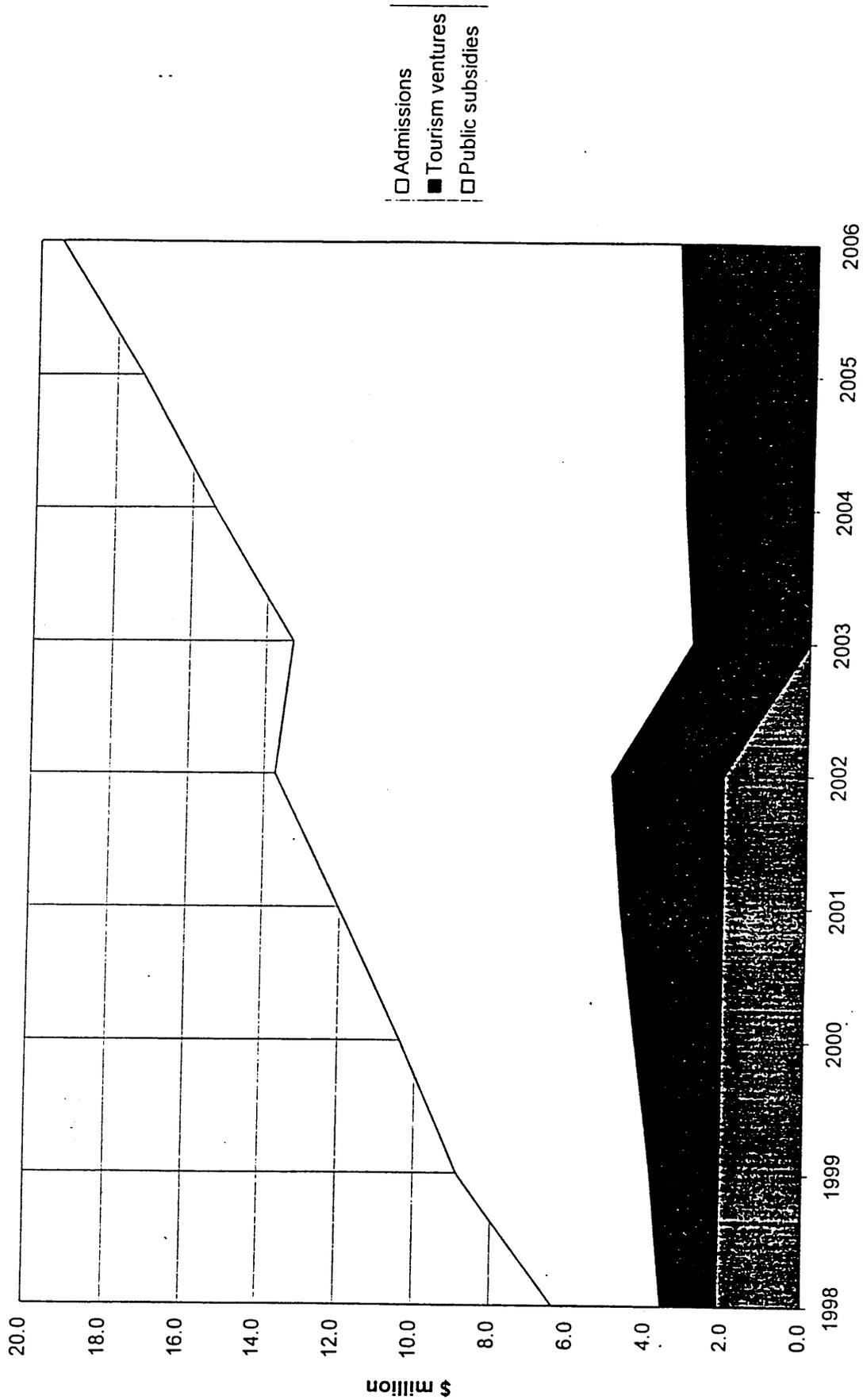
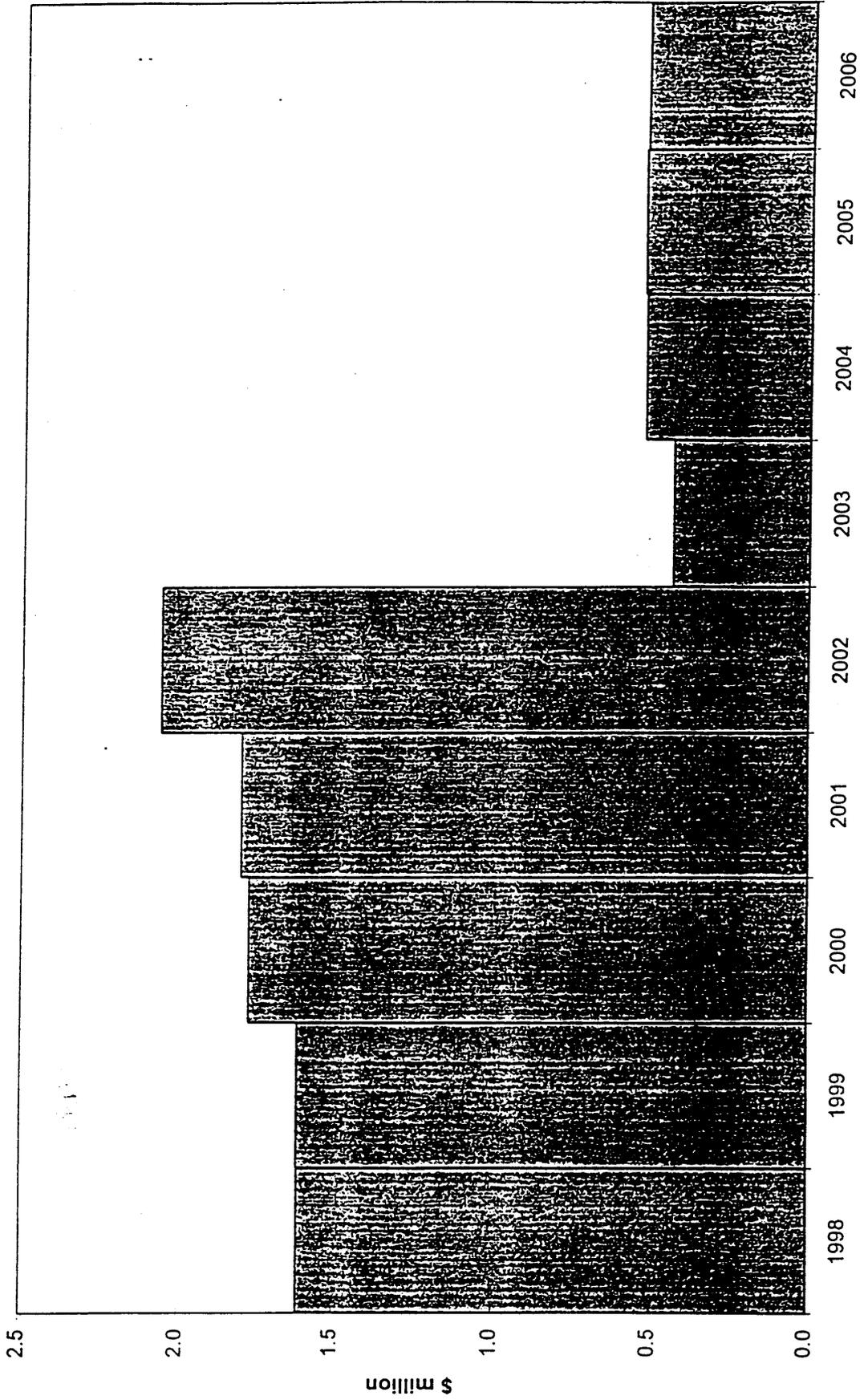


Chart3

### Cape Peninsula National Park: Alien Clearance Program



## Annex 13

### Capacity Building through the Training of Entrepreneurs and NGO's

#### Introduction

The thinking with regard to project implementation has been suffused with two ideas, the need to work through partnerships wherever possible and the intention to develop contractor capacity over a very wide spectrum of activities, so that extensive outsourcing becomes a practical possibility. One of the most challenging aspects of managing this project involves scaling-up in a very short space of time. This implies expanding the available contractor capacity significantly beyond what exists at present. These ideas are already being given a practical reality in the on-going activities of the project team. Starting in February, 1997 the team has been running a pilot programme on the development of small contractors, working with long-term unemployed and largely illiterate people from a neighbouring squatter community as the experimental group. This pilot programme has been funded by a grant of \$90,000 from USAID through the US-SA Bi-national commission.

#### Contractor Capacity

The contractor capacity referred to here involves very basic technical skills relating to activities such as alien vegetation clearing, picnic site maintenance, footpath maintenance and construction and anti-erosion work. A suite of different activities will be undertaken concurrently in order to expand the available contractor capacity as rapidly as possible. The business and managerial skills that contractors must develop are common to all emerging small and medium enterprises. A sample of approaches being considered is the following:

- (i) Expand existing contractor capacity by awarding contracts to this group subject to conditions designed to achieve the objective of creating contractor opportunities for members of previously disadvantaged communities i.e. contract subject to skill transfers being built in;
- (ii) Encourage NGO's with some demonstrable abilities in this area to establish their own contracting units. This is a very interesting possibility to which some members of the NGO fraternity have already responded positively. There are at least 10 NGO's with the managerial capacity already in place which would allow them to respond positively to this proposal immediately;
- (iii) Allow private landowners to operate as contractor of choice on their land once this land has been contracted into the park subject to the considerations under (i) and that the rates charged by the landowner would have to be commercially competitive;
- (iv) Enter into partnerships with NGO's and other organisations operating through the provision of training programmes, in the field of job creation and entrepreneurial development. This looks very promising in that one of the important things which the national park can bring to this arrangement is a guaranteed market for the service that emergent contractors are being trained to supply;

(v) Expand the pilot programme activities mentioned above as rapidly as possible. One mechanism is through the use of training professionals applying our methodology under our supervision at least to those parts of the process where this could be appropriate e.g. use others to impart the practical skills of footpath maintenance. There are undoubtedly parts of this process which only the park management can do, such as the relationship building activities within the target community. Another is to expand internal team capacity to undertake these activities on a significantly larger scale. Both options need serious exploration; and

(vi) Establish incentives for ex-municipal employees, being inherited from existing municipal employers along with the conservation areas being transferred to the park's management, to resign and become contractors to the park. This group consists of 220 employees amongst whom there are several individuals who have expressed serious interest in this idea. One or two well-celebrated success stories should have the effect of exciting considerable further interest in this option.

### **Brief process description**

In the case of most of the options mentioned above, practical implementation is impossible until the park management have conservation areas under their operational control. Preparatory and planning activities are at various stages of advancement with regard to these opportunities but the project team cannot take this work beyond preparation at this time. However, the pilot activity mentioned above is the exception to the rule. It has gone through the following steps:

(i) Choose a community to work in and interact with them informally until they are comfortable with you and you are able to identify the "movers and shakers";

(ii) Facilitate the setting up of a core representative group. Get the community's agreement regarding the proposal to work with a group of community members in order to attempt the development of stand alone contractors from their community;

(iii) Agree the criteria for choosing the starter group. In the pilot, these were not more than one member of a household, currently unemployed, equal numbers of men and women and physical fitness adequate to the envisaged task;

(iv) Begin training of technical skills but design all activities in such a way as to encourage individuals to take responsibility for their life outcomes. In the pilot, this process lasted 3 months during which time all 23 participants were on short-term employment contracts receiving a daily wage. A half day per week was devoted to off-the-job training. Phase 1 was followed by a four week interval in which half the time was spent in a training room for which participants received an allowance. Some of the original group dropped out voluntarily in this phase; and

(v) A core group of 11 remaining participants selected from the original 23, were given further on-the-job training in Phase 2. After a number of "simulated contracting" experiences, 5 members of this group are setting up contracts for their own completion under guidance, experimenting with different possibilities and "employing" others. These "employees" are drawn from the original group and have learnt the skills to clear alien vegetation effectively, but for one or other reason are no longer part of the group seen as having the potential to become stand alone contractors. The responsibility for these "employees" is still with the project

team. In other words, they are not yet employees of the emergent contractors but in some respects are treated as if they already were indeed employed by them. The next developmental step for these nascent contractors is to take responsibility for the employment of the labour resources that they require in order to execute their contracts.

### **Concluding Remarks**

Developing capable and reliable contractors from the ranks of the unemployed is an arduous and exacting process for which no recipes exist. It is essential that an acceptance of learning-by-doing is adopted, which implies that on occasions, with the benefit of hindsight, it will be possible to identify "mistakes" with their attendant cost implications. However, for a park being created adjacent to many desperately poor communities, perseverance has many rewards. As a mechanism for developing very sound relationships between the park and the community, the process is possibly unsurpassed. Furthermore, the process offers numerous opportunities for spin-off benefits, for example in terms of environmental education for participants, their families and other community members.

In the first 5 years the park team would hope to see the emergence of at least 50 robust contractors, each employing on average 10 other people. An essential qualitative target is that these contracts should depend on the park for no more than 50% of their annual turnover. The objective of the process must be independence of the contractors not dependency. This is an outcome on which there is no room whatsoever for compromise.

The pilot indicates that the process is characterised by high rates of attrition. The original 23 are down to only 5 and the process is not yet complete. Eventually, 2 robust contractors may be a realistic outcome. Supposing that the growing experience of the park team allows the attrition rate to be restricted to approximately 75%, this implies that the efforts of the pilot need to be doubled and then maintained at that level every year for the next 5 years in order for an outcome of 50 contractors to be a realistic possibility. What this analysis has ignored is that among the other processes enumerated above, all easier to implement than the pilot process, there will undoubtedly also be some success stories in terms of new, capable contractors emerging.

## Annex 14

### Rehabilitation and Restoration following Alien Vegetation Removal

#### Background

Alien invasive species (particularly *Acacia Cyclops* and *Acacia Seligma*) are the major threat to biological diversity in the Cape Peninsula and in the Broader Cape Floral Kingdom. These species were introduced from Australia to South Africa with the best of intentions generations ago. If nothing is done, these species will continue spreading and subduing the exceptionally biodiversity rich natural vegetation almost entirely unless effectively controlled. A study in 1994 showed that 33% of the natural vegetation on the entire peninsula was lightly invaded by alien species (canopy cover < 25%) and about 11% is densely invaded (>25%). The rate of infestation varies considerably depending on soil fertility, rainfall, altitude, fire frequency and differences in reproductive and dispersal ability of each alien species. It is therefore difficult to model the spread in a laissez-faire scenario. Based on aerial photo interpretations, experts have modeled infestation using various declining spread rates, showing that the current infestation may reach 70-90% of the area in about 20 years.

Alien plants, besides their threat to natural biodiversity, do not present any substantial value both in terms of timber and fuelwood. Their scrubby nature precludes almost entirely their use for carpentry. Their fuelwood value is substantially lowered because of broken terrain and resulting extremely high cost of transportation to access roads. Consequently most of eradicated alien plants has to be burned on the spot.

This problem has been extensively researched by the University of Cape Town for the last 20 years in association with the Council for Scientific and Industrial Research (CSIR) and the Department of Water Affairs. Results from this research have been applied through the Working for Water Program for the last 3 years as well as through NGO-implemented conservation activities. The lessons learned from research and acquired experience are the following: (i) re-establishment of natural biodiversity-rich "fynbos" ecosystem has been amazingly rapid because of large seed bank stored in the soils. Nevertheless maintenance is required because soils do also contain seed bank from alien plants. This maintenance (done mainly manually) does not create any particular disturbance to fynbos regeneration, on the contrary; (ii) the denser the alien plant thicket is, the riskier it becomes in terms of high temperature fire due to excessive accumulation of biomass, which in turn have a negative impact on natural seed bank and on soil erosion. Thick alien plant canopy are also detrimental for natural fauna development; (iii) there is no need for re-seeding or growing nurseries due to fynbos resilience; (iv) the diversity of topography and micro-climate on the Cape Peninsula and the broader CFK requires permanent fine-tuning, monitoring and knowledge dissemination of alien plant eradication combined techniques and their actual effect of fynbos regeneration; and (v) despite the diversity of situations, there is however solid track records on average cost of eradication and maintenance in three types of alien plant infestation (low, moderate, high).

## **Combined techniques**

The first intervention consists of cutting alien plants using manual tools and chain saws as well as herbicide on the stumps to eliminate resprouting. Such intervention has to start in upper watersheds as seeds are disseminated by water streams inter alia. This intervention is preceded by, or combined with, bio-control techniques using parasitic fungus and insects that hamper seed production of alien plants.

The first intervention needs to be followed by annual maintenance to eliminate re-infestation by alien plant seed bank stored in the soils. Assuring this maintenance is steadily done, its intensity will progressively decrease providing there is no re-infestation from adjacent areas.

## **Fire as a regenerative mechanism**

Fire is an essential regenerative mechanism in the Cape Floral Kingdom and all species are adapted in one way or another to survive periodic fire events with some species being favoured by events of low heat intensity while others are at an advantage following fires of high intensity. The accumulation of seed stock in the soil, with the seeds of different species being moved by ants or other agents to different depths in the soil profile, makes post-fire regeneration, with insurance against variations in intensity, possible. In the case of certain species, the primary regenerative mechanism is fire stimulated resprouting of root stock, bulbs and corms or by the release of canopy stored seeds.

The most problematic aspect of alien vegetation control in the fynbos is that the alien species which present the most serious threats originate from a similar fire climax vegetation in Australia and have their own suite of adaptive mechanisms to survive periodic fires. Chief amongst these is the storage of seed in the soil profile. The long term viability of such soil stored seed from the main alien species, is unknown but there is abundant evidence that it exceeds 50 years, and probably exceeds 100. Furthermore, these plants generally grow at a faster rate than local species and produce seed within 3 years of germination in incredibly prolific quantities.

## **Natural restoration following clearing**

After the removal of light to medium infestations of alien species, defined as showing less than 25% canopy cover, recovery of original fynbos communities is not a serious issue. It occurs by coppicing root stock, resprouting bulbs & corms and the germination of soil borne seed in the isolated spots where the aliens have been cleared. Unfortunately, the alien seed store generally germinates at least equally proficiently as indigenous seeds, which necessitates regular weeding once in every two years in previously cleared areas.

It is after the removal of medium or heavy alien infestations, greater than 25% canopy cover up to closed canopy situations, that restoration may require more careful consideration. Following alien vegetation removal, the litter covered soil surface is exposed to heat, either from fire or the radiation of the sun, or disturbance, if only to a limited extent. All of these factors stimulate rapid germination of soil stored seed, both of the alien and indigenous kind. The re-establishment of cover is extremely rapid in general and does not require any deliberate intervention to restore the natural vegetation other than regular weeding to remove the regenerating alien species.

There are two serious risks following alien clearing operations. The first is the occurrence of regular fires on the same area at intervals of between 3 and 10 years. Before 3 years there is generally insufficient fuel for a fire. Each successive fire restimulates the germination of as yet ungerminated soil borne seed. The indigenous seed stock is exhausted far more rapidly under these conditions than the alien stock, especially in cases where local species only produce viable seed quantities at ten or more years of age. If indigenous species post fire regeneration is poor, then the need for reseedling would merit consideration. This necessity is extremely rare but cannot be ruled out.

The second risk is more commonly experienced. Many of the soils on which fynbos occurs are naturally hydrophobic. The occurrence of exceptionally hot fires on such soils exacerbates this characteristic, leading to overland water flows rather than saturation of the soil profile and the recharging of ground water resources, following heavy rainfall events. This can have serious erosional consequences, as has been documented in a number of cases. Following alien vegetation removal on medium to heavily infested sites, the fuel load remaining, either broadcast across the site or stacked in brush rows or piles can be very high indeed. In the hot, windy conditions which occur frequently in the Cape summer, fires on such sites usually are very intense and result in exactly the hydrophobic consequences which should be avoided. The ideal would be the removal of all the brushwood generated in the alien clearing operations. However, the piece sizes, the nature of the terrain, the distance from road side and the very low economic value of the material, all mitigate against removal except under very special circumstances. In situ burning of cut brush piles is an option presently used. At the moment the primary use is for fire wood. The development of a high value added market for this material would make the removal of far greater quantities than occurs at present an economic possibility. Some studies on the use of this woody material as a feedstock for the production of activated carbon powder are currently being undertaken by a company already involved in the activated carbon business with some support from the project team. It is however too early to predict the chances of success.

In a very small number of isolated cases it may be necessary to consider the creation of barriers along the contour to prevent soil losses and the use of nursery raised transplants for the rehabilitation of cleared areas. In 95% of the area, if not more, rehabilitation and restoration of the natural state needs no specific intervention other than the regular weeding of alien germinants.

### **Reinfestation Issues**

The germination of soil stored alien seed is by far the greatest source of reinfestation for the reasons elaborated above. The issue of reinfestation from beyond the area under conservation management is far less serious, although not to be discounted entirely. The main vectors for seed transport are wind, water, birds and to a lesser extent by mammals such as baboons and the importation of seeds with construction/road fill material. Wind is only a serious issue in the case of pines, mainly *Pinus pinaster*, but the others are responsible for some inbound seed movement amongst the other weed species of concern. Infestation of some streams and rivers by Blackwood, Black Wattle and other waterborne seed producers is a localised problem. This leaves the effects of birds on seed movement. Clearing of alien infestations, particularly where these are dense, and the return of the plant cover to fynbos, constitutes a very significant habitat change seen from the point of view of resident bird populations. This is likely to be the main contributing factor discouraging the inbound movement of bird-borne seed following initial alien vegetation removal. In summary, reinfestation from sources other than the seed stock in the soil is likely to be no more significant in the future than to have nuisance value. The object

which must be constantly strived for is to ensure that invasive alien species re-establishing themselves are denied the opportunity ever to set seed.

### **Methodology for Eradication**

The approach to eradication is to achieve the objective, the removal of all alien invasive species at the seed bearing stage of development within five years, by applying methods which will limit the concomittant damage to the surviving or emerging indigenous flora to a minimum. Considered together with the mountainous terrain, this definitely calls for the use of manual, labour intensive methods. This approach obviously has other attractions such as the creation of significant numbers of jobs and the releasing of large numbers of contracting opportunities for small entrepreneurs. The specific methods will depend extensively on the use of hand weeding where possible but usually in follow-up situations, or the use of hand tools such as loppers, bush knives and bow saws. These hand tools will be mechanised in appropriate situations being upgraded to chainsaws and hand-held mechanical brushcutters as required. The only practical method available to kill permanently resprouting alien species is the use of herbicide. The product of choice is Garlon (Triclopyr) which is selective to broadleaf species but can have some deleterious affects on other plants if not applied correctly. There are no identifiable medium or long term consequences through the use of this herbicide other than plant mortality. In most cases, it would be applied with a brush by hand, in solution with dieseline, to the stumps of resprouting species immediately after felling or alternatively using a knap-sack sprayer in solution with water through a cone nozzle in a highly directed spray onto dense stands of seedlings.

## Annex 15

# STRATEGIC PLAN AND INVESTMENT PROGRAM FOR THE CONSERVATION OF THE MARINE AND TERRESTRIAL BIODIVERSITY OF THE CAPE FLORISTIC REGION

## 1. BACKGROUND ON THE CAPE FLORISTIC REGION

The Cape Floristic Region (CFR) and adjoining marine areas:

- have spectacularly high levels of plant and animal biodiversity;
- embrace one of the world's six floral kingdoms - by far the smallest, and the only floral kingdom within one country;
- have three marine provinces;
- have important RAMSAR sites;
- have many sites of scenic beauty.

Because of the high biodiversity and threats to terrestrial systems, the CFR is world's hottest biodiversity hotspots. The region houses 1400 Red Data Book species. Some important habitats have been reduced by 90%, and only 5% of land in the lowlands enjoys any conservation status. Major threats to biodiversity in terrestrial systems include alien plants, urbanisation, coastal resort development, unsustainable harvesting of natural products, environmental degradation e.g. soil erosion, and inappropriate waste management leading to declining scenic quality.

Unsustainable exploitation of marine resources is having a major impact on biodiversity, with very important economic implications (e.g. a collapse of commercially exploited fish stocks).

For both terrestrial and marine systems, a major problem has been the *ad hoc* nature of conservation planning. Another major problem is related to the reduced budget allocation to conservation activities at the local, provincial and national levels due to social and economic priorities

## 2. OBJECTIVES AND SCOPE

(a) *The objectives are twofold:*

- to develop a long-term strategy to ensure the conservation of the CFR and adjoining marine ecosystems; and
- to prepare a 5-year investment program focused on first priorities within the strategy to be presented to financial agencies, private and public, national and international, including GEF.

The overarching goal will be to promote economic growth with social equity through the conservation and wise utilization of the CFR's biodiversity while mobilizing resources, such as GEF, to support the incremental costs related to global benefits. More specifically, the Plan will focus on;

- the effective and efficient conservation of marine and terrestrial biodiversity and landscapes;
- the utilization of biodiversity through the promotion of responsible nature-based tourism and sustainable exploitation of biodiversity;
- the development of biocentric planning approaches that minimize biodiversity loss and landscape degradation and maximize economic growth based on sustainable use of natural resources;
- ensuring that employment opportunities are created especially within the disadvantaged communities.

*(b) Scope*

The plan and its first 5-year investment program will be limited to the Western Cape Province which encompasses most of the Cape Floral Kingdom. Regarding GEF financing, the plan will be limited to the “green agenda”. However should the Province be able to mobilize additional resources, the Plan could become an overall environmental action plan including the “brown agenda” related to industrial and urban environmental management.

The preparation of this plan would be the first of its kind in South Africa and, consequently could be used as a model in other provinces.

### 3. PHASING AND PROCESS

The overall plan and investment program would be prepared in 3 phases:

*(i) taking stock of the current situation and highlighting the main conservation issues related to current physical, institutional, legal, economic and social conditions*

*(ii) elaborating a long-term strategic vision via the preparation and comparison of various scenarios; and*

*(iii) preparing the 5-year investment program to deal with conservation priorities.*

This 3-phased approach will involve consultation of the main stakeholders through workshops, particularly following the completion of each phase.

#### 4. MAIN BUILDING BLOCKS

The preparation of the long-term strategy and related investment program will be based on four main building blocks:

(i) *Terrestrial biodiversity* This block would aim to identify an effective and efficient reserve system; to identify and model dynamic spatial patterns of principal threats to biodiversity; and to provide a planning framework for the conservation of biodiversity outside of reserves. Work on this block has already been initiated by UCT and will be pursued and completed.

(ii) *Marine biodiversity and coastal zone management.* This block would aim to identify the priority coastal and marine areas for conservation. A methodology similar to (i) will be used.

(iii) *Institutional, legal and policy framework:* This block will aim (i) to assess the current institutional, legal and policy framework of the Western Cape Province regarding the “green agenda”; this includes both the public and private sectors as well the NGO community; (ii) to highlight the main issues; (iii) to propose solutions; and (iv) to implement them within the context of the 5-year investment program

(iv) *Financial, economic and social analysis:* This block will aim (i) to assess the current situation regarding the financing of conservation; (ii) current benefits and their distribution to the different segments of society through conservation farming, nature-based tourism and other activities; (iii) key issues; and (iv) solutions to be proposed.

The preparation of these four blocks would have to be well coordinated, as the last two blocks cross over the first two. These blocks then would have to be fully integrated for the preparation of the long-term strategy and the first 5-year investment period.

#### 5. ORGANIZATION AND MANAGEMENT

The preparation of the Plan and its related investment program will be supervised by a Provincial Steering Committee chaired by the Minister of Finance and Environment, Government of the West Cape Province. This committee will meet from time to time when key decisions need to be made. The composition of this Committee and its terms of reference are being defined.

The day-to-day plan preparation activities will be coordinated by a full-time coordinator assisted by a light secretariat. These activities will involve individual consultants as well as consulting firms on the major building blocks. Overall technical supervision will be ensured by a Technical Committee chaired by the director of the Institute for Plant Conservation, UCT and including members covering areas related to biodiversity conservation, institutional, legal aspects, and socio-economic aspects. This technical committee is being assembled and its Terms of Reference are being defined.

The financial management including contracting will be ensured by the WWF-SA in close association with the Technical Committee and the South African National Parks.

## 6. TIMETABLE

Dates	Activities	Responsibility
End of October 1997	agreement on the concept of the CFK strategic plan and investment program;	WWF-SA/UCT/Provincial Government
Date of Effectiveness (DE)	terms of reference for the steering and technical committees as well as for plan coordinator	WWF-SA/UCT/Provincial Government
DE	Advertising of CFK building blocks 3 and 4 in development business	WWF-SA/World Bank
De + 1 month	(i) Establishment of Steering and Technical Committees (ii) Appointment of plan coordinator	WWF-SA/UCT/Provincial Government WWF-SA
DE + 2	First stakeholder consultation	Steering Committee
DE + 3	Appointment of consultants for the main building blocks	WWF-SA
DE + 9	Taking stock of the current situation	Coordinator/Consultants
DE + 14	Development of scenarios and long-term strategy	Technical Committee/Consultants
DE + 16	Second Stakeholder consultation	Steering Committee
De + 18	Preparation of the 5-year investment program	Coordinator/Technical Committee/Consultants
DE + 19	Third stakeholder consultation	Steering Committee
DE + 20	Program presentation to financial agencies including GEF	Steering/Technical Committees/ WWF-SA

## 7. COST ESTIMATE

### 5. Costing (in SUS)<sup>1</sup>

Components	GEF contribution	Local contribution <sup>2</sup>	Total	% of Grand Total
Biodiversity (terrestrial and marine)	300 000	30 000	330 000	32

Institutional	250 000	20 000	270 000	26
Socio-economic	200 000	15 000	215 000	20
Coordination	100 000	10 000	110 000	10
Public participation	50 000	10 000	60 000	6
Preparation of GEF submission	50 000	10 000	60 000	6
Sub-total	950 000	95 000	1045 000	
Contingency (10% of total)	95 000	9 500	104 500	
Total	1 045 000	104 500	1 150 000	

- <sup>1</sup>. Costing for “green” issues only; “brown” issues to be funded from local external sources
- <sup>2</sup>. Local contribution corresponds to funds already budgeted for participating agency (eg. SANP, UCT)

## Annex 16

# CAPE PENINSULA BIODIVERSITY CONSERVATION PROJECT PROJECT APPRAISAL DOCUMENT

## ENVIRONMENTAL ANALYSIS

### EXECUTIVE SUMMARY

## EXECUTIVE SUMMARY

### 1. Introduction

This Environmental Analysis (EA) was commissioned by South African National Parks (SANP) and carried out by the Environmental Evaluation Unit (EEU), University of Cape Town. A first draft was presented during the World Bank appraisal in September 1997 with NGO participation. This draft was then made available to the public and finalized by EEU in October 1997.

### 2. Terms of Reference

The Environmental Evaluation Unit's terms of reference for this study were to:

1. Review the existing institutional and legal context to determine whether the potential environmental implications (both negative and positive) of the Cape Peninsula Biodiversity Conservation Project would be managed effectively.
2. Identify the potential environmental impacts of the Cape Peninsula Biodiversity Conservation Project.
3. Assess the significance of potential negative and positive environmental impacts arising from the Cape Peninsula Biodiversity Conservation Project through the application of standardised assessment criteria (first step criteria: extent, magnitude, duration, and second step criteria: risk, probability and cumulative effect).
4. Recommend management measures required to effectively manage potential impacts arising from the Cape Peninsula Biodiversity Conservation Project.

### 3. Cape Peninsula Biodiversity Conservation Project

The Cape Peninsula Biodiversity Conservation Project consists, in its initial phase (6 years), of three distinct (yet interrelated) clusters of activity.

- The largest element involves establishing a national park on the Cape Peninsula which will integrate the conservation of the area's terrestrial and marine biodiversity under a single management authority (see Figure 2).
- The second component involves the management of the Table Mountain Fund by World Wide Fund for Nature, South Africa (WWF-SA).
- The final cluster of activities involve the compilation of a strategic plan and investment programme for conservation of the biodiversity of the Cape Floral Kingdom (see Figure 1).

### 4. Scope of and approach to the EA

The EA aimed to:

- Focus on the activities encompassed in the three broad components of the Cape Peninsula Biodiversity Conservation Project identified for Global Environmental Facility funding.
- Be informed by, and be undertaken in accordance with, the South African Integrated Environmental Management guidelines (Department of Environment Affairs, 1992). Although Integrated Environmental Management does not require public participation for an initial EIA, relevant specialists and key interested and affected parties were consulted where appropriate.
- Approach the environment in an holistic and integrated fashion. The environmental effects were assessed for significance in the following interrelated categories: natural environment (e.g. fauna and flora, physical features and processes); socio-economic (e.g. social delivery, environmental education, economic empowerment, revenue generation, skills training and capacity building), and user experience (e.g. quality of experience, sense of place, aesthetics, accessibility, range of recreational activities, information).

Although the programmes (and activities) that make up the Cape Peninsula Biodiversity Conservation Project were assessed separately, they should not be seen in isolation. These programmes are interrelated and thus need to be integrated to ensure effective operational management of the proposed Cape Peninsula National Park.

## **5. Key assumptions and limitations**

Key assumptions and limitations relevant to the EA are as follows:

- The EEU has assumed that the information supplied to them by the SANP is comprehensive and accurate;
- In evaluating the overall significance of the effects of the programmes, the EEU assumed that mitigatory actions (measures committed to by SANP and recommendations made by the EEU relating to each programme) would be effectively implemented by the SANP. Without these mitigatory actions, the significance ratings would change substantially and become largely negative in status.
- This study had to be undertaken in a very short time period (first draft: 4 weeks and second draft: 4 weeks). Verification of information and new research was therefore limited. However, the EEU is confident of its EA. The initiation of monitoring and auditing programmes [committed to as part of the environmental management system (EMS)] will act as future checking mechanisms for the proposed programme.

## **6. Key findings relating to legal context and institutional capacity**

Key findings of the Initial Assessment regarding legal context and institutional capacity are as follows:

### **6.1 Legal and statutory context**

A review of the legal and statutory context found that:

- There is a political commitment (in terms of existing South African legislation and policies) to protect, regulate and invest in biodiversity conservation.
- Regarding areas within the boundaries of the proposed National Park, the National Parks Act 57 of 1976 will supersede all existing legislation. In terms of an agreement reached between SANP and local authorities, SANP is committed to Integrated Environmental Management (IEM) which include environmental impact assessments for any infrastructural developments such as roads or buildings.
- Regarding developments on the boundaries of the proposed National Park, IEM regulations, published on 5 September 1997 under the Environmental Conservation Act 73 of 1989, require that environmental impact assessments be undertaken for listed activities. The IEM regulations will take effect from March 1998 onwards.

## **6.2 Institutional capacity of the South African National Parks, WWF-SA and National Park Committee**

The successful implementation and ongoing management of the components of the Cape Peninsula Biodiversity Conservation Project is dependent mainly on the strong institutional capacity of the National Parks Board.

The initial evaluation found the SANP to be capable of successfully managing this project, once the integration and training of personnel is completed and mechanisms are in place to interact with local authorities and land owners to address urban interface issues on an ongoing basis.

WWF-SA, which will manage and administer the Table Mountain Fund has a good reputation and track-record and has as its major objective biodiversity conservation. WWF-SA has managed many similar projects efficiently. The EEU's initial evaluation found them capable of effectively managing their component of the Cape Peninsula Biodiversity Conservation Project.

The National Park Committee was appointed in April 1997 by the Minister of Environmental Affairs and Tourism. Its terms of reference are: to be the driving force for the proposed National Park in the Cape Peninsula within the general policy framework of the SANP; to propose significant policies to the SANP after wide public consultation; to monitor and advise the SANP as to whether the integrated environmental management procedures are followed for infrastructural developments within the national park or areas possibly affecting it; to monitor the reporting process of the SANP to the major stakeholders on a regular basis; to recommend the appointment of advisory subsidiary committees; and to recommend a name for the new National Park after extensive public consultation.

The EEU's assessment has found that this committee is currently unable to fulfil the terms of reference as given by the Minister. The rationale is threefold:

- Due to the complexity of the issues to be addressed, the committee has not had enough time to address its terms of reference.
- Individuals appointed to this committee come from diverse backgrounds and it has been difficult for them to act in a cohesive fashion.
- The committee also lacks expertise in specific fields and issues can, as a result, not be satisfactorily addressed until all members are properly informed.

## 7. Impact assessment: methodology

The EEU used a number of criteria to determine the significance of impacts, namely: extent, magnitude, duration, risk, probability and cumulative effect. An assessment procedure was followed to assign (1) a *significance rating* and (2) a *status* (positive or negative).

A significance (importance) rating was assigned to potential environmental impacts both **with** and **without the Cape Peninsula Biodiversity Conservation Project**. It is important to note that although the Cape Peninsula Biodiversity Conservation Project will give biodiversity conservation and environmental management a "kick-start" in the initial years of establishing the proposed National Park, the Global Environmental Facility (GEF) funds will only cover 14% of the costs. 86% of the funds required for the operation and management of the proposed National Park will be supplied through other sources.

Without the GEF funds, biodiversity conservation will follow the "slow-go" scenario, where the focus will initially be on development of infrastructure and tourism development to obtain the necessary funds for biodiversity conservation (i.e. there will be less funding available for alien plant eradication programmes and these plants will therefore be removed at a slower rate). With GEF funds, biodiversity conservation will follow the "fast track" scenario, where most of the invasive alien plants within the boundaries of the proposed National Park will be removed within the initial six year period, thereby directly benefiting biodiversity conservation.

Key programmes forming part of the Cape Peninsula Biodiversity Conservation Project are:

- invasive alien plant control;
- environmental education;
- fire control and management;
- tourist infrastructure development;
- capacity building;
- incorporation of marine environment into the proposed National Park;
- knowledge management and monitoring and evaluation; and
- the development of a strategic plan and investment programme for the Cape Floral Kingdom.

Potential impacts were assessed in three categories:

- natural environment (e.g. fauna and flora, physical features and processes)
- socio-economic (e.g. social delivery, environmental education, economic empowerment, revenue generation, skills training and capacity building), and
- user experience (e.g. quality of experience, sense of place, aesthetics, accessibility, range of recreational activities, information). In the context of this study the term 'users' refers to recreational users and visitors.

The significance ratings were defined as follows:

- **High:** impacts are pronounced and felt in a region or beyond, and/or locally over an extended period of time (>6 years).

- **Medium:** impacts will have a significant effect locally to regionally which may extend over the duration of a project programme or activity (<6 years), but are likely to be of shorter duration.
- **Low:** impacts will be localised and temporary.
- **No change:** a potential concern which, upon evaluation, was found not to change the status quo.

A *precautionary principle* was integrated into the assessment methodology. A conservative significance rating was awarded in instances where there was insufficient information but the potential for a high level of risk associated with an impact.

*It should be noted* that the SANP has committed itself publicly, both in writing and verbally, and in agreements with local authorities, to the implementation of necessary mitigatory actions to prevent and/or minimise any potential impacts arising from its activities. In the assessment of the overall significance of each programme, the EEU therefore assumed that the SANP will honour this commitment.

## 8. Synopsis of EA findings

The synopsis of the EA findings are provided in tabular form overleaf. The tables evaluate two scenarios:

1. A "slow-go" scenario - without the specified programmes (see section 7 above) forming part of the Cape Peninsula Biodiversity Conservation Project; and
2. A "fast track" scenario - with the specified programmes forming part of the Cape Peninsula Biodiversity Conservation Project.

The first and second columns of the attached tables list the broad potential environmental impacts and their potential effects respectively. Columns three to eight provide the significance rating and status both **without** (slow-go scenario) and **with** (fast-track scenario) the programmes forming part of the Cape Peninsula Biodiversity Conservation Project. Each of these potential environmental impacts (and their respective effects) is described in more detail in the main body of this report.

Recommendations and conclusions for each programme are also provided in tabular form.

The assessments were made by a multi-disciplinary panel consisting of members of the EEU team. The SANP project team supplied relevant information and commented on all iterations that took place during the development of this document.

Only the tables regarding the invasive alien plan control program are presented in this annex as a model. The tables concerning the other project components are available on request from project file.

### 8.1 INVASIVE ALIEN PLANT CONTROL PROGRAMME

The invasive alien plant control programme of the Cape Peninsula Biodiversity Conservation Project is designated to receive a total of approximately US\$ 12 million (SANP: US\$ 7 million and WWF-SA: US\$ 5) GEF funding. The objective of this six year programme is to remove the entire initial infestation of woody, seed-bearing alien invasive plants from the proposed National Park, except on modified landscapes. Potential environmental impacts, their related environmental effects and an assessment of significance and status both without and with this programme, are provided below.

POTENTIAL IMPACTS	POTENTIAL EFFECTS	WITHOUT THE PROGRAMME slow-go scenario			WITH THE PROGRAMME fast track scenario		
		NATURAL	SOCIO-ECONOMIC	USER EXPERIENCE	NATURAL	SOCIO-ECONOMIC	USER EXPERIENCE
Improved biodiversity conservation	<ul style="list-style-type: none"> <li>increased stability of endemic flora</li> <li>increased stability of indigenous fauna</li> <li>minimisation of species loss</li> <li>larger cleared areas (reduced infestation)</li> <li>reduced alien seed banks</li> <li>increased risk posed through use of chemicals solutions</li> </ul>	low (+)	low (+)	low (+)	high (+)	medium (+)	high (+)
Increased socio-economic opportunities	<ul style="list-style-type: none"> <li>job creation</li> <li>capacity building of contractors</li> <li>capacity building of labourers</li> <li>higher environmental awareness</li> <li>increased gender equality</li> <li>loss of fuel and income source</li> </ul>	no change	low (+)	no change	no change	high (+)	no change

POTENTIAL IMPACTS	POTENTIAL EFFECTS	WITHOUT THE PROGRAMME slow-go scenario				WITH THE PROGRAMME fast track scenario			
		NATURAL	SOCIO-ECONOMIC	USER EXPERIENCE	NATURAL	SOCIO-ECONOMIC	USER EXPERIENCE		
Increased fire risk (short term)	<ul style="list-style-type: none"> <li>reduction in alien seed store</li> <li>germination of soil stored alien seeds</li> <li>germination of fynbos seeds</li> <li>loss of indigenous fauna and flora</li> </ul>	low (-)	low (-)	low (-)	medium (-)	low (-)	low (-)		
Cost effectiveness	<ul style="list-style-type: none"> <li>(in)effective phasing of control programme</li> <li>use of (un)suitable control methods</li> </ul>	no change	low (-)	no change	no change	medium (+)	no change		
Aesthetic degradation (short term)	<ul style="list-style-type: none"> <li>degradation of views of local residents and day tourists to the city</li> <li>degradation of user experience</li> </ul>	low (-)	low (-)	low (-)	low (-)	low (-)	medium (-)		
Increased trampling and littering	<ul style="list-style-type: none"> <li>degradation of fynbos as a result of trampling</li> <li>visual degradation resulting from litter</li> </ul>	low (-)	low (-)	low (-)	medium (-)	low (-)	low (-)		
Increased soil and air pollution	<ul style="list-style-type: none"> <li>increased soil contamination by chemicals</li> <li>increased groundwater pollution</li> <li>increased air pollution</li> <li>increased pollution of water systems</li> </ul>	low (-)	low (-)	low (-)	low (-)	low (-)	low (-)		

POTENTIAL	POTENTIAL EFFECTS	WITHOUT THE PROGRAMME	WITH THE PROGRAMME
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CONCLUSIONS	RECOMMENDATIONS
<p>The funding of the invasive alien plant control programme would have significant benefits for biodiversity conservation and provide employment opportunities and skills development to previously disadvantaged communities. Cost effectiveness depends on phasing and methods used and can be either positive or negative.</p> <p>Potential negative environmental effects include: increased fire risk, short term aesthetic degradation; increased trampling and littering; increased soil and air pollution; noise from the use of mechanical equipment; windblown sand and potential health and safety risks.</p> <p>Except for the aesthetic impact of cleared areas, which is temporary and short-term, all negative impacts can be effectively managed.</p> <p>The SANP will address potential impacts using the following measures:</p> <ul style="list-style-type: none"> <li>• Management and monitoring of the programme (and related staff) by section and regional rangers and the Environmental Manager.</li> <li>• Implementation of a flexible (and adaptable) alien plant eradication plan which makes provision for follow up clearing and ongoing monitoring.</li> <li>• Integration of requirements for fire management into the programme to reduce the potential for loss of species, damage to property and personal injury.</li> <li>• Ensure good on-site supervision for alien clearing programmes.</li> <li>• Ensure workers do not make cooking fires on the mountain.</li> <li>• Provision of appropriate training for labourers and contractors regarding use of chemicals, equipment, identification of alien plants (before commencement of programmes).</li> <li>• Ensure suitably qualified trainers, train workers to employ the correct methods to ensure maximum mortality of alien species during initial clearing.</li> </ul>	<p>Additional measures required:</p> <ul style="list-style-type: none"> <li>• Investigate alternative economic solutions to ensure members from previously disadvantaged communities, who are currently working as woodcutters or woodsellors, have a source of income, once the invasive alien species are removed from within the boundaries of the proposed National Park.</li> <li>• Ensure the daily removal of litter from work sites.</li> <li>• Where appropriate, stabilise steep slopes to reduce soil erosion.</li> <li>• Restabilise areas where wind blown sand poses a nuisance to neighbouring communities with the appropriate indigenous plant species.</li> <li>• Plan access to alien plant clearing sites to minimise negative environmental impacts.</li> <li>• Use the clearing of alien plants as an opportunity to educate the public regarding the regeneration of indigenous vegetation and the importance of biodiversity conservation.</li> <li>• Do not use chemical treatments during wet and windy weather conditions.</li> <li>• In ecologically sensitive areas limit the use of chemicals to minimise the potential harmful effects on invertebrates or aquatic ecosystems.</li> <li>• Burn alien plants during calm winter days (while recognising that this will contribute to air pollution).</li> </ul>

**CONCLUSIONS (CONTINUED):**

- Ensure staff wear appropriate protective clothing (e.g. boots, hats, gloves) to reduce the risk of injury.
- Use of labour from previously disadvantaged communities wherever practically possible.
- Encourage community participation and long term community support for the proposed National Park through outreach initiatives.
- Undertake additional research on biocontrol measures used in alien plant control which will be fed into the knowledge management system.
- Undertake effectiveness studies on alien clearing methods.
- Monitor the effectiveness (ecological and social delivery) and cost - effectiveness of alien clearing operations.

From the assessment, these measures would contribute towards the mitigation of potential negative impacts and optimisation of benefits arising from the programme. Additional measures identified are listed under recommendations.

## 9. Mitigation and monitoring plan

The SANP and WWF-SA have committed itself to developing and implementing an Environmental Management to be minimized within the next year to systematically control, manage and review their level of environmental performance. SANP will particularly follow the International Standards Organisation (ISO) 140001 requirements.

A mitigation and monitoring plan aimed at mitigating and monitoring potential negative environmental impacts arising from activities within the proposed Cape Peninsula National Park, will be included in the EMS. The different programmes and plans forming part of the Cape Peninsula Biodiversity Conservation Project will therefore need to be integrated into the overall EMS.

It is essential that the measures identified by SANP in each section (see conclusions in Sections 4 to 11), and recommendations made by the EEU, be integrated into the EMS to ensure continual improvement in environmental management by the SANP.

The EEU recommends that the EMS be developed to address the following broad categories:

- conservation and sustainable utilisation of natural resources
- visitor management
- information management
- public relations (communication, involvement, consultation, capacity building and public participation)
- training of SANP staff and contractors

These categories are interrelated and integrated and should not be seen as isolated components.

The EEU's evaluation of institutional capacity shows that SANP is, with the assistance of specialist consultants, capable of successfully developing and implementing an ISO 14001 EMS.

## 10. Overall recommendations

The successful implementation and ongoing management of the components of the CPBCP are dependent on the institutional capacity of the SANP and WWF-SA. Overall recommendations apply mostly to the South African National Parks as the managing authority of the proposed National Park. They are as follows:

### Regarding legal and statutory context related to the CPBCP

Key recommendations relating to the legal and statutory context are:

- ⇒ The National Parks Act 57 of 1976, the empowering legislation of the SANP, will need to be modernised to reflect present day socio-political norms and eliminate elements of ambiguity especially relating to the management of urban fringe areas of the proposed National Park over the long term. In addition, the Act will need to be adapted to allow for mechanisms whereby the SANP may exert influence over policies, programmes and actions affecting land use planning and development beyond the boundaries of a park, where necessary, both to protect the ecological processes and to safeguard the aesthetic value of the scenic national assets in parks. Given the urban setting of the proposed National Park, the National Parks Act 57 of 1976, must ensure the sustainable multi-purpose use of Park areas.

Although it is important for the National Parks Act 57 of 1976 to be revised, it should not be a constraining factor towards the allocation of GEF funds for the CPBCP.

- ⇒ Form strong, transparent and co-operative relationships and binding agreements with relevant local authorities over the short to long term to address issues relating to the management of the urban interface. It is further recommended that SANP regularly interact with adjacent landowners and other key stakeholders.

## Regarding programmes forming part of the CPBCP

To ensure SANP will effectively manage the programmes forming part of the CPBCP the following management actions are recommended:

- Within one year develop and implement an environmental management plan (EMP) according to the International Standards Organisation (ISO) 14001 guidelines. *SANP has stated its commitment to such an undertaking.*
- Increase communication with National Park Committee, NGOs, CBOs and tourist organisations to raise awareness of SANP activities. *SANP has started implementing this strategy.*
- Build capacity of local NGOs, CBOs and previously disadvantaged communities to support management initiatives. *SANP has started implementing this strategy.*
- Promote co-operative relationships with relevant local authorities and recognised educational and scientific institutions. *SANP has stated its commitment to such an undertaking.*
- Develop and follow a growth management strategy to effectively manage increasing numbers of tourists to the proposed Cape Peninsula National Park, while ensuring protection of remote areas with wilderness characteristics. *SANP has stated its commitment to such an undertaking.*
- Co-ordinate (and develop) contingency plans in partnership with relevant authorities in order to ensure:
  - \* the management of pollution incidents and accidents in marine environments; and the
  - \* joint management of fire control and emergencies in urban fringe areas and the proposed National Park.

## 11. Conclusion

The proposed National Park will be proclaimed on an incremental basis in early 1998. The SANP will then become the managing authority of the proposed National Park. The proposed National Park will be managed in terms of the National Parks Act 57 of 1976.

### Regarding legal and statutory context related to the CPBCP

A review of the legal and statutory context found that:

- There is a political commitment (in terms of existing South African legislation and policies) to protect, regulate and invest in biodiversity conservation.
- Regulations published on 5 September 1997 under the Environmental Conservation Act 73 of 1989 will require environmental impact assessments to be undertaken for development proposals on the boundaries of the proposed National Park.
- The National Parks Act 57 of 1976 will supersede all existing legislation within the boundaries of the proposed National Park. In terms of an agreement reached between SANP and local authorities, SANP is committed to Integrated Environmental Management which includes environmental impact assessment for any infrastructure developments.

Key potential constraints related to the CPBCP are :

⇒ SANP will need to effectively absorb and integrate the approximately two hundred and twenty employees being transferred as part of land transfer agreements. To facilitate this integration process, the SANP project team will adopt a comprehensive in-house training programme to ensure good environmental performance and management of the proposed National Park and CPBCP. This transition period, notwithstanding how well managed, will understandably cause a degree of organisational disruption and could constrain effective environmental management in the short term.

SANP already has a core project team, institutional structure and operational management strategies in place to develop, implement and manage the CPBCP.

Issues regarding urban interface management still need to be addressed as areas not included in the proposed National Park would continue to fall under existing legislation.

## Regarding programmes forming part of the CPBCP

The major challenge facing the SANP is the management of increasing numbers of visitors to the proposed Cape Peninsula National Park without degrading the natural environment and the effective conservation of biodiversity. The Cape Peninsula Biodiversity Conservation Project will enable the SANP to follow a fast track versus a slow-go scenario thereby making a positive contribution to biodiversity conservation, mainly through the removal of invasive alien plants within the next six years.

Potential negative environmental impacts identified in this study can all be managed to eliminate or reduce environmental risks arising from SANP activities. An assumption is made that SANP will meet their commitments and follow the EEU's recommendations as given in this report.

Key benefits of the Cape Peninsula Biodiversity Conservation Project are:

- Eradication of alien vegetation in the proposed National Park to contribute to long term biodiversity conservation of the Cape Floral Kingdom.
- Improved conservation of terrestrial and marine ecosystems in the Cape Peninsula and the Cape Floral Kingdom.
- Provision of job opportunities and capacity building initiatives to members of local communities, thereby also involving previously disadvantaged communities in skills development and nature conservation activities. This forms part of National Parks Board's broader social delivery programme.
- Provision of environmental education programmes to target previously disadvantaged communities and users of the proposed National Park.
- Upgrading and development of tourist infrastructure to ensure a high quality user experience.
- Management of the proposed National Park to reduce risks of wild fires and other potentially dangerous situations.
- Improved baseline information, monitoring and evaluation and research to inform and continually update National Parks Board's knowledge management system thus contributing to effective park management.

The overall finding of the EEU's initial environmental impact assessment is that SANP is potentially able to:

- conserve biodiversity effectively
- manage recreational users of the proposed National Park adequately without degrading the natural environment; and
- contribute to capacity building of previously disadvantaged communities.

With GEF funding the Cape Peninsula Biodiversity Conservation Project will be able to follow a "fast track" scenario as GEF funding will give a "kick-start" to the conservation of biodiversity and the establishment of the proposed National Park. Without GEF funding, a "slow-go" scenario will be followed, where the focus will initially be on development of infrastructure to obtain the necessary funds for active biodiversity conservation.