



# 2010



## EROSION MANAGEMENT PLAN



FOOTPRINT ENVIRONMENTAL

### SERVICES

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## **v. EXECUTIVE SUMMARY**

The Groot Winterhoek is an extraordinary example of the Cape Floral Region. This high altitude, rugged and beautiful landscape is a World Heritage Site. The biophysical nature of the area makes it highly prone to erosion. The fragility of the environment was severely impacted historically due to poor land management practices and frequent fires. Well informed and effective management of this area is key if erosion problems are to be remedied.

The first section of the report aims to contextualise the Groot Winterhoek in terms of historical management by the Department of Forestry, Department of Nature and Environmental Conservation and finally by CapeNature. Thereafter a brief summation follows of the aims and objectives of the CapeNature Wilderness Policy and the mission of UNESCO in terms of its status as a World Heritage Site. If implemented correctly, the key recommendations for repair & maintenance and rehabilitation will deliver directly on the mission and objectives set in these policy documents.

The current status of the footpaths, tracks and sites that should be targeted for rehabilitation was established during a field survey. Each of the sites was recorded on a GPS and the data transferred to an Excel Spreadsheet and transformed to a DBF 4 format for use in Arcview 3.2 GIS. The recommendations contained in this report are site specific to each and every one of the erosion sites encountered. Findings indicate that there are in excess of 270 erosion sites on Groot Winterhoek at present. These vary from relatively minor sites to severe erosion gullies that will require an extended period of time to repair. Management or more importantly the absence thereof and staff and contractor capacity both in terms of training and staff numbers are at the root of the problems that are currently being faced by the business unit and the reserve staff of Groot Winterhoek.

For the most part these erosion sites are at a stage where simple but effective repairs should be enough to halt further degradation and with regular monitoring and maintenance these sites should be fully repaired in the short to medium term. The three sites identified as rehabilitation sites will require a more concerted effort over a considerably longer period of time. The most important aspects that will contribute to the success of the rehabilitation effort include availability of adequate budgets to sustain the intervention, capacity building with staff, regular monitoring and in an ongoing manner

the immediate and effective implementation of adaptive management principles if the intervention shows signs failure.

It is very important to realise that erosion control is an inexact science and as such is a learning by doing activity. While both general and site specific intervention recommendations have been given for footpaths, jeep tracks and rehabilitation sites, management on the reserve is young and inexperienced and should be mentored and supported by senior experienced staff through the initial implementation and monitoring phases.

It is possible to complete the initial repair, maintenance and rehabilitation intervention within two years. The first monitoring efforts must commence in the second year. Thereafter (next five years) it is our opinion that all except the rehabilitation sites could be adequately repaired and maintained by the field rangers on Groot Winterhoek.

The importance of monitoring cannot be over stated. It will be the key to success or failure of this intervention and must be rigorously adhered to. The report supplies route specific monitoring recommendations.

Finally, CapeNature should be able to restore Groot Winterhoek by investing sufficient funds and other resources to implement this plan. This will be achieved if there is high level support for the effort in the organisation, effective and capacitated management on the ground ensure that quality work is undertaken and well capacitated field staff to undertake repair, maintenance and monitoring.