

AFRICA

**CAPE FLORAL REGION PROTECTED AREAS
(Extension of “Cape Floral Region Protected Areas”)**

SOUTH AFRICA



Rich heathlands made up of proteas, ericas and restios in Kogelberg Nature reserve - © Mark and Alida Johns

WORLD HERITAGE NOMINATION – IUCN TECHNICAL EVALUATION

CAPE FLORAL REGION PROTECTED AREAS (SOUTH AFRICA) – ID 1007 Bis

IUCN RECOMMENDATION TO WORLD HERITAGE COMMITTEE: To approve the extension under natural criteria.

Key paragraphs of Operational Guidelines:

Paragraph 77: Nominated property meets World Heritage criteria.

Paragraph 78: Nominated property meets integrity and protection and management requirements.

Background note: The existing Cape Floral Region Protected Areas (CFRPA) property was inscribed on the World Heritage List in 2004 under criteria (ix) and (x) (Decision 28 COM 14B.12). Following inscription, several Committee decisions have welcomed the State Party's intentions to extend the property to include additional areas of value. Previous Committee decisions have also highlighted concerns regarding the adequacy of financial resources to ensure effective management of the property (Decisions 30 COM 7B.5; 31 COM 7B.8) and the need to establish a single property-wide coordinating authority to guide management and facilitate the buffering and extension of the property (31 COM 7B.8; 33 COM 7B.6).

1. DOCUMENTATION

a) Date nomination received by IUCN: 18 March 2014

b) Additional information officially requested from and provided by the State Party: Following the IUCN World Heritage Panel a letter was sent to the State Party seeking its response to specific proposals to adjust the boundary of the nominated extensions to the property. The State Party was also requested to update progress on preparing an integrated management plan and to advise on phosphate mining proposals in the West Coast Complex area (which has now been deleted from the nomination). The information in response was received on 10 February 2015.

c) Additional literature consulted: Various sources including Cowling, R. M., et al. (2003) **A Conservation plan for a global biodiversity hotspot- the Cape Floristic region, South Africa**. Biological Conservation 112 (1-2): 191-216. Bradshaw, P. and Holness S. (2013) **Fynbos World Heritage Site Assessments**. Internal report compiled for comparative analysis of sites appropriate for the Extension Nomination of the Cape Floral Region. Timmins, Cape Town. Rutherford, M.C. (1997) **Categorization of biomes**. In: Cowling, R., Richardson, D.M., Pierce, S.M. (eds) **Vegetation of Southern Africa**. Cambridge University Press, Cambridge, pp 91-98 ISBN 0-521-57142-1. DWAF (2004) **Development of a framework for the assessment of wetland ecological integrity in South Africa. Phase 1: Situation Analysis**. Uys, M.C. Contributors Marneweck, G. and Maseti, P. ISBN No.: 0-621-35474-0. Department of Water Affairs and Forestry, Pretoria. Van Wilgen B.W. et al, **Challenges in invasive alien plant control in South Africa**. S Afr J Sci. 2012;108(11/12), Art. #1445, 3 pages. BirdLife International (2014) **Endemic Bird Area Factsheet: Cape Fynbos**. Downloaded from <http://www.birdlife.org> in October 2014. Conservation

International (2014) **Hotspots: Cape Floristic Region**. Downloaded from <http://www.conservation.org/how/pages/hotspots.aspx>, accessed in October 2014. Cowling R.M. and Heijnis C.E. (2001) **Identification of Broad Habitat Units as biodiversity entities for systematic conservation planning in the Cape Floristic Region**. South African Journal of Botany 67(1): 15–38. Friedman Y. and Daly B. (eds) (2004) **Red Data Book of the Mammals of South Africa: A Conservation Assessment: CBSG South Africa**, Conservation Breeding Specialist Group (SSC/IUCN), Endangered Wildlife Trust, South Africa. Linder P.H. (2003) **The radiation of the Cape flora, southern Africa**. Biological Reviews 78: 597–638. Mucina L. and Rutherford M.C. (eds) (2006) **Vegetation Map of South Africa, Lesotho, and Swaziland**. Strelitzia 19. South African National Botanical Institute. Pretoria. Available online at <http://bgis.sanbi.org/vegmap/map.asp>, Accessed in October 2014. WWF (2006) **WildFinder: Online database of species distributions: Montane Fynbos and Renosterveld, and Lowland Fynbos and Renosterveld**. Downloaded from www.worldwildlife.org/WildFinder, ver. Jan-06, accessed October 2014.

d) Consultations: 10 desk reviews received. The mission also met with representatives of the national Department of Environmental Affairs, SANParks, the two provinces concerned with the nomination (Western Cape and Eastern Cape) and their responsible agencies for provincial protected areas (Western Cape Nature Conservation Board known as CapeNature and the Eastern Cape Parks and Tourism Agency), and the City of Cape Town; managers and staff of many protected areas included in the nomination; representatives of a wide range of partners and other stakeholders.

e) Field Visit: Bastian Bertzky, 1-5 October 2014

f) Date of IUCN approval of this report: April 2015

2. SUMMARY OF NATURAL VALUES

The Cape Floral Region (CFR) is located in the southwest corner of South Africa, centred on the Western Cape Province but also expanding into the Eastern Cape and Northern Cape Provinces. The CFR is an exceptionally important region for plant biodiversity globally. It is one of the six Floral Kingdoms of the world, by far the smallest and richest in species relative to its size, and is one of 35 global terrestrial biodiversity hotspots. In less than 0.5% of the area of Africa the CFR has nearly 20% of its flora and in less than 4% of the area of South Africa it has 39% of its flora. Some 69% of the estimated 9,000 plant species in the CFR are restricted (endemic) to this region.

The State Party has advised in its supplementary information of a number of boundary adjustments to the extension areas originally nominated. The changes ensure that all proposed extension areas contribute to enhancing the values of the existing site and satisfy the conditions of integrity as required by the Operational Guidelines. Adjustments were made to five clusters of the originally nominated extension, namely West Coast Complex (deleted); Table Mountain National Park; Agulhas Complex; Langeberg Complex; and the Garden Route Complex. As a result the extended Cape Floral Region Protected Areas (CFRPA) property now covers 1,094,741.5 ha, representing approximately 6% of the total extent of the CFR and almost doubling the extent of the originally inscribed World Heritage site of 557,584 ha.

The extended property if approved includes 157 component parts (land parcels) in 13 clusters (see Table 1), corresponding to the majority of proclaimed protected areas within the CFR that are owned or managed by the State (at national or provincial level). These protected areas include National Parks, Provincial Nature Reserves, Wilderness Areas, State Forests and Mountain Catchment Areas. The property is surrounded by a buffer zone which has also been adjusted to an area of 798,513.85 ha, made up of privately owned, declared Mountain Catchment Areas and other protected areas. The functions of the buffer zone are further supported by other buffering mechanisms such as Stewardship Programmes, Landscape Initiatives, Biosphere Reserves and Critical Biodiversity Areas.

Elevations range from 2077m in the Groot Winterhoek Complex to sea level in several of the clusters. Peaks such as Table Mountain form a scenic backdrop to the Western Cape, and different parts of the property are characterised by rugged mountains, undulating hills, flat lowlands, or rocky and sandy coastlines. The region has a semi-Mediterranean climate of cool wet winters and hot dry summers in the west with summers tending to be rainier in the east. Rainfall varies markedly with topography between 300-500mm in the lowlands to 1000-3300mm in the mountains where snow falls in winter.

As was noted in IUCN's 2004 evaluation of the currently inscribed property, the distinctive flora of the CFR which comprises 80% of its floristic richness, is a sclerophyllous shrubland known as *Fynbos* (fine bush), a fine-leaved vegetation adapted to both the Mediterranean climate and to periodic fires. Its main components are heaths, *Proteaceae*, reedlike *Restionaceae* and geophytes (bulb-plants), including many *Iridaceae*. Plant diversity is based on soil types which vary from predominantly coarse, sandy, acidic, nutrient-poor soils, to alkaline marine sands and richer alluvials. There are areas of evergreen forest in fire-protected gorges and on deeper soils, valley thickets and succulent thickets in the east, and succulent Karoo shrubland in the drier north.

The property is also an outstanding example for a number of biological, ecological and evolutionary processes associated with the Fynbos vegetation. These include (1) the adaptations of the plants to fire and other natural disturbances (2) seed dispersal by ants and termites, (3) the very high level of plant pollination by insects, mainly beetles and flies, birds and mammals, and (4) high levels of adaptive radiation and speciation.

The 13 clusters and their component parts have been selected to provide good representation of the CFR's phytogeographic centres, its 119 recognized Fynbos vegetation types, endemic and/or threatened Fynbos species, and the biological, ecological and evolutionary processes associated with the Fynbos vegetation. According to the nomination, the proposed extension areas were selected because they 1) significantly strengthen the values represented within the existing site; and/or 2) significantly strengthen the integrity of the existing site.

Table 1. Summary of the protected areas or clusters included in the nomination including area of the property and buffer zone should the extension be approved. The extension areas which are the subject of this nomination are also shown.

Cluster Number	PA or Cluster Name	Province	Area of property (ha) including extension	Area of extension (ha)	Area of buffer zone (ha)
1	Cederberg Complex	Western Cape	77,945.50	12,793.80	121,039.75
2	Groot Winterhoek Complex	Western Cape	27,509.61	703.32	103,541.99
3	Table Mountain National Park [#]	Western Cape	21,630.59	4,138.3	101,400.78
4	Boland Mountain Complex	Western Cape	124,717.37	12,070.39	79,418.89
5	Hexrivier Complex	Western Cape	22,641.40	22,641.40	88,248.01
6	Riviersonderend Nature Reserve	Western Cape	26,630.52	26,630.52	42,626.23
7	Agulhas Complex	Western Cape	24,159.18	24,159.18	0
8	De Hoop Nature Reserve	Western Cape	32,481.73	0	31,806.27
9	Langeberg Complex	Western Cape	43,660.15	29,016.82	76,420.35
10	Garden Route Complex	Western Cape	176,998.35	176,998.35	60,906.95
11	Anysberg Nature Reserve	Western Cape	79,629.40	79,629.40	0
12	Swartberg Complex	Western Cape	187,337.76	75,307.69	92,295.67
13	Baviaanskloof Complex	Eastern Cape	249,399.94	73,068.14	808.96
	TOTAL^{##}		1,094,741.50	537,157.31	798,513.85

[#] This table includes the Cecilia Plantation (area 45; 57.04 ha) in the buffer zone of Table Mountain National Park, as confirmed in the State Party's cover letter to IUCN accompanying the submitted supplementary information.

^{##} The total area of the property's buffer zone includes the 42,626.23 ha buffer zone of Riviersonderend Nature Reserve which was wrongly omitted in the total area given in the State Party's supplementary information.

3. COMPARISONS WITH OTHER AREAS

The global comparative analysis provided in the re-nomination is very short, simple and general; however, the earlier evaluation and inscription of the serial property has already demonstrated the Outstanding Universal Value of the CFR's overall biodiversity values, as represented in the eight clusters of the existing property. Since the original inscription, further research and surveys have confirmed the CFR's globally exceptional biodiversity values, and the State Party, IUCN and UNESCO have long supported the idea to extend the existing site to provide a better representation of the full range of biodiversity values in the region.

Global comparative analysis confirms the overlap of the CFR with biogeographical units, where no other existing World Heritage site is located: Cape Sclerophyll and Karoo provinces; Mediterranean Forests, Woodlands, and Scrublands biome in the Afrotropic realm; and Montane fynbos and renosterveld ecoregion. The re-nominated area also belongs to a biodiversity hotspot, Cape Floristic Region, where no other existing World Heritage or Tentative List site is located and represents the terrestrial Global 200 Fynbos priority ecoregion that is not otherwise represented on the World Heritage List. Finally, it overlaps with two Endemic Bird Areas (EBAs), two Centres of Plant Diversity and nine Important Bird Areas (IBAs) / Key Biodiversity Areas (KBAs). Furthermore, the existing property has been identified as one of the most irreplaceable protected areas in the world for the conservation of amphibian, bird and mammal species.

In this re-nomination, the comparative analysis focuses rightly on the additional site selection within the region, building on an internal 2013 study that compared protected areas (PAs) and PA complexes based on several biodiversity criteria. The study's primary criteria included Fynbos extent, number of Fynbos habitat (vegetation) types, and number of these types endemic to the PA / complex – all these criteria fit well under criterion (ix). The study's supporting criteria included average plant species richness, Fynbos species richness, and endemic Fynbos species present – all these criteria fit well under criterion (x). IUCN was concerned that the inclusive approach to this analysis resulted in many, often small component parts and a potentially fragmented serial site. The site configuration which clusters smaller component areas (some as small as 0.04 ha) into larger complexes of between 15,000 to 190,000 ha alleviates this concern to some extent; however, a number of originally included areas were questionable in terms of adding substantial values and integrity to the existing property. IUCN believes the further boundary modifications referred to above have refined and strengthened the value of the extension.

In conclusion the Outstanding Universal Value of CFR under both criteria (ix) and (x) has already been recognized in the 2004 inscription. This extension would add 5 new clusters and a total of 126 protected land parcels of fynbos to the 8 existing clusters with their 31 land parcels. The extension would more than double the number of unique fynbos types that are protected in the property and nowhere else. Many of the proposed additions would be in the lowland fynbos areas which are poorly represented in the existing property. Conservation connectivity improvements would also be significant should the extension be approved.

4. INTEGRITY, PROTECTION AND MANAGEMENT

4.1. Protection

All of the proposed extension areas are designated as National Parks, Provincial Nature Reserves, Wilderness Areas, State Forests and Mountain Catchment Areas under various pieces of legislation including the National Environmental Management: Protected Areas Act (NEM: PAA) (57 of 2003), National Forests Act or by decree (Ordinance). The buffer zones are made up of privately owned, declared Mountain Catchment Areas and other legally protected areas.

NEM:PAA recognizes as 'protected areas' World Heritage Sites; National Parks; Nature Reserves; Special Nature Reserves; Protected Environments; Marine Protected Areas; Specially Protected Forest Areas; and Mountain Catchment Areas. Special regulations exist under NEM: PPA for the administration of World Heritage Sites, National Parks and Special Nature Reserves. Other important pieces of legislation include the Environmental Impact Assessment (EIA) Regulations, Disaster Management Act, and the Provincial Parks Board Act for the Eastern Cape. In addition, numerous plans, strategies and frameworks at national, provincial and municipal levels guide and regulate development activities in and around the property and its buffer zones. According to recent reports, the South African World Heritage Convention Act, no 49 of 1999, was amended on 18 December 2013 to be included under the Specific Environmental Management Act (SEMA) framework instead of the National Environmental Management Act (NEMA). The compliance and enforcement tools under SEMA are reportedly more stringent than those under NEMA. The present legal protection and management framework appears to be adequate.

All of the proposed extension areas are protected areas that are owned and/or managed by the State. The few protected areas which are not owned by the State, were purchased by WWF-SA and have 99-year or 'in perpetuity' lease agreements with the relevant management authority.

The use of any terrestrial resources (marine resources not relevant here) in the property and the proposed extension areas is well regulated by the environmental laws and regulations applicable to the different types and zones of protected areas. Low-intensity commercial timber (of native hardwood trees) and/or flower harvesting takes place in some areas (e.g. Garden Route National Park) and provide some revenues for park management and/or small benefits to local communities and economies.

IUCN considers that the protection status of the nominated extended property meets the requirements of the Operational Guidelines.

4.2 Boundaries

The re-nominated property covers approximately 6% of the total extent of the CFR and includes almost all

currently proclaimed protected areas under State management in the region. At a coarse scale, the property is made up of 13 medium to large protected areas or clusters, however, at a finer scale, the property appears much more fragmented and includes many small and sometimes 'isolated' land parcels. All national parks and many of the other protected areas (e.g. Boland Mountain Complex) have zoning plans.

The State Party's review and refinement of the component parts contributing to this extension has resulted in adjusted boundaries which better reflect the values of the enlarged site and improve integrity and connectivity.

The property is surrounded by extensive buffer zones (made up of privately owned, declared Mountain Catchment Areas and other protected areas) and supported by various buffering mechanisms in the region. Together, these provide good connectivity and landscape integration for most of the PAs / PA clusters, especially in the mountain areas. Only two of the 13 clusters do not have a buffer zone defined: the Agulhas Complex and Anysberg Nature Reserve. If the areas within the buffer zones and buffering mechanisms are added to the area of the property, the whole 'network' covers 20% of the CFR. IUCN notes that the Cecilia Plantation (area 45) whilst indicated by the State Party as now excluded from the nomination remains shown on the maps and within the revised nomination table. This inconsistency should be clarified.

IUCN also notes that some of the longstanding issues with local communities and landowners around Table Mountain National Park result at least in part from confusion over the exact boundaries of the property. If the extension is approved, the legally gazetted boundaries of the property should be brought in line with those officially inscribed.

In conclusion the re-nominated property is of sufficient size, has adequate buffer zones and buffer mechanisms, mostly adequate zoning schemes within its PAs, and is overall relatively well connected (especially in the mountain areas, less so in the lowlands) and well integrated into the surrounding landscape.

IUCN considers that the boundaries of the nominated extended property meet the requirements of the Operational Guidelines.

4.3 Management

Individual sites all have management plans, however, some plans are outdated and others are in the process of being updated. In addition to the PA management plans, numerous plans, strategies and frameworks at national, regional and local levels concern the property and its buffer zones. As has been noted in past Committee decisions, the CFRPA serial property lacks an overall management strategy but this framework is now being commissioned. The State Party has advised that several Environmental Management Framework (EMFs) already exist for portions of the CFR which

need to be integrated within an overall EMF. It is anticipated that work on the EMF will start in earnest during the course of 2015.

A Joint Management Committee (JMC) for the whole property was established in 2010 and involves the three management authorities (SANParks, CapeNature and Eastern Cape Parks and Tourism Agency) and the national Department of Environmental Affairs (DEA). The JMC has a coordinating role but limited decision-making power over any of the individual protected areas.

Overall, the governance arrangements for the individual protected areas are considered adequate. Management planning (including zoning / re-zoning) involves stakeholder consultation, and the buffer zones and buffering mechanisms are implemented through consultation and collaboration of a wide range of stakeholders. The various Stewardship Programmes, Landscape Initiatives, Biosphere Reserves and Critical Biodiversity Areas / Corridors are particularly noteworthy in this regard.

The management organisation and capacity of the three management authorities is overall high and certainly adequate for a World Heritage property. In general, all three authorities deliver effective protection and management. Challenges exist locally in the enforcement and management of lowland / coastal areas with high human pressures / influence, while the mountain areas are overall under lower pressure / influence and thus 'easier' to enforce and manage. Resource issues have been noted in the past by IUCN and UNESCO and, based on the discussions during the mission, continue to be an issue for CapeNature and, to a lesser extent, the Eastern Cape Parks and Tourism Agency. All three authorities acknowledge the importance of the substantial external funding (e.g. from donors such as the World Bank, GEF, CEPF and many NGOs) and support (e.g. through the public works programmes) the region receives.

All three authorities are recognized for their dedicated and skilled staff. Staff numbers are greatest in the national parks, which are also subject to some of the biggest management challenges (including tourism pressure); however, numbers can be relatively low in some of the nature reserves in the mountains. The different public works programmes that supply labour for the majority of hands-on conservation work make a critical contribution to the management of the property and its buffer zones. All authorities make good use, and rely heavily, on this support.

The biggest threats to the property – invasive alien species (IAS), fire / water related issues, and climate change – are all well understood and addressed in the planning and management of the protected areas and their buffer zones and buffering mechanisms. The State Party, management authorities and their partners are in fact recognized as global leaders in several of these areas. Monitoring and evaluation takes place at the level of individual protected areas, across the portfolio of each of the three management authorities, and at regional level through the Cape Action for

People and the Environment (CAPE) Monitoring and Evaluation (M&E) protocol.

Overall, the management planning, monitoring and evaluation arrangements for the individual protected areas are considered adequate, and these are well complemented by the buffer zones and buffering mechanisms.

Whilst noting the urgent need for a property-wide management strategy and concerns regarding the adequacy of financial resources, IUCN considers the management of the nominated extended property nevertheless meets the requirements of the Operational Guidelines.

4.4 Community

As evident during the mission, the preparation of the re-nomination has for the most part included consultation and collaboration of a wide range of stakeholders in the CFR, many of which have a long history of working together. Through the broader Cape Action for People and the Environment (CAPE) and its many projects, different stakeholders and rights holders in the CFR appear to have been identified and consulted. Several public works programmes such as Working for Water also involve many stakeholders and provide clear benefits to the local communities. The various mechanisms in the buffer zones, which include privately owned, declared Mountain Catchment Areas, Stewardship Programmes, Landscape Initiatives, Biosphere Reserves and Critical Biodiversity Areas / Corridors, involve landowners, local communities and other stakeholders and rights holders.

Overall, the nomination correctly states that the number of inhabitants for each inscribed or proposed PA / PA complex is 'negligible or zero' and any 'habitation is usually restricted to staffing accommodation'; however the mission noted some localized encroachments and a small, voluntary resettlement project which require ongoing attention.

South African laws governing protected areas require all management authorities to adopt a coherent spatial planning system in all National Parks and Nature Reserves and stipulate a comprehensive and consultative planning process for the management of National Parks and other protected areas. The Park Zoning and Conservation Development Frameworks of National Parks were classified through a process of iterative and consultative spatial development planning. Management planning for Nature Reserves also employs consultative planning processes.

Through CAPE and the different public works programmes that carry out the majority of the labour-intensive conservation work, the CFR protected areas already provide substantial benefits to local communities and economies, and this is unlikely to change. The goal of CAPE is to achieve joint outcomes for nature conservation and community benefits and many programmes exist in support of this goal. Over 140 environmental projects of the different public works programmes across the CFR generate

the equivalent of almost 4,500 full-time jobs per annum. Nature tourism is also an important sector in the region and likely to increase further with expanded World Heritage status, with potential benefits for local livelihoods if managed well.

4.5 Threats

Large areas of the property, especially in the mountains, have not suffered notably from past development and/or neglect. In the property's non-coastal mountain areas, human development has been largely restricted to some mountain pass roads (tarred and untarred), small dams, and a few radio transmitters / antennas. Locally, small areas have also been subject to past farming and/or grazing, with associated infrastructure (e.g. farmhouses and workers' houses) and impacts (e.g. small stands of non-native trees). All these past developments are very localized, have limited impact on the overall Outstanding Universal Value, and are thus of low concern.

The situation is somewhat different, however, in several of the lowland areas and coastal mountain areas which have had a long history of human settlement and development, including agriculture and forestry (with non-native, sometimes invasive species). The ongoing expansion of the PA network in these areas is constantly adding areas that were in the past under human use and need to be cleared of alien vegetation, returned to natural fire regimes, and/or otherwise rehabilitated and restored. Extensive rehabilitation and restoration programmes are underway in such areas, notably in the Agulhas Complex, Garden Route Complex, Langeberg Complex and Table Mountain National Park.

Some of the extension areas originally nominated were heavily affected by past development (e.g. agriculture and pine plantations) and are in the process of long term restoration. IUCN believes the revisions made to the boundaries of the originally nominated extension will if approved result in a property with improved values and integrity.

The most important and widespread threats affecting the property as a whole (in common with most regions of the CFR) are IAS, fire and water related issues, and climate change. The primary natural disasters affecting parts of the property are runaway wildfires and occasional flooding.

IAS are recognized as a critical threat to the indigenous biodiversity of the CFR, and the number, extent and impact of IAS continue to increase in the region. IAS affect all areas of the property to varying degrees; particularly problematic areas include the previously heavily infested Bontebok National Park in the Langeberg Complex (where the problem is exacerbated by the peri-urban context) and parts of the Garden Route Complex. However, successful control of IAS is possible through monitoring and management interventions, and previously infested / affected areas can be rehabilitated or restored (as demonstrated in many areas around the Table

Mountain National Park for example). The main mechanisms to combat IAS are the Working on Fire and Working for Water public works programmes, the recently established DST-NRF Centre of Excellence for Invasion Biology at the University of Stellenbosch, and SANBI's Early Detection and Rapid Response (EDRR) programme for Invasive Alien Plants.

Fire is an integral part of the natural ecosystems in most areas of the property, however, disruption of fire regimes and disturbance by more frequent or more intensive fires poses a threat to species and ecosystems, as well as humans. Fire management plans / programmes and close collaboration with the Working on Fire programme and local Fire Protection Associations have been established throughout the property to address this threat. These efforts are further supported by information on active fires from the Advanced Fire Information System (AFIS).

Groundwater abstraction for agriculture and/or cities/towns is an important issue for some of the complexes of the re-nomination (especially the Agulhas Complex and Langeberg Complex including Bontebok National Park) and needs to be carefully monitored and managed in these areas in cooperation with local authorities and relevant stakeholders.

The potential impacts of climate change on the CFR have been extensively studied and some impacts are already apparent. This threat requires solutions well beyond the individual PA level and numerous assessments have helped to identify important adaptation strategies for the CFR (e.g. through improving connectivity and reducing fragmentation). Climate change is now taken into account in most if not all conservation planning, management and monitoring.

The nomination noted that, overall, development pressures in each of the nominated extension areas are "extremely low to non-existent". However, this is not entirely true for some of the complexes, especially along the coast and in the lowlands. Urban development of the city of Cape Town may impact on Table Mountain National Park, and urban development is also a potential issue around the Garden Route Complex, and the coastal and lowland areas of the Boland Mountain Complex and Langeberg Complex. However, at present, none of these pressures is out of control anywhere within the property and the existing laws, regulations and plans are expected to protect the nominated extension areas.

In conclusion threats to the property are well understood with integrated management programmes in place to address these, however, resource limitations continue to hamper effectiveness.

In conclusion IUCN considers that the integrity and protection and management requirements of the Operational Guidelines are met.

5. ADDITIONAL COMMENTS

5.1 Consideration in relation to serial properties

a) What is the justification for the serial approach?

As IUCN noted in its original evaluation, most of the natural vegetation in the CFR has been transformed during 400 years of European settlement. The remaining areas with natural habitat form an archipelago of islands separated by other land uses. Some of the remaining natural areas are covered by State owned and/or managed protected areas (existing and extended property), others are within privately owned, declared Mountain Catchment Areas and other protected areas (proposed buffer zones).

No single PA or PA cluster in the CFR can adequately represent all the outstanding values (e.g. evolutionary history, unique vegetation types, plant richness and endemism, and processes) of the region in relation to criteria (ix) and (x). This is particularly true given the very high plant species turnover (beta and gamma diversity) and the often highly localized distribution of endemic and/or threatened species and vegetation types. The originally inscribed eight clusters represented the eight main phytogeographic centres of endemism that had been identified in the CFR; however, it has long been recognized that the existing World Heritage Site does not provide adequate representation of the full range of outstanding biodiversity values in the region. The re-nomination seeks to address these shortcomings and includes additional areas that add substantial values and/or add to the integrity of the existing World Heritage Site.

b) Are the separate component parts of the nominated property functionally linked in relation to the requirements of the Operational Guidelines?

All the clusters and component parts of the property are functionally linked through the shared history of the Fynbos biome which has evolved in overall similar climatic and geological conditions. Many species overlaps occur between the different clusters while each also has a particular suite of species depending on variations in geology, rainfall, soil type and elevation. Many of the component parts and clusters are spatially contiguous, in relatively close proximity, and/or well connected through the extensive buffer zones and buffering mechanisms in the region. Connectivity is lower for some of the coastal clusters and several smaller, isolated component parts, often as a result of human activities including agriculture.

c) Is there an effective overall management framework for all the component parts of the nominated property?

In order to facilitate coordinated management, the Minister appointed the Director-General of the national Department of Environmental Affairs (DEA) to be the responsible authority for the property.

A Joint Management Committee (JMC) for the existing site was established in 2010 to enhance coordination whilst respecting the mandates and independence of the authorities concerned. The JMC includes DEA and

the Chief Executive Officers of the three management authorities (SANParks, CapeNature and Eastern Cape Parks and Tourism Agency). One of the most important current activities of the JMC is to oversee the development of an Environmental Management Framework (EMF) which would function as an integrated management plan for the property. As noted above the development of the EMF is underway.

Improving resourcing for more effective operation of the JMC remains a priority as is completion of the EMF. Pending this, however, the individual PAs of the property appear to be effectively managed by the responsible authorities with the JMC playing a relatively weak coordinating role.

6. APPLICATION OF CRITERIA

The **Cape Floral Region Protected Areas** has been nominated as an extension of the inscribed property under natural criteria (ix) and (x).

Criterion (ix): Ecosystems/communities and ecological/biological processes

Both the existing and extended property meet this criterion. The reconfigured property contributes additional values and to improved integrity.

The property is considered of outstanding universal value for representing ongoing ecological and biological processes associated with the evolution of the unique Fynbos biome. These processes are represented generally within the Cape Floral Region and captured in the component areas that make up the 13 protected area clusters. Of particular scientific interest are the adaptations of the plants to fire and other natural disturbances; seed dispersal by ants and termites; the very high level of plant pollination by insects, mainly beetles and flies, birds and mammals; and high levels of adaptive radiation and speciation. The pollination biology and nutrient cycling are other distinctive ecological processes found in the site. The Cape Floral Region forms a centre of active speciation where interesting patterns of endemism and adaptive radiation are found in the flora.

IUCN considers that the extended property as nominated meets this criterion.

Criterion (x): Biodiversity and threatened species

Research has shown that seven of the originally inscribed eight clusters in the existing World Heritage Site alone conserved close to half the number of plant species and selected vertebrate taxa of the region. This figure was even higher for endemic plants (69%) and for Proteaceae elements (59%). Evidence also suggests that the proposed extension areas are estimated to support over 400 Fynbos plant species that are strictly endemic to these areas. As a whole, the extended property would clearly be of Outstanding Universal Value under (x), as many of the proposed extension areas add substantial numbers of endemic and/or threatened plant species associated with the Fynbos vegetation that is unique to the CFR.

The Cape Floral Region is one of the richest areas for plants when compared to any similar sized area in the world. It represents less than 0.5% of the area of Africa but is home to nearly 20% of the continent's flora. The outstanding diversity, density and endemism of the flora are among the highest worldwide. Some 69% of the estimated 9,000 plant species in the region are endemic, with 1,736 plant species identified as threatened and with 3,087 species of conservation concern. The Cape Floral Region has been identified as one of the world's 35 biodiversity hotspots.

IUCN considers that the extended property as nominated meets this criterion.

7. RECOMMENDATIONS

IUCN recommends that the World Heritage Committee adopts the following draft decision:

The World Heritage Committee,

1. Having examined Documents WHC-15/39.COM/8B and WHC-15/39.COM/INF.8B2;

2. Approves the extension of **Cape Floral Region Protected Areas (South Africa)** on the World Heritage List under natural criteria (ix) and (x);

3. Adopts the following Statement of Outstanding Universal Value for the extended Cape Floral Region Protected Areas property, replacing the Statement of Outstanding Universal approved by Decision 35COM 8E:

Brief synthesis

The Cape Floral Region has been recognised as one of the most special places for plants in the world in terms of diversity, density and number of endemic species. The property is a highly distinctive phytogeographic unit which is regarded as one of the six Floral Kingdoms of the world and is by far the smallest and relatively the most diverse. It is recognised as one of the world's 'hottest hotspots' for its diversity of endemic and threatened plants, and contains outstanding examples of significant ongoing ecological, biological and evolutionary processes. This extraordinary assemblage of plant life and its associated fauna is represented by a series of 13 protected area clusters covering an area of more than 1 million ha. These protected areas also conserve the outstanding ecological, biological and evolutionary processes associated with the beautiful and distinctive Fynbos vegetation, unique to the Cape Floral Region.

Criteria

Criterion (ix)

The property is considered of outstanding universal value for representing ongoing ecological and biological processes associated with the evolution of the unique Fynbos biome. These processes are represented generally within the Cape Floral Region and captured in the component areas that make up the 13 protected area clusters. Of particular scientific interest are the adaptations of the plants to fire and

other natural disturbances; seed dispersal by ants and termites; the very high level of plant pollination by insects, mainly beetles and flies, birds and mammals; and high levels of adaptive radiation and speciation. The pollination biology and nutrient cycling are other distinctive ecological processes found in the site. The Cape Floral Region forms a centre of active speciation where interesting patterns of endemism and adaptive radiation are found in the flora.

Criterion (x)

The Cape Floral Region is one of the richest areas for plants when compared to any similar sized area in the world. It represents less than 0.5% of the area of Africa but is home to nearly 20% of the continent's flora. The outstanding diversity, density and endemism of the flora are among the highest worldwide. Some 69% of the estimated 9,000 plant species in the region are endemic, with 1,736 plant species identified as threatened and with 3,087 species of conservation concern. The Cape Floral Region has been identified as one of the world's 35 biodiversity hotspots.

Integrity

The originally inscribed Cape Floral Region Protected Areas serial property comprised eight protected areas covering a total area of 557,584 ha, and included a buffer zone of 1,315,000 ha. The extended Cape Floral Region Protected Areas property comprises 1,094,742 ha of protected areas and is surrounded by a buffer zone of 798,514 ha. The buffer zone is made up of privately owned, declared Mountain Catchment Areas and other protected areas, further supported by other buffering mechanisms that are together designed to facilitate functional connectivity and mitigate for the effects of global climate change and other anthropogenic influences.

The collection of protected areas adds up in a synergistic manner to present the biological richness and evolutionary story of the Cape Floral Region. All the protected areas included in the property, except for some of the privately owned, declared Mountain Catchment Areas, have existing dedicated management plans, which have been revised, or are in the process of revision in terms of the National Environmental Management: Protected Areas Act. Mountain Catchment Areas are managed in terms of the Mountain Catchment Areas Act. Progress with increased protection through public awareness and social programmes to combat poverty, improved management of mountain catchment areas and stewardship programmes is being made.

Protection and Management requirements

The serial World Heritage property and its component parts, all legally designated protected areas, are protected under the National Environmental Management: Protected Areas Act (57 of 2003). The property is surrounded by extensive buffer zones (made up of privately owned, declared Mountain Catchment Areas and other protected areas) and supported by various buffering mechanisms in the region. Together, these provide good connectivity and landscape integration for most of the protected area clusters, especially in the mountain areas. The

protected areas that make up the property are managed by three authorities South African National Parks (SANParks), Western Cape Nature Conservation Board (CapeNature) and Eastern Cape Parks and Tourism Agency. These authorities, together with the national Department of Environmental Affairs, make up the Joint Management Committee of the property. All of the sites are managed in accordance with agreed management plans, however, there is a recognised need for a property-wide management strategy in the form of an Environmental Management Framework.

Knowledge management systems are being expanded to advise improved planning and management decision-making, thus facilitating the efficient use of limited, but increasing, resources relating in particular to the management of fire and invasive alien species. The provision of long-term, adequate funding to all of the agencies responsible for managing the property is essential to ensure effective management of the multiple components across this complex serial site.

Invasive alien species and fire are the greatest management challenges facing the property at present. Longer-term threats include climate change and development pressures caused by a growing population, particularly in the Cape Peninsula and along some coastal areas. These threats are well understood and addressed in the planning and management of the protected areas and their buffer zones. Invasive species are being dealt with through manual control programmes that have been used as a reference for other parts of the world.

4. Commends the State Party for its review of the nomination boundaries to bring forward an extension of the property which, on the basis of fine scale scientific analysis, significantly increases the number of Fynbos vegetation types protected within the property and strengthens the property's integrity.

5. Encourages the State Party to address longstanding shortfalls in financial resources which are impeding management of the property and which will be increasingly important in light of the substantially increased area and complexity of the extended property.

6. Requests the State Party to complete the Environmental Management Framework and submit a copy to the World Heritage Centre by no later than 1 February 2017 and to strengthen the role and resources of the Joint Management Committee so that it can more effectively act as a single coordinating authority that guides management across all inscribed component parts of the property.

7. Requests the State Party to submit to the World Heritage Centre, by **1 December 2017**, an updated report, including a 1-page executive summary, on the state of conservation of the property including progress on the finalization of a property-wide integrated management plan; strengthened governance arrangements to improve coordination; and the implementation of actions to ensure adequate financial resources for the property's management, for examination by the World Heritage Committee at its 42nd session in 2018.

Map 1: Currently inscribed World Heritage Property (in green) and proposed extension (in red)

