Appendix 2

List if Ramsar sites in South Africa

The Annotated Ramsar List of Wetlands of International Importance in South Africa

The Convention on Wetlands came into force for South Africa on 21 December 1975. South Africa presently has 17 sites designated as Wetlands of International Importance, with a surface area of 498,721 hectares. Site; date of designation; region, province, state; surface area; coordinates

Barberspan. 12/03/75; Northwest; 3,118 ha; 26°33'S 025°37'E. Provincial Nature Reserve. One of the few permanent, natural water bodies in the highveld. An alkaline, freshwater lake, surrounded by grassland. The lake supports a rich plankton community and ten fish species, and is seasonally important for staging and breeding birds and locally migrant waterbirds. A research station and recreational facilities are located at the site. Ramsar site no. 35.

Blesbokspruit. *02/10/86;* Gauteng; 1,858 ha; 26°17'S 028°30'E. Added to the **Montreux Record**, 6 May 1996. Bird Sanctuary, Nature Reserve. One of the few permanent water bodies in the Transvaal region. Formed during the 1930 construction of road and pipeline embankments for the mining industry. Seasonally important for several species of locally migrant waterbirds and various notable mammals. Mining activities take place upstream. The site was placed on the Montreux Record in May 1996 in response to contamination by large quantities of polluted water discharged from adjacent mines. Ramsar site no. 343.

De Hoop Viei. 12/03/75; Western Cape; 750 ha; 34°27'S 020°20'E. Provincial Nature Reserve. A coastal lake of seasonally varying levels of water and salinity, formed when dunes blocked the course of the Sout River. Important for numerous species of wintering and staging waterbirds. A major research programme is under way to monitor the impact of the military test range on the ecology of the reserve and surrounding area. The native turtle, common in the 1960s, has since become rare. Ramsar site no. 34.

De Mond (Heuningnes Estuary). 02/10/86; Western Cape; 918 ha; 34°43'S 020°07'E. Nature Reserve. Estuary, dune system, and saltmarsh where shifting dunes are isolating the estuary. Important as wintering, staging and feeding area for several species of breeding birds and locally migrant waterbirds. Provides habitat for various reptiles, notable crustaceans, and the sea horse *Hippocampus*. Ramsar site no. 342.

Kosi Bay. 28/06/91; Kwazulu/Natal; 10,982 ha; 27°01'S 032°48'E. Nature Reserve. Composed of four interconnected lakes subject to tidal influence, an estuarine channel, and three extensive swamps. Fresh water is derived from three permanent rivers. Principal habitats include swamp and mangrove forest, reedbeds, dune systems with associated woodland, and coastal grassland. The site supports a diverse bottom-dwelling invertebrate fauna (30 species) and a rich fish fauna, including eight endangered species. Several birds, mammals, butterflies, and plants are endemic, threatened or endangered. Large areas of swamp forest have been subjected to non-sustainable slash and burn cultivation practices. Human activities include subsistence farming and fishing. Ramsar site no. 527.

Lake Sibaya. 28/06/91; Kwazulu/Natal; 7,750 ha; 27°20'S 032°38'E. The largest natural freshwater lake in South Africa, separated from the ocean by forested dunes; includes areas of swamp forest and wet grassland. A large variety of endangered or endemic species of reptiles, fish, birds, mammals and plants occur. The site is important for numerous species of breeding birds and supports the second largest population of hippopotamus in Kwa Zulu. The lake supports a diverse zooplankton fauna, 15 species of aquatic and 43 species of terrestrial molluscs, as well as flora and fauna unique to South Africa. A research station is located within the site. The lake provides water for Mbazwane and Vasi. Human activities consist of livestock grazing and cultivation. Ramsar site no. 528.

Langebaan. 25/04/88; Western Cape; 6,000 ha; 33°06'S 018°01'E. National Park. A large, shallow marine lagoon, includes islands, reedbeds, sand flats, saltmarshes and dwarf shrubland. The lagoon is an important nursery area for a number of fish species and supports a diverse and ecologically important algal and shoreline biota. Important for wintering and staging wading birds, and the numerous breeding birds include the largest colony of gulls in South Africa. Human activities include farming, sheep/cattle rearing, and a small commercial fishery. There are an environmental education centre, bird observation hides, and several nature trails. Plans to construct an industrial facility reached agreement with Ramsar input; a case study is available. Ramsar site no. 398.

Natal Drakensberg Park. *21/01/97*; Kwazulu/Natal; 242,813 ha; 29°30'S 029°45'E. Wilderness Area, Nature Reserve, Game Reserve, Provincial Park, State Forest. Set in an extremely rugged area that includes three altitudinal zones along the border between South Africa and the Kingdom of Lesotho, The Drakensberg is regarded as the most important mountain catchment in South Africa due to its high yield and water quality, supplying rural, agricultural, urban and industrial users downstream. Conserved since the turn of the century, the entire wetland system is in near-pristine state. The three largest rivers in Kwa Zulu-Natal originate here, supporting extensive wetlands of various types within the Afroalpine and Afromontane belts. The area supports numerous endemic and endangered plant and animal species. Human activities include nature conservation and a variety of outdoor recreation activities. There are a research station and a conservation education center available. The site is renowned for the quantity, quality and variety of prehistoric rock art. Many parts are declared wilderness areas. Ramsar site no. 886.

Ndumo Game Reserve. 21/01/97; Kwazulu/Natal; 10,117 ha; 26°53'S 032°16'E. Nature Reserve. Situated at the junction of the Usuthu and Pongolo floodplain systems, the site forms the largest floodplain system in South Africa, consisting of five wetland types, from fresh to brackish, permanent to ephemeral lakes, marshes and pools, as well as riparian and gallery forest. Well known for its abundant bird life and diversity of species, internationally important numbers of several species are supported, including many that are rare or vulnerable. Human activities include controlled harvesting of reeds and sedges, low-density tourism, an important fishery, illegal black and white rhinoceros hunting, and collecting river water for sale in nearby communities. A large agricultural irrigation scheme is operating erratically south of the reserve in the catchment area. Ramsar site no. 887.

Nylsvley Nature Reserve. 07/07/98; Northern Province; 3,970 ha; 24°39'S 028°42'E. Nature reserve. The nature reserve has riverine floodplains, flooded river basins, and seasonally flooded grassland, with the dominant wetland type being a seasonal river associated with a grassland floodplain. The wetland has the endangered roan antelope *Hippotragus equis*, and the area serves as a breeding ground for eight South African red-listed waterbirds and is the only site in South Africa which is a recorded locality for wild rice, *Oryza longistaminata*. The area is open to tourists, who usually come for birdwatching, and

volunteers work in the area to help clear alien invasive plant species and build bird hides. Ramsar site no. 952.

Orange River Mouth. 28/06/91; Northern Cape; 2,000 ha; 28°40'S 016°30'E. Added to the **Montreux Record**, 26 September 1995. Transboundary area of extensive saltmarshes, freshwater lagoons and marshes, sand banks, and reedbeds shared by South Africa and Namibia. Important for resident birds and for staging locally migrant waterbirds. The upper Orange River serves as a domestic water source and is experiencing increasing demand. This could severely restrict the amount of water reaching the site. Following the collapse of the saltmarsh component of the estuary, the site was placed on the Montreux Record in 1995. The rapid degradation was the result of adjacent diamond mining activities and flow regulation of the Orange River as a result of dam construction. Ramsar site no. 526.

St. Lucia System. *02/10/86;* Kwazulu/Natal; 155,500 ha; 28°04'S 032°28'E. Added to the **Montreux Record**, 4 July 1990, removed from the Record, 11 March 1996. Wetland Park, State Forest Reserve. Coastal wetlands system associated with Lake St. Lucia and consisting of several principal habitat types. Supports the largest estuarine prawn nursery area in South Africa. An important migratory bird staging area, feeding ground for flamingos, and spawning and nursery area for many of the 82 species of fish supported. It is also a breeding area for crocodiles. Large mammals include hippopotamus and black rhino. Human activities have included cattle grazing, slash and burn cultivation, and the planting of *Pinus elliottii*. The site is an important recreational area offering many facilities and activities. The site was threatened by large-scale mining for heavy metals but spared. Subject of a Ramsar Advisory Mission in 1992. A case study is available. Ramsar site no. 345.

Seekoeivlei Nature Reserve. *21/01/97*; Free State; 4,754 ha; 27°34'S 029°35'E. Nature Reserve. The largest inland wetland in the Highveld. It has high conservation priority, as it provides water to the highly industrialized and densely populated Gauteng Province. It is a world-renowned sanctuary rich in birdlife and supporting several species of rare or endangered birds and mammals. The site consists of seasonal freshwater lakes, riverine floodplain, seasonally flooded grasslands, marshes and pools, and peatlands. Human activities include tourism and livestock grazing. Ramsar site no. 888.

Turtle Beaches/Coral Reefs of Tongaland. *02/10/86;* Kwazulu/Natal; 39,500 ha; 27°30'S 032°40'E. Marine Reserve. An important transition zone between true reef and non-limestone substrates with reef communities. Known to support 16 species of coral, 1,200 species of fish, five species of marine turtles, 41 species of marine mammal, and 49 species of bird. The flora is predominantly algal, and many species reach the southern limit of their distribution. General water recreation is a popular activity. Ramsar site no. 344.

Verloren Valei Nature Reserve. 16/10/01; Mpumalanga; 5,891 ha; 25°17'S 030°09'E. Nature Reserve. A provincial protected area above 2000m altitude comprising more than 30 wetlands (14% of the site's area), ranging between 2 and 250 hectares, primarily permanent freshwater marshes, with the emergent vegetation waterlogged for most of the season. The area is especially important hydrologically because it acts as a sponge in the upper catchment of important river systems for both South Africa and Mozambique, ensuring gradual release to more populous downstream regions during rainy periods. It supports high botanical diversity and is one of the last areas with suitable Wattled Crane *Bugeranus carunculata* breeding habitat. A variety of wetland types characteristic of the region is represented, and a significant number of vulnerable and threatened plant, butterfly, and mammal species are supported. Population density in the area is low, but farming and

grazing occur in the surrounding areas. A management plan, including controlled burning, is in place, employing local people. Small-scale avi-tourism occurs and guided tours are planned. No urgent threats are foreseen, though introduced exotic plant species are being watched carefully. Ramsar site no. 1110.

Verlorenvlei. 28/06/91; Western Cape; 1,500 ha; 32°24'S 018°26'E. One of the largest lakes (and one of the country's few coastal freshwater lakes), with associated scrub, shrubland, dune systems, marshland and reedbeds representing a transition zone between two plant communities. The site is an important feeding area for rare pelicans and fish, for molting and breeding birds, as well as for staging wading birds. During dry periods, large numbers of flamingos gather. The site also supports notable plant species. Water is pumped for irrigation purposes, and the marshland is used for cattle grazing. Ramsar site no. 525.

Wilderness Lakes. 28/06/91; Western Cape; 1,300 ha; 33°59'S 022°39'E. National Park, Wilderness Area, Nature Reserve. A series of three permanent, interconnected coastal lakes linked to the Indian Ocean; includes a dune system with associated thickets, woodlands, marshes, and reedbeds. Important numbers of locally-migrant resident birds as well as staging and breeding birds use the site, which supports 285 native plant species, 32 fish species (several of which use the site as a