

Table 7 provides information on the Ecological Status and Importance of the Kaaimans, Swart and Malgas Rivers. The Kaaiman's River is in good condition (Category A), with no in-channel impoundments. The Swart River however, is already impounded and, probably as a result of this, is in a much poorer ecological condition (Category D).

TABLE 7: PRESENT ECOLOGICAL STATUS (PES) AND ECOLOGICAL IMPORTANCE AND SENSITIVITY (EIS) FOR THE KAAIMANS, SWART & MALGAS RIVERS.

RIVER NAME	PRESENT ECOLOGICAL STATE	ECOLOGICAL IMPORTANCE & SENSITIVITY
Kaaimans River	Category A	High
Swart River	Category B/D	High
Malgas River	Category C	Moderate

Source: Southern Waters Ecological Research and Consulting, 2005.

The Garden Route Dam is the largest dam in the GM and is located on the Swart River (see Section 3.4.3 Infrastructure and Services for additional detail on the dam).

3.2.7 MARINE AND COASTAL ENVIRONMENTS

The coast can be defined in many ways. This report adopts the definition of the White Paper for Sustainable Coastal Development in South Africa, 2000. Thus, the 'coast' includes the:

- Coastal waters, which reach from the low water mark into the sea to where water is no longer influenced by land-associated activities;
- Coastline, between the low and high water mark; and
- Coastlands, which lie above the high water mark but still influence the coastal waters.
- The coast of the GM is approximately 50 km long and highly diverse, harbouring a great variety of life. It is characterised by a rocky shoreline interspersed with bays, sandy beaches, dunes, rivers, estuaries and lakes.

3.2.7.1 LAKES AND ESTUARINE SYSTEMS

The Wilderness area is best known for its estuarine lakes. These include the:

- Island Lake;
- Bo-Langvlei;
- Rondevlei; and
- Swartvlei.

Island Lake, Bo-Langvlei and Rondevlei are linked via the Serpentine River. Swartvlei falls with a different catchment and is fed by the Groot and Klein Wolwe Rivers and the Hoogekraal and Karatara Rivers. The Swartvlei and Wilderness Lakes system are of national and international biodiversity conservation importance, for which South Africa has a particular responsibility to the world to manage appropriately.

Swartvlei Lake is of considerable age. It formed at the end of the last Ice Age (15000 – 18000 years BP). Swartvlei is a sensitive coastal lake, unique in many features. It is considered to be ecologically special and ranks as sixth most important estuary in South Africa in terms of conservation significance when evaluated on size, habitat, zonal type rarity and biodiversity criteria (Southern Waters Ecological Research and Consulting, 2005).

The Swartvlei Lake has a surface area of 8.8 km² and is characterised by a plant rich littoral zone with the greatest abundance of aquatic macrophytes compared to any standing water system in South

Africa. The rich littoral standing stock of plants attracts an array of invertebrates, and an abundance of angling species, e.g. leervis (*Lichia amia*) that prey on the smaller estuarine fish when they leave the safety of the submerged plants (Southern Waters Ecological Research and Consulting, 2005).

Additional estuarine systems include the Kaaimans Estuary that ranks number 209 out of the 255 estuaries (i.e. of low importance) included in the Water Research Commission study done by Turpie, (Southern Waters Ecological Research and Consulting, 2005).

3.2.8 BIODIVERSITY AND PROTECTED AREAS

This section has been included to identify the resources offered by protected areas and to describe biodiversity conservation efforts in the GM. The importance of biodiversity conservation within the GM cannot be over emphasized and recent biodiversity planning has revealed that the area as a whole is environmentally sensitive and large areas must be conserved in order to meet the principle of sustainability.

The Wilderness National Park is an existing protected area managed by the South African National Parks (SANParks) that has national protection status.

The Garden Route Initiative (GRI) is driven by SANParks and aims to coordinate biodiversity planning along the Garden Route. The initiative integrates the principles of the Bioregional Planning Approach.

The GRI is the driving force behind the formation of the Garden Route mega-park, the establishment of a consolidated national park in the Garden Route. The high biodiversity conservation value and sensitivity of the Garden Route, as well as the established tourist industry in the Garden Route, make the formation of the consolidated mega-park of strategic importance not only for GM, but for the country. The area is a national asset worthy of protection and appropriate sustainable management to the benefit of all South Africans and visitors to the country. This asset can be used to develop the tourism industry in the area which in turn could also provide (potentially more) sustainable economic opportunities for the people of the region.

Currently there are a number of statutory proclaimed reserve areas in the greater George area. These include:

- Outeniqua Nature Reserve (managed by Cape Nature);
- Van Kervel Reserve (George Municipality) of mixed fynbos proclaimed in 1968;
- Forests on George Campus (Port Elizabeth Technikon);
- Kat River Reserve (George Municipality) of mixed fynbos proclaimed in 1989;
- Rooi River Wetland (Cape Nature Conservation) that was proclaimed in 1996;
- Mountain Fynbos reserves (private nature reserves) in Victoria Bay area since 1996;
- Hebron Reserve (private nature reserve) of Afromontane forest since 1996.

Private Nature Reserves include:

- George (kleinbaai)
- Kwelanga
- Blydskap
- Kaaimans River Gorge

Figure 9 illustrates the private nature reserves, the current distribution of statutory protected areas and the conservation status of areas (according to STEP) in the GM. The statutory protected areas cover a combined area of 60400 ha or 56.36 % of the total George municipal area.