

Complex Coastal Systems: Transdisciplinary Learning on International Case Studies.
First edition

Advancing mouth management practices in the Groot Brak Estuary, South Africa

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Abstract

The early 1990s in South Africa were characterised by a strongly hierarchical and technocratic regime where planning and development decisions regarding the environment were made at national government level with little or no public consultation (Slinger et al., 2005). One such a decision was the construction of the 70 m high and 270 m wide Wolwedans Dam (with a capacity of 23×10^6 m³) only 3 km upstream of the Groot Brak Estuary (also known as the Great Brak Estuary) by the South African Department of Water Affairs and Forestry (DWAF) (Figure 6.1). However, then the local community of the Town of Groot Brak feared the effects of reduced water supply on the health of the estuary, as well as the risk of flooding during dam failure. Increasing public pressure, and consequent media coverage, culminated in the DWAF setting up a steering committee, the Groot Brak River Environmental Committee (GEC). This committee was tasked to investigate the effect of the dam on the estuary, and to establish a management plan for the optimal use of the reserved water (1×10^6 m³) to maintain current ecological health. The Council for Scientific and Industrial Research (CSIR) were commissioned to undertake this assessment (CSIR, 1990; Slinger et al., 2005).