

# ABSTRACT

## The Macrophytic Vegetation

of the

## Black River Upper Morass

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The macrophytic vegetation of the Black River Upper Morass was explored using the 3-parameter test in 14 sites within the area. This test allowed for the assessment of wetland status of the study area in terms of hydrophytic vegetation, hydric soils and wetland hydrology. The Upper Morass exhibited 100% hydrophytic vegetation typical of wetlands (vascular and non-vascular plants) and classified as a Palustrine System with sub-classes of Aquatic Bed and Emergent Wetland as well as being recognised as a disturbed ecosystem. The Upper Morass showed evidence of hydric soils, which were characterised by relatively high organic matter and water content by weight. Both parameters were intimately linked with the presence of clumps of vegetation and the presence of the predominant clay soil. The main hydrological evidence of the Upper Morass was centred on the watercourses and extended to lands in close proximity to them. The vegetation and soil type present in association with the hydrology, allowed the Upper Morass to be classified as being ground water driven, displays floodwater and groundwater soils and is a temporarily inundated/totally saturated wetland.

Delineation of the Upper Morass indicated that the expanse of the wetland had increased. Supporting evidence was provided in terms of water content by weight and hydrology as to which areas persisted as wetlands overtime and which areas had reverted to wetland having been previously dry. The relatively high values of organic matter indicated that the regeneration rate of the Upper Morass varied and was linked to the presence of extensive stands of vegetation.