

COASTAL EROSION HAZARD IN THE AKURALA AREA:
A MOST ENDANGERED TRACT OF THE SW COAST

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A survey of landforms based on 1:10,000 aerial photographs and investigated by field work show very clearly that the Akurala coastal tract consists of old barriers in the southern part and a concave narrow beach in the northern part, backed by a low relief hinterland with densely concentrated mining pits. The denudational hills followed by the lowland demarcate the landward boundary of a former lagoon (the Akurala swamp). Recession of the coastline may form a sluice-way connecting the lowland and the sea. This study concerns such an area which is on the verge of opening a sluice-way in the near future.

The coastline changes based on old maps and aerial photographs confirm that the old barriers, especially at its northern end, have receded continuously during the last century, forming the narrow concave beach. A ledge of beach rocks exposed at the northern end of the old barriers turns wave energy towards the concave beach to form a strong headward flow. The present concave beach which does not exceed 75 m in width is liable to be destroyed completely due to the headward erosion.

Intrusion of sea water at this point will submerge many parts of the lowland. The process is accelerated by the densely clustered mining pits. Areas of possible submergence in the future were surveyed pertaining to lands which are now below the present sea level.