Tropical storm brings much needed relief to iSimangaliso

iSimangaliso Authority

While other parts of southern Africa cursed its destructive power, Tropical Storm Irina has brought much needed water to one of southern Africa's premier water heritage locations, iSimangaliso Wetland Park.

Leigh-Ann Morrison

Above: *Establishment of a spillway to join the uMfolozi River and Lake St Lucia estuary began in March, and was helped along by heavy seas and rain.*

Left: *The uMpathe River flooded its banks on the Western Shores.*

Encompassing 9% of the country's coastline, iSimangaliso has, until recently, been weighed down heavily by the burden of a decade-long drought. However, five years to the day after Cyclone Gamede thrashed the coast and broke open the Lake St Lucia estuary, Tropical Storm Irina brought similar heavy rainfall and high waves to the country's first World Heritage Site. Classified as a 'moderate storm' by the South African Weather Service, Irina crashed into the eastern coast of southern Africa at the end of February and during the start of March.

The previously parched pans on the eastern and western shores of

Right: *The 2 km-long sand berm between the estuary and Maphelane before Irina's arrival.*

Below right: *The 2 km-long sand berm between the estuary and Maphelane after Irinia's arrival.*

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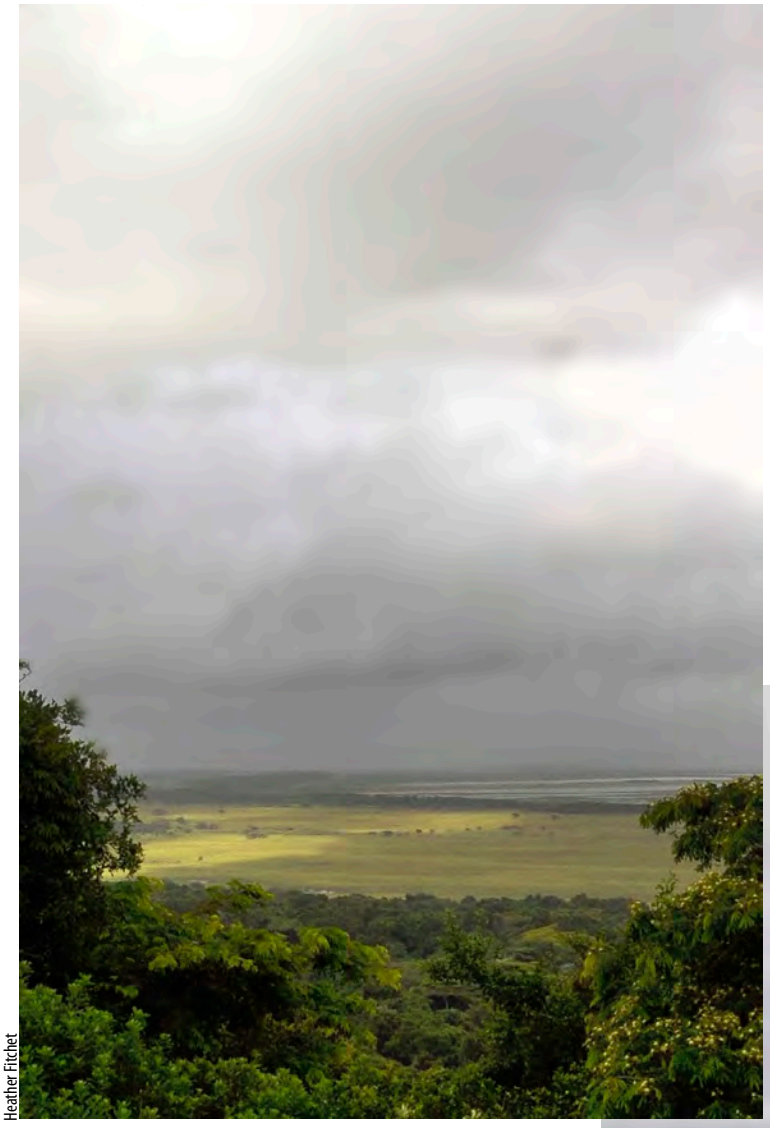
Lake St Lucia have been recharged, with lake levels rising significantly. As winter approaches, this is good news for the park's 800 hippopotami and 1 200 adult crocodiles, as well as the resident herds of buffalo and elephant.

Over a 48-hour weekend period at the start of March, the highest rainfall figures in iSimangaliso were recorded at Cape Vidal (375 mm), Charters Creek (350 mm), Mission Rocks (Eastern Shores section) (346 mm), and Sodwana Bay (304 mm). Thankfully, no significant damage was reported to infrastructure.

Meanwhile, management expressed its satisfaction at the way nature had advanced the park's efforts towards rejoining the Lake St Lucia system with the uMfolozi River. The park has been working actively since 2011 to rejoin the latter river to Lake St Lucia, from which it has been artificially separated since 1952. This has greatly reduced freshwater inflow to the lake.

Combined with drought conditions, the St Lucia estuary mouth has remained closed to the sea for the



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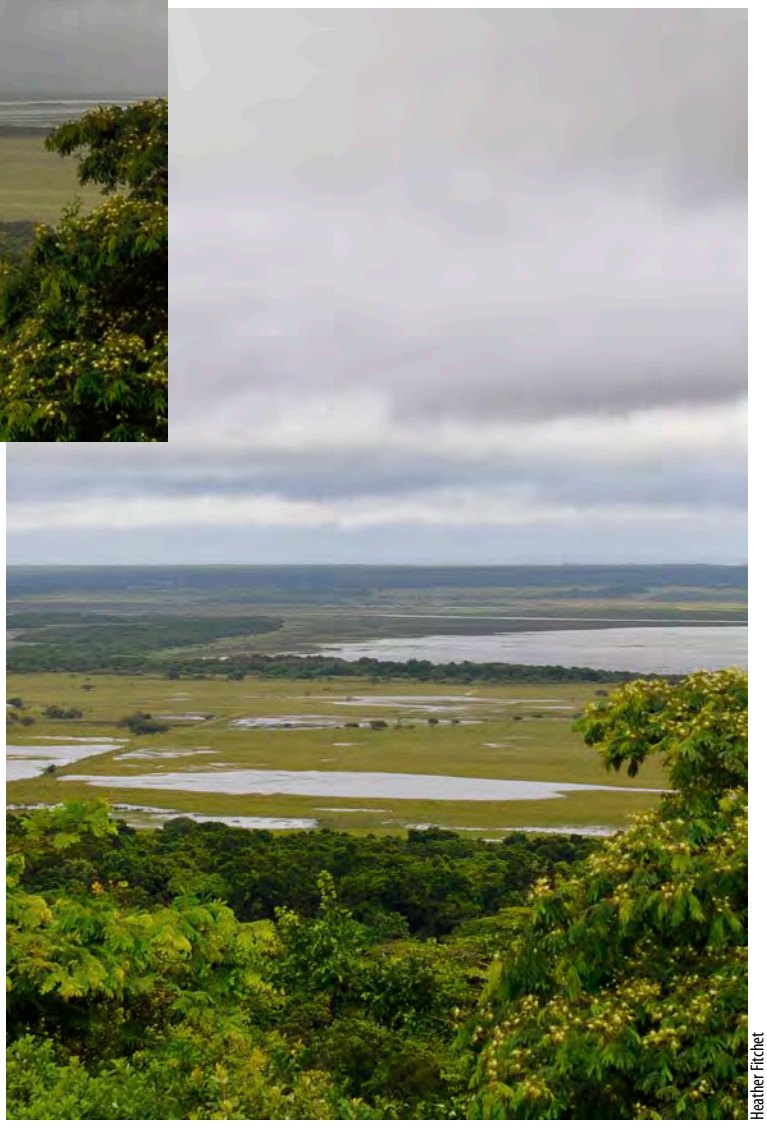
Left and below: *A view over the Eastern Shores before and after Tropical Storm Irina, taken on 2 and 4 March, 2012, respectively.*



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best part of the last decade. This has resulted in St Lucia being unable to function as an estuary. In November 2011, the processing of breaching the uMfolozi River started. The process was facilitated through the assistance of a tracked excavator and wheeled dozer. Among others, the work entailed the removal of old dredger spoil and marine sediments that had been deposited on the breach creating an artificial berm deflecting the river away from St Lucia.

Following Tropical Storm Irina, the uMfolozi River flowed from bank to bank while the 2 km-long sand bar at the uMfolozi River mouth was overtopped as a result of the high swell. At the time of writing, the St Lucia estuary and uMfolozi River had not joined yet and the estuary mouth had not opened to the sea. However, the situation remained dynamic and was being closely monitored by staff.

"The uMfolozi River mouth has continued to 'eat' its way north towards the estuary, taking with it the thousands of tons of unwanted dredger spoil and marine sediments creating the artificial berm," noted iSimangaliso CEO, Andrew Zaloumis. "The management strategy of iSimangaliso to allow the uMfolozi and Lake St Lucia estuary to re-join, in line with new scientific work, is rapidly being brought closer by the extreme weather currently being experienced." ❑