

Abstract

We examine the degradation of the natural capital and ecosystem services of an important tropical lake, Kenya's Lake Naivasha, in the context of human activities and exploitation since the mid-20th century. These factors have culminated in the recent emergence of innovative governance arrangements with potential contributions to the future sustainability of the lake ecosystem.

Lake Naivasha maintains high ecological interest and biodiversity value despite its food web being controlled, at three trophic levels, by alien species for the past 40 years. The lake now has very high sites worldwide to be nominated by the government for Ramsar status as a result of local action, By 2010, however, progress towards sustainable management was limited, not least because the lake water had continued to be over-exploited for irrigation, geothermal power exploration and domestic supplies outside the catchment. A prolonged drought in Kenya in 2009–10, in conjunction with this ongoing over-exploitation, caused the lake level to recede to the lowest since the late 1940s and

We examine the ecological changes over the past 40 years and the reasons why new management regimes instituted over the past 10 years have to date been unable to halt

ecological degradation of the lake and its environs. We outline a future trajectory that links new governance initiatives with a wider network of stakeholders which, together with external

interventions that have been initiated in 2011, may well help to restore the ecosystem's health.

management; ecohydrology.