

Exploring the Impacts of COVID-19 on Coastal Tourism to Inform Recovery Strategies in Nelson Mandela Bay, South Africa

Estee Ann Vermeulen (Miltz)^{*1,3}, Jai Kumar Clifford-Holmes^{1,2,3}, Bernadette Snow^{1,3},
Amanda Lombard^{1,3}

¹ *Institute for Coastal and Marine Research, Nelson Mandela University, Gqeberha, South Africa*

² *Institute for Water Research, Rhodes University, Makhanda, South Africa*

³ *One Ocean Hub, University of Strathclyde, United Kingdom*

**Corresponding email: esteever01@gmail.com*

Address: Office 32, A Block, Ocean Sciences Campus, Nelson Mandela University, Gomery Avenue, Summerstrand, Gqeberha, 6001

ABSTRACT

Globally the COVID-19 pandemic has brought devastating impacts to multiple economic sectors, with a major downfall observed in the tourism sector, owing to explicit travel bans on foreign and domestic tourism. In Nelson Mandela Bay (NMB), South Africa, tourism plays an important role in the metro, but negative effects from the pandemic and resulting restrictions have left the sector dwindling and in need of a path to recovery. Working together with local government and stakeholders, this study applied system dynamics modelling to investigate the impacts of COVID-19 on coastal and marine tourism in NMB, to provide decision-support and inform tourism recovery strategies. Through model analysis, a suite of management interventions was tested under two 'what-if' scenarios, with reference to the business-as-usual governance response scenario. Scenario one specifically aimed to investigate a desirable tourism recovery strategy assuming governance control, whereas scenario two investigated a scenario where the effects of governance responses are impeded by exogenous effects from the virus. Results suggest that uncertainty remains prevalent in the trajectory of the infection rate as well as in associated trends in tourism. However, through the lifting of travel restrictions and the continual administration of vaccines, a path to recovery is evident.

KEYWORDS

COVID-19; Tourism, System Dynamics Modelling, Nelson Mandela Bay, South Africa.