

# Socio-Economic Analysis of the Costs of inaction of plastic debris leakage

The case of uMngeni River catchment in KwaZulu-Natal, Durban, South Africa

Swedish Agency  
for Marine and  
Water Management



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Global workshop on Source-to-Sea Management

114-16 December 2022, Geneva

# Sweden – South Africa Bilateral Cooperation on climate change and environment



SwAM and Oceans and Coasts cooperate on:

- » Source to Sea
- » Marine Spatial Planning
- » Environmental monitoring



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# Plastic leakage in SA

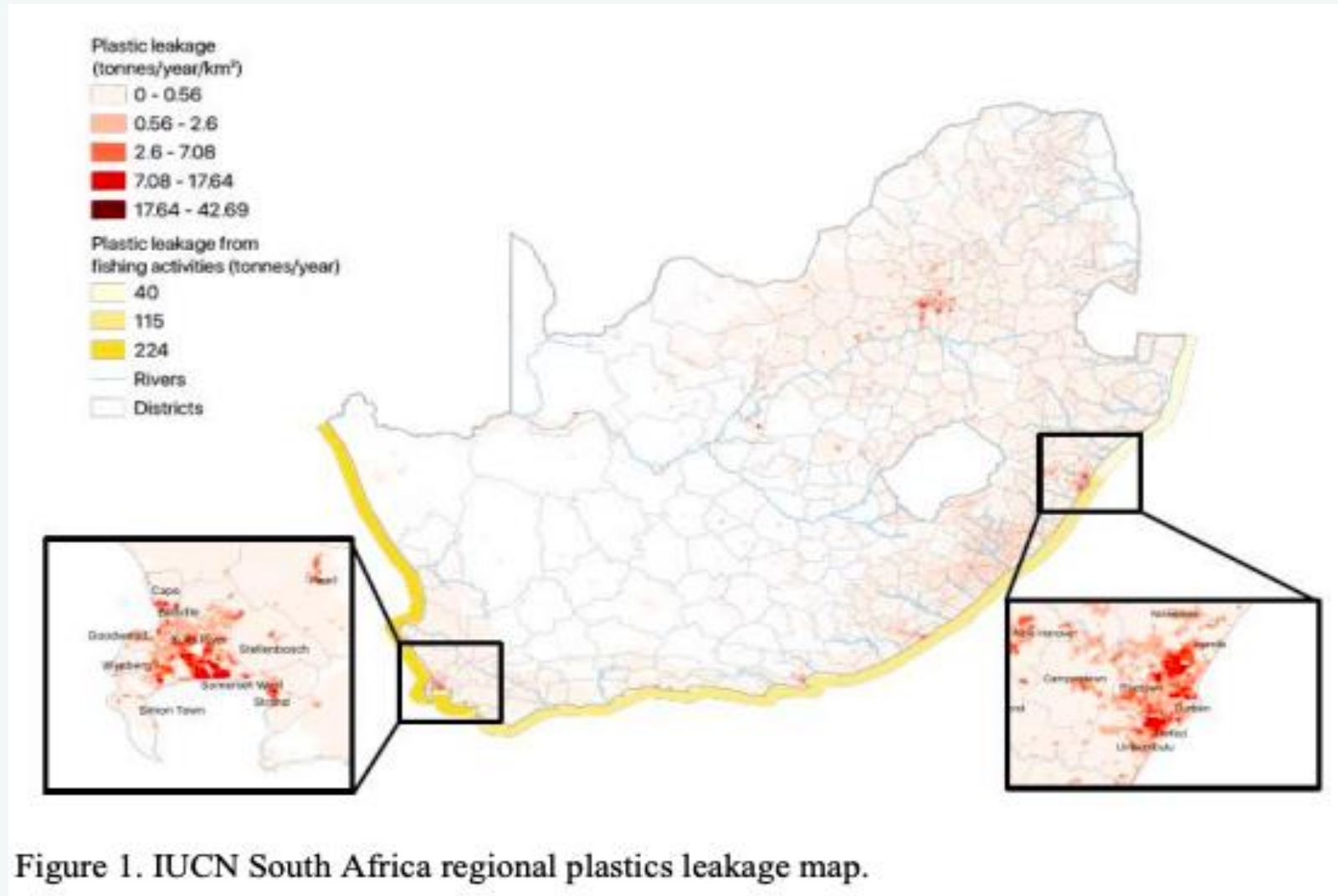


Figure 1. IUCN South Africa regional plastics leakage map.

# Purpose of the study

Swedish Agency  
for Marine and  
Water Management

**Socio-Economic Analysis of the Costs  
of inaction of plastic debris leakage into  
the uMngeni River catchment in  
KwaZulu-Natal, Durban, South Africa**

Final report



”Investigate **social and economic impact** of plastic pollution in the the uMngeni River Catchment”

Report 2022:8

Swedish Agency  
for Marine and  
Water Management

# Methodology

## Interviews

Assessment of  
stakeholder perceptions

## Modelling

Supply and demand of  
ecosystem services

Future scenarios and their  
predicted changes to  
ecosystem services

## Literature review

Known monetary costs  
of plastic waste

## Main results

- » Plastic waste has a direct impact on socio-economic wellbeing as well as on ecosystem services in Durban and its surrounding areas.
- » Plastic pollution affects peoples' dignity and perceptions about self-worth.
- » Conversely, when areas are re-stored people start taking pride in the area and themselves and this has potential to build social capital and a sense of community, which in turn has potential to enhance investment in environmental restoration and management
- » Monetary costs of plastic waste in the environment may include;
  - Damage to municipal infrastructure,
  - Loss of income from tourism,
  - Clean-up costs
  - Property value decline

# Future recommendations

- » Installation of a basic, efficient and maintained solid waste services (waste collection, recycle bins etc)
- » Expand Transformative Riverine Management Programme (TRMP) (**community co-operatives** clearing solid waste)
- » Installation of passive solid **waste traps**
- » Create a **value chain** for plastic waste





**Thank you!**

**Swedish Agency  
for Marine and  
Water Management**

