

THEME 6 COASTAL POLLUTION ALONG THE WESTERN CAPE COAST

The coastal zone is influenced by the direct interaction between land and sea and is therefore affected by both land- and marine-based sources of pollution. Most people in the province live within 25 km of the coast (Oceans and Coasts, 2012). The global report on human settlements suggests that by 2025, 73% of the African Population will be living in coastal communities (UN Habitat, 2011). Consequently, development and other pressures on the coastal zone are expected to continue.



DRIVERS

As the population increases in coastal area, so will the need for the treatment and handling of waste. Waste needs to properly managed in coastal areas in order to prevent the coastal environment from being impacted.

PRESSURES

There is a higher risk of pollution (including the risk of oil spills) in and around coastal metropolitan areas, which leads to deteriorating environmental health on the coastline, within coastal waters and on coastal islands. Some of the key sources of pollution include litter, wastewater, dredging and dumping and ship-based pollution.

STATE

The number of outfalls in the Western Cape totals 124. Currently 18 outfalls are authorised, 62 outfalls are in the process of applying for authorisation and 44 outfalls are not authorised (2017). The total discharge of wastewater for 2017 was recorded for only 40/124 outfalls, at 312,408,957 m³/annum. The highest contributor is the Overberg District Municipality due to the presence of aquaculture facilities. The majority of waste water treatment facilities fell below 80% compliance with the Green Drop Certificate (2017) (Figure 1). Single use plastics, such as straws, shopping bags, plastic utensils, plastic bottles, etc. are being identified as one of the largest contributions to solid waste ending up in coastal and marine systems. The number of emergency (S30) pollution incidents along the coast indicates that 17 incidents occurred between 1994-2017. However, there is no detailed reporting on any associated spill. The DEA, in collaboration with the Department of Science and Technology (DST), are in the process of developing a National Ocean and Coastal Information Management System (OCIMS) which aims to detect, assess and report marine-pollution incidents.

IMPACT

It is very important to assess, monitor and predict the impacts of pollutants on South African marine ecosystems in order to ensure long term sustainability of their resources. The assessment, monitoring, prediction and control of pollutants entering coastal waters is also as a potential risk to human health.

RESPONSES

Waste, in this case litter/rubbish, along the Western Cape coastline is managed through the Working for the Coast (WftC) initiative. Currently, the WftC programme is active along all sections of the coastline with a total budget of R137 950 000.00 being allocated between 2015 and 2018. Blue Flag beaches is an international annual award which focuses on the environmental management of our coastline and coastal waters to help tourism growth and development. There are currently 28 official Blue Flag beaches in the Western Cape. The Blaauwberg Nature Reserve was awarded the first WESSA Green Coast award in South Africa in 2018. The monitoring of coastal water quality in the Western Cape in response to pollution and waste is driven by Operation Phakisa. Ocean Conservancy's International Coastal Clean-up engages people to remove pollution from the beaches and waterways, identify the sources of debris and change behaviours that cause marine debris in the first place. The top 3 items collected in the International Coastal Clean-up event in terms of total numbers are cigarette butts (9 192 units), food wrappers (8 285 units) and plastic bottle caps (7812 units).

OUTLOOK: HIGH CONCERN

The state of pollution and waste of the Western Cape is not yet fully understood. There are some positive responses to pollution and waste (such as the WftC, Blue Flag Beaches and Green Drop programme). Other programmes that are currently being implemented include the Berg River and Breede River Improvement Projects. However, pollution and waste still remain an area of high concern due to the ever increasing pressures resulting in increasing levels of pollution and waste.



