

CLIMATE CHANGE IMPACT ASSESSMENT

PROPOSED DEVELOPMENT OF THE GRANGER BAY PRECINCT AND LAND RECLAMATION AT THE V&A WATERFRONT

BACKGROUND

A **Climate Change Impact Assessment** was conducted by **SRK Consulting** to determine the risks posed to the development from sea-level rise and other climate change enhanced hazards, as well as the impact of the development on these risks.



Granger Bay has a **Mediterranean climate** that is characterised by warm, dry summers and cool, wet winters with rainfall peaking in the winter months. Cape Town's climate is also influenced by changes in ocean conditions due to its location on the coast.



This section of shoreline is already **degraded**, consisting of a rocky beach with remnants of previous fill material. The site experiences significant **overtopping during winter storms**.

NATURAL HAZARDS THAT POSE A RISK TO THE SITE

FLOODING

1

Flooding is the most common recorded hazard in the Western Cape, accounting for 44.4% of disasters since 1980. The site is currently at medium risk of inland flooding and very high risk of coastal flooding risk due to its shoreline position.

STORM SURGES

2

Storm surges occurs frequently, with regional projections showing modest increases in surge height by 2050 and local bathymetry contributing to higher winter storm exposure.

DOUGHT FREQUENCY

3

Drought frequency is increasing, with biannual drought occurrence since 2015 and strong evidence of future intensification.

WILDFIRE RISK

4

Wildfire risk is high regionally; however, the immediate project site is fully urbanised and coastal and therefore has a low risk of direct exposure.

COASTAL EROSION RISK

5

Coastal erosion risk is low for most of the Waterfront due to engineered protections, but will increase with projected sea-level rise.