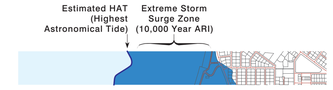
Northern Territory Government

GHD

SEA

NORTHERN TERRITORY STORM SURGE MAPPING

COX PENINSULA AREA 10,000 YEAR STORM SURGE INUNDATION for 2100



The technical information forming the basis of this storm surge inundation mapping is contained in the following reports prepared for the NT Government by Systems Engineering Australia Pty Ltd (SEA):

1. Darwin Storm Tide Mapping Study - 2006
2. High Resolution Storm Tide and Climate Change Impacts Study - 2010

Using the storm surge levels and estimates of Highest Astronomical Tide (HAT) from the above studies, the inundation and HAT extents for the projected mean sea level in 2100 were developed by GHD Pty Ltd in 2014 based on the latest topographic information (2009 and 2011). This map is produced by the NT Government for the Cox Peninsula area based on the storm surge inundation and HAT extents.

The map shows the total storm surge (technical terminology is storm tide) hazard risk due to tropical cyclones in terms of ocean water level comprising the combined effects of astronomical tide plus storm surge plus wave setup for one statistical Average Recurrence Intervals (ARI). It also shows the estimated HAT extent. The "Extreme Storm Surge Zone" shown on the map refers to the extent of inundation for a storm tide event of 10,000 year ARI (with approximately a 0.5% chance of exceedance within any 50 year period). The extent does not include the possible effects of very localised wave runup.

Average Recurrence Interval (ARI) is also called Return Period of the Risk and is defined as the "average" number of years between successive events of the same or greater magnitude. The ARI of a storm tide event gives no indication of when a storm tide of that magnitude may occur.

Highest Astronomical Tide (HAT) is the highest ocean level expected due to any combination of astronomical conditions alone and has an equivalent ARI of approximately 18.6 years. The HAT extent is used in this map as the reference for storm surge inundation. It is based on estimates of HAT levels derived from numerical hydrodynamic modelling that has not been verified by long term insitu measurements.

For detailed interpretation of this map and further information contact:
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Storm surge reports and maps are available on **www.nt.gov.au/floods**
This map produced **November 2014**, supercedes all previous versions.

GENERAL FEATURES

- Local Government Area — LITCHFIELD
- Property / Road Boundaries
- Suburbs / Localities — *STUART PARK*
- Major Road
- Minor Road
- Park / Reserve
- Railway
- Gas pipeline
- Watercourse, Lake or Lagoon
- Mangroves

Data Source:
Cadastre, road centrelines and administrative information
Northern Territory Department of Lands, Planning and the Environment.

Map prepared by:
Spatial Data and Mapping, Water Resources NT,
Department of Land Resource Management,
Goyder Centre, Chung Wah Terrace, Palmerston,
Northern Territory of Australia.

metres 500 0 500 1000 1500 2000 metres 2500

Black numbered lines are 2500 metre intervals of the Map Grid of Australia (MGA) Zone 52
Transverse Mercator Projection Horizontal Datum: GDA 94

GDA This map was produced on the Geocentric Datum of Australia 1994 (GDA 94)

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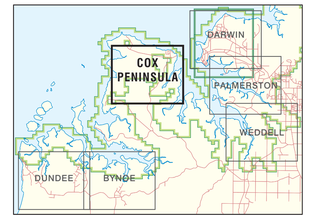

Extent of topographic information 2009 2011

MAP LOCATION