

NSW Nearshore Wave Tool

Wave hello to the new coastal wave tool and explore past, present and future wave conditions along the NSW coastline.

Visit the new NSW Nearshore Wave Tool (nearshore.waves.nsw.gov.au), to explore a regional forecast wave map across the entire NSW coast.

Use the interactive map to zoom in and explore any location along the NSW coastline. Here you'll find a series of data points at 10 m and 30 m depth, spaced every 250 m along the NSW coast. Click on a location to reveal the wave information panel, with access to:

- graphical plots of the current wave forecast period
- · user-selectable hindcast periods
- storm event analysis data.

The 10-day forecast uses colour contours to represent wave height across the map, with the white animations indicating wave direction.

A 10-day wave forecast





Historic wave data (hindcast), from the 1950s





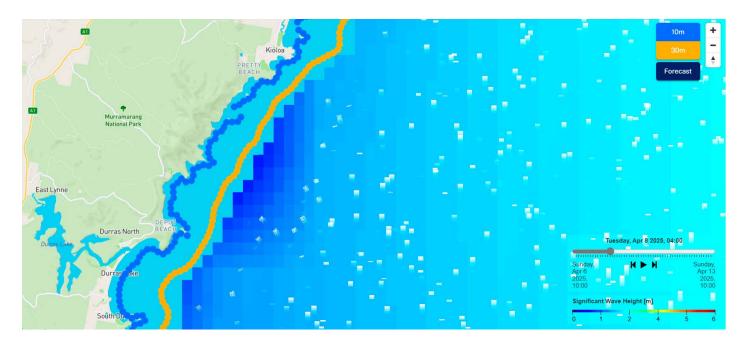
Historic storm event data (or an extreme value analysis)





Department of Climate Change, Energy, the Environment and Water





Explore past wave events and storms

The hindcast function allows you to look back in time at historic wave data, extending all the way back to the 1950s, to see how waves have changed through time.

The storm analysis tab can help you investigate historic coastal storm events and determine the wave conditions that were associated with an event.

An analysis can also be performed either for the peak wave height (in metres), or the total storm energy (MWh/m) reaching the coast over the duration of the storm event. Data such as this is important in supporting coastal erosion mapping, and informing development of coastal management programs and planning across NSW.

Our data request page allows users to request even more detailed hindcast data for selected points along the coastline (maximum 10 locations per request) for a specified date range. Once processed, the hindcast data is sent by email direct to your inbox for you to download.

Easy for everyone

The NSW Nearshore Wave Tool has been designed with everyone in mind including:



surfers, swimmers, boaters and recreational fishers to check what the wave forecast is over the next 10 days, and plan accordingly



coastal managers, scientists and engineers to inform coastal hazard assessment and planning



lifeguards and emergency response agencies to help manage risk from coastal hazards such as large storm waves, and to inform decisions around beach closures



coastal researchers who can use the data for wave models and sand transport studies to better understand coastal erosion and wave flooding.

For more information and to access the tool, visit nearshore.waves.nsw.gov.au/home/forecast

Cover photo: East Coast low swell at Mimosa Rocks NP (David Rogers/DCCEEW)

Published by: Environment and Heritage, Department of Climate Change, Energy, the Environment and Water, Locked Bag 5022, Parramatta NSW 2124.

Phone: 1300 361 967; Email: info@environment.nsw.gov.au; Website: www.environment.nsw.gov.au.

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