Department of Sustainability and Environment

Short-term coastal erosion

Where's my beach gone?

Summer 2011/2012

Short-term coastal erosion is a normal coastal process. In some years this can cause changes to our beaches.

Waves, tides and wind move and deposit sand along the coast all the time. As a result, the coastline advances and retreats. Most years this is barely noticeable but in some years, like this one, you will notice differences at some beaches.

Major erosion events usually happen in winter. They can lead to cliff slumps, sand slumps and slips on dunes, sand being removed from one beach and deposited on another, new sand bars, sand blocking estuaries and loss of vegetation.

During 2011 there were significant changes at some locations. Local managers are now working on the best way to look after these beaches.

Which beaches are affected?

Some beaches from Point Lonsdale to the South Australian border may be impacted by winter erosion.

Areas that have been particularly affected include beaches at Anglesea, Fairhaven, Skenes Creek, Apollo Bay, Marengo, Port Fairy and Portland.

All beaches are still open and available for normal coast uses including surfing, fishing, walking and swimming. In some cases there may be less sand to play on or barriers protecting dangerous or sensitive areas.

Beaches from Point Lonsdale to the South Australian border may be impacted by coastal erosion

What happens where short-term erosion has occurred?

Protection of the shoreline is not usually required as a result of short-term erosion. However, sometimes action is needed where coastal settlements are very close to the changing beach environment or where people and their activities have changed normal coastal processes.

This year along the south west coast actions being undertaken by authorities in response to short-term erosion include:

- Closing and/or providing alternative beach access points and car parks
- Rebuilding beach access points
- Erection of temporary barriers

In extreme cases the Department of Sustainability and Environment has approved sand to be moved from beaches where sand has built up to beaches experiencing erosion. This helps protect eroded beaches against unusually high tides.

What you can do to help

Our coast is very resilient, but it can also be very fragile if it has been impacted by erosion. Simply walking on sand dunes can damage the sensitive vegetation and the homes of animals. Some things that you can do to help are:

- Keep to formed dune tracks to protect sensitive coastal plants and animals.
- Don't drive cars or motorbikes on our beaches.
- Don't dune surf or ride boogie boards on dunes.
- Obey warning signs and other barriers restricting access to dangerous or sensitive locations.
- Join your local volunteer groups and become involved in the protection of our coastline.

State Government Victoria

What is being done to reduce the impact of short-term erosion in the future?

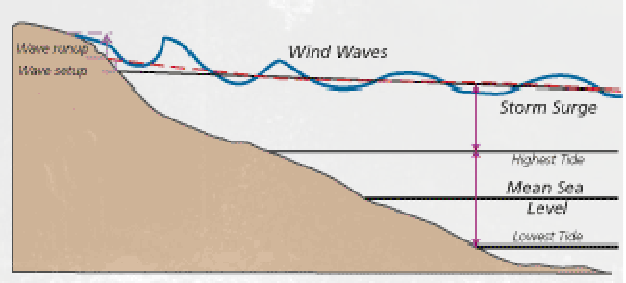
The Department of Sustainability and Environment is working with coastal planners and managers to help manage risks and minimise impacts from a range of coastal processes, including erosion.

Wherever possible the need for emergency works as a result of coastal erosion is addressed by the Department of Sustainability and Environment.

How does short-term coastal erosion happen?

The coast is always changing and coastal erosion is part of this dynamic environment.

Short-term erosion, similar to what has occurred on many beaches in the winter of 2011, takes place over periods of days or years. During storms, waves remove sand from beaches and can reach the backshore area and erode the sand dunes. This sand acts as a sand reservoir. The beach changes, but the change is considered normal.



The interaction between tides, storm surges and wave breaking processes at the coast. ***Source: CSIRO***

Impact of Climate Change on short-term coastal erosion

The Victorian Coastal Strategy 2008 identifies that during this century it is likely the Victorian coastline will be impacted by sea level rise and increased frequency and severity of storm events which are likely to lead to greater coastal erosion and inundation.

The Strategy contains a range of policies and actions to help prepare Victoria's coastal communities for impacts associated with climate change (see http://www.vcc.vic.gov.au/vcs.htm).

For more information on climate change impacts, see www.climatechange.vic.gov.au.

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