# FACT SHEET Cliff Risk



Cliffs are dynamic and can collapse without warning. When visiting areas with cliffs remember:

- Stay away from cliffs and caves
- Stick to established tracks
- See the signs and follow guidance
- Share the word and warn others.

### **COASTAL CLIFFS**

Cliffs and bluffs occupy 46% of the Victorian coastline. Over time, they have been shaped into variable and often spectacular features. They include some of the Great Ocean Road's most iconic natural sites, including the Twelve Apostles in the Port Campbell Marine National Park. Many cliffs overlook beaches or rocky platforms that are exposed at low tide, and are popular coastal locations or surf breaks.

## **CLIFF HAZARDS**

Cliff collapses, also known as cliff failures, occur when the internal strength of the cliff formation is reduced beyond a threshold and can no longer support its own weight. This can occur when the cliff is exposed to:

- · Erosion at the cliff base
- Changes in moisture content (drying or wetting)
- · Extreme heat and cold
- · Large rainfall events and erosive water runoff
- · Seismic activity.

However, cliff failures are unpredictable and can also occur without warning, posing a significant risk to clifftop and beach users.

Cliff failures occur at a range of scales, depending on the cliff structure and the trigger for collapse. Cliff failures may range from localised rock topples to large-scale rotational landslides. Collapses at Demons Bluff in Anglesea are regularly over 100 metres in length, extend over 40 metres out from the base of the cliff and weigh over 10,000 tonnes (see Figure 1).



Figure 1 - Cliff failure at Demons Bluff, Anglesea (2019).

### **CLIFF HAZARD MANAGEMENT**

Parks Victoria and the Great Ocean Road Coast and Parks Authority undertake regular geotechnical assessments of the cliffs within our management areas to better understand coastal cliff dynamics and associated hazards enabling us to make effective management decisions.

We undertake the following management actions for public safety:

- Installation of cliff warning signage
- Ongoing monitoring including regular site visits, aerial imagery analysis and drone surveys to improve our understanding of cliff dynamics
- Installation and maintenance of fencing on clifftops to keep users away from the cliff edge
- Relocation of assets such as walking tracks inland away from the cliff edge as erosion encroaches landward
- Working with local communities, event organisers and partner agencies to raise awareness of cliff hazards and safety.

# **GET IN TOUCH**

If you have any questions or would like to provide a photo of a recent cliff collapse or failure, please get in touch:

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