

Apollo Bay and Marengo Foreshores Winter 2018

August 2018



Coastal erosion at Apollo Bay and Marengo in 2018 has impacted on the coastline, resulting in community risk and increasing vulnerability to future storms.

The Department of Environment, Land, Water and Planning (DELWP) with the land manager the Otway Coast Committee of Management (OCC) is responding to coastal erosion with support from VicRoads and Colac Otway Shire. These agencies are considering a range of repair works, in addition to long-term measures to protect the sites from further coastal erosion.

By early October, DELWP will present the community with a range of options to consider during public consultation events. Potential solutions will be worked through with the community, and their views will be integrated into the decision-making process. Before undertaking long-term actions, significant consideration will also be given to potential effects on the community, ecosystems, organisations, infrastructure and coastal assets.

Winter 2018

Coastal erosion has significantly impacted the foreshores at Apollo Bay and Marengo this winter, with most damage seen during the storm from 14 - 18 June. The storm damaged 750 metres of foreshore at Apollo Bay, resulting in the erosion of 5,000 cubic metres of

sand, and increasing the vulnerability of township infrastructure and the environment to future erosion.

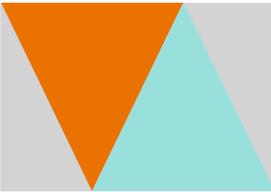
Response

Drones have been regularly used to monitor sand levels at Apollo Bay. Flights were conducted prior to the storm (1 June 2018) and following the storm (21 June and 27 July 2018). Comparing the drone footage from these flights has helped prioritise sites for sand placement during sand renourishment works.

A local community group, with support from Deakin University Marine Mapping Group through the Victorian Coastal Monitoring Program, will take over sand monitoring for the next three years and provide regular reports to DELWP and the OCC.

Government agencies are working together to identify long-term solutions for the Apollo Bay and Marengo foreshores, and on-site meetings involving VicRoads, DELWP, the OCC and Colac Otway Shire have taken place.

So far this year, more than 6,200 cubic metres of sand has been transported to the Marengo foreshore, as part of an ongoing sand renourishment program. At Apollo Bay more than 6,100 cubic metres of sand has been delivered to the foreshore, to provide short-term protection for assets behind the foreshore while long-term solutions are determined. All DELWP renourishment projects are designed by coastal engineers to optimise foreshore protection relative to cost.



Apollo Bay and Marengo Foreshores Winter 2018

During the renourishment works, sand is placed in a way that allows natural coastal processes to reshape the new sand to a more natural form. In some cases, it appears the new sand is eroded; however, it is not lost and is still in the system. For example, it may settle offshore, preventing larger waves from reaching the shore.

Prior to the recent erosion at Apollo Bay, DELWP and the OCC prioritised sand relocation works at Marengo over Apollo Bay, based on advice from coastal experts. The Marengo works provided an immediate buffer from winter storms, with the additional sand safeguarding infrastructure behind the foreshore including the Great Ocean Road path, public car parking and the Great Ocean Road foundation. Once renourishment works are completed at Apollo Bay, further works will continue at Marengo.

Expert advice as to how beaches respond to sand renourishment can be found at coastadapt.com.au

Next steps

Government agencies are identifying potential solutions to address the storm damage at Apollo Bay and Marengo, and to protect assets behind the foreshores from future erosion events.

DELWP and the OCC will seek further advice from specialist coastal and infrastructure engineers to guide response works and capital works including replacement of walking tracks, car parks, beach access, fencing and barriers. DELWP, the OCC and VicRoads are also investigating a range of long-term measures to address erosion in the future.

By early October, the community will be presented with a range of short-term and long-term measures to consider. During a public consultation process, community feedback will be sought regarding the prioritisation of repair works and preferences around long-term solutions to address ongoing erosion events. Discussions will also be held about the issues associated with restoring damaged infrastructure. The views of community and stakeholders will be integrated into the decision-making process.

Ongoing sand renourishment

The prevailing winter conditions will continue for the next few months with overactive swell continuing to be

generated in the Southern Ocean. The biggest erosion impact at Apollo Bay is when these swells combine with high tides and strong winds.

As a result, the only short-term option is to continue to renourish the beaches with sand dredged from the Apollo Bay Harbour. This will help minimise further erosion and provide temporary protection for assets behind the Apollo Bay foreshore.

Beach renourishment on its own is not a long-term solution to future climate change scenarios. Regardless of what the solution is, sand renourishment will need to continue along the foreshores at Marengo and Apollo Bay.

DELWP will keep the community informed about what is happening at the Apollo Bay and Marengo foreshores, and community monitoring of the foreshores will help guide future management of works to address erosion.

Safety and wellbeing

As the project works continue, it's important that people respect the safety barriers that have been put in place, closing off dangerous sections of beach.

The stretch of Apollo Bay foreshore that has been closed is approximately one kilometre in length and runs from Cawood Street (Tuxion Road) to Marriners Lookout Road. Signs are in place, in addition to barriers which have closed the area off to the public.

The car park on Cawood Street remains partially open to the public. Barriers are in place, closing off a section of the car park.

DELWP held a community beach monitoring workshop in Apollo Bay on 7 May 2018. To get involved in community monitoring, contact the OCC at www.otwaycoast.org.au