

**CASE STUDY:**

# ELCOROCK SEA WALL

**ROYAL NATIONAL PARK, BONNIE VALE NSW  
DECEMBER 2017**

**CLIENT: NATIONAL PARKS & WILDLIFE  
SERVICE**

## ELCOROCK

The ELCOROCK system consists of sand-filled geotextile containers built to form a stabilising, defensive barrier against coastal erosion.

The geotextile containers are made from Texcel, a durable staple fibre geotextile. It's a versatile system ranging from hand-filled 40kg containers to hydraulically-filled 300 tonne mega-sand containers and tubes.

The ELCOROCK shoreline protection system has been proven through over 20 years of use in harsh coastal environments. These structures have withstood coastal abrasion, vandalism, UV damage and even Category 5 cyclones.

The ELCOROCK system is supported by extensive research and development and superior design support. It provides a cost-effective alternative to traditional coastal erosion protection systems made from concrete, rock armour, steel or timber. It increases public amenity of foreshore areas and enhances the environment.

National Parks and Wildlife Service (NPWS) in NSW has a long coastline with developed infrastructure that is subject to storms eroding the foreshore and ultimately the infrastructure. The beach front erosion caused the popular Bonnie Vale Campground to be reduced in size. Previous installation of rock rip rap has continued to fail incrementally and has been a hazard to users when climbing over the rip rap to access the beach.

The client, consultant and representatives from Geofabrics walked over the site and discussed the advantages of Elcorock. The client and consultant decided that the 0.75m<sup>3</sup> Elcorock bags would provide a structural solution to the erosion and be able to be rapidly installed prior to Christmas when the park is crowded with campers.

Using Elcorock containers instead of rock eliminated the use of heavy trucks which damage the lightly built access road. Also unlike rock, Elcorock does not have any sharp edges -reducing potential for injury or liability that rocks may cause. The sand-filled containers enhance the environmental and public amenity in a high public use area.

Elcorock was installed in a neat flowing wall, gently staggered 5 bags high which allowed the grassed grounds to be re-established.

Upon seeing visitors using the bags as seating and transiting the beach NPWS were impressed and has subsequently specified additional Elcorock walls in other locations.