Palm Beach Shoreline Project

Palm Beach Artificial Reef

The Palm Beach Artificial Reef is a unique underwater rock structure, built to enhance coastal protection along an iconic stretch of Gold Coast coastline.

Historically, Palm Beach on the southern Gold Coast is one of the city’s beaches most vulnerable to the threat of coastal erosion. Data collected since the 1960s showed that this vulnerability was a result of Palm Beach having the lowest volume of sand compared to other Gold Coast beaches backed by beach front infrastructure.

After carefully considering an appropriate solution, an artificial reef in combination with sand nourishment was adopted as the best option for Palm Beach. This option was also shown to be capable of enhancing surf amenity, an important outcome for the local surfing community.

In 2017, sand nourishment kicked off and more than 470,000 cubic metres of clean sand was delivered along the shores of Palm Beach. This was part of a wider program delivering more than three million cubic metres of sand along all Gold Coast beaches.

Fast forward to May 2019 and work commenced on a one-of-a-kind artificial reef, located approximately 270 metres offshore from Nineteenth Avenue between the beach and the existing natural reef. 60,000 tonnes of rock, each weighing up to eight tonnes, were loaded onto barges in Brisbane and transported to Palm Beach. A specialist marine construction vessel then moved the rocks into position using GPS technology.

In September 2019, a plaque was unveiled onshore from the artificial reef, to mark the completion of the $18.2 million project.

Read our brochure to learn more about this initiative:

- Palm Beach Shoreline project brochure A4 [PDF, 1Mb]
- Palm Beach Shoreline project brochure A3 [PDF, 1Mb]

Safety around the artificial reef

All beach users should familiarise themselves with beach and surf safety information prior to accessing Gold Coast beaches. Signage has been installed along beach access points near the Palm Beach Artificial Reef detailing hazards and warnings related to the reef.

When swimming or surfing near the artificial reef please note:

- Water can be shallow above the artificial reef; please exercise caution when in close proximity.
- Observe the surf and wave conditions before surfing.
- Conditions may be dangerous and can change unexpectedly.
- There may be strong currents and hazardous waves on and around the artificial reef at times.
- The submerged uneven rock surface may present an entanglement risk.
- Similar safety considerations exist when swimming or surfing near any submerged rocks.
- The area may not be patrolled by lifeguard services.

Project videos

More information

- Palm Beach Artificial Reef fact sheet [PDF, 1Mb]
- Palm Beach Artificial Reef FAQs [PDF, 1Mb]

Key Information

Brochures, fact sheets & reports

Gold Coast Surf Management Plan

External links

Griffith University - Coastal management

Palm Beach Artificial Reef time-lapse

YouTube - Palm Beach 2013
Projects & strategies

Ocean Beaches Strategy