

The Tweed River Entrance Sand Bypassing Project is a joint initiative of the New South Wales and Queensland State Governments.

Administered by the NSW Department of Lands in conjunction with the Queensland Environmental Protection Agency, the project receives financial contributions from Gold Coast City Council and support from Tweed Shire Council.

In December 1999, the two state governments awarded contracts to a consortium led by McConnell Dowell Constructors (Aust) Pty Ltd to design, construct and operate a sand bypass system until September 2024. Construction began in February 2000 and the system began operating in May 2001.

For more information

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Or visit the following websites

www.tweedsandbypass.nsw.gov.au
www.lands.nsw.gov.au/crown_land/tweed_sand_bypass
www.epa.qld.gov.au/sandbypass

Tweed River Entrance Sand Bypassing Project



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Why the system is needed

Prior to the sand bypass system, sand that naturally moved northwards along the coast accumulated on Letitia Spit behind the Tweed River's southern training wall. It also formed a sand shoal across the river's mouth that hindered navigation to and from the river.

As sand was being trapped, the southern Gold Coast beaches didn't receive their natural sand supply. This meant the beaches were unable to fully recover following storm erosion events.

The system provides a practical means of moving sand past the Tweed River entrance. It improves navigation conditions and provides the southern Gold Coast beaches with a constant supply of sand.

The bypass system will keep the beaches in a condition like that seen prior to the training walls' construction in the 1960s.



What is the Tweed River Entrance Sand Bypassing Project?

The project is a sand transport system that collects sand from the southern side of the Tweed River entrance and pumps it under the river to outlets on the northern side. From there the sand is transported by wave currents to nourish southern Gold Coast beaches. The project periodically dredges sand that accumulates at the Tweed River entrance. This sand is also transported to southern Gold Coast beaches. The system is designed to transport the natural quantities of sand that move northwards along the coast.

The project's objectives are:

- to establish and maintain a safe, navigable entrance to the Tweed River
- to restore and maintain the amenity of beaches on the southern Gold Coast of Queensland.



The sand bypass system consists of:

- a 450m sand collection jetty, located 250m south of the Tweed River entrance
- 10 submersible jet pumps supported by the jetty that sit below the sea bed and collect sand
- a water intake on the river's southern bank, that supplies water to operate the jet pumps
- a control building located on Letitia Spit which houses the pumps, electrical equipment and controls. From here, sand slurry is pumped northwards under the river
- 3.1km of 400mm diameter steel and polyurethane underground pipeline which transports the sand to one of the discharge outlets
- discharge outlets located at East Snapper Rocks and West Snapper Rocks. Intermittent outlets are also used at Kirra Point and Duranbah.

