

Gold Coast Seaway: a marine lovers' paradise

Underwater at the Gold Coast Seaway you can find a world of colourful fish, distinctive rays, territorial turtles and even a seahorse colony. This may not be the place to see corals but you'll most definitely see big fish. A variety of 404 species of fish have been sighted throughout the Seaway, comparative to the well-known Flinders Reef off the tip of Cape Moreton (which supports 477 fish species).¹ Ian Banks, the local dive expert believes "the Gold Coast Seaway is the best dive site in any Australian city."¹

Located at the northern end of the Gold Coast, adjacent to the most southern part of the Moreton Bay Marine Park, the Gold Coast Seaway separates The Spit from South Stradbroke Island and allows tidal exchange between the ocean and the Broadwater (see *Tidal Exchange* information sheet). Tidal flows carry estuarine nutrients from the rivers and canals, making food available to a myriad of marine life. The Seaway also offers a unique mix of structures and formations on the seafloor where marine life can take shelter. The annual water temperature range is 18–27°C. This is ideal for sub-tropical marine life and marine life lovers, too!



Aerial view of the Gold Coast Seaway (Source: Skyepics 2011)

Habitat values of the Gold Coast Seaway

The Gold Coast Seaway supports a diverse range of marine habitats and although largely man-made, the area supports fish communities rarely seen elsewhere in the region.¹ Experts have recognised how ecologically impressive the Gold Coast Seaway is for such a small area.²

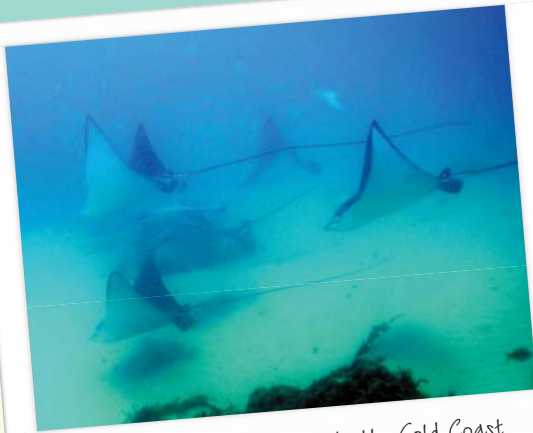
The seabed floor is mostly coffee rock covered by current-swept sand. Rock is exposed where currents are strongest. The channel has a maximum depth of 20m and is bordered by two steep seawalls comprised of large boulders. There are some patches of seagrass meadows in the west, near Wave Break Island, and the long and short sand bypass pipes that run across the Seaway attract large aggregations of fish.



Bigeye Trevally congregate around the sand bypass pipe (Source: Ian Banks 2008)

Did the Gold Coast Seaway always have so much marine life?

The ever-changing sand bar of the Gold Coast Seaway was not always flourishing with life. The Deep Hole at Mud Island was the place to see muck-diving critters, turtles and other marine creatures; however, once the Gold Coast Seaway was developed, it was sooner colonised by a wider range of marine life.



White-spotted Eagle rays in the Gold Coast Seaway (Source: Ian Banks 2005)



A Stripey amongst the seagrass bed at Wave Break Island (Ian Banks 2008)

Migration patterns

The Gold Coast Seaway has many visitors, both big and small. Humpback whales can be spotted off the coast and sometimes around the seaway entrance during their annual migration along the east coast of Australia. There are also many aggregations of fish that migrate through the seaway channel on a seasonal basis, adding to the conservation value of the area.

Human impacts

As the strong currents traverse through the Seaway, conditions can change quite quickly. This means fishing lines can get caught amongst the rocks, snap and be left tangled in the marine environment. This fishing debris is a risk to fish, turtles and rays. Boat strikes with marine life are also common, so care must be taken when entering and exiting the Seaway.

Gold Coast City Council and State Government sectors actively work together to manage this valuable coastal marine haven. Frequent litter pick-ups, Go Slow limits and community education programs have helped maintain this much-loved environment.



A Green Sea Turtle tangled in fishing line in the Seaway (Source: Ian Banks 2007)

For more information

To find out more about the construction of the Gold Coast Seaway and associated Wave Break Island, see *Wave Break Island* and *The Gold Coast Seaway* information sheets. You can also check out divingthegoldcoast.com.au for more on the marine life of the Gold Coast.

¹ Ian Banks (2010), Gold Coast Seaway divingthegoldcoast.com.au/index.asp?PageID=seaway

² Johnson, J. W. (2010) Fishes of the Moreton Bay Marine Park and adjacent continental shelf waters, Queensland, Australia, *Nature* Vol 54 (3), pp: 299-353.