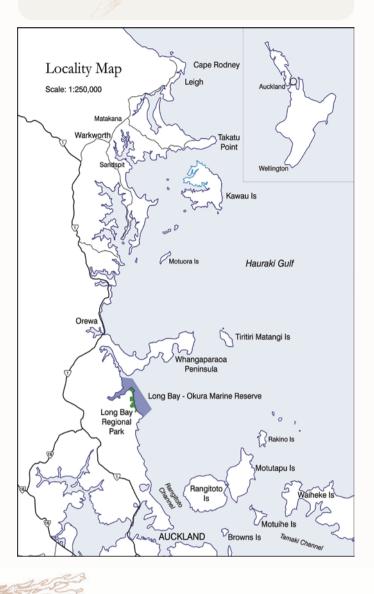
How to get there

The reserve is only 25 km from the centre of Auckland and is easily accessible by both public and private transport. (A regular bus service operates between Auckland CBD and Long Bay).There is road access to several points on the Okura Estuary, the Okura Bush Walkway and Stillwater (see map overleaf). Excellent public access and car parking facilities are found at Long Bay Regional Park.



Caring for Marine Reserves

E aukati ana i te hi ika, ki te mau ki te patu ika koura kaimoana mataitai, rimu

COOK ISLAND MAORI

Kare e akatikaia te tautai, apai, me kare, tā i te ika, te koura, te au kai mei te pipi, ka'i, i roto i teia pae tai i rauiia.

TONGAN

'E 'ikai ngofua ha fangota, pe ha fetuku pe tamate'i 'a e ika, paka, 'uo, fingota

Ua faasaina le fagota, le aveina ma le faaleagaina o ia, pa'a, ula, figota ma isi taumafa o le sami i lenei ogaeleele o le sami faaleolec

Nakai maeke ke futi ika, uta poke keli ha ika, tau kai moana kehekehe poke tau limu makamaka mai he tau maaga tahi fakakatofia kua leveki pauaki ke

CHINESE 在海洋保護區內禁止釣魚、捕捉或殺魚類、甲殼 類動物、貝類或海藻。

해양보호시역내에서는 몽고기나 갑각류 및 조개류와 해초유를 포함한 모든 해양동식물을 잡거나 세집 혹은 녹이는 등의 행위를 일체 곱합니다.

JAPANESE

海洋自然保護区 (Marine Reserve) 内での負釣り、または負、エビやカニ等 の甲殻類、貝類、海草類を採集したり、殺すことは禁止されています。

ห้ามตกปลา จับหรือม่าปลา สัตว์ทะเลประเภท ปู กุ้ง และสัตว์อื่นๆเช่น หอย หรือสาหร่ายทะเล เป็นอันขาคภายในบริเวณทะเลสงวนแห่งนี้

पर, रस्म संबंधी कारण, मछली, कर्क मछली, सीपदार मछली और समुद्री शैवाल पकड़ना, मारना या संग्रह करना वर्जित है

Isa sthāna para, rasma sambandhi kāraṇa, machalī, karka machalī, sīpadāra machalī aura samudrī śaivāla pakaṭanā, māranā yā saṅgraha karanā varjita hai.

Further Information

Maungauika/North Head Office North Head Historic Reserve, Takarunga Rd, Devonport Ph 09-445 9142 (office hours)

Tāmaki Makaurau/Auckland Visitor Information Ph 09-379 6476 (office hours)

www.doc.govt.nz

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New Zealand Government





What are marine reserves?

Marine reserves are areas of sea and foreshore where all marine life is totally protected. They are the national parks of the marine world and fishing, shellfish gathering and any other disturbance of marine life is strictly prohibited. Marine species and habitats are left to grow naturally and degraded areas are allowed to recover. This makes them ideal places to study marine ecosystems, and for comparisons with other unprotected marine

Long Bay - Okura Marine Reserve

The Long Bay-Okura Marine Reserve protects a stretch of coastline on the east coast just north of Auckland city. The coast here is typical of that found throughout much of the Waitemata Harbour and inner Hauraki Gulf - moderately sheltered, and largely formed of Waitemata sandstones and mudstones. Formally established in November 1995, the reserve includes a variety of coastal habitats - sandy beaches, rocky reefs, estuarine mudflats and mangroves.

What can you do in the reserve?

Marine reserves are ideal places for scientific study, education, snorkelling, diving, eco tourism, swimming and exploring rock pools. You are welcome to visit Long Bay-Okura Marine Reserve where all these activities, together with boating and picnicking, are encouraged.

Walking

A walking track from the adjacent Long Bay Regional Park (Auckland Council) extends northwards along the coast to the Okura River. The Okura Estuary Scenic Reserve (DOC) and the Okura Bush Walkway (part of the NZ Walkway system) provide walking access to the north bank of the Okura River and to Stillwater. These are accessed from Stillwater and Haigh Access Road.

Explore

Explore the rock pools but put any rocks you turn over back in their original position. This will help protect the plants and animals living on and under them.

Boating

Boats are allowed within the marine reserve, but care should be taken to avoid damaging marine life by dragging anchors. No waste, sewage or ballast water should be discharged within the reserve.

Help take care of this reserve

Long Bay - Okura Marine Reserve is managed by the Department of Conservation Maungauika/North Head Office. Its rangers watch over the area and enforce the "no take" restrictions. Taking or attempting to take from a marine reserve is a criminal offence with a maximum penalty of up to 3 months in prison and a \$250,000 fine.

All marine life within the marine reserve is protected from disturbance or harm, including all plants and animals. No fishing or collecting marine life or unnecessary disturbance is allowed. The seabed, foreshore and all natural material such as sand, rocks and shells are also protected.

In the interests of visitor safety there is a 5 knot restriction on all vessels within 200 metres of a divers' flag or the shoreline, or 30 metres from a person in the water or another vessel.

The success of a marine reserve depends on a caring community that supports conserving the reserve in its natural state for all to enjoy. Please report any breaches of these rules to the Department of Conservation on the 24 hour DOC HOTline

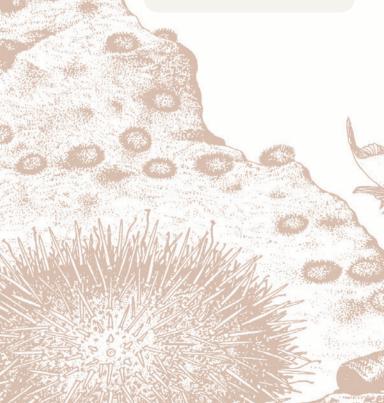
0800 362 468.



Te Papa Atawbai









Sand, rock and mud

The shores and waters of the Long Bay-Okura Marine Reserve are typical of the relatively sheltered inner Hauraki Gulf.

However, you can find a great diversity of coastal habitats here—the sandy beaches of Long Bay and Karepiro Bay, the rocky reefs off the two headlands at either end of Long Bay, and the sandflats and mudflats of the Okura River and estuary. While Toroa Point at the southern end of Long Bay is moderately exposed, the Okura River estuary, in contrast, becomes increasingly sheltered as it extends inland for some four kilometres. These different coastal environments, with their different degrees of shelter and exposure, provide homes for a great variety of plants, animals and fish.

Along the sandy shores

Along the shoreline at Long Bay, a population of tuatua, Paphies subtriangulata, makes its home by burrowing into the sand. Below the tides, the sand dollar, Fellaster zelandiae, is common at Long Bay and Karepiro Bay. Further out to sea, beyond the reach of most breaking waves, are more stable, fine, muddy sands. These are home for the heart urchin Echinocardium cordatum.

On the rocky reefs

To the north and south of Long Bay beach are low rock reefs. In the coastal cliffs here you can clearly see the alternating layers of Waitemata series sandstone and siltstone. These same rock formations extend down into the sea to form subtidal reefs that extend to a depth of about six metres.

Along the shoreline, in the intertidal zone, the rocks form broad, wave-cut platforms, often almost horizontal, which step down from the base of the cliff to below low spring tides. One of the best examples of this is at Piripiri Point. Here you'll find rock pools with kina (sea eggs), cats eyes, whelks, periwinkles and barnacles.

Under the sea, in the subtidal zone, a dense forest of large brown seaweeds grows on the flat tops of the rocky reefs. The kelp *Ecklonia radiata* dominates, together with the tangled bladder wrack *Carpophyllum flexuosum*.

Beneath the kelp canopy, the rock surface is encrusted with pink "coralline paint", a thin calcaerous red alga.

Animals adapted to turbulent waters make their home here, like kina, *Evechinus chloroticus*, Cooks turban shell, *Cookia sulcata*, and a variety of other molluscs. Paua and crayfish populations are recovering.

Around the edges of these underwater reefs, ledges and overhanging rocky shelves of sandstone are formed as the softer siltstone layers erode more rapidly. A myriad of creatures, mostly filter feeders, live under these ledges - sponges, bryozoans, ascidians, small corals and at least three types of colourful nudibranchs.

Around some reef edges, a narrow band of low rocks is covered with a thin layer of sediment. Gardens of sponges have developed here, with finger sponges projecting 30-40cm above the rock surface.

A variety of fish frequent the reefs, such as the spotty, Notolabrus celidotus, snapper, Pagrusophrys auratus, and parore, Girella tricuspidatta.

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- Protect birds, fish, mammals and plants
- Keep the marine environment intact
- Keep the seas clean
- Remove rubbish
- Dispose of toilet wastes properly
- Consider others
- Cruise slowly
- Respect our cultural heritage
- Enjoy your visit
- Toitū te moana (leave the sea undisturbed)



Into the mangroves

The upper reaches of the Okura River are extremely sheltered and muddy, and salt water becomes diluted with fresh water. These are ideal conditions for mangrove forests, one of the most productive ecosystems on earth. Worms and crabs feed on detritus from the mangrove, *Avicennia marina*, and the tidal wash; barnacles and mussels grow on the trees' lower branches and roots.

At high tide, yellow eyed mullet, flounder and other finfish feed and spawn among the mangrove roots. The mangrove swamp traps sediments in its web of roots, and over time land is reclaimed from the sea. Already you can see areas of saltmarsh adjoining the mangroves, signs of natural land reclamation at work.

In the mudflats and estuary

At the sheltered mouth of the Okura River, shell sediments pile up. The dead shells attract the filter feeding tube worm *Pomatoceros caeruleus* and the barnacle *Elminius modestus*. Chitons and limpets are other residents. Scavengers and carnivores abound, including whelks and a variety of crabs.

The sandy flats of the Okura River support communities of animals and plants that are adapted to sheltered environments, such as the cockle, *Austrovenus stuchburyi*. The brown anenome *Anthopleura aureoradiata* attaches to shells, and the whelk *Cominella glandiformis* is common.

The sands of the estuary and mudflats are feeding grounds for many birds including herons, pied oyster-catchers and pied stilts.

The reserve extends north-east from Toroa Point (approximately 0.9 nautical miles (1.68km) towards Tiritiri Matangi Island, then past Piripiri Point to a port hand beacon marking the approaches to the Weiti Estuary. From here, the boundary extends to a small headland in Karepiro Bay. It includes all of the Okura Estuary and part of Karepiro Bay.

