

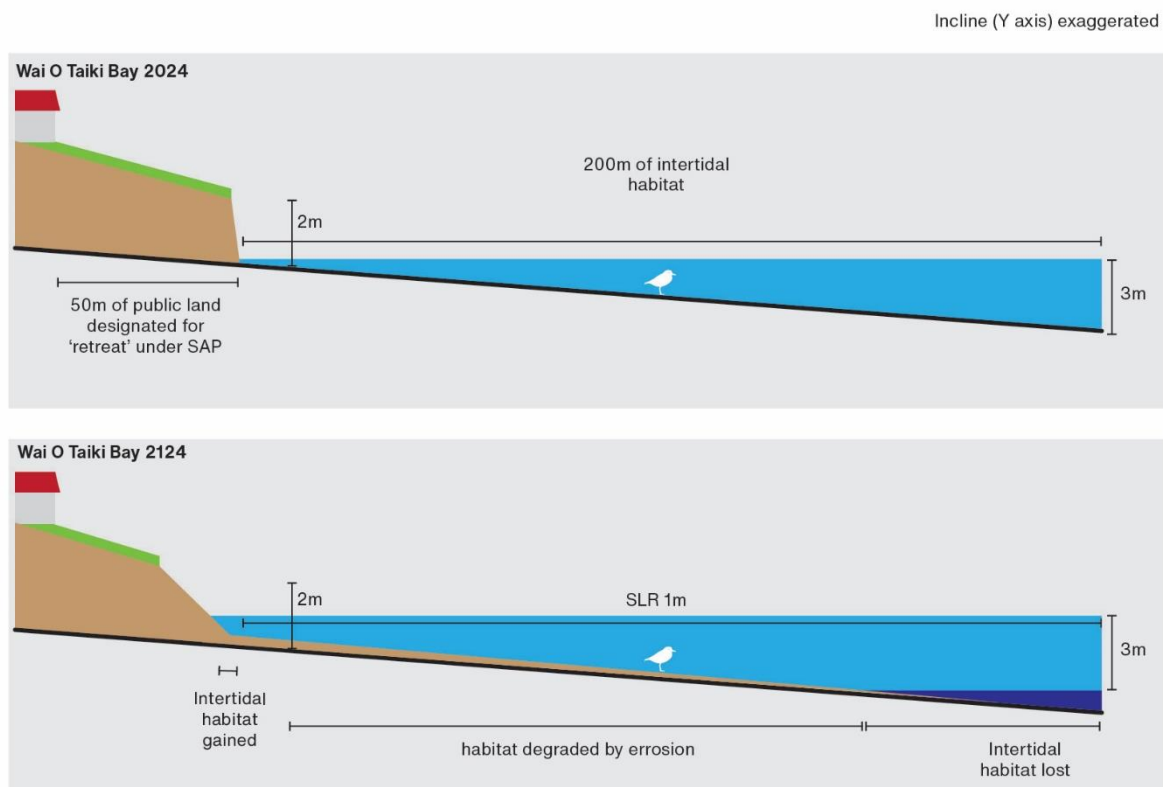
Submission on the Tāmaki Estuary Shoreline Adaption Plan

Kia ora, I monitor the shorebird populations in the Tamaki Estuary. I have had discussions with staff about this plan. I think the process is flawed and would like my concerns noted in the community engagement report.

Sea Level Rise (SLR) will continue to drown shorebird breeding, roosting and feeding habitat in Wai O Taiki / The Tāmaki Estuary. 100's of tones of shoreline will be lost to the ocean¹, this sediment will smother benthic sea life and reduce fish populations.

The plan won't prevent or even quantify habitat loss

Most of the natural margins of the Estuary (where the SAP will recommend natural retreat) are around two meters above the high tide line (Wai o Taiki Bay is a good example). The inclines of these cliffs will remain steep after 100 years of erosion, we won't see much 'relocation' but rather a net loss of shorebird habitat. (See diagram below). Erosion of these cliffs and elsewhere will result in 'mudification' which will degrade the function of the remaining shorebird feeding habitat.



The plan won't do anything about mudification

There is too much sediment in the Tāmaki Estuary, it smothers seagrass beds and chokes filter feeding shellfish and other invertebrates that shorebirds feed on. Tonkin & Taylor estimate that the do nothing approach adopted by the Maungakiekie-Tāmaki Local Board in Wai o Taiki Bay has allowed 100 tones of life choking sediment go into the Gulf over the last seven years. The SAP will not quantify the tones of mud that will be lost from the shoreline

¹ <https://blog.sh aunlee.co.nz/erosion-in-wai-o-taiki-bay/>

and go into the Hauraki Gulf Marine Park between now and 2050. Reducing terrestrial² sediment inputs is a high priority for ecosystems heavily impacted by mud but it is not within remit of the SAP.

The plan contradicts principles, including its own

Previous plans have made no effort to uphold the SAP principle – “to protect biodiversity including fish populations”.

One of the principles in the Shoreline Adaption Plan (SAP) is to let nature take its course, but the speed of predicted sea level rise is not at all natural, neither is most of the Tamaki's urban / suburban catchment.

The SAP will not quantify or attempt to remedy the impacts of SLR driven erosion on the intertidal or marine environment. I find this to contradict:

- 1) The operational guiding principles for all Shoreline Adaptation Plans developed by the Auckland Council Infrastructure and Environmental Services Mana Whenua Kaitiaki Forum, particularly to Protect koiora (biodiversity).
- 2) Auckland Council's responsibly as resource managers to protect indigenous biodiversity.
- 3) Community objectives to preserve and enhance the natural environment and ecosystems.

The plan has no teeth

The Tāmaki Estuary has a well-documented shorebird roosting habitat problem. The estuary has lost most of shell banks and its ability to produce shell is limited. The SAPs support the restoration of native habitats like mangroves and dune plantings that can protect the shoreline from storm surge, however the plans seem biased against protecting habitats which provide the same ecosystem services but are primarily threatened by over-fishing. Auckland Council is not protecting shellfish and kelp from the effects of fishing using the powers it was given in the Motiti decision until 2026. The Tāmaki SAP will not even suggest habitat protection for the upcoming revision of Councils Coastal Management Plan.

The plan has no funding

Where we might want to build infrastructure to ‘hold the line’ against SLR no budget has been provided.

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² <https://blog.shaunlee.co.nz/wp-content/uploads/2019/03/Shorebirds-of-the-Tamaki-Estuary-by-Shaun-Lee.pdf>