

SOUTHSHORE

Area	Southshore
Issue	Risk of flooding in Southshore
Option	New setback bund
Plain English explanation	A new set-back bund in front of existing Rocking Horse Road back sections would be designed and engineered to provide the same or a greater level of flood management as other areas in Ihutai/Estuary. As it would be set back from the estuary edge, it would not block views or impact on access to the edge but may impact on views from private properties. People may also be able to see into private properties from the top of the bund. This structure could be raised in the future with some modifications.
	It could be planted to enhance the natural environment and improve wildlife habitat.
	This option is likely to be more expensive and would require consents). As it would cross some easements, we would need to negotiate with private landowners. There are also some underground services in the area that would need to be considered as part of the bund's design.
	All of these options could impact on how long this option takes to implement.
	This option could work with any range of estuary edge erosion management options. The estimated total cost is approximately \$2.5-3 million.
Description	This option involves the construction of a new bund in a new position on the eastern part of the red zone land adjacent to the existing houses. Having the new bund set well back from the estuary edge means it would not be at risk of erosion. The existing Land Information New Zealand (LINZ) bund could be retained or removed. The bund would be built to a height of at least 11.4 with topsoil, grass and crusher dust top. Additional temporary pumping locations may need to be relocated and new stormwater manholes installed.
	RL 11.4m is the height of the Beachville Road sea wall and the Kibblewhite Street stopbank and is higher than the McCormacks Bay causeway (RL 11.2m).







	Treatment of the road ends and across private properties will need to be considered and negotiated. Given the close proximity of the new bund to property boundaries a swale may be necessary to manage overland flows and local stormwater. There is also the opportunity for extensive landscaping. The bund would protect adjoining properties from flood risk, and could work in with any estuary edge management options.
Estimated Cost	Approximately \$2.5-3 million. This is due to the length of the bund, required easements, and the need to manage underground services in the area.
Timing	About 1-2 years to allow for further investigations, design, impact assessments and consenting, and negotiations with private landowners before construction can begin. Construction could be staged, depending on consent conditions, over a 12 month period.
Implementation Requirements	This option would require agreement or a lease of the land from LINZ. Negotiations with private landowners would be required as there are five sections south of Tern St where titles include strips of land to the estuary edge, and there are two privately owned properties near Heron St that extend to the estuary edge
Consenting Requirements and Compliance with Statutory Documents	This option would likely require a restricted discretionary or discretionary resource consent from Environment Canterbury and Christchurch City Council for construction works in the Special Purpose Flatland Recovery Zone. Any consent application would require detailed assessment of the effects on the natural environment and cultural values, and consideration of alternatives. Ihutai/Estuary is a Statutory Acknowledgement area and is of high significance to Ngāi Tahu. The bund in this option is well set back from the edge so provides the opportunity for indigenous planting and the potential for treatment of stormwater before run-off enters Ihutai/Estuary, and allows natural processes at the water's edge. During the consenting process engagement would be required with mana whenua and the Te Ihutai Ahu Whenua Trust.
Considerations	There are good opportunities to plant the bund for improved habitat for wildlife, and amenity.

Christchurch City Council



Community Input	This option links to community options requesting flood risk
	protection and a mixture of hard and soft edge protection.

