



## SOUTHSHORE

<b>Area</b>	Southshore
<b>Issue</b>	Flooding of Southshore
<b>Option</b>	Improve existing bund
<b>Plain English explanation</b>	<p>This option would involve filling in the low points of the Land Information New Zealand (LINZ) bund so that it was all consistently to a height of at least RL 11.2 (in some places it is already RL 11.4). This would provide the same level of flood management as the McCormacks Bay causeway, and other areas in the Ihutai/Estuary.</p> <p>It would not be engineered and designed to the same standard as the set-back bund, but this would also make it quicker and cheaper to implement, while still providing a similar level of flood management.</p> <p>This would also involve planting on the front of the bund in areas where it is close to the estuary edge to reduce the risk of erosion to the bund.</p> <p>This option could work with any range of estuary edge erosion management options. The estimated total cost is approximately \$500,000.</p>
<b>Description</b>	<p>This option involves filling in the low points in the existing LINZ constructed bund to a height of at least 11.2m. Planting in areas where the berm between estuary edge and bund is narrow would reduce the erosion risk to the bund.</p> <p>RL 11.2m is the height of the McCormacks Bay causeway (RL 11.2m). The bund is constructed from top soil and extends approximately 1600m from Godwit St to south of Tern St with a height that currently varies between RL 11.0m – 11.4m. The bund had been grassed and a narrow informal path is worn along the crest.</p>
<b>Estimated Cost</b>	Less than \$500,000 (if no significant engineering / design is required).
<b>Timing</b>	<p>Between 6 and 12 months (if no significant engineering / design is required).</p> <p>This work could be completed in Spring 2020.</p>
<b>Implementation Requirements</b>	<p>As this is not an engineered construction it may be more readily consentable.</p> <p>Low points need to be documented and in-fill methods identified.</p>



<b>Consenting Requirements and Compliance with Statutory Documents</b>	<p>As this is an existing bund built by LINZ it may be covered by the LINZ global consent.</p> <p>If not, this option would likely require restricted discretionary or discretionary resource consents from Environment Canterbury and Christchurch City Council for construction works in the Special Purpose Flatland Recovery Zone.</p> <p>Any consent application would require detailed assessment of the effects on the natural environment and cultural values, and consideration of alternatives.</p> <p>Ihutai/Estuary is a Statutory Acknowledgement area and is of high significance to Ngāi Tahu. Where the bund is set back from the edge there is the opportunity for indigenous planting and natural processes at the water's edge. Engagement with mana whenua and the Te Ihutai Ahu Whenua Trust would be required as part of any resource consent preparation.</p>
<b>Considerations</b>	<p>This is a low impact option provided existing areas of natural vegetation and habitats are protected. There is an opportunity to plant for screening to reduce visual impact and potentially to improve habitat.</p>
<b>Community Input</b>	<p>This option links to community options requesting flood risk protection and repair of the estuary edge by filling low points.</p>