




# Plimmerton Stormwater Catchment Management and Improvements Project – Phase 1; Karehana Park Catchment

## Project overview

Wellington Water (WWL) and Porirua City Council (PCC) are undertaking a review of possible stormwater management options to reduce flooding in the Karehana Park catchment.

With previous flooding events in this catchment, an appropriate catchment specific option needs to be identified in order to keep people and property safe and healthy. This project is subject to the WWL service objective associated with reducing the effects of flooding.

**Table 1: Customer outcomes and service goals for this project**

<b>Primary customer outcome</b>		Outcome 3: Resilient networks support our economy
<b>Primary goal</b>		3.1 We minimise the impact of flooding on people's lives and proactively plan for the impacts of climate change
<b>Secondary customer outcome</b>		Outcome 1: Safe and healthy water
<b>Secondary goal</b>		1.2 We operate and manage assets that are safe for our suppliers, people and customers
<b>Secondary goal</b>		1.4 We minimise public health risks associated with wastewater and stormwater

**Table 2: Wellington Water primary service objectives and performance measures for this project**

<b>Primary service objectives and performance measures</b>	
<b>Primary service objective</b>	Potential impact of flooding on property & key transport links from stormwater is identified and the impacts are minimised
<b>Primary performance measure</b>	Predicted number of properties that do not have facility for basic Stormwater drainage (Nuisance flooding occurs for < 1:2 yr event)

**Table 3: Wellington Water Secondary service objectives and performance measures for this project**

<b>Secondary service objectives and performance measures</b>	
<b>Secondary service objectives</b>	<ul style="list-style-type: none"> <li>• The public is protected from direct exposure to untreated wastewater onto land</li> <li>• Asset safety risks are identified and improved</li> </ul>
<b>Secondary performance measures</b>	<ul style="list-style-type: none"> <li>• Number of wet weather overflows onto land is reduced</li> <li>• All public stormwater assets (existing and new) meet the Wellington Water health and safety requirements. Any existing operational risks are identified and changes to the assets are included in the design.</li> </ul>

### Summary

The Stormwater Management and Improvements Project will be delivered in two phases. The first phase (Phase 1) will involve investigation and optioneering, the second phase (Phase 2) will involve detailed design, contractor engagement and project delivery. Approval has been given to undertake Phase 1 of this project.

The key objective of Phase 1 of this project is to develop a concept design and cost estimate of the preferred option to reduce flooding for each of the catchments. The preferred options will be the result of a robust Multi Criteria Analysis (MCA) process.

The key requirements during Phase 1 are:

- Identification of measures to reduce flooding impacts on properties through a robust MCA process.
- Robust consultation with:
  - the community to understand the hazard and identifying what good solution may look like. It should be noted that the selection of preferred solutions and its funding will be a council decision.
  - PCC, WWL and other relevant parties to select preferred options to mitigate flooding impacts.
  - Greater Wellington Regional Council (GWRC) for resource consent requirements.
  - Local Iwi.
- Concept design of preferred flood mitigation solution including cost estimates. It is noted that the consenting, preliminary and detailed design, procurement, and delivery of physical works (Phase 2) will be subject to budget approval which will be consulted on by PCC through 2021-31 Long Term Plan.

## **Project Description (Phase 1)**

The project includes:

- Investigations, Hydraulic Modelling and Gap Analysis.
- Communications and Engagement, including facilitating the establishment of the Flood Management and Resilience Working Group.
- Multi Criteria Analysis (MCA) Options Assessment Methodology.
- Long list options assessment, including Flood Management and Resilience Working Group input.
- Short list options assessment, including Flood Management and Resilience Working Group input.
- Engagement with PCC, WWL and community on preferred option.

A flow chart of the process is on the following page.

Plimmerton SW Options Assessment MCA Process

