

**Draft long term plan 2018-38
Consultation - supporting information**

Stormwater capital works programme – background information



2018-38 Long term plan - stormwater capital works programme background information

Background

The severe weather events we've experienced in Kāpiti over the last three years prompted the Council to review our 2015-35 long term plan stormwater programme to improve our community's safety and resilience to flooding hazards.

We carried out investigations on more than 800 flooded locations in 2015/16 and identified various causes for flooding. In 2016/17 we further advanced this work with detailed investigations, incorporating the flooded locations into various projects and grouping them into different categories as follows.

Category	Description	No. of projects
A	Habitable floor (home) flooding	28
B	Commercial building flooding	5
C	Garage flooding only	23
D-1	Asset renewals in the areas not covered under other categories	34
D-2	Minor capital works (sump upgrades, overland flow paths etc)	34
E	Eliminating downstream constraints	22
F	Catchment based attenuation	1
G	Section flooding only	93
	Total	240

Prioritisation

We prioritised our programme to tackle projects that address flooding in homes first, followed by commercial buildings, garages, and then sections.

Projects in category E are designed to enable us to undertake the prioritised projects, and categories D1, D2 and F are part of an ongoing programme that we will review regularly. For these reasons we did not assign an explicit priority to these other categories.

We applied the following criteria to the projects within each category to determine their order of priority.

- Threat to life – Is there any direct threat to life due to flooding;
- Critical facilities affected – for example: emergency operations centres, communications facilities, hospitals, and schools;
- Lifelines affected - Roads, bridges, and transportation facilities that may be damaged or closed;
- Severity - measure of relative impact of a storm event;
- Frequency – how often does it flood;
- Recovery time – measure of how long flooding effects last;

- Indirect cost – clean-up, emergency response, loss of profits;
- Number of properties affected – direct impact of flooding;
- Increase in developable land – will the project open up development potential;
- Risk to Council - what liability will accrue to KCDC if the project does not proceed;
- Water quality benefits and sustainability - other than solving flooding, can sustainable elements be incorporated in the project; and
- Implementation arrangements – clearing downstream constraints before implementing upstream projects.

Our proposed work programme

We considered three options for the programme’s timeframe – 25 years, 30 years or 45 years, or to retain the programme in the 2015-35 long term plan (the status quo option). The Council’s preference is the 45 year programme as it fits within our financial constraints and will have a greater improvement to flooding risks than retaining the status quo.

The 45 year programme with the 240 projects is shown in the attached table together with the project maps. Each project is assigned a project ID, project zone and the project category. Project zones are geographical areas in the district (five in Otaki – OK1 to OK5, eight in Waikanae – WK1 to WK8, 18 in Paraparaumu – PP1 to PP18 and two in Paekākāriki PK1-2.)

How to find out about stormwater projects in your neighbourhood

1. Find your property on the relevant map – there are 33 maps organised into four main areas of the district, each map is titled with its project zone e.g. Paraparaumu zone 7 (PP07)
2. If there is a project planned for your neighbourhood it will be surrounded by an orange-brown border labelled with a project ID number and a category letter e.g. 268-A
3. Look up the project zone and project ID on the attached project list – from there you’ll be able to see what year/s the project is planned for and the number of properties that will benefit from the work.