

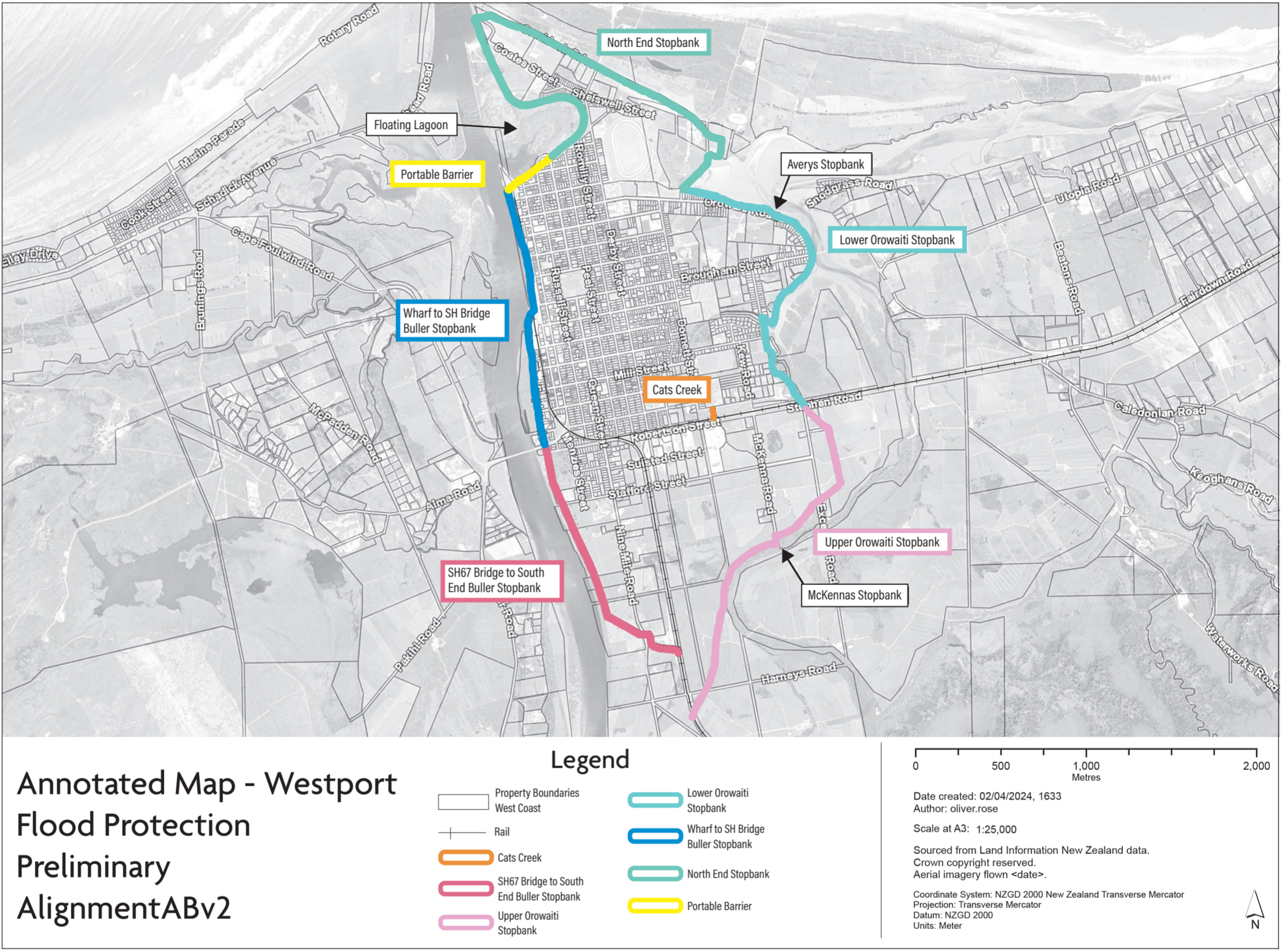
RESILIENT WESTPORT FLOOD PROTECTION UPDATE: JUNE 2024

Resilient Westport

Under the Resilient Westport package of work, several projects are underway to reduce the impact of flooding on Westport. The Buller District Council and West Coast Regional Council are working collaboratively with iwi, other organisations and government departments to deliver the package. Flood protection is the largest project being undertaken by Resilient Westport and is being led by West Coast Regional Council (WCRC).

It centres on building floodwalls and stopbanks with the aim of delivering structural mitigation works to prevent direct threats from the Buller and Orowaiti rivers. The floodwall project is funded via a contribution of \$15.6 million from central government. The West Coast Regional Council's contribution is estimated at \$8.37m taking the full project budget to \$23.97m. The preliminary plan involves a combination of earth stopbanks, 'planter-box' stopbanks,

concrete floodwalls, wooden floodwalls, and portable flood barriers. The heights of the flood protection structures will generally be around 2 metres, with a maximum height of 3.6 metres. The total length around is 16km. The work will be designed generally to 1% Annual Exceedance Probability (AEP) which means there is 1% chance in any single year of a flood event happening, and 600mm freeboard. Freeboard is engineering provision for estimating accuracy and other factors not included, such as waves and debris.



PLANNED OVERALL CONSTRUCTION PROGRAMME

The elements of the preliminary project design are shown on the Westport Flood Mitigation Stopbanks - Draft Scheme map, above.

What's happening now?

There's been significant progress with the Stage One designs (Cats Creek, McKenna's, Avery's and the Floating Lagoon stopbanks). Stage Two is the remainder of the flood protection work. Draft engineering design reports and the initial geotechnical designs are completed on all four Stage One projects.

In the next three months we expect to see:

- Construction of Cats Creek stopbank (a small earthen bund that will redirect floodwaters in Cats Creek to the Abattoir Drain).
- Remediation of low sections of stopbank near Floating Lagoon and vegetation clearance at Floating Lagoon. A stopbank and 200-metre-long portable flood barriers are planned here.
- Completion of geotechnical design on McKenna's and Avery's stopbanks. The McKenna Road project is a 400m low earthen bund that will assist with preventing overflow from the Orowaiti River.
- Final plans, landowner agreements and consents for McKenna's stopbank.
- Completion of a study by WSP Consultants on impacts on the SH67 Buller Bridge.

The following components of the wall are scheduled for construction in 2024/25

- Floodwalls Buller River - upstream of SH67
- Avery's stopbank (part of the Lower Orowaiti stopbank)
- Upper Orowaiti (including the balance McKenna's Rd stopbank)
- Floating Lagoon stopbank and installation of portable barrier (near Talley's).

The following components of the wall are scheduled for 2025/26

- Lower Orowaiti (excluding Avery's, already completed)
- Buller downstream of SH67 through to North End
- Drains and stormwater provision.

West Coast Regional Council chief engineer Peter Blackwood says it is important to note the programme details and timings shown here are based on the design as it stands now.

"While they are advanced and based on the best engineering advice, the final scheme alignment options and floodbank forms are being considered, including options for flood mitigation for Carters Beach. In tandem with that, we will be talking to homeowners and landowners who might be directly affected, as well as the wider community."

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DESIGNED TO PROTECT

Chief engineer West Coast Regional Council Peter Blackwood says all points raised in the review of the floodwall design, that was requested by government, have been addressed.

“The project is designed to protect Westport from river inundation, and we have modelled it extensively using a range of scenarios and climate change variables to come up with the best overall approach.

“The aim of the floodwalls is to protect the town from large flows of water entering the catchment from the Buller and Orowaiti rivers.

“Coupled with new rainwater gauges upstream to provide early warning signs, and the planned reforestation of Organs Island, there is no way Westport would not be in a significantly better position in the face of a significant river flooding than it has been in the past,” says Mr Blackwood.

“There is always a very small, or residual, risk from a flood larger than what has been designed for to

occur, or a potential stopbank breach. This risk exists despite every good engineering practice undertaken to maximise the stability of a stopbank, with any flood protection scheme constructed.”

Buller District Council chief executive Simon Pickford acknowledges that concerns about Westport’s stormwater system have been raised in relation to the project.

“That Westport needs a new and improved stormwater system is a fact and one that applies to most cities and towns throughout New Zealand. Like most councils we are working out how to fund that and currently examining possible funding avenues under the new coalition government.

“Meanwhile, what we are doing in relation to flood protection is looking at stormwater solutions that directly interface with the planned new walls. We have begun a stormwater concept study that will be complete by mid to late Au-

gust to provide a concept plan for an integrated stormwater and flood protection system. This includes considering a stormwater pump-out solution. From this, we will have a range of design options and costings, including affordability considerations that will guide and inform the next steps,” says Mr Pickford.

Regional Council chief executive, Darryl Lew, expressed his confidence in the modelling and design work undertaken for the Westport Flood Protection Project.

“We are all working together on this. There is an extensive amount of work going on behind the scenes to bring this together. People can now see the overall design, timings and layout of the scheme and hopefully now have a better understanding of the technical expertise we are tapping into and the sheer commitment to make this happen – this is for a safe and strong future Westport,” says Mr Lew.



An example of a planter box stopbank.



Resilient Westport



**Resilient
Westport**

CONTACT US

If you want to find out more about Resilient Westport, you can email us at info@resilientwestport.co.nz

Our new website is coming.

Check it out at: www.resilientwestport.co.nz

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