

PROTECTING SOUTHLAND'S LARGEST URBAN CENTRE

INVERCARGILL / WAIHŌPAI

Project: Flood Protection Upgrades **Location:** Invercargill / Waihōpai, Southland

The challenge

Extensive flooding in 1984 closed Southland's only passenger airport in Invercargill / Waihōpai. The primary sources of that floodwater – the Waihōpai River, Waikiwi Stream and Ōreti River – underwent significant flood protection upgrades following the event.

In March 2016, a phenomenon known as storm surge caused the sea to spill onto Stead Street, resulting in road closures and surface flooding of the land surrounding the airport. Stead Street provides the only transport link to the airport and connects the suburb of Ōtātara with Invercargill's CBD and emergency services.

The work

Invercargill City Council:

- Reinforced the old Stead Street stop bank with a heightened sheet pile floodwall, providing a much more robust defence against the sea waters.
- Raised the height of the adjoining Cobbe Road stop bank.

Environment Southland:

- Replacing the Stead Street Pump Station with a new facility, housing two new fish-friendly pumps. The existing Stead Street pump station is now over 70 years old.
- Widening and raising the stop bank on the true left bank of the Waihōpai River.

Together, these projects begin to systematically address the vulnerabilities Invercargill has to climate change and provide much more resilient flood defences for the people of Invercargill and the city's critical infrastructure.

Below: Whakawātea to mark the beginning of the construction of the new Stead St pump station.



Project funding

Stop bank upgrades (ICC)

Kānoa \$10.8m | Council \$4.7m

Pump station (ES)

Kānoa \$2.77m | Council \$8.75m

Waihōpai stop bank upgrade (ES)

Kānoa \$2.63m | Council \$ subject to approval

Key Benefits

- ✓ **Enhanced protection:** for Southland's largest urban centre, properties and critical infrastructure.
- ✓ **Strengthened partnerships:** between councils and with Waihōpai Rūnaka.
- ✓ **Environmental impacts lessened during construction:** using borrow sites for stop bank fill with the least impact on river ecology, fish passage and spawning.
- ✓ **Safe fish passage, energy efficiency and reduced maintenance:** with new Archimedes screw pump technology.
- ✓ **Cultural and archaeological values protected:** with robust cultural and archaeological discovery protocols.
- ✓ **Enhanced recreational access:** with upgraded shared pathways.
- ✓ **Economic and social benefits:** through investment in the region.

