

**Activity 14.1: Flood Protection and Control Works** (split from Waterways and Land Drainage)  
**Accountable Manager: John Mackie**

**What services are provided?**

✚ Maintaining the natural waterways and associated structures and systems, *such as stop banks, flood gates, and the hydrometric network (rain and water level monitoring systems).*

**Why do we provide these services?**

To protect the community from and respond to significant flooding events. This activity is intrinsically linked to the Stormwater Drainage activity.

What outcomes are we trying to achieve?	How do the services contribute to desired outcomes?
✚ Water quality in rivers, streams, lakes and wetlands is improved	<i>Looking after natural waterways and providing a well-maintained flood protection system helps to protect water quality, safeguarding public health and the health of ecosystems</i>
Stream and river flows are maintained	<i>Minimum stream and river flows are maintained, helping to maintain the health of natural waterways</i>
Existing ecosystems and indigenous biodiversity are protected	<i>As a significant part of the network of green space throughout the district, the management of waterways protects existing ecosystems, indigenous vegetation, and wildlife</i>
A range of indigenous habitats and species is enhanced	<i>As a significant part of the network of green space throughout the district, waterways provide opportunities for enhancing indigenous species</i>
Injuries and risks to public health are minimised	<i>Maintaining levels in waterways and safeguarding neighbouring suburbs</i>
✚ Risks from natural hazards, including earthquakes, flooding, tsunami and rock fall are minimised.	<i>Maintaining a safe and reliable flood protection system reduces the risk of flooding</i>
Sites and places of significance to tangata whenua are protected	<i>Managing the flood protection system to minimise likelihood of flooding, helps to protect associated water values of tangata whenua</i>

**Which group or section of the community will benefit from this activity?:**  
 Christchurch residents, ratepayers, visitors to Christchurch, commercial and industrial businesses, property owners adjacent to waterways, recreational users, local iwi, environmental societies, fishing enthusiasts, NZTA, developers, regulatory authorities

**Key legislation and Council Strategies:** Resource Management Act 1991; Local Government Act 1974 & 2002; Building Act 1991; Christchurch District Drainage Act 1951, and Land Drainage Act 1908; Waterways and Wetlands Natural Asset Management Strategy, 1999; Surface Water Strategy 2009, Water Related Services By-Law 2008 ; Public Open Space Strategy; Biodiversity Strategy; Land and Water Regional Plan

## Customer

*What business results must we deliver to our customers, to deliver on the outcomes?*

### Performance Standards for LTP

Performance Standards for LTP	Current performance	Benchmarks	Recommended LOS	Rationale	LTP Committee Direction
<b>Maintaining the natural waterways and associated structures and systems</b>					
14.1.1 (was 6.5.1) Ensure dwellings are safe from flooding during normal rain events	2012/13 per draft AP  Less than 10 properties per year flooded	No relevant Bench Mark available	14.1.1.1 Less than 0.25% of dwellings (4 per 1,000) are flooded per year (based on a 50 year rain event)  14.1.1.2 Minimum floor levels specified for new dwelling consent applications meet Building Act and District Plan requirements.	This requires the building and maintenance of stop banks and flood gates to control flooding events.  Flooding is considered to be stormwater that enters the dwelling where the floor level has been constructed to the correct level.  The trend over recent years is less than 10 properties per year flooded, however changes to land levels and drainage paths is likely to increase this number. There will also be a reduced LOS in some damaged areas until the infrastructure rebuild has been completed	<b><i>Accepted</i></b>

## Customer

*What business results must we deliver to our customers, to deliver on the outcomes?*

### Non-LTP Performance Standards

Non-LTP Performance Standards	Current performance	Benchmarks	Recommended LOS	Rationale	LTP Committee Direction
<b>Maintaining the natural waterways and associated structures and systems (cont'd)</b>					
14.1.2 Hydrometrics – Climate modelling available for minimum floor level setting	2012/13 per draft AP  New LOS		Accurate and up-to-date hydrometric (rainfall and water level) data is maintained and made available	Accurate and up-to-date hydrometric (rainfall and water level) data must be maintained and made available for modelling and climate analysis at all time.  This is used by Council For setting the minimum floor levels for the building of dwellings and other buildings.  No more than 48 hours continuous outage due to mechanical/electrical failure, per year per site	<b><i>Accepted</i></b>