Stormwater and Flood Protection and Control Works

What activities are included in stormwater and flood protection and control works?

Stormwater drainage
- Provide and maintain the stormwater drainage system (surface water management systems, e.g. streams, rivers, utility waterways, basins, pumps, structures, pipes, etc

Flood protection and control works
- 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 is the Council involved in storm water drainage and flood protection and control works?

To protect the community from surface flooding from normal/average water flows and enhance the waterway environment through naturalisation and protection of water quality, which provides key linkages for walking and cycling connections to open spaces, and provides access for recreational opportunities. To protect the community from and respond to significant flooding events.

How do stormwater drainage and flood protection and control works contribute to our community outcomes?

Water quality in rivers, streams, lakes and wetlands is improved
- Looking after natural waterways and providing a well-maintained stormwater drainage and flood protection system helps to protect water quality, safeguarding public health and the health of ecosystems

Stream and river flows are maintained
- Minimum stream and river flows are maintained, helping to maintain the health of natural waterways

Existing ecosystems and indigenous biodiversity are protected
- As a significant part of the network of green space throughout the district, the management of waterways protects existing ecosystems, indigenous vegetation and wildlife

A range of indigenous habitats and species is enhanced
- As a significant part of the network of green space throughout the district, waterways provide opportunities for enhancing indigenous species

Injuries and risks to public health are minimised
- Maintaining water quality in natural waterways protects the quality of drinking water drawn from surface water supplies and safeguards the health of recreational users
- Maintaining the stormwater drainage system reduces the risk of toxic substances from entering waterways.
- Maintaining levels in waterways and safeguarding neighbouring suburbs

Risks from natural hazards, including earthquakes, flooding, tsunami and rock fall are minimised
- Maintaining a safe and reliable stormwater drainage and flood protection systems reduces the risk of flooding

Sites and places of significance to tangata whenua are protected
- Managing the stormwater system to reduce pollutants and enhance the waterway environment, and managing the flood protection system to minimise the likelihood of flooding, contribute to protecting the surface water values of tangata whenua

What changes are planned for stormwater drainage and flood protection and control works?

There will be improvements in the time to respond to problems in the stormwater system.

New targets have been introduced for minimising property damage from flooding, through minimising the number of properties affected by flooding and specifying minimum floor levels in areas most at risk from flooding.

What negative effects or risks can occur in relation to stormwater drainage and flood protection and control works?

Negative Effects	Mitigation Options
Contaminants from many sources travel in the storm water system	Maintain regular street sweeping. Monitor and investigate storm water quality and sources of contaminants.
Inadequate drainage and surface water capacity in extreme events.	Maintain waterways. Monitoring and inspections. Maintain response times to reported issues.
Maintaining and altering streams and river banks can affect habitats	Review grass cutting on river banks. Use stream restoration projects to provide some additional habitat.
Dwellings flooded during rain events	Ensure minimum floor levels are specified for all new dwelling consent applications. Review minimum flooring and flood protection work requirements, as necessary.

Council Activities and Services

Stormwater and Flood Protection and Control Works

Activity	What is the Council trying to achieve?	What services will the Council offer to make this happen?	How would we know these services were successful?	Target
			Measure	
Stormwater drainage	Water quality in rivers, streams, lakes and wetlands is improved Existing ecosystems and indigenous biodiversity are protected A range of indigenous habitats and species is enhanced Injuries and risks to public health are minimised Risks from natural hazards, including earthquakes, flooding, tsunami and rock fall are minimised Sites and places of significance to tangata whenua are protected	Provide and maintain the stormwater drainage system (surface water management systems, e.g. streams, rivers, Utility Waterways, basins, pumps, structures, pipes, etc.)	Response times to Drainage faults and Surface Water Management Issues	Achieve contract compliance re response times for emergency works specified in the Waterways and Land Drainage Maintenance contract: Urban 2 hours; Rural 6 hours
				Achieve contract compliance re response times for urgent work specified in the Waterways and Land Drainage Maintenance contract: Urban 24 hours; Rural 24 hours
				Achieve contract compliance re response times for priority work specified in the Waterways and Land Drainage Maintenance contract: Urban 3 working days; Rural 5 working days
				Achieve contract compliance re response times for routine call-outs specified in the Waterways and Land Drainage Maintenance contract: : Urban 5 working days; Rural 10 working days
			Resource consent compliance	Major or persistent breaches of Resource Consent conditions regarding the management of waterways and the land drainage system per year, resulting in court action by ECAN.
			Customer satisfaction with the maintenance of waterways and their margins	Achieve specified level of satisfaction with maintenance of waterways and their margins

Council Activities and Services

Stormwater and Flood Protection and Control Works

Current Performance	Planned Performance		
	2013/14	2014/15	2015/16
2011/12: 100% compliance with response times	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Emergency Works: Urban 2 hours; Rural 6 hours	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Emergency Works: Urban 2 hours; Rural 6 hours	
2011/12: 100% compliance with response times	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Urgent Works: Urban 24 hours; Rural 24 hours	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Urgent Works: Urban 24 hours; Rural 24 hours	
2011/12: 100% compliance with response times	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Priority Call Outs: Urban 3 working days; Rural 5 working days	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Priority Call Outs: Urban 3 working days; Rural 5 working days	
2011/12: 100% compliance with response times	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Routine Call Outs: Urban 5 working days; Rural 10 working days	Achieve 100% contract compliance re response times specified in the Waterways and Land Drainage Maintenance contract: Routine Call Outs: Urban 5 working days; Rural 10 working days	
2009/10 – Nil 2010/11 – Nil 2011/12 – Nil	None	Maintain	Maintain
2009/10 – 72% 2010/11 – Not surveyed 2011/12 – 60%	At least 66% satisfaction with maintenance of waterways and their margins	At least 66% satisfaction with maintenance of waterways and their margins	

Council Activities and Services

Stormwater and Flood Protection and Control Works

Activity	What is the Council trying to achieve?	What services will the Council offer to make this happen?	How would we know these services were successful?	Target
			Measure	
Flood protection and control works	Water quality in rivers, streams, lakes and wetlands is improved Stream and river flows are maintained Existing ecosystems and indigenous biodiversity are protected A range of indigenous habitats and species is enhanced Injuries and risks to public health are minimised Risks from natural hazards, including earthquakes, flooding, tsunami and rock fall are minimised. Sites and places of significance to tangata whenua are protected	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).	Ensure dwellings are safe from flooding during normal rain events	No more than a specified percent of dwellings are flooded per year (based on a 50 year rain event)
				Minimum floor levels specified for new dwelling consent applications meet Building Act and District Plan requirements

Council Activities and Services

Stormwater and Flood Protection and Control Works

Current Performance	Planned Performance		
	2013/14	2014/15	2015/16
2011/12: Nil houses recorded as flooded. 2010/11 Not measured due to earthquakes. 2009/10 Nil	Less than 0.25% of dwellings (4 per 1,000) are flooded per year (based on a 50 year rain event)	Less than 0.25% of dwellings (4 per 1,000) are flooded per year (based on a 50 year rain event)	
New	Minimum floor levels specified for new dwelling consent applications meet Building Act and District Plan requirements	Maintain	Maintain

Council Activities and Services

Stormwater and Flood Protection and Control Works

Annual Plan 2012/13		Three Year Plan 2013 - 2016 2013/14	2014/15	2015/16
	$000			
	Cost of proposed services			
24,289	Stormwater Drainage	23,836	24,434	25,317
-	Flood Protection and Control Works	348	353	363
24,289		**24,184**	**24,787**	**25,680**
	Operating revenue from proposed services			
4	Stormwater Drainage	20	21	21
-	Flood Protection and Control Works	-	-	-
4		**20**	**21**	**21**
11,907	Capital revenues	39,527	40,616	19,524
400	Vested assets	400	418	435
11,978	**Net cost of services**	**(15,763)**	**(16,268)**	**5,700**

Rationale for activity funding (see also the Revenue and Financing Policy)

User charges are collected for certain services at levels considered reasonable by the Council. The balance of the net operating cost is funded by a targeted rate on properties within the catchment area.

Development contributions are applied towards the appropriate capital expenditure. The balance of the capital expenditure is funded corporately in accordance with the Revenue and Financing Policy.

Council Activities and Services

Stormwater and Flood Protection and Control Works Funding Impact Statement

Annual Plan 2012/13	$000	Three Year Plan 2013 - 2016 2013/14	2014/15	2015/16
	Sources of operating funding			
(9,696)	General rates, uniform annual general charges, rates penalties	(2,327)	(2,438)	(1,800)
24,283	Targeted rates	16,965	17,455	18,138
-	Subsidies and grants for operating purposes	-	-	-
4	Fees and charges	20	21	21
-	Internal charges and overheads recovered	-	-	-
-	Earthquake recoveries	-	-	-
-	Local authorities fuel tax, fines, infringement fees, and other receipts	-	-	-
14,591	**Total operating funding**	**14,658**	**15,038**	**16,359**
	Applications of operating funding			
18,233	Payments to staff and suppliers	18,636	18,999	19,577
687	Finance costs	-	-	-
822	Internal charges and overheads applied	977	962	987
-	Other operating funding applications	-	-	-
19,742	**Total applications of operating funding**	**19,613**	**19,961**	**20,564**
(5,151)	**Surplus (deficit) of operating funding**	**(4,955)**	**(4,923)**	**(4,205)**
	Sources of capital funding			
-	Subsidies and grants for capital expenditure	-	-	-
641	Development and financial contributions	1,425	1,915	2,317
10,920	Earthquake recoveries	38,102	38,702	17,207
26,913	Increase (decrease) in debt	41,858	46,402	33,976
-	Gross proceeds from sale of assets	-	-	-
-	Lump sum contributions	-	-	-
38,474	**Total sources of capital funding**	**81,385**	**87,019**	**53,500**

Annual Plan 2012/13	$000	Three Year Plan 2013 - 2016 2013/14	2014/15	2015/16
	Applications of capital funding			
	Capital expenditure			
2,049	- to replace existing assets	2,245	2,389	3,316
28,800	- earthquake rebuild	68,427	69,709	34,146
217	- to improve the level of service	153	42	87
12,857	- to meet additional demand	5,605	9,956	11,746
(10,600)	Increase (decrease) in reserves	-	-	-
-	Increase (decrease) of investments	-	-	-
33,323	**Total applications of capital funding**	**76,430**	**82,096**	**49,295**
5,151	**Surplus (deficit) of capital funding**	**4,955**	**4,923**	**4,205**
(0)	**Funding balance**	**-**	**-**	**-**
	Reconciliation to net cost of services			
(5,151)	Surplus (deficit) of operating funding from funding impact statement	(4,955)	(4,923)	(4,205)
(14,587)	Remove rates funding	(14,638)	(15,017)	(16,338)
(4,547)	Deduct depreciation expense	(4,571)	(4,827)	(5,116)
11,907	Add capital revenues	39,527	40,617	19,524
400	Add vested assets / non cash revenue	400	418	435
(11,978)	**Net cost of services per activity statement surplus/(deficit)**	**15,763**	**16,268**	**(5,700)**