



**Section 3
Activities**

**Waiāwhā
Stormwater**



Waiāwhā Stormwater

Council's stormwater network is designed to manage the risk of flooding and coastal erosion to buildings and property, in a way that avoids negative impacts on the environment. The stormwater network includes watercourses, open channels, swales, pipes and structures that channel stormwater to a final discharge point. It includes primary and secondary overland flow paths, stormwater detention and stormwater treatment.

What we provide

- 231.05km of stormwater pipes
- 3,320 manholes
- 16 soakholes
- 2 dams
- 10 pump stations
- 663 utility catchpits
- 49 stormwater ponds
- 34.15km of open drains
- 1.2km of rising mains.

Why we provide this activity

Our community outcome

- We can all enjoy a healthy and safe lifestyle.
- Our environment is clean, green and valued.

Stormwater

Stormwater management will continue to be a high priority over the next 10 years. With climate change and urban growth, there is a focus on designing networks in urban areas that are resilient to changing weather patterns, while also contributing to improving water quality and enhancing ecological and cultural values. This requires an integrated approach that focuses on the receiving environment and sustainable management of water resources alongside the need to manage the risk of flooding.

Documents such as Ngā Wai Manga – Urban Water Principles, produced by the Urban Water Working Group, provide guidance for implementing an integrated approach.

Legislative requirements regarding the quality and quantity of stormwater released must be met by Council.

Stormwater demand is indirectly linked to population growth. Demand for new or upgrade of existing stormwater infrastructure comes as a result of:

- Changes in land use.
- Changes in rainfall patterns with climate change.
- Regulatory changes which aim to improve the quality of stormwater discharges.

Following a number of extreme weather events in early 2023, Council is beginning to review district wide levels of service to explore whether levels of service should not only consider the affects of flood waters on habitable floors but also the flood hazard risk to people.

The District has three stormwater management areas:

Urban growth areas

These are the main urban areas within our District planned for future urban development and expansion. They will have significant stormwater infrastructure and the greatest potential to affect receiving environments.

Small settlements

These are small urban settlements with some stormwater infrastructure generally of low capital value when compared to the infrastructure in urban growth areas.

Rural settlements

These areas include land zoned rural as well as rural villages that have fewer than 50 residential dwellings. These areas are provided for by the stormwater infrastructure that is supplied as part of the roading system.

Urban		Rural
Urban growth areas	Small settlements	Rural settlements
<ul style="list-style-type: none"> • Katikati • Ōmokoroa • Te Puke • Waihi Beach (including Island View, Pios Beach, Athenree). 	<ul style="list-style-type: none"> • Kauri Point • Maketu • Minden • Ongare Point • Paengaroa • Pukehina Beach • Tanners Point • Te Puna. 	<ul style="list-style-type: none"> • Little Waihi • Plummers Point • Pongakawa • Rogers Road • Te Kahika • Tuapiro • All other rural areas.



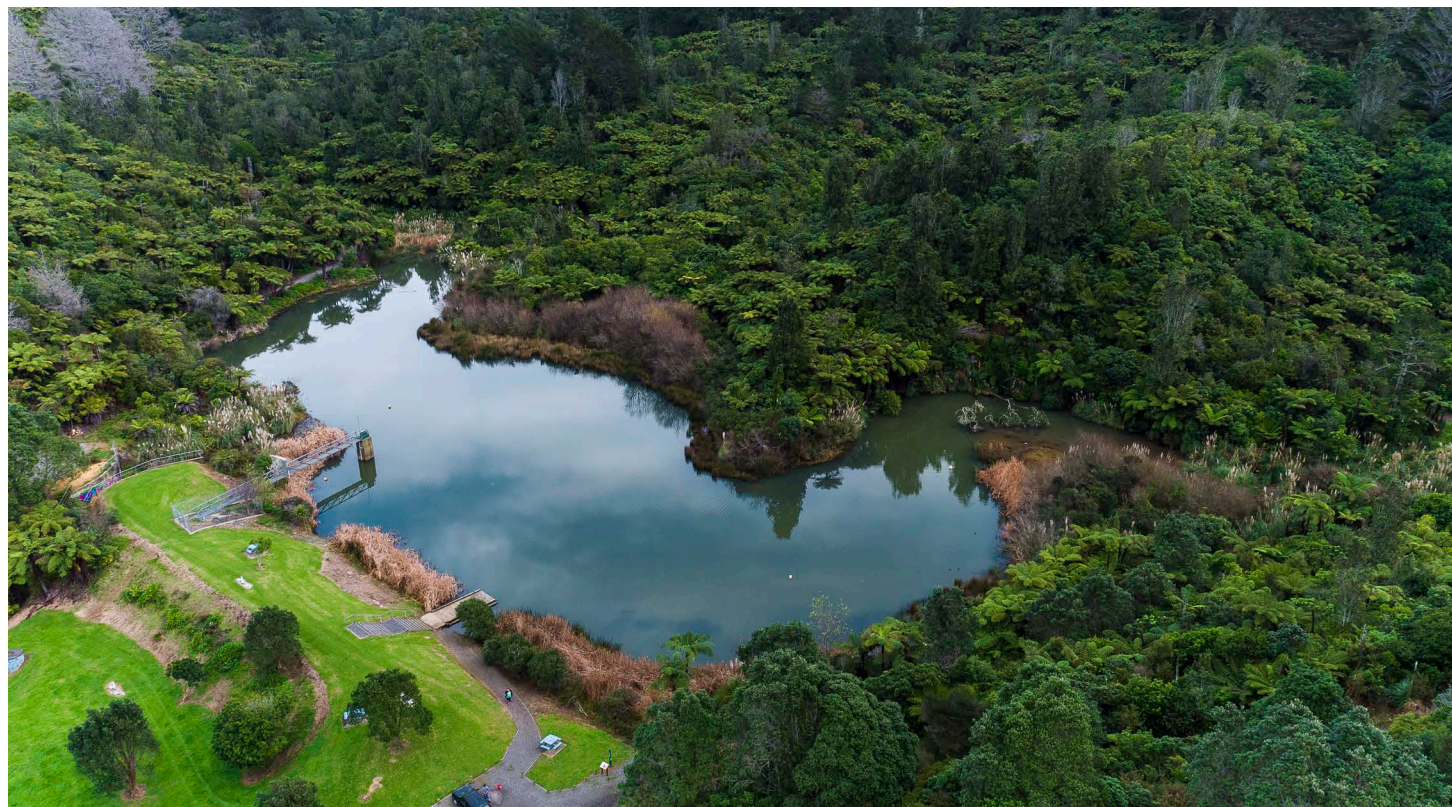
Over the next 10 years we will continue to obtain and implement comprehensive stormwater consents for sub-catchments, based on an integrated catchment management planning approach. We will carry out monitoring and modelling work to ensure compliance with consent conditions.

We will use structure planning processes to design integrated stormwater management networks in urban growth areas.

Under our Development Code and the resource consent process for subdivision, developers are required to make adequate provision for the collection and disposal of stormwater run-off from hard surfaces created through the development process. This may result in vesting of new stormwater infrastructure in Council, where appropriate.

As the need for stormwater management increases with the intensification of development and increasing frequency and intensity of rainfall events caused by climate change, so changes to the design of stormwater infrastructure are required in accordance with our level of service for stormwater.

Urban growth areas and small settlements that receive direct benefits from the stormwater network pay a targeted rate for stormwater management. Stormwater management also has a public good benefit in terms of public health and environmental benefits. As a result, 10% of stormwater funding is provided by the general rates levied on all rateable properties.



Extensive modelling has been completed and used to obtain comprehensive stormwater consents. This has resulted in:

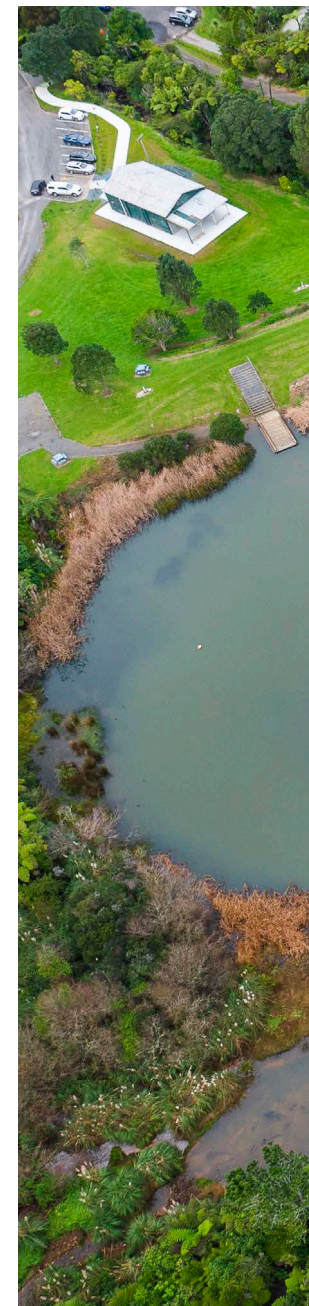
Specific District Plan rules for the Minden area - Overland flow paths are identified in the Minden Lifestyle Zone Structure Plan and new stormwater works may be proposed as a result of development in the future.

Waihi Beach and Te Puke - Identification of floodable areas and at-risk properties in Te Puke and Waihi Beach. A programme of work is in place to address flooding issues. We aim to protect 97% of existing urban growth areas and small settlement properties from having a habitable floor flooding incident in a 1:10 year rainfall event. It is important to understand that we are not aiming to stop flooding of non-habitable floor space such as garages, sheds or gardens. Communities can expect some surface flooding.

We will continue to invest in our stormwater network to meet agreed levels of service and the conditions of our comprehensive stormwater consents.

How we will achieve our community outcomes

Goal	Our approach
<p>Use an integrated catchment-based management approach that:</p> <ul style="list-style-type: none"> Reduces flood risk by upgrading infrastructure, identifying secondary flow paths and minimising runoff. Uses low-impact design to improve water quality, including maintaining natural flows as much as possible and reducing contaminants through systems that mimic natural processes Minimises loss of habitat in receiving environments Provides recreational opportunities and amenity values where possible. Recognises cultural values associated with local waterways. 	<ul style="list-style-type: none"> We will continue work to obtain and implement comprehensive stormwater consents that are based on catchment management plans. We will progressively upgrade the public stormwater network in accordance with our asset management plan and the requirements of our comprehensive stormwater consents. We will use structure planning processes to develop integrated stormwater networks in urban growth areas
<p>Engage with communities and Tangata Whenua to build understanding about various approaches to stormwater management, including coastal erosion protection and ensure their views are sought and taken into account.</p>	<ul style="list-style-type: none"> We will engage with communities and Tangata Whenua through the process of obtaining comprehensive stormwater consents and in structure planning processes. We will carry out specific engagement in areas where upgrades to the existing network or options for coastal erosion protection are proposed.
<p>Undertake compliance and monitoring activities through a balanced approach, to ensure best practice use of the stormwater network.</p>	<ul style="list-style-type: none"> We will implement a monitoring and compliance programme in accordance with requirements of our comprehensive stormwater consents.



What are we planning to do

Project ID	Name	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
226332	Waihi Beach Pump Station Renewals	-	99,446	74,267	61,605	73,214	245,674	114,758	134,956	147,488	40,802
226353	Waihi Beach 2 Mile Creek West Bank	1,140,000	-	-	-	-	-	-	-	-	-
226356	Waihi Beach Diversion of Maranui Flood Water	100,000	-	-	-	-	-	-	-	-	-
226361	Stormwater - Waihi Beach Pio Shores	150,000	-	916,000	-	-	-	-	-	-	-
226362	Waihi Beach Pipe Upgrade	-	-	515,250	-	-	-	-	-	-	-
226363	Waihi Beach 2 Mile Creek Catchment Improvements	-	725,631	-	-	-	-	-	-	-	-
226364	Waihi Beach Earth Dam	150,000	3,345,000	8,415,750	-	-	-	-	-	-	-
226365	Stormwater - Waihi Beach Improvements various	100,000	223,000	171,750	235,000	180,600	184,800	126,000	193,050	131,500	201,300
226420	Katikati upgrades Belmont Rise, Grosvenor Place	-	-	-	-	-	-	544,844	-	-	-
226421	Katikati upgrades Francis Drive	-	241,072	-	-	-	-	-	-	-	-
226515	Ōmokoroa Upgrades Hamurana Rd, Owen Pl	-	-	495,116	119,084	-	-	-	-	-	-
226523	Stormwater - Ōmokoroa Vivian Dr upgrade	-	-	662,360	-	-	-	-	-	-	-
226524	Ōmokoroa Stormwater Renewals	-	452,010	-	71,451	-	-	-	-	-	-
226525	Ōmokoroa Stormwater Upgrades	-	-	464,172	-	-	-	-	-	-	-
226602	Stormwater - Te Puke Area 3 Structure Plan	120,000	1,446,924	2,175,500	1,081,000	-	-	-	-	-	-
226620	Te Puke SW Upgrades for Growth	-	1,115,000	-	-	-	-	-	-	-	-
226642	Te Puke Upgrades Williams Dr	-	-	263,350	-	-	-	-	-	-	-
226651	Te Puke Upgrades Oxford Street/ Boucher Avenue	538,000	-	-	963,500	-	-	-	-	-	-
226652	Te Puke Stormwater - King Street Outfall	-	446,000	-	-	-	-	-	-	-	-
226657	Stormwater - Te Puke Upgrades Tynan St	-	-	-	-	-	-	346,500	-	-	-
226658	Stormwater - Te Puke Upgrades Jellicoe St/ Dunlop Rd	-	-	-	-	-	492,800	-	-	-	-
316601	Katikati Structure Plan Utilities Stormwater	100,000	1,892,155	1,685,042	-	48,160	609,066	-	-	-	-
317201	Ōmokoroa Structure Plan - Stormwater Industrial	12,771,853	2,977,254	-	-	-	-	-	-	-	-
319601	Stormwater - Comprehensive Stormwater Consents	250,000	278,750	274,800	235,000	301,000	308,000	315,000	321,750	328,750	335,500
331501	Waihi Beach Otawhiwhi Marae stormwater drain	100,000	1,115,000	-	-	-	-	-	-	-	-
340001	Stormwater - Small Communities Infrastructure Remediation	-	12,265	12,595	12,925	13,244	13,552	35,280	14,157	14,465	14,762
340101	Stormwater - District Wide Modelling	-	78,050	80,150	94,000	96,320	98,560	100,800	102,960	105,200	107,360
340201	Asset Management - Waihi Land Drainage District	25,000	-	-	29,375	-	-	-	-	-	33,550
344601	Waihi Beach Stormwater - Athenree improvements	-	223,000	-	-	-	-	-	-	-	-
344901	Ōmokoroa Stormwater- Harbour View Road Upgrade	-	602,100	-	35,250	-	-	-	-	-	-
345001	Ōmokoroa Stormwater - Upgrade for Ōmokoroa Road, Tory Way, Tralee Street	-	-	-	424,821	-	-	-	-	-	-
345101	Ōmokoroa Stormwater - Upgrade Precious Reserve Pond	-	-	-	135,125	-	-	-	-	-	-
LTP25/34-46	Stormwater, Waihi Beach, Brighton Road Diversion and Darley Drain Outlet Improvements	100,000	557,500	2,290,000	-	-	-	-	-	-	-
LTP25/34-47	Stormwater, Waihi Beach, Wallnutt Avenue Pipe Renewal	50,000	-	687,000	822,500	-	-	-	-	-	-

Project ID	Name	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
LTP25/34-48	Stormwater, Waihi Beach, Beach Road Boardwalk Renewal	250,000	278,750	-	-	-	-	-	-	-	-
LTP25/34-49	Stormwater, Waihi Beach, Wilson Park/ The Crescent SW improvements	50,000	557,500	572,500	-	-	-	-	-	-	-
265413	Maketu Upper Catchment Attenuation	-	11,150	189,691	-	-	-	-	-	-	-
301832	Upgrades Pukehina Beach Rd stage 9	-	-	-	452,375	301,000	-	-	-	-	-
332614	Small Communities Stormwater Infrastructure rehabilitation	-	-	6,870	-	7,224	-	15,120	-	7,890	-
332616	Tanners Pt Upgrades Tanners Pt Road East stage 2	-	-	137,400	-	-	-	-	-	-	-
332617	Tanners Pt Upgrades Tanners Pr Road North	-	133,800	103,050	223,250	-	-	-	-	-	-
332621	Kauri Point Upgrades	-	-	579,565	-	-	-	-	-	-	-
332627	Stormwater - Kauri Point upgrades Stanley St	-	-	-	-	162,697	-	-	-	-	-
332635	Paengaroa Upgrades Halls Rd stage 1 & 2	-	-	-	-	565,880	837,760	-	785,070	299,820	897,798
352801	Stormwater - Ongare Point Improvements	-	-	-	-	-	86,240	340,200	-	-	-
311302	Stormwater - Asset Validation	30,000	33,450	34,350	35,250	36,120	36,960	37,800	25,740	26,300	26,840
352901	Stormwater - Catchment Management Plans review and update	75,000	83,625	-	-	-	-	94,500	96,525	-	-
LTP25/34-50	Levels of Service Review	100,000	111,500	114,500	-	-	-	-	-	-	-
332630	Stormwater - Small Communities Annual Contribution to Waihi Drainage Society	-	5,575	5,725	5,875	6,020	6,160	6,300	6,435	6,575	6,710





Where the money comes from

Please refer to 'Policies, Summaries and Statements' for the Revenue and Financing Policy for the Stormwater Activity.

How we will track progress

What we do	How we track progress	Result	Target					
		2023	2025	2026	2027	2028-30	2031-34	
We use an integrated catchment based management approach to provide a stormwater network that minimises risks of flooding events.	The number of times per annum flooding occurs outside identified flood-prone urban areas during a one-in-50year or less storm event.	1	<3	<3	<3	<3	<3	
	The number of flooding events that occur within the Western Bay of Plenty District. For each flooding event (district-wide), the number of habitable floors affected (expressed per 1000 properties connected to Council's stormwater system).	1.72	<30 (3%) per event	<30 (3%) per event	<30 (3%) per event	<30 (3%) per event	<30 (3%) per event	
	For a one-in-ten year flooding event, the number of habitable floors affected (expressed per 1000 properties connected to Council's stormwater system).			per event				
		Waihi Beach	0	<60 (6%)	<60 (6%)	<60 (6%)	<60 (6%)	<60 (6%)
		Katikati	0	<10 (1%)	<10 (1%)	<10 (1%)	<10 (1%)	<10 (1%)
		Ōmokoroa	0	<10 (1%)	<10 (1%)	<10 (1%)	<10 (1%)	<10 (1%)
Te Puke		0	<30 (3%)	<30 (3%)	<30 (3%)	<30 (3%)	<30 (3%)	
Maketu	0	<30 (3%)	<30 (3%)	<30 (3%)	<30 (3%)	<30 (3%)		
We use an integrated catchment based management approach to provide a stormwater network that avoids impacts on water quality. We will carry out compliance and monitoring activities in a balance way to ensure best practice.	Compliance with Council's resource consents for discharge from our stormwater system, measured by the number of: Received by Council in relation to those resource consents.	Abatement notices	0	0	0	0	0	
		Infringement notices	0	0	0	0	0	
		Enforcement notices	0	0	0	0	0	
		Convictions	0	0	0	0	0	
We will be responsive to customer's stormwater issues.	The median response to attend a flooding event, measured from the time that Council receives the notification to the time that service personnel reach the site.		<120 minutes	<120 minutes	<120 minutes	<120 minutes	<120 minutes	
	Urgent	73 mins	<60 mins	<60 mins	<60 mins	<60 mins	<60 mins	
	Non-urgent	17 hrs, 21 mins	<24 hours	<24 hours	<24 hours	<24 hours	<24 hours	
	The number of complaints received by Council about the performance of its stormwater system, expressed per 1000 properties connected to the Council's stormwater system.	23.8	<30	<30	<30	<30	<30	

Significant effects of providing this activity

Wellbeing	Positive	Negative	How are we addressing these effects
 <p>Social</p>	<ul style="list-style-type: none"> The stormwater network reduces the risk of damage from flooding to individual properties. The stormwater network provides a safe living environment for the whole community. 	<ul style="list-style-type: none"> Disruption during the implementation of works. Individuals can affect the stormwater network and neighbouring properties by altering natural flowpaths. Flooding can affect public health and safety. Stormwater can cause public health issues through the bacterial contamination of beaches. 	<ul style="list-style-type: none"> Continue to advise landowners of potentially flood-prone areas. Monitor new developments to ensure natural flowpaths are maintained.
 <p>Cultural</p>	<ul style="list-style-type: none"> The stormwater network can help in protecting sites of cultural and historical significance from erosion and flooding. Acknowledges the significance of the receiving waters and the need to improve the mauri of water bodies, which improves health and wellbeing. 	<ul style="list-style-type: none"> Contamination of the receiving environment is unacceptable to Tangata Whenua. 	<ul style="list-style-type: none"> Continuing to better identify sites of cultural significance. Continue to monitor discharges to comply with the consent conditions set by the Bay of Plenty Regional Council.
 <p>Environmental</p>	<ul style="list-style-type: none"> The stormwater network reduces the potential for damage and erosion to property, essential utilities and transport infrastructure. The stormwater network can help prevent other contaminants from reaching sensitive environments. 	<ul style="list-style-type: none"> Stream degradation through erosion by inadequately controlled discharges. Barriers for fish, contamination from sediment and pollutants. Beach erosion from stormwater outlets. Transfer of contaminants such as silt, nutrients, toxic substances. 	<ul style="list-style-type: none"> Continue to monitor discharges to comply with the consent conditions set by the Bay of Plenty Regional Council.
 <p>Economic</p>	<ul style="list-style-type: none"> The stormwater network reduces the potential for damage and erosion to property, essential utilities and transport infrastructure. Efficiencies are available through integrating stormwater activities with others such as land use, transportation and industrial development 	<ul style="list-style-type: none"> The cost of maintaining the stormwater network to ensure it is free from blockages before high rainfall events. Existing stormwater issues include costs associated with damage related to flooding, stream erosion and personal safety. 	<ul style="list-style-type: none"> Continue to promote value for money by integrating stormwater upgrades with other projects.

