Project Name	Description	Update
One Mile Creek Flow Improvements	Assess stream capacity and improve conveyance.	
Erosion Monitoring of One Mile Creek	Procedure or process for monitoring erosion at One Mile Creek.	Council has completed initial modelling of the Waihī Beach earth dam. Stormwater modelling has shown that the downstream effects are made
Earth Dam - Capital Improvements	Upgrades in line with T&T report regarding secondary flow channel and meeting new dam safety guidelines, also	worse for both removal of the Dam and Upgrading the Dam.
	investigating if the dam can be operated as an attenuation device which drains completely following rain events and if there is any benefit. Investigate potential dam removal and second spillway.	To offset this increased flood hazard, it is proposed to enhance channelling and containment within the One-Mile Creek catchment. Since the dam poses the highest risk for cost escalation, council are exploring the removal of the dam as the preferred option. While these changes may alter the dam's recreational value, they also present an opportunity for improvement.
Attenuation in Upper Catchment of One Mile Creek	Investigation into further locations upper catchment attenuation in Waihi Beach could reduce flooding.	This project is not progressing, modelling indicates no benefit. the existing dam is located in the best position for attenuation purposes as attenuation dams are more effective when placed lower in the catchment where they can capture and control a larger volume of runoff from the entire upstream area, reducing peak flow and preventing downstream flooding.
Earth Dam - Dam Management Procedure	Dam Management procedure needs to be revised. Consider maintaining lower operating level.	Initial modelling of the earth dam indicates there is some benefit leaving the dam permanently empty. Council staff have updated their Dam Management Procedure.
Ownership & Maintenance of Drains Upstream of Jenkinson St	Establish ownership and clear drains of overgrown weeds and debris.	Council Are Still seeking to gian easement over the drain
Fyfe Road Pond and Elder Housing Drain Upgrade	Increase the size of Fyfe Rd pond and improve flowpath through elder housing.	Council has completed stormwater modelling which has shown that increasing the ponds volume will have no improvement to the overall flooding of dwellings. Project not progressing further.
Darley Drain Outlet Improvements - Retaining Wall Renewal	Renewal of the retaining wall at the Darley Drain outlet. Investigate possible flap gate at Darley Drain.	Concept design complete. Project not progressing due to risk to significant reserves asset (bridge). Relocation of Darley Drain outlet being investigated which will mean the retaining wall renewal will not be required.
Darley Drain Upper Catchment Attenuation	Investigate safe methods of attenuation to protect Darley Drain catchment properties.	Although initial modelling confirmed that attenuation (including a large dam) in the gully at Mayor View Terrace above the Darley Drain catchment would provide some flood relief, this concept had a number of flaws including large dam construction and regulation implications, acquisition of land required, geotechnical issues and increasing flooding to developed properties on Fyfe Road. To mitigate these risks two smaller dams higher in the catchment were modelled, the results of which showed that the project would be costly and provide minimal flood relief. This project has therefore been recomended for removal from the LTP as they are considered unfeasible and would not provide adequate flood relief.

Maranui Catchment Re-Diversion	Diverting flows from Maranui Estate towards Two Mile Creek. This project is dependent on upper catchment attenuation of Two Mile Creek to provide additional capacity within Two Mile Creek.	Initial modelling confirmed that diversion of stormwater towards Two Mile Creek would prov some flood relief to the Darley Drain catchment however investigation during concept design to that the budget allocated towards these project the current LTP was signficantly under-estimate due to a number of design constraints and risks such as geotech, power and land acquisition. Duthe level of uncertainty it is recomended that dof this project is completed in the first year of the LTP (2024/25 FY) to quantify these risks and bet define the scope to allow Council to quantify the benefit and consider a more reflective cost estimate for reccomendation in the 2027 LTP.
New Pipe - Wallnutt Ave	New pipe down Wallnutt. Explore possibility of extending down Ocean View Road direct to the Darley Drain outlet, also address restrictions of existing Wallnutt Ave pipe.	As this is critical line, which currently runs underneath existing homes, it poses a risk to the Darley Drain stormwater system. Replacement the Wallnutt Ave pipe has been recomended for financial years 26/27 and 27/28 in the LTP. Upgrades need to be coordinated with the Darl Drain outlet and Brighton Reserve projects, which planned for the first three years of the LTP.
Darley Drain Outlet Rediversion	Assess feasibility of rediversion on the performance of the Darley Drain catchment.	Modelling results for the Darley Drain outlet upg and Brighton Reserve diversion have shown to provide flood relief and be cost effective. This project aligns with best practice stormwater management by replacing grey infrastructure to open drains, inturn providing network resilience has been recomended that this project is priorit for design and construction in the first three year the LTP (2024/25 - 2026/27).
Pump Station at Wallnutt Ave	Investigate the feasibility of a pump station in the Darley Drain catchment, to reduce the effects of flooding in the Wallnutt and Marine Ave area. Could be pumped to Brighton Reserve.	As the modelling has a number of flaws i.e. land acquisition, consenting issues and potential du erosion risks, the project is considered to be complex and there are concerns over what can achieved. This project will be reviewed as part the district wide Levels of Service (LOS) review we recommendation for implementation for the 20 LTP.
Pipe the Beach Road to Marine Ave Boardwalk Drain	Assess and implement options to improve performance of the boardwalk drain.	Project has progressed to design phase. Survey and soil testing are complete. Funding for construction has been included in the LTP for the 2025 financial year.
Grate Over Beach Road Culvert from Pensioner Flats	Prevent blockages of downstream pipe network, large mesh/slotted grate to prevent large debris from entering piped network.	Project is complete. Newly constructed grate hobeen installed on the upstream end of the culve
25 Wilson Road Improvements	Carpark extension and sealing linked to concrete dish channel capacity.	Carpark has been extended. Further investigat underway to install pump. Refer to Otto Road project.

Two Mile Creek Erosion Protection	Rock revetment of Two Mile Creek to protect properties from erosion.	Contractors have successfully completed downstream construction works on 26	
		properties. Upstream resource consent for	
		upstream works has been approved by the Bay	
Two Mile Creek Erosion Protection - Extension	Consent variation required for the extension of consented works to protect properties further upstream.	of Plenty Regional Council (BOPRC). All works are expected to be completed by the end of this calendar year (2024).	
Improvement of Flowpath through	Assess options to improve flow through open swale.	Modelling has shown that the affects of the	
Coronation Park	Access options to improve now allocagn open on ale.	overland flowpath through Coronation Park does not impact habitable floors in the area therefore this project will not progress.	
The Crescent Rd Runoff Management	Investigate existing network capacity constraints, look at the effects of privately owned soakage network in the area on overland flow causing downstream flooding, investigate the use of mega or super pits in steep sections of The Crescent, investigate use of Wilson Park for attenuation, investigate connecting The Crescent properties to Wilson Park.	Investigations have been undertaken and identified that there are issues with flow path and inlet works within Wilson Park to Crescent, it was also noted that kerbs along the Crescent are unable to effectively contain flow and divert stormwater into a catchpit. A consultant has been engaged to undertake design options to help reduce the effects of flooding. Design options are expected to be completed in FY 24/25 with recommendation to Council to carry out construction works in financial year 25/26 to FY 26/27.	
Two Mile Creek Upper Catchment Attenuation	Upper catchment attenuation to support diversion of Maranui Estate to Two Mile Creek.	Initial modelling confirmed that attenuation would provide some flood relief to the Two Mile Creek catchment and can offset the effects of the Maranui diversion which would increase flow towards the Two Mile Creek catchment. As a stand alone project investigations have identified that the cost benefit of implementing upper catchment attenuation is not viable however it will be required if the Maranui diversion project is implemented. Refer to Maranui project for further information.	
Otto Road Stormwater Pump Station/Reticulation	Assess the feasibility of installing a pump to mitigate flooding.	Initial modelling has shown that a pump could provide some flood relief for habitable floors in this area. This project has been recomended for design and construction in 25/26 FY.	
Inform Community of Modelling at Three Mile Creek		Modelling has shown that there is no downstream impact from the wastewater treatment plant on Three Mile Creek.	
Vary Consent for Outlet Clearing		Consent variation approved to enable Council to clear Two and Three Mile Creek outlets more frequently.	
Otāwhiwhi Drain	Initial concept of a box culvert extending into the harbour with some other erosion protection and stormwater treatment, will help hapu reclaim some land and improve flow and water quality.	Concept design is underway with Stantec.	
Overland Swales Blocked	Investigate blockages and restrictions in the swale network.	Survey of blocked swales completed, details handed to councils compliance team.	

Basins Maintenance	Soakage basins require scouring to break up firm sand which inhibits soakage in the dunes at Bowentown.	The basins have now been scoured to ensure water can drain through the dunes.
Bowentown Wider Project List (T&T report)		These projects will proceed as agreed in the 2021 LTP and any further funding past the 2027 LTP will be reviewed as part of the Level of Service review.
Raising Gully Traps in Flood Zone	Prevent inflow of flood waters into the wastewater network and overwhelming the system leading to overflows.	Asset Manager undertaking further analysis of the data collected to better understand what solutions can be undertaken. Implementation plan anticipated by end 2026.
Blocking of Overland Flow Paths	Education and awareness for internal and external customers on the risk of blocking flow paths.	Education campaign is ongoing via social media and website updates.
On Call Pumps with Dedicated Wet Wells to Protect Properties from Flooding	Install dedicated manholes to provide a dedicated location for portable pumps to be dropped in during extreme weather events. Portable pumps will pump flood waters over to permanent pump station.	These pumps are planned to be implemented by end 2025.
Collecting Photos	Looking at maintenance contract variation to collect photos of works completed.	Councils maintenance contractor collects photos against completed works.
Continuous Photo Monitoring at Key Locations	Investigating the feasibility of installing cameras for continous monitoring of key stormwater assets.	Council has installed a CCTV camera at Dillon Street (by the Two-Mile Creek bridge) to monitor flood levels in the creek. We're currently looking to install signage to notify the public of its purpose and are also looking at options to help us get accurate water level readings.
58 Beach Road - Tree Roots	Tree roots causing flooding Box drain inspected, no tree roots were found in drain. However, due to erosion into 56 Beach Road this will be monitored further when piping of box culvert is considered.	Box drain inspected, no tree roots were found in drain however due to erosion into 56 Beach Road this will be monitored further when piping of box culvert is considered.
Shaw Road Pump	Could direct some of the water down to Two Mile Creek below Dillon Street bridge.	Stormwater modelling undertaken indicates no benefit in progressing with new pump.
Floodgate Wilson Road Culvert	Investigate the benefit of Installing a flap gate at 53 Wilson Road.	Floodgate installed in conjunction with Two Mile Creek improvement works.
Pipe Didsbury Street Drain, Edwards St Pump	Investigate piping the drain. Investigate a pump installed to drain area.	This project will be reviewed as part of the district wide Levels of Service (LOS) review with a recommendation for implementation for the 2027 LTP.
Montessori Pre-School	Stormwater from roads runs off and floods carpark and into pre-school. Volume and velocity is a risk. Need to investigate options for remediation.	Consultants have been engaged to undertake the survey and concept design works. The survey and concept design is expected to be completed by financial year 24/25 with a recommendation to Council to carry out construction works in financial year 25/26.

Regular Silt Surveys Maranui Pond	Set up regular silt surveys of Maranui pond and Dam (post in ground).	Silt was removed from the forebays of the Maranui Pond. Ongoing monitoring of this will be defined in the Pond Maintenance Strategy being developed for the district.
Half Mile Creek - Headwall	Upgrade headwall at Half Mile Creek to minimise erosion. - New rocks have been installed at outlet to protect the bridge from erosion.	New rocks have been installed at outlet to protect the bridge from erosion. Project is now complete.
Drone Survey of the Dam	Drone Survey of the dam to check silt and debris levels following recent weather events.	A drone survey of the dam was completed late 2023. The survey has shown no excess silt build up in the dam and so it can operate as required.
Dam - Clean out	Clean out of the dam in the vicinity of the primary spillway.	The silt survey of the dam showed no excess build up of silt or debris, therefore no cleanout was required.
CCTV Pipe Down Wallnutt Ave	Needs updated CCTV inspection.	CCTV of the stormwater pipe down Wallnutt Ave was completed late 2023. The survey did not show any blockages or issues with the stormwater network.
Inspect Dip or Tomo at Beach Rd Culvert	Raised as a potential risk. Needs investigating Council staff investigated, there are no obvious dip or signs of collapse or erosion.	Council staff investigated, there was no obvious dip or signs of collapse or erosion.
Right angle in Wallnutt Ave/Marine Ave Pipe	Improve flow/hydraulics in the Darley Drain catchment.	Modelling looking at the benefit of removing the right angle from this pipe, showed no benefit. The project will not progress at this stage however will be reviewed again following the Darley Drain upgrade.
23 Browns Drive	Management of overland flow.	Construction and reinstatement is now complete.
Investigate Blocked Pipes - Snell/Didsbury/Citrus	Check catchpits and CCTV network.	CCTV complete. Cesspits cleared. Reports received indicate there are no further issues with the stormwater system.
Catchpit Clearance	Roading catchpit clearance.	Completed September 2023.
Hillview Open Drain	Open drain behind 4 and 6 Hillview road is blocked Drain was sprayed and re-sprayed again following an audit.	Drain was sprayed and re-sprayed again following an audit.
Citrus Ave Open Drains/Existing road Culverts	Drains need to be cleared Road side open drains have been cleared of silt.	Road side open drains have been cleared of silt and debris build up.
12 Jenkinson Street	Upstream Grate in the stream blocks causing flooding.	Second inlet structure being constructed by Beach Contractors. A separate contractor will be engaged to provide the grill. New manhole and temporary grate installed.23
Clear Didsbury Drain of Sediment Build Up	Improve flow through Didsbury Drain removing sediment Didsbury drain has been cleared of silt.	Didsbury drain has been cleared of silt and debris build up.