

# Whangamata Stormwater Improvement Project

Presentation to Whangamata Community Board

By Ian Holyoake of Whangamata Stormwater Action Group

16 July 2024

## Request to Voluntarily appoint an Independent Commissioner

### This document is a draft:

This is a formal request to the Community Board to voluntarily support the appointment of an independent commissioner to 'co-ordinate and manage' the Whangamata Stormwater Improvement Project, create the Master Plan and see the implementation of scopes/projects of improvements.

I would like to move this draft into a formal term of reference for the engagement of the independent commissioner. This request is to be read in conjunction with my WSAG discussion Document dated 16 June 2024 and my request to the Community Board as submitted dated 4 June 2024. Together these documents form the basis of my recommendations to the Community Board.

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## Summary:

The current process of 'engagement between council and stakeholders through workshops' is not working. I proposed at the last Community Board meeting that the Community Board take the initiative to manage stakeholders' engagement.

On 10<sup>th</sup> July 2024 council responded with the following:

*It was discussed that there is already a fully established Whangamatā Stormwater Improvement Working Group, which is consistent with other areas. As well as updating the website, the Water*

*Service Manager, District Manager and Board Chair have initiated the following changes to assist with the flow of information:*

- 1. Minutes of the Stormwater Community Stakeholder Engagement meetings can be received as a "For your Information report" in upcoming Community Board agenda*
- 2. Those same minutes will be added to the webpage above*
- 3. Water Service Manager to update Board as part of the formal Work Program Report*
- 4. Community Board representatives at the Stormwater Community Stakeholder Engagement events to informally update Board as part of networking*

With due respect this provides no benefit to community. It does not solve the missing Master Plan, disclose its content, provide a timetable for its release or continue my proposal as lodged.

I have already advised twice that workshop minutes prepared by council have been inaccurate and that Councillors and Community Board members the email refers to have not been attending workshops.

Since the last Community Board meeting, I asked council for 3 things. Instead of providing the information council turned my requests into LGOIMA requests (which they weren't) which effectively delayed the information for 20 days.

The information when it arrived opened more lines of investigation. Council claim they did receive a peer review of the Drybasin dated 4 days prior to my meeting with council on 30 May 2024. This should have been part of that discussion. Council also states that despite the 'peer review' council will remain responsible if the Drybasin fails. This is not consistent with the purpose of peer reviews.

Yet more LGOIMA requests are required. I am already labelled by council as 'persistent' and placed on LGOIMA restrictions. This does not demonstrate transparency, open engagement or the desire to share information. What do I have to do to get engagement and transparency for SAG and stakeholders?

I am a volunteer. Council commented this was my choice. Whilst that is true council has had every opportunity to welcome positive input from SAG. I refer you to the attached references at the end of this request. This is positive proof SAG has not been sitting on the fence criticising.

I prepared a 'discussion document' on 16 June 2024 between TCDC, WRC and SAG for responses by 18 July 2024. The questions I wanted to have discussed are the important matters the Community Board needs to include<sup>1</sup> in its Agenda Packets and recorded minutes.

WRC response was immediate but unacceptable. TCDC has not responded or acknowledged my discussion request. I lodge this discussion document request formally to the Community Board now.

I am of the firm opinion that supporting the appointment of an independent commissioner would remove all concerns of 'conflict' or 'skin in the game'. It would ensure decision making is based on fairness and transparency to benefit the community and restore faith in council.

Community has little if any trust left in council. They are afraid to come forward to volunteer as we (SAG) have to be labelled, abused and have media statements to denigrate our professional input. For council to claim in media releases 'we must let the experts decide' is disrespectful to SAG

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<sup>1</sup> In my opinion as stakeholder representative WSAG

volunteers. To then find out no expert report was even prepared before the media release is despicable.

## The primary reasons for this request are:

### Protection of Ratepayers Interests

The bulk of funding for Stormwater Improvements comes from rates and fees. For over 20 years ratepayers have funded rates in anticipation of flood protection. Despite council having a CSDC it has failed to deliver a comprehensive or consistent Stormwater Management Plan.

The issues for ratepayers include:

1. The Whangamata CSDC has been managed by Council since 2001 without any formal engagement or consultation with ratepayers (and those affected) who are funding Council<sup>2</sup>.
2. RMA 1991 section 30<sup>3</sup> places the statutory responsibility onto WRC our Regional Authority to manage stormwater discharges. WRC has not conducted any form of engagement or consultation with affected parties.
3. WRC email dated 19<sup>th</sup> June 2024 states *'the management of the Whangamata stormwater network components are best discussed with TCDC, who manage the network for the community.'* The statutory provisions provided within RMA to protect affected persons expect WRC to manage Council to ensure Council is complying with communities' interests and the provisions of RMA (and Building Act 2004). The expectation is WRC are checking and approving compliance with RMA and WRC Stormwater Guidance policy. This is not visible to us.
4. When the Stormwater Workshops began Council had removed the \$6.36M for stormwater improvements. It was resurrected after debate. In the workshops we learnt \$9.17M would be included in the upcoming LTP (for the next 3-5 years) and that more would be made available if needed. The latest LTP has apportioned the \$9.17M over 10 years. It is of concern that Council can divert monies.
5. During workshops, debate and council media statements threats have been made if we argued we would lose all the money. It is of concern Council makes threats of this nature using collected rates as bargaining tools.

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<sup>2</sup> Watercare Services vs Auckland Council 2011 NZEnvC 155 'consultation is best practice, and it would be foolish for a party not to consult with those with a known interest in a proposal. Consultation is actively encouraged (if not directed) by the Court.

<sup>3</sup> Section 30 of the RMA sets out the statutory responsibilities of regional councils. These include **controlling the use of land for soil conservation purposes, maintenance and enhancement of water quality and ecosystems, and controlling discharges of contaminants.**

6. The Williamson Pond decision to become a Wetland is a clear breach of Council protecting Ratepayers money. That decision included installing two Gross Pollutant Traps that are totally unjustified and unnecessary. Discussed later. TCDC Reserves Policy requires engagement before designs are confirmed regarding the use of Reserve Land. This did not happen. It is noted that the Williamson Reserve is a deed of gift for the community use – not for stormwater infrastructure. Stormwater infrastructure must be removed.
7. Installing a flying fox in the Island View Reserve altered existing stormwater assets (the detention basin) to an extent it caused a washout of the shoreline. Council failed to consider the adverse effect of reducing the detention basin storage capacity.
8. Kiwi Rd improvements directed significant extra catchment to low lying properties causing flooding and extensive damage. Council has failed to respond to any request for explanation. It appears this was a ‘design and build’ project that had no oversight from Council or WRC meaning the interests of ratepayers and affected parties were totally ignored to their detriment.
9. Council released media statements included mention council has engaged with Iwi over the Wetland. I am particularly concerned ‘consultation with Iwi occurred when it did’, 6 months after council made the wetland decision. Legislation requires consultation with Iwi, but in this instance, I find it troublesome. The way the media statement reads council has belatedly consulted with Iwi to provide support for its decision to support the unlawful<sup>4</sup> wetland decision. Council has not named the Iwi or whether these Hapu are residents or affected parties or parties with an interest in Whangamata. Council has failed to provide me<sup>5</sup> with essential information so I would conclude Iwi hapu members will be no better informed than me. Councillors reported to SAG that council advised them the ‘stakeholders had agreed to the Wetland’ which is untrue. The consultant’s email to WRC dated 3 April claims ‘we mostly have the community on board’ – which is blatantly untrue.

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<sup>4</sup> OAG publication Open for Business states decisions cannot be made in workshops. Despite this the wetland decision was made. Even after bringing this to the attention of council and councillors attempts were made to ratify the unlawful decision.

<sup>5</sup> Me – as in my role as stakeholder’s representative within the Whangamata Stormwater Action Group.

**From:** S7(2)(a) LGOIMA 1987 <S7(2)(a) LGOIMA 1987 >  
**Sent:** Wednesday, April 3, 2024 11:06 AM  
**To:** Brian Richmond <Brian.Richmond@waikatoregion.govt.nz>  
**Cc:** S7(2)(a) LGOIMA 1987 <S7(2)(a) LGOIMA 1987 >; S7(2)(a) LGOIMA 19... <S7(2)(a) LGOIMA 1987 >  
**Subject:** RE: Williamson Pond drawings

Hi Brian,

Thank you – we mostly have the community on board. There is one resident who is still not entirely happy with the wetland idea, but we can't quite hold up a project for one person!

No worries if you/S7(2)(a) L... are too busy this week. To keep things moving, we may just go out to tender now with the existing design. We'll then incorporate your feedback into the drawing set for construction. Hope that is OK?

Ngā mihi,

S7(2)(a) LGOIMA 1987 (S7(2)(a) L...)  
CMEngNZ CEng(UK) MICE MSc B.S.  
S7(2)(a) LGOIMA 1987

- S7(2)(a) LGOIMA 1...
- S7(2)(a) LGOIMA 1987
- [metisconsultants.co.nz](http://metisconsultants.co.nz)

My concern is race relations are at a disturbingly low ebb. Councils are required by law to allow Iwi input. Whangamata is a tight community, and no-one wants confrontation with friends and neighbours. Was council transparent with Iwi? If not, this could be labelled a very divisive abuse of legislation established to empower community to consider each other's points of view to work together. Iwi did not get invited or attend workshops where the debate of options was to occur. I for one would like to hear the views of whoever hapu was consulted. Iwi are part of community, own property and need the very same stormwater protections and work towards the common goal to clear up water discharges. It is an insult to both Iwi hapu and stakeholders that consultation was 'late', 'if at all', 'if truthful' and 'sanitised' all behind closed doors. I am sure Iwi would like to be told the truth to confirm they made the decision in good faith and on its merits. I am sure Iwi would also want to hear our views.

## Level of Service

Level of service is critical to expectations of community. Currently at least 4 different versions appear in Council statements.

10. **Connected Properties:** Current LTP 2024-2034 Service Levels and performance measures for stormwater – *'For each flooding event the number of habitable floors affected (per 1000 connected properties) baseline 1'*. Very few Whangamata properties are **connected** to stormwater by way of roof or property drainage systems. What exactly does this mean? Do the RFS actually go anywhere when we have no 'connected properties' other than retail and commercial properties.

11. **Connected Properties:** Current LTP 2024-2034 Service Levels and performance measures for stormwater – ‘Number of complaints received about the performance of the stormwater system (per 1000 connected properties) Baseline 5.03’. Very few Whangamata properties are **connected** to stormwater by way of roof or property drainage systems. What exactly does this mean? What is a ‘complaint’ when Councils website does not include an option under RFS to complain about stormwater? Extract from LTP 2024-2034 ‘meet the needs of our communities’.

What you can expect us to deliver

Activity	The service you can expect from us	How we'll measure whether we delivered	Latest result (2022/23)	Our targets			
				2024/25	2025/26	2026/27	2027-34
Stormwater	Our stormwater services protect habitable areas from flooding	Number of flooding events	1	≤1	≤1	≤1	≤1
		For each flooding event, the number of habitable floors affected, per 1,000 connected properties	1	≤1	≤1	≤1	≤1
	We'll provide a responsive stormwater request service	The median response time to attend a flooding event, measured from the time our Council receives notification to the time that service personnel reach the site	20 minutes	≤20 minutes	≤20 minutes	≤20 minutes	≤20 minutes
		Number of complaints received about the performance of the stormwater system, per 1,000 connected properties	5.03	≤5	≤5	≤5	≤5
Stormwater and land drainage	We'll minimise the environmental impact of protecting habitable areas from flooding	Compliance with the Council's resource consents for discharge from its stormwater system, measured by the number of:	a) 0 b) 0 c) 0 d) 0	a) 0 b) 0 c) 0 d) 0	a) 0 b) 0 c) 0 d) 0	a) 0 b) 0 c) 0 d) 0	
		Our Stormwater and land drainage activities meet the needs of our communities	Our community's satisfaction with our Stormwater and land drainage services as measured by an annual customer satisfaction survey	New	Establish initial baseline results	Set target once baseline is known	Set target once baseline is known

12. Maintenance of catchment area within Whangamata. Council has provided the KTB Stormwater Management Plan that stipulates catchpits are to be cleaned annually in May but refused to provide maintenance logs or contracts to support this. In response Council states they only clean catchpits after complaints after storms. This is not a LoS.
13. Road sweeping is an important consideration in coastal towns with significant windblown sand and sand bases. Sweeping after windblow will reduce the amount of sediment entering and filling catchpits.
14. Management of RFS is practically non-existent. Many affected owners have come forward and stated this is not the first time they have had to complain. The true performance measure would be outstanding RFS.
15. Hazard Tags on property files. It is expected that stormwater improvement projects would come from properties being repeatedly flooded. The ‘improvements’ would then remove the hazard tags. Whilst many properties are below the road crowns this of itself does not mean they are or will flood. Most of our investigations clearly show road water runoff is the cause of flooding.
16. SAG has been provided with Opus project documents prepared in 2005 covering much of what is now being proposed. It is difficult to reconcile councils LoS when it engages consultants to investigate, make recommendations, prepare scopes and projects to meet community expectations of LoS to then get nothing.

## Protecting our Coast

Whangamata is blessed with its natural Beach, Harbour and Estuaries. Development of Forestry and farming are causing drastic and irreversible adverse effects to our Estuaries and Harbour (and likely replenishment of sand and dunes). Developing the sand dunes into housing is causing more adverse effects. It is incumbent on WRC and Council to provide sufficient space for natural growth of towns, but this must be balanced whilst still protecting our Beach, Harbour and Estuaries.

17. Coastal management plan to remove discharge pipes from the Coast. Removing discharge pipes from the beach must be a priority otherwise we will be left with a 'dead' beach.
18. Council has 'pumped' contaminated water<sup>6</sup> onto the beach 3 times over the past 15 months. Whilst this was the only option left it should not have got to this stage. The issue became exacerbated from the 2018 Opus report<sup>7</sup> increasing the pipe discharges into the pond.
19. Councils current plan for stormwater is to construct more discharge pipes onto the beach. This is without engagement with community.
20. Council constructed a pipe discharge onto the beach at access 11 without any discussion or engagement.

## Specific Investigations Ignored

Stormwater failures are generally because of failed design, unauthorised changes of failure to maintain. It is incumbent on Council as manager of our CSDC to investigate why designs have failed, whether changes have been made (e.g. disrupting overland flow paths), or whether maintenance would have prevented the adverse event.

Council refuses to discuss any failure or flooding issue. The expectation is communities pay rates for a LoS which includes knowing whether that LoS is being examined with an open mind and with transparency. These are a few of the more serious ones.

Most of the contentious flooding is to locations included in the Opus 2005 report. The transparent thing for council to do was review the Opus recommendations and get them underway. Instead, council have engaged more consultants to 'better plot the low points'. These were already known. Opus maps produced in 2005 depict all these areas still flooding.

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<sup>6</sup> Council claims that road water is contaminated. Detaining road water in the old 'pond' was illegal and became contaminated with algae bloom and sludge. Despite this knowledge council pumped the water out onto the beach 3 times since Gabrielle.

<sup>7</sup> Council has not yet provided this document but has supplied the Opus drawings for the pipe upgrade to 1050mm Dia indicating readiness to increase the catchment to discharge into Williamson another 7 times. The pond hasn't coped since the last increase in catchment so could never cope with more.

21. Williamson Pond design. Initially it was understood that the weir rebuild in 2008 was to allow infiltration out the base but also under the spillway through the weir. It was rumoured that Geotech cloth had been used around rocks to promote increased soakage though the weir. Council refused to provide any drawings despite a local engineer still in practice being the designer. Council refused to accept when the pond was full it would restrict upper pipe networks from draining. Council refused to acknowledge that each dredge out of the bottom had lowered the basin to below the water table so still water remained, got warmed and grew algae bloom. Now that the weir has been opened, we could see how it was built. If this was known last year in April when we asked for a pipe flooding would have receded months before it did. Council refuses to accept detaining water in the pond<sup>8</sup> will adversely affect and lift the water table to the surrounding ground reducing the ability of the water table to drain. WRC emails state the Gross Pollutant Traps are not acceptable and that discharge onto the beach is not to make it worse<sup>9</sup>. What is of concern is the 2018 Opus report and pipe upgrade is misdirected and not in accordance with good stormwater management, the gross pollutant traps are not needed, and the consultant fees have been wasted since 2018. These costs are likely to be close to \$1.5M-\$2M
22. Kiwi Rd improvements. Council has refused to discuss the failed design and construction. Council has even stated in LGOIMA that Kiwi Rd had no stormwater improvements. This is false as 1200 lm of curb and channel have been installed to manage road water runoff by marshalling and directing it to 10 catchpits and 5 soakage devices. A letter to the mayor went no-where. When council did respond they mislead the owner that was complaining.
23. Island View shoreline washout. Council refused to investigate the cause. In response council authorised Pinnacle Construction to provide a design and build – which included hundreds of Cirtex buried into the ground. It is understood council has shelved this project likely because the cost would have been in the millions. Allowing a contractor to design build is not managing the failure. WRC should have been protecting ratepayers and affected persons. Luckily council has agreed to delay that project, but it is unknown what is to be done.
24. Mooloo is the subject of Opus 2005 report stating no more impervious until a solution is found. My count is 14 building consents have been issued to properties that can drain into Mooloo basin. Ranfurly Rd has been concreted with just soakage devices which are installed below the winter water table so will be useless in winter. The Campsite has 5 approved BC each with driveways running to Ranfurly.
25. Ranfurly floods yet more properties have been built
26. Chartwell floods every rain. Council claimed it was because cesspits were blocked. The recent rain caused flooding again. The neighbour immediately went out and found the grate was not blocked.

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<sup>8</sup> Example Williamson Pond as it was or a Wetland if constructed. Both hold water permanently so affects the surrounding water tables, or they require liners.

<sup>9</sup> The pipe through the weir means all rain events of a magnitude to cause road water to enter pipes will be discharging onto the beach. It is expected we will now have a permanent erosion channel hence making it worse. The SAG wants this to be temporary and all road water discharge removed from the Beaches.

27. The other 26 odd Opus recommendations still outstanding
28. The Office of the Auditor General stormwater report 2018 stated councils<sup>10</sup> would respond to storms by getting a report and then doing little. This seemed to dissipate the community by leading them into the belief council was being proactive. Instead, council was claiming the storm was a 1 in 250-year events, so we'll never see another.

## Compliance and Regulatory

Compliance and Regulatory in respect to issuing land use and building consents.

Despite warnings from Opus 2005, MBIE 2012, KTB and others council is still issuing land use consents knowing the areas are not serviced by pipes or overland flow paths, with floor levels below the crown of the roads.

I personally have offered free of charge to meet council staff and train them in these fields.

Council has flood modelling plans created we believe in 2018. Council refuses to provide these even under LGOIMA. By withholding these from the community owners getting plans done cannot predict if a property floods or whether it should be built on or whether the ground should be filled first.

29. Council has issued the land use for the campsite<sup>11</sup> with articulated surface flow paths of stormwater being discharged onto Diana, Beverly and Barbara. These streets already flood with many properties below the road crown. The overland flow paths are uncontrolled along roads and accessways leading to nuisance water and flooding. The adverse effects have been ignored.
30. Currently 2 homes are being constructed on Ocean Rd below the road crown with articulated drawings showing an overland flow path behind the rear property. This overland flow path was blocked when Graham Road was formed.
31. In my investigations I would predict at least 100 homes have been built too low to comply with RMA or the Building Act. The figure could be 400.
32. Tags are not visible until they are on the CT. This needs investigating but my understanding is natural hazards are to be recorded on CT to protect interested parties in case 'councils records were not kept clear'.
33. Council has been asked many times to correctly tag properties and require building consents to be lodged under s73 of the Building Act and have appropriate waivers. This failure becomes a contingent liability on council and our future rates.

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<sup>10</sup> TCDC was one of 3 councils the Office investigated.

<sup>11</sup> 47 major homes each with extensive impervious areas. Note WRC stormwater guidelines states changing pervious to impervious changes flood water by 4 times.

## Master Plan

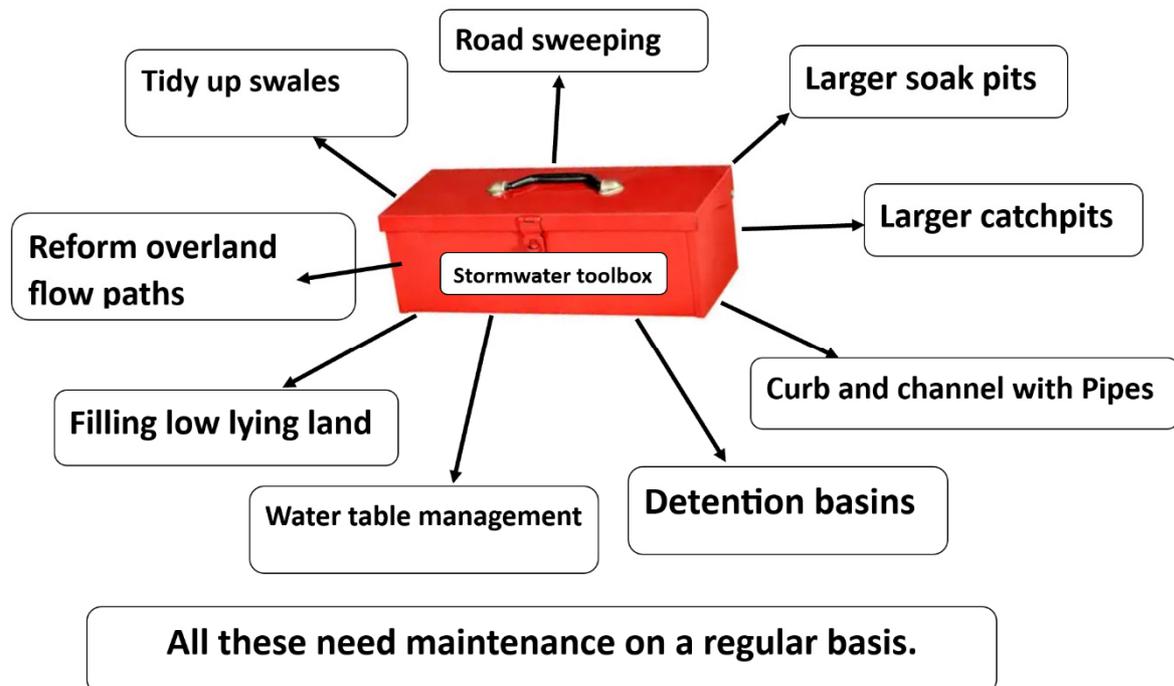
Members of the Whangamata Stormwater Action Group were invited to become stakeholders in council's stormwater project. The 'promise' was a master plan by 23 November 2023.

To date council has provided no insight into what the Master Plan would include. Council decided to retain its consultants and redirect their terms of reference to scopes and projects.

This is not what we would expect of a Master Plan. It is accepted scopes and projects will be needed but these must be formulated into a planning document that the community and Community Board can approve.

It is our belief to produce the Master Plan the following is required:

34. CSDC must be completed and made public and available for consultation. It is not acceptable that since the 'urgent CSDC application was lodged in 2001' that council has collected in today's money upwards of \$600M rates from our community and has not made anything public or allowed the community to participate in LoS
35. Toolbox of Solutions must be presented to public and made available to them to identify if they have a tagged property and how or what to do to remove that tag. One major benefit of this is many owners will self-fund solutions meaning our budgets go further and owners of properties that do not flood will not be concerned they are funding others who purchased in flood areas. Toolbox to include:



36. Land Acquisitions where needed to open overland flow paths and open ground to raising.

37. List of changes needed when new LoS is agreed to align the District Plan, Annual and LTP, Strategic and Corporate Goals, Councils website and CSDC.

### Strategic and Corporate Goals

The stormwater activity contributes to Council's Outcomes as shown in Table 3.

Table 3 - Strategic and Corporate Outcome Goals

Council Outcome	The Stormwater Activity...
A Prosperous District	<ul style="list-style-type: none"> <li>Effective management of stormwater to prevent excessive surface water creating access difficulties. This helps to ensure uninterrupted operation of businesses and prevent damage to property. By providing a stormwater service, this activity supports growth of the local economy.</li> </ul>
A Liveable District	<ul style="list-style-type: none"> <li>Provides infrastructure to help build safe and healthy communities by minimising risks because of the stormwater activity and retaining a safe living environment.</li> </ul>
A Clean and Green District	<ul style="list-style-type: none"> <li>Stormwater management is critical in playing our part in keeping our environment safe and clean</li> </ul>

38. What protections will WRC be providing considering a portion of our rates goes to them for compliance.

39. Introducing guidelines for the correct use of outside consultants. Current process is seen as a staff protection exercise.

40. Council will need to trust its community, let them have a say and implement what comes of that engagement.

41. It is noted Hamilton City Council engaged Morphem Environmental to prepare a Stormwater Master Plan in 2016. TCDC has used Morphem in the past so is familiar with their services. Snippets from that plan indicate gross pollutant traps and Wetlands (and other forms of treatment) is only considered for roads that have traffic counts greater than 5000 vpd<sup>12</sup>.

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<sup>12</sup> Highly trafficked roads >5,000 Vpd (vehicles per day) with high contaminant producing land use are considered priority for treatment. Noted trucks contribute more than 16-30 times that of cars so categorizing vehicles by yield is important.

# Whangamata Stormwater Improvement Project

## Contaminant Management

Developed and developing catchments need to be managed to reduce the discharge concentrations and total loads of key contaminants such as heavy metals (zinc/copper), sediment and other chemicals such as nitrogen and phosphorus. These pollutants result in negative impacts on our waterways, lakes and wetlands. In order to manage these effects it's important to understand the relative contributions of key pollutants from their source land use types such as zinc and copper from our roadways.

The SMP has developed a citywide contaminant load model which utilises the geometric network and hydrology tools, to define total annual loads and relative annual average concentrations to target areas where water quality treatment could be investigated and implemented. It should be noted that further development of the model is required including monitoring inputs, calibration and refinement however the inputs to the model such as the land cover layer (Figure 2) and load values are immediately available for use to provide developers and HCC with a high level estimation of contaminants loads for defined areas. This is considered a major development, in particular the loads expressed through the geometric network that focuses attention towards high relative concentration locations.

In Hamilton City there are currently 21 council-vested stormwater ponds and wetlands which are designed to manage flows and/or remove pollutants from the stormwater passing through them. As per 2015 aerial imagery, 70% of the area confined within the boundary is developed or brownfield and the remaining 30% is undeveloped greenfield. There is a relatively low proportion of the City currently being treated – approximately 14% of the total land area. The considerable greenfield areas bordering the urbanised areas are earmarked for growth with proposed development areas to be treated to the HCC Infrastructure Technical Specification (ITS) Standard and as required by the WRC Stormwater Discharge Consents. The SMP has accounted for the treatment of these growth areas and summarised the extent and other key details to help inform long term costing and catchment management planning. There are currently over 80 wetlands and ponds proposed to be built in the greenfield and structure planning areas.



Figure 2: Hamilton Land Cover Layer (purple and yellow represent priority)

Most of the city drains to the Waikato River (within the city boundary) being 81% of the total with 19% draining into Waipa or Waikato District land before ultimately discharging to the Waikato River. Source annual total loads have been estimated in the HCCLM, from the Hamilton City Catchments. In kilograms, these are as follows:

Total TSS .....	5,193,171	Total Nitrogen .....	141,808
Total Copper .....	175	Total Phosphorus .....	18,075
Total Zinc .....	1,781		

Given that the greenfield areas are to be treated to a minimum of ITS standards and are undergoing catchment management planning and consenting application reviews, the SMP has given some particular focus to the brownfield areas where five catchments have less than 2% of the area managed through a recorded stormwater device. Less than 20% of the brownfield area is treated in Hamilton. The SMP had a particular focus on identifying brownfield areas with commercial and industrial land use areas, highly trafficked roads<sup>1</sup>, and with isolated catchments at the headwaters of watercourses.

<sup>1</sup> Highly trafficked roads; e.g., larger than 5,000 VPD are considered priority where they may coincide with a high contaminant producing land use. The corresponding yields for roads are incorporated through the model run as per Appendix 5: Methodology for the Creation of the Hamilton City Contaminant Load and Treatment Model.

HCC Master Plan uses quotes from many other councils and sources including:

**Table 3 Summary of data sources and contaminant types considered**

	COD	TSS	T Cu	T Zn	T N	T P	TPH	T Pb	Bacteria
NIWA 2001	✓	✓	✓	✓	✓	✓	✓	✓	✓
ARC 2010		✓	✓	✓			✓		
CCC 2012		✓	✓	✓	✓	✓	✓	✓	✓
URQIS	✓	✓	✓	✓	✓	✓		✓	✓
Streamlined					✓	✓			
ISBD 2015		✓	✓	✓	✓	✓		✓	
NZTA 2010		✓	✓	✓	✓	✓			

Table 3 are not all the references used in ARC 2010 but more relevant as far as Hamilton is concerned.

Using NZTA rates for individual stormwater management devices with respect to contaminants of concern (Table 17) is considered a conservative approach which may tend to overstate performance; therefore further research in this area will be incorporated in the HCCLM as part of version 2. Percentage removal rates are based on international literature, referenced in Section 8.6 of NZTA, 2010. Local performance can vary, but the rates are considered approximate and consistent with both lab scale experiments and in ground built systems.

**Table 17 Device Removal Rates (%) as per NZTA Table 8-1**

<b>Device type</b>	<b>TSS</b>	<b>T Cu</b>	<b>T Zn</b>	<b>T N</b>	<b>T P</b>
Swales	70	60	75	20	30
Filter Strips	80	60	75	20	20
Sand Filters	80	90	90	35	45
Rain Gardens (normal)_	90	90	90	40	60
Rain Gardens (with anaerobic zone)	90	-	-	50	80
Infiltration Practices	80	70	80	30	60
Wet Ponds	75	40	50	25	40
Wetlands	90	80	80	40	50
Oil Water Separators	15	5	5	0	5

Table 17 is the NZTA model for removal rates of contaminants HCC is modelled on.

**Table B.1. Contaminant yields for the source areas used in the CLM. The zinc and copper yields shaded cells were derived by multiplying the TSS yield by 35 mg kg<sup>-1</sup> and 7 mg kg<sup>-1</sup> respectively and dividing the products by 10<sup>5</sup>. (For more details refer Section 5.5 in CLM Development Report (Timperley et al., 2010))**

	AREA	TSS	Total zinc	Total copper	TPH	
		g m <sup>-2</sup> year <sup>-1</sup>				
Roofs	galvanised steel unpainted	5	2.24	0.0003	0	
	galvanised steel poor paint	5	1.34	0.0003	0	
	galvanised steel well painted	5	0.20	0.0003	0	
	galvanised steel coated	12	0.28	0.0017	0	
	zinc/aluminium surfaced steel unpainted	5	0.20	0.0009	0	
	zinc/aluminium surfaced steel coated longrun and tiles	5	0.02	0.0016	0	
	concrete	16	0.02	0.0033	0	
	copper	5	0.00	2.1200	0	
	other materials	10	0.02	0.0020	0	
Roads	<1k vpd	21	0.0044	0.0015	0.0335	
	1k-5k vpd	28	0.0266	0.0089	0.2013	
	5k-20k vpd	53	0.1108	0.0369	0.8387	
	20K-50K	96	0.2574	0.0858	1.9474	
	50k-100k vpd	158	0.4711	0.1570	3.5645	
	>100K vpd	234	0.7294	0.2431	5.5192	
Paved	Residential paved	32	0.1950	0.0360	0	
	Industrial paved	22	0.5900	0.1070	0	
	Commercial paved	32	0.0000	0.0294	0	
Pervious	Urban grasslands and trees	<5°	45	0.0016	0.0003	0
		<i>Slope</i> 5-10°	92	0.0032	0.0006	0
		>10°	185	0.0065	0.0013	0
	Urban stream channels (length x width)		6000	0.2100	0.0420	0
	Construction sites	<5°	2500	0.0880	0.0180	0
		<i>Slope</i> 5-10°	5600	0.1960	0.0390	0
		>10°	106000	0.3710	0.0740	0
Rural	Exotic production forest	<10°	35	0.0012	0.0002	0
		<i>Slope</i> 10-20°	104	0.0036	0.0007	0
		20-	208	0.0073	0.0015	0
	Stable forest	<10°	14	0.0005	0.0001	0

Table B.1 is the representation of contaminant yields used in CLM. It is worthwhile taking into account 'Roads' with <1000 vpd yield less than 1000<sup>th</sup> that of roofs – Whangamata roof stormwater goes to soakage devices not to pipes so does not require treatment.

This Master Plan is approved by WRC so it would be of interest to cut and paste this for Whangamata CSDC as our Reginal Council is the same. Whangamata population is around 3% of Hamilton so we do not need to re-invent the wheel or spend vast resources completing a Master Plan.

42. Council has done some traffic counts on several Urban streets a few years ago. These should be accessed to see how our streets compare to vpd. I would suspect only Port Road and Heatherington Road would have any vpd count that needs consideration.

43. Councils claims that the Williamson Road discharge road water is contaminated is false. SAG has been notified council did contaminant testing in 2018 (approx.) and found the samples were clear.
44. Setting up Neighbourly Hubs. That is along streets that have been formed by 'cut to fill' the low-lying property owners face the same problems. By getting them into Hubs and providing guidance from the Toolbox and possibly free building consents and even incentives could solve a lot of the localised problems.
45. Setting policies in place to keep ahead of sea level and inundation rise is critical. This can start with policy that now excavation material can be removed – must be applied to fill low lying areas.
46. The Master Plan must work in with Coastal protection measures. Constructing hardwall protection will not work in Whangamata as we have insufficient land for detention basins between tides.

## Conclusion:

We have the opportunity right now. If we squander this the outcomes will never be achieved – or delayed to such an extent, we would have lost the opportunity. Council has forwarded the first scopes of less than half of Whangamata. Already the costs are more than the \$9.17M.<sup>13</sup>

At the last Community Board meeting I proposed that the Community Board take the active role of managing the stakeholder's input. Since that meeting I asked council 3 questions. Councils' response was to turn them into LGOIMA to delay me 20 days.

I prepared the attached discussion document to coincide with the Community Board meeting on 16 July 2024. I formally table that document now. WRC responded by saying its TCDC who manage the stormwater and did not accept the discussion part. TCDC has not responded.

I have prepared numerous reports and summaries to little or no avail. Community should be able to engage with council purposely. That means we need induction into what council knows of the situation, what went wrong, what needs to be done to improve and whether there are more options.

I do not accept council has thought through the Drybasin at Williamson Park. The retention storage of 2100m<sup>3</sup> will be filled with just 8 minutes of rain at the 2%AEP and if the Opus pipe upgrade was fully implemented that would cause the detention basin to fill in under 2 minutes. The velocity and disturbance would cut anything growing lose. The HCC wetland requires a 24-hour settling period for the first flush. This will never work.

Council has now claimed it has peer reviewed the Drybasin but has not released it. I cannot be expected to prepare hundreds of LGOIMA to be engaged. This needs a full-time person to just get what's needed from council and to ensure they are doing things correctly to a Master Plan.

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<sup>13</sup> 5 areas tally \$16.79M with year 1 CAPEX set at \$2.135M for 2024-2025 with 6 areas yet to be assessed including some of the bigger items.

The Master Plan will not be provided as that will pin council down to achieving what it knows must be done – works that should have been done years ago.

Councils' workshops were to include a Councillor and Community Board representative. This was to ensure the Community Board and elected members were privy to the discussions, options and outcomes. This did not happen and when Rob and I asked for assistance we were dismissed as lay persons and that we should be heeding experts' advice. It appears there was no expert advice.

I seek the Community Board to support the appointment of an independent commissioner.

My reasoning is I am not at all confident council can engage or be transparent. I will not be surprised when the independent commissioner works through the issues that council has failed to fully inform our elected members, or indeed mislead them, so they would not support Rob and myself when asked.

I see no harm in agreeing to this appointment even if the only outcome is council learn how to engage and be transparent. The cost of an independent commissioner will be saved by ensuring the Master Plan meets community wishes and reducing the needless work and faulty design concepts presented so far. Stormwater is not all about more pipes.

## References:

WSAG prepared submissions and reports: Total formal reports 29

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 20230319 WSAG 29 Issues and Solutions Floo...	 20230417 WSAG Flood Complaint Formv2.pdf
 20230418 WSAG to the Community Board floo...	 20230421 WSAG Stormwater Working Group P...
 20230430 Emails WSAG and TCDC stakeholder...	 20230504 WSAG Flood Report Whangamata R...
 20230523 WSAG Stormwater Group Flood Rep...	 20230529 WSAG Stormwater Group Flooding ...
 20230613 WSAG To Honourable Len Salt Mayo...	 20231013 ERics notes of Whangamata Stormw...
 20231029 WSAG Island View stormwater pond...	 20231108 WSAG Island View stormwater dete...
 20231122 WSAG Proposed DrainMOD modifie...	 20231202 WSAG 110 Kiwi Road flooding - pro...
 20231211 WSAG lans meeting notes.docx	 20240222 WSAG Addendum report Williamson...
 20240222 WSAG Flooding Photos collected.pdf	 20240226 WSAG Workshop Stormwater Group...
 20240311 WSAG Compiled street addresses fl...	 20240311 WSAG Compiled street addresses fl...
 20240320 WSAG Williamson Park Pond Storm...	 20240325 WSAG Email to Brett draft - tone of ...
 20240404 WSAG Details of spillway constructio...	 20240407 WSAG Williamson Pond Beach scour...
 20240408 WSAG LTP submission final.pdf	 20240411 WSAG Email trail workshops WRC le...
 20240415 WSAG Investigation into Island View...	 20240415 WSAG Mooloo Crescent Flooding.pdf
 20240422 WSAG Draft Open letter to CEO TCD...	 20240423 WSAG Complaint to our elected me...
 20240524 WRC LGOIMA Response REQ208325...	 20240527 WSAG selected LGOIMA email respo...
 20240528 WSAG Stormwater Action Group up...	 20240604 WSAG Request to Community Board...
 20240618 WSAG Discussion Document WRC T...	 20240618 WSAG Whangamata Park CSDC 105...
 20240619 WSAG Perspective on Stormwater Pr...	 20240701 WSAG Williamson Drybasin progres...
 20240716 WSAG presentation CB Stormwater ...	