The Proposed District Plan seeks to be a guide for how we build together and following on from that how we will live together.
Several factors will determine future scenarios, some we can influence and some we cannot but at least estimate/forecast.
We are given a historically grown environment and ratio of permeable land versus impervious land and drainage network to deal with rain and storm water.
This we will have to manage to secure existing investments or suffer further deterioration.
The analysis of natural hazards such as rain spans over decades whereas the management or control of human activities focuses on the short term process of obtaining a permit.
Once that is done more space can be and has been covered.

If this process is allowed to continue the baseline for any flood predictions will be shifted by an unknown and irreversible factor.

The DP prescribes some values for maximum site coverage such as :
Minimum permeable surface area 30% of the site
This is the current District Plan standard for the General Residential and Medium Density Residential Activity Areas

"The District Plan must incorporate a building coverage standard of 50% for relevant zones.
However, it can include a more lenient standard or omit the standard.
The more lenient standard for the Medium Density Residential Activity Area (60% of the site) is the current District Plan standard for this zone."
So why having a standard if it even could be omitted?
Reducing the minimum site size to 400m2 or less and even allowing "discretion" for permeable space looks bizarre.

Minimum rainwater retention tank
Roofed buildings (excluding accessory buildings) must have a rainwater retention tank, with the size of the tank relating to the roof area of the relevant building:
• Roof area of 100m2 or less - 2,000 litre capacity.
• Roof area of 100m2 to 200m2 - 3,000 litre capacity
• Roof area of more than 200m2 - 5,000 litre capacity
This is the current District Plan standard for the General Residential and Medium Density Residential Activity Areas.
Are these always observed? How many water tanks have been installed?

Example from 15/02/2004 with 148.5 mm rain in 24 hours.
A 100m2 would capture 14.85 m3 of water or on average 0.61875 m3 per hour.
A 2000litre = 2 m3 tank would be full in 3.2 hours, the remainder 12.85 m3 of the days intake would just spill and run off.

The specified tank capacity seems totally inadequate to mitigate rapid run off.
We suggest that the panel have the tank capacity reconsidered and that the tanks should be equipped with an automatic slow release mechanism.
If the tanks are not emptied swiftly they would lose their buffer function and the next rain would render them ineffective.

Assessing Hydraulic neutrality at the time of permit application and granting consent is incomplete if the assessment does not take into account the reasonably foreseeable development of the site.

The same holds true for minimum permeable space requirement of 30% of the site.

An example of Bloomfield Terrace 8 A , B ,C shows the depletion of permeable space over time.
Peak run off now is substantially higher compared with the original landscape

The local authority LH City Council is the only entity with enough power to regulate the application of the hydraulic neutrality by recording the initial values,

The application of the neutrality will have to be clarified with regards to :
Who measures the values before and after?
Who will follow up and control adherence?
Where will those details recorded?
Who will be accountable for deviations?
What will be the consequences for non compliance?
Which remedies will be done in a short time frame?

Stating hydraulic neutrality if the surplus run off can be directed to storm water network ,does not mean that neutrality has been achieved.
Simply directing additional run off into the public stormwater network does not achieve hydraulic neutrality. The important question is whether the development increases peak flows entering the downstream drainage system.
Hydraulic neutrality should mean that the post-development stormwater flows do not exceed those from properly established existing condition.
Only once the surplus water has been removed to either the river or the sea will the flooding pressure reduce.
This is especially the case for the Opahu stream which has many open channels and a huge catchment area.
The published flood maps for our house at Bloomfield Terrace look inflated and need reworking.

The district panel wishes to more clearly identify natural hazards but should equally identify the non natural hazards.
Examples are man made build ups in or close to the stream channel, risk of obstructions to water flows and reduction of original flood plains.

The new DP must help to reverse the trend that benefitted developers and owners of new constructions at the expense of others.

Reference Document : Appendix 2: Annotated version of plan change provisions

This document postulates a raft of targets and uses the terms of existing infrastructure for stormwater and even "spare capacity".
Floodings every few years in central Hutt and at open channels of the Opahu stream do not support much spare capacity to exist.
A new objective was added
AMENDMENT 3 - Add new Objective
Objective
A well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future

At present safety is not provided in the vicinity of the Opahu stream during heavy rainfall every few years.
1.10.3A Housing Bottom Lines

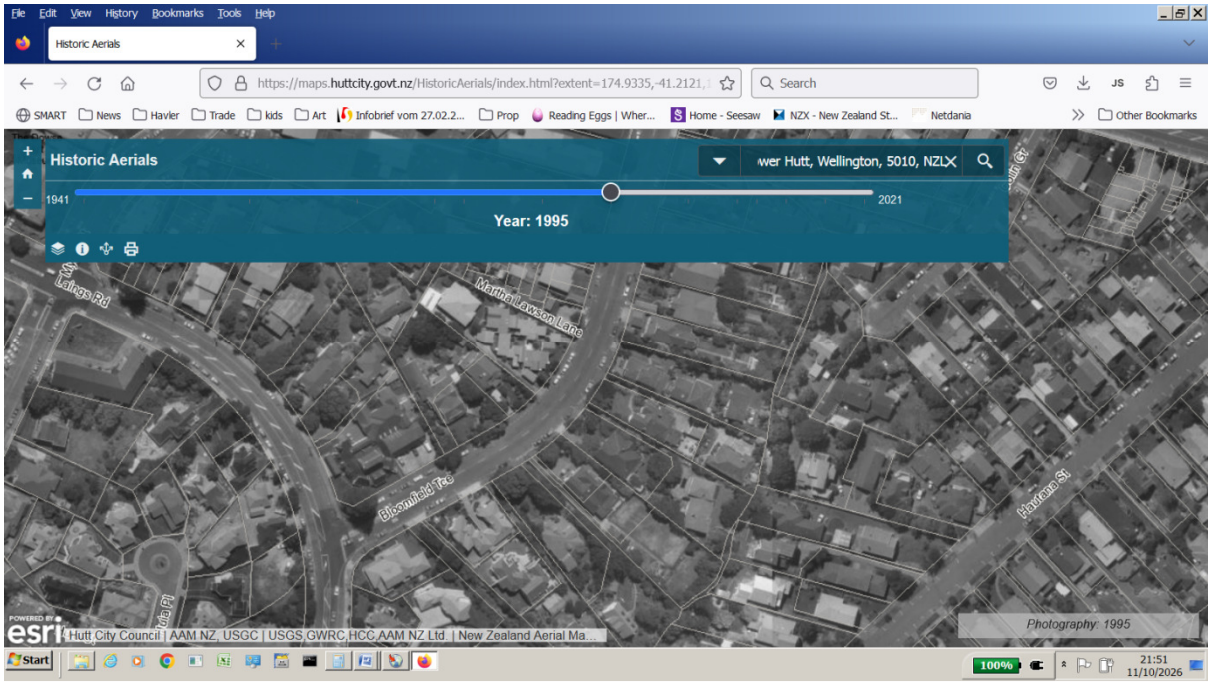
Objective

Shortmedium term (2021 2031)	Long term 2031 2051)	Total
9,709 dwellings	15,064 dwellings	24,773 dwellings

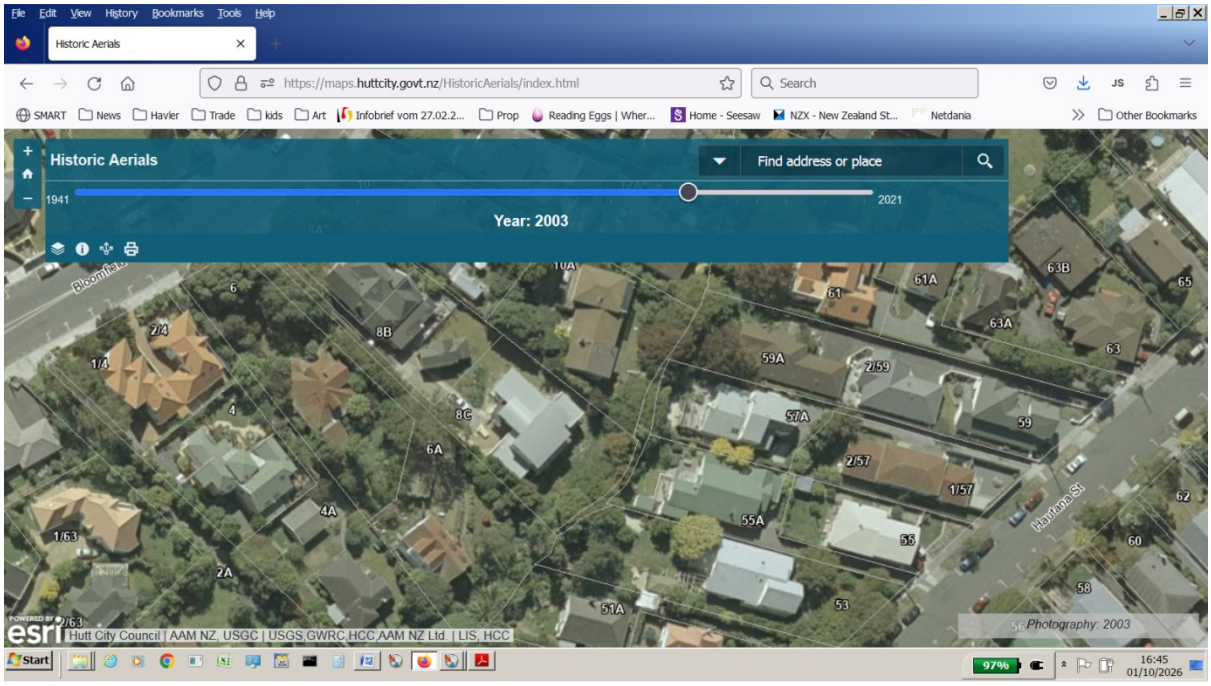
The projections above will require extraordinary investment into infrastructure and especially storm water management, control and discharge to final depositories such as Hutt river or the sea.
Both of which are not able to take surplus due to tidal movements and flow levels every time.

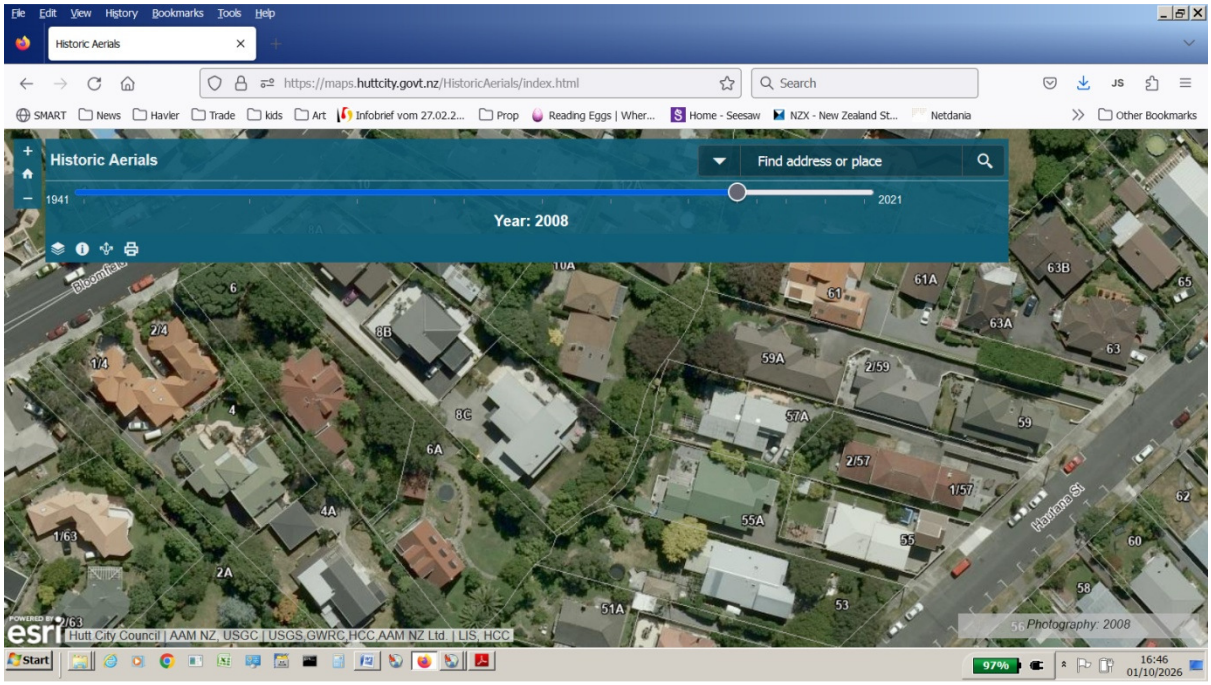
Could the panel please instigate that the projected increase of housing is checked for impacts and quantified in terms of amount of water, damages, cost for network and pumps as well as constant future monitoring using the Whaiwhetu stream model as a starting point.

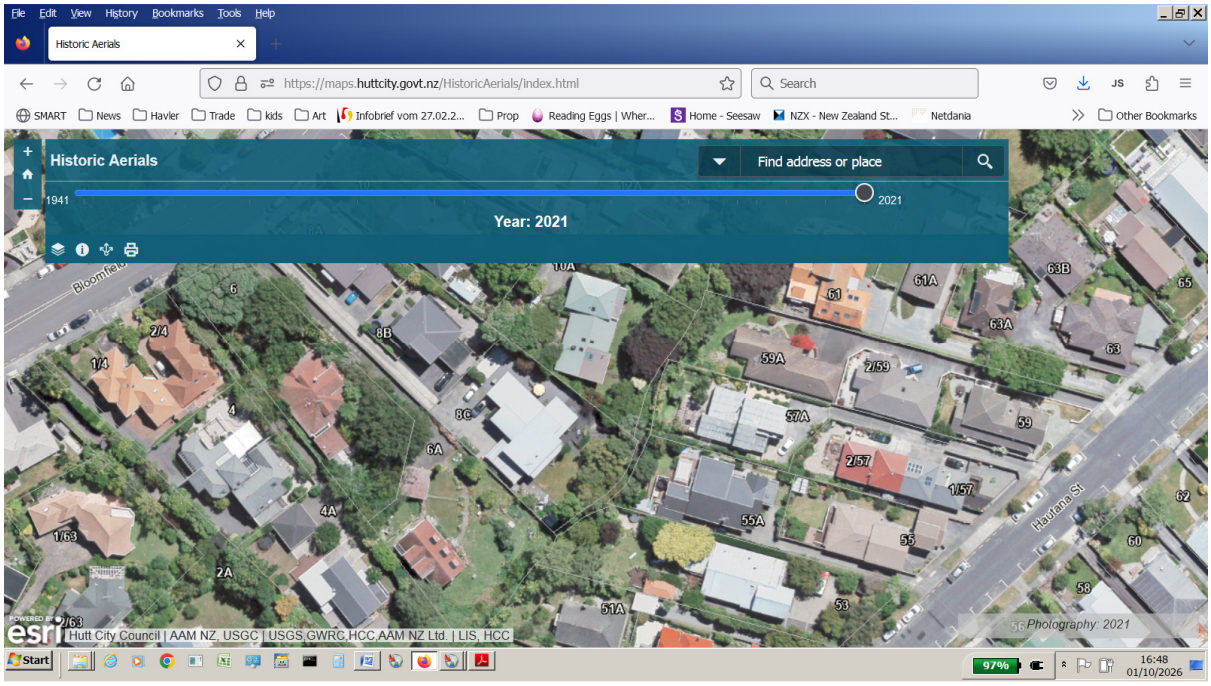
8 Bloomfield Terrace

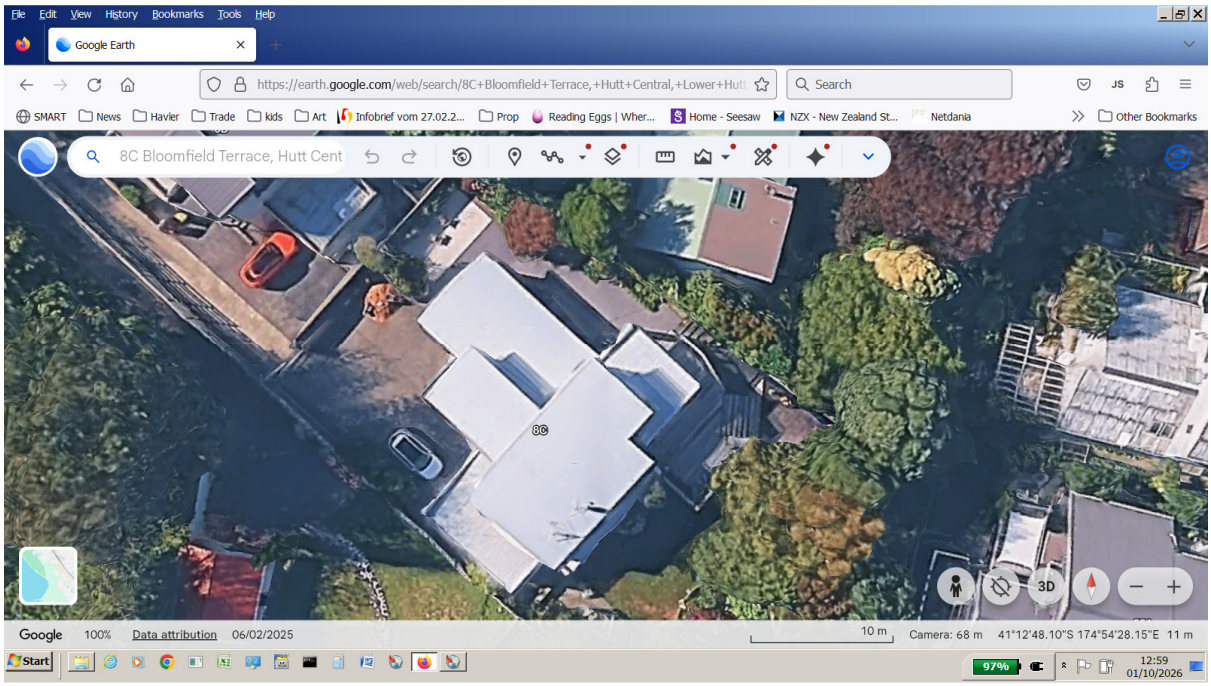


Same coverage in 1998 changes begun in 1999 and 2000

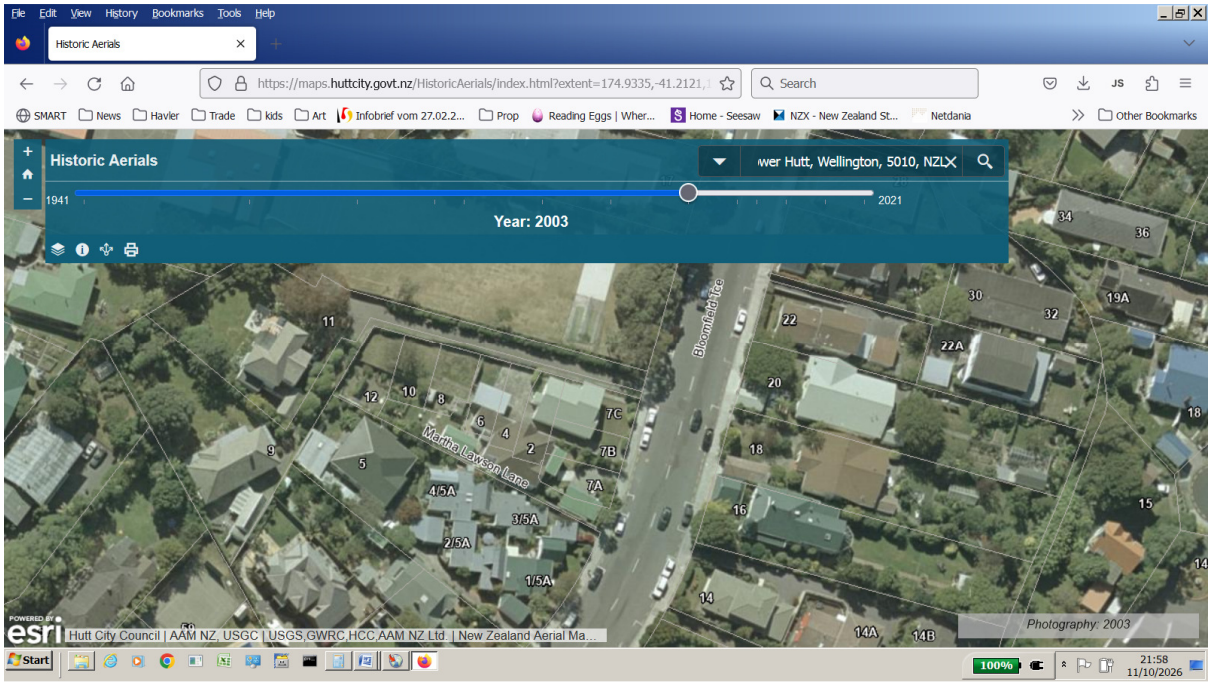

Historic Aerials
Find address or place
1941
2021
Year: 2003
Photography: 2003
Hutt City Council | AAM NZ, USGC | USGS,GWRC,HCC,AAM NZ Ltd. | LIS, HCC

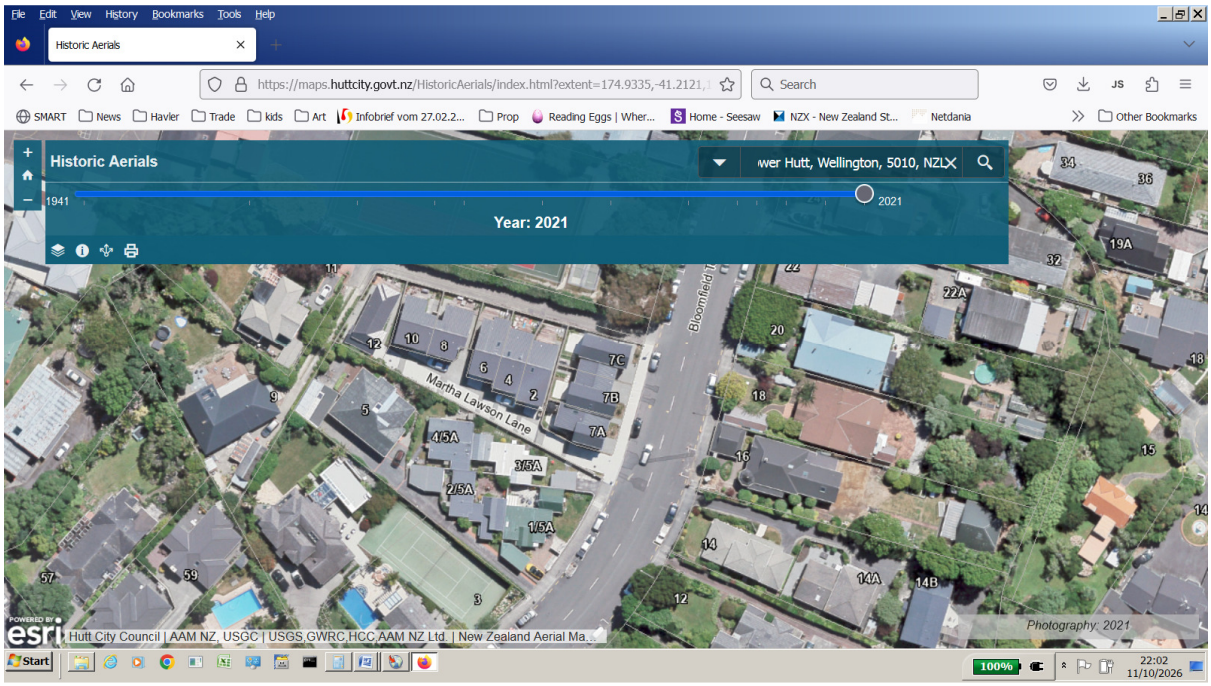

Historic Aerials
Find address or place
1941
2021
Year: 2008
Photography: 2008
Hutt City Council | AAM NZ, USGC | USGS,GWRC,HCC,AAM NZ Ltd. | LIS, HCC





Recent development Martha Lawson Lane





Hardly any permeable ground left in Martha Lawson Lane

The true cost of change need to be identified much more precisely and charged to the party who wishes to change the existing ratio of permeable to impervious.
If one section disposes of run off to the storm water drainage pipe and that goes into the open channel than there is no neutrality but shifting the problem.
If LHCC does not follow up and monitors the actual increases over time we are just playing catch-up.
Blaming increased for Hutt Central just on climate change and rain is disingenuous.

HCC Hearing 16 October 2026 - Dieter Engel PDP-475.4 Supplementary Note_FINAL

HUTT CITY PROPOSED DISTRICT PLAN HEARING STREAM 7 – SUBDIVISION

SUPPLEMENTARY NOTE OF DIETER ENGEL – PDP/475.4 - Hydraulic neutrality – amendments sought to SUB-S6 and SUB-R4

Submitter: Dieter Engel – PDP/475 , 10A Bloomfield Terrace, Lower Hutt

1. Original submission point and purpose of this supplementary note

My original submission point **PDP/475.4** asked that subdivisions and new buildings be assessed for the stormwater **"load factor"** they place on stormwater infrastructure and on properties downstream. The Stream 7 Section 42A reporting officer has interpreted my concern as seeking to ensure that new subdivision and development does not increase stormwater runoff or place additional pressure on stormwater networks and downstream properties. I agree with that interpretation. The officer also agrees with the intent of my submission but recommends that it be rejected because the Proposed District Plan already requires hydraulic neutrality through **SUB-S6**.

I accept that hydraulic neutrality is the appropriate mechanism for addressing the concern raised in my submission. However, I do not consider the present drafting ensures that hydraulic neutrality will actually be achieved in practice and therefore request that my submission be accepted in part.

The principal difficulty is that **SUB-S6.1** appears mandatory, stating that all subdivisions and stormwater systems *"must be designed to achieve hydraulic neutrality"*, while **SUB-R4.2** allows a restricted discretionary consent pathway where SUB-S6 is not complied with.

The amendments below are intended to address that inconsistency. If hydraulic neutrality is the mechanism relied upon to protect stormwater infrastructure and downstream properties, the requirement for hydraulic neutrality should be non-discretionary, clear, measurable and enforeable.

2. Definitions

The Definitions chapter should provide a clear basis for the flood-hazard and hydraulic-neutrality provisions relied upon elsewhere in the Plan.

At present, **"Flood Hazard Overlays"** is defined simply as the Low, Medium and High Flood Hazard Overlays. The individual definitions of the **Low, Medium and High Flood Hazard Overlays** in turn essentially say that they mean the areas shown on the planning maps under those names.

Those definitions do not tell a plan user what physical flood conditions cause land to be classified Low, Medium or High.

I agree with the Natural Hazards section 42A reporting officer that the mapped hazards need to be described in more detail, and that the High, Medium and Low Flood Hazard Overlays should be explained by their depth and velocity characteristics rather than merely named. The officer expressly agreed that this correction should be made.

I therefore seek either amended definitions, or an operative table expressly cross-referenced by those definitions, identifying the modelled event and the depth/velocity criteria used to determine the Low, Medium and High Flood Hazard Overlay classifications. The Plan should also make clear that the modelled 1% AEP flood level, depth and extent are identifiable separately from any freeboard allowance used for minimum floor-level advice.

The current definition of **hydraulic neutrality** is: "managing stormwater runoff from all new lots or development through either on-site disposal or storage, so that stormwater is released from the site at a rate that does not exceed the pre-development peak stormwater runoff".

That definition addresses **peak runoff rate**, but not **runoff volume**, and does not explain how the pre-development baseline is to be established and retained. I suggest replacing it with:

Hydraulic neutrality *means managing stormwater runoff from subdivision or development so that, for the relevant design events, post-development* ***peak stormwater flow rates and total runoff volumes*** *at the relevant discharge point(s) do not exceed the corresponding values from the approved existing or pre-development condition, and the development does not transfer increased flood risk to other properties or downstream infrastructure.*

The approved baseline should be retained as part of the Council record for the property so that later buildings, paving, additions or further subdivision can be assessed against the same established condition.

3. Clause-by-clause amendments sought

PDP provision	Present issue	Amendment sought
SUB-S6.1 – Stormwater management	Present wording requires systems to be **"designed to achieve hydraulic neutrality"**, but does not itself state what hydraulic neutrality means or require actual demonstration that it is achieved.	Amend SUB-S6.1 to require hydraulic neutrality to be **demonstrated and achieved**, measured by both peak stormwater flows and runoff volumes.
SUB-S6.2 – Connection to public stormwater system	A subdivision may be able to connect to the public network, but connection by itself does not establish hydraulic neutrality. Additional runoff can simply be transferred downstream.	Make SUB-S6.2 expressly **subject to compliance with SUB-S6.1**.
SUB-S6.3 – Disposal to ground	This provision deals with the method of disposal but should not operate as an alternative to achieving hydraulic neutrality.	Retain, but make it expressly subject to SUB-S6.1.

PDP provision	Present issue	Amendment sought
SUB-S6 – matters of discretion	The present heading applies where "the standard is breached", meaning Council may exercise discretion after failure to comply with SUB-S6, including hydraulic neutrality. Matters include whether site constraints make compliance impracticable. Section 42A Report – Subdivision	Amend the heading so that the listed discretion applies only to **SUB-S6.2 and SUB-S6.3**, and not to the hydraulic-neutrality requirement in SUB-S6.1.
SUB-R4.1	Correctly requires compliance with SUB-S6 for controlled-activity subdivision. Section 42A Report – Subdivision	Retain.
SUB-R4.2	Makes non-compliance with **SUB-S6** a restricted discretionary activity. This means failure to achieve hydraulic neutrality remains consentable. Section 42A Report – Subdivision	Remove **SUB-S6.1** from the restricted discretionary pathway. Breaches of the servicing requirements in SUB-S6.2 and SUB-S6.3 could remain within it.
SUB-R4 – new provision	There is presently no separate rule making achievement of hydraulic neutrality genuinely non-discretionary.	Add a rule providing that where compliance with **SUB-S6.1 Hydraulic Neutrality** is not achieved the **activity status is Prohibited**

Suggested replacement wording: I suggest that **SUB-S6.1** be amended to read:

1. All subdivisions and associated stormwater systems must demonstrate and achieve hydraulic neutrality, such that post-development peak stormwater flow rates and runoff volumes discharged from the site to the receiving environment or downstream stormwater network do not exceed the corresponding peak flow rates and runoff volumes from the properly established existing or pre-development condition for the relevant design events.

I also suggest that immediately following this a new provision be added:

1A. Compliance with SUB-S6.1 must identify the existing or pre-development baseline and the corresponding post-development peak stormwater flow rates and runoff volumes at the relevant discharge point or points. Those approved baseline and post-development values must be retained as part of the Council record for the property and subdivision.

SUB-S6.2 and SUB-S6.3 should then be expressly stated to be **subject to compliance with SUB-S6.1**.

Where hydraulic modelling is relied upon to establish the approved existing or pre-development baseline, the baseline must be based on the best available validated flood information, including observed flood evidence and gauged data where available, and must identify separately any planning freeboard or other allowance not representing modelled floodwater.

The heading **"Matters of discretion if the standard is breached"** should be replaced by:

"Matters of discretion where compliance is not achieved with SUB-S6.2 or SUB-S6.3."

In **SUB-R4.2**, the present reference to: **"SUB-S6: Stormwater management"** should be replaced by:

"SUB-S6.2 or SUB-S6.3: Stormwater management."

A new rule should then provide:

Activity status: Prohibited
Where: a. compliance is not achieved with **SUB-S6.1 Hydraulic neutrality**.

This would ensure that failure to achieve hydraulic neutrality cannot be approved through the restricted discretionary pathway.

4. Consequential amendments to SUB-P22 and NH-P9, and effect on SUB-R14 to R16

SUB-P22 – Subdivision of land in natural hazard risk areas presently takes a risk-based approach based on the sensitivity of activities and the likelihood and consequences of natural hazards. I suggest adding:

Subdivision must not increase natural-hazard risk on other properties or downstream infrastructure.

NH-P9 – Subdivision, use and development in the Flood Hazard Overlays repeatedly refers to risk on the site and, in several places, risk to **"adjacent properties."**

For stormwater and flooding, "adjacent" is too narrow. An increase in runoff may affect properties or infrastructure some distance downstream without those properties adjoining the development.

I suggest replacing relevant references to **"adjacent properties"** with:

"other properties, including downstream properties and infrastructure."

NH-P9 should also contain an overarching requirement that:

Subdivision, use and development must not increase flood levels, depths, velocities, flood extent, peak stormwater flows or runoff volumes on other properties or downstream infrastructure.

The existing rules **SUB-R14, SUB-R15 and SUB-R16** already regulate subdivision within the Low, Medium and High Flood Hazard Overlays and refer back to SUB-P22 and the relevant Natural Hazards flood policies. SUB-R14 provides controlled/restricted discretionary pathways in the Low Flood Hazard Overlay, SUB-R15 restricted discretionary/discretionary pathways in the Medium Flood Hazard Overlay, and SUB-R16 makes subdivision creating building platforms within the High Flood Hazard Overlay non-complying.

I do not consider those rules require substantial rewriting for the purpose of PDP/475.4, provided that the **Definitions, SUB-S6, SUB-R4, SUB-P22 and NH-P9 are strengthened as above**.

The essential outcome sought by my submission is:

Future subdivision and development should not increase peak stormwater flows or runoff volumes above a properly established baseline, and should not transfer additional flood risk to downstream properties or infrastructure.

5. Why these amendments are necessary

The section 42A report says SUB-S6 is intended to ensure that subdivision does not increase the **rate or volume** of stormwater runoff to the receiving environment or downstream network. That is also the outcome sought by my submission.

But if non-compliance with hydraulic neutrality can still be approved as a restricted discretionary activity, then the protection relied upon by the reporting officer may not be achieved. My concern is therefore not with the use of the term **hydraulic neutrality**. I am prepared to use that term rather than my original expression “load factor”. My concern is that hydraulic neutrality must mean something measurable and enforceable:

post-development peak stormwater flows and runoff volumes should not exceed those from the properly established existing condition, and that requirement should not be capable of being waived through discretion.

The approved before-and-after values should also remain with the property record so that later buildings, paving, garages, additions or further subdivision can be assessed against the same established baseline. This is particularly important where numerous individual developments discharge to the same stormwater network or stream. Each development may appear small in isolation, but their cumulative effect can place additional pressure on infrastructure and downstream properties.

Relief sought: Accept submission point **PDP/475.4 in part** and amend the **Definitions, SUB-S6, SUB-R4, SUB-P22 and NH-P9** substantially as set out above, together with any consequential amendments necessary, to give those provisions effect and ensure hydraulic neutrality is clearly defined, demonstrated, recorded and mandatory.

Dieter Engel, 16 October 2026