

SUBMISSION FORM (FORM 5)**PROPOSED PLAN CHANGE TO THE UPPER HUTT CITY COUNCIL
DISTRICT PLAN: PROPOSED PLAN CHANGE 42 - MANGAROA AND
PINEHAVEN FLOOD HAZARD EXTENTS**

To: Upper Hutt City Council

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| File Number: 351/12/046 Submission Number: (for office use only) |
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Submission on Proposed Plan Change 42 to the Upper Hutt City Council District Plan

Submissions can be:

Delivered to: Level 1 Reception, Civic Administration Building, 838-842 Fergusson Drive, Upper Hutt
 Posted to: Proposed Plan Change 42, Upper Hutt City Council, Private Bag 907, Upper Hutt
 Faxed to: (04) 528 2652
 Emailed to: planning@uhcc.govt.nz

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| The closing date for submissions is 8 May 2017 at 5pm |
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**PLEASE NOTE THAT THE INFORMATION PROVIDED IN YOUR SUBMISSION, INCLUDING YOUR
CONTACT DETAILS, WILL BE AVAILABLE TO THE PUBLIC**

DETAILS OF SUBMITTER

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|--|--|---|
| Name of submitter | Save Our Hills (Upper Hutt) Incorporated | |
| Postal address of submitter | P.O. Box 48-070 Silverstream, 5142 | |
| Agent acting for submitter (if applicable) | — | |
| Address for service (if different from above) | Please indicate if you wish email to be the authorised method of service: <input checked="" type="radio"/> YES/ <input type="radio"/> NO | |
| Contact phone / email | Telephone: 027 226 3374 | Email: sjpattinson@paradise.net.nz |
| I could gain an advantage in trade competition through this submission (Please tick one) | <input checked="" type="radio"/> NO | Only answer this question if you ticked YES: I am / am not (select one) directly affected by an effect of the subject matter of the submission that: (a) adversely affects the environment; and (b) does not relate to trade competition or the effects of trade competition. |
| | <input type="radio"/> YES | |

DETAILS OF SUBMISSION

The specific provisions of the proposed Plan Change that my submission relates to are as follows:

The flood maps are clearly wrong; the way the PC 42 maps represent hazard is completely misleading and inadequate. AWRC & UHCC have consistently avoided addressing legitimate concerns of residents and submitters to push through flood maps that will allow extensive development on Cuildford land. inflated

My submission is that:

AWRC's flood maps for Pinehaven Stream and Mangaroa River lack quality data and credibility. UHCC must not adopt AWRC's flood maps into the District Plan until the community is satisfied that residents concerns have been properly addressed.

(Please state in summary the nature of your submission. Clearly indicate whether you support or oppose the specific provisions or wish to have amendments made, giving reasons. Please use additional sheets if necessary)

I seek the following decision from the local authority:

To withdraw Plan Change 42
 To engage a truly independent auditor to investigate the impact of future development on Cuildford land on flooding
 To not accept AWRC flood maps until the community's concerns have been properly addressed.

(Please give precise details and use additional sheets if necessary)

| | | |
|---|---|-------------------------------------|
| Please indicate whether you wish to be heard in support of your submission (Tick appropriate box) | I do wish to be heard in support of my submission | <input checked="" type="checkbox"/> |
| | I do not wish to be heard in support of my submission | <input type="checkbox"/> |
| Please indicate whether you wish to make a joint case at the hearing if others make a similar submission (Tick appropriate box) | I do wish to make a joint case | <input type="checkbox"/> |
| | I do not wish to make a joint case | <input checked="" type="checkbox"/> |

SIGNATURE AND DATE

Patterson (President)

Signature of person making submission or person authorised to sign on behalf of person making submission

Date: 08 May 2017

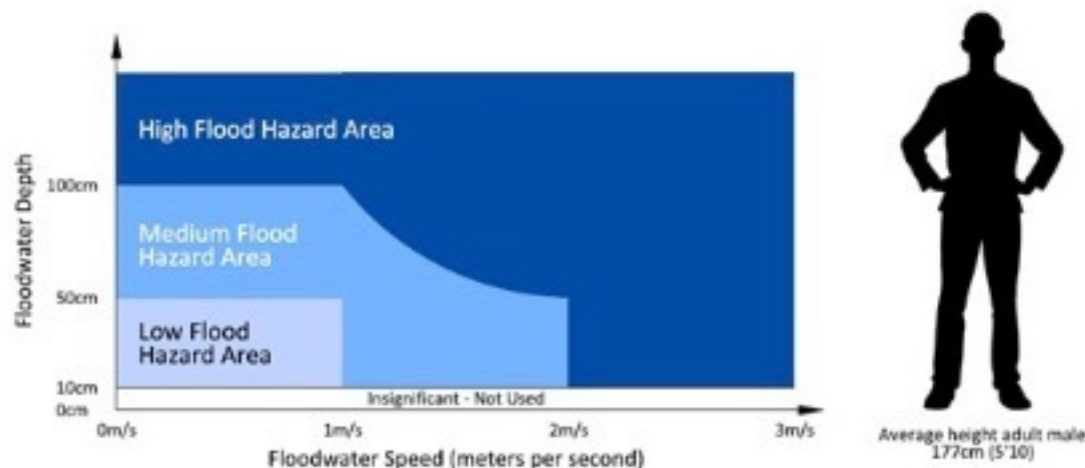
(Note: A signature is not required if you are making your submission by electronic means)

3-5. High, Medium and Low Flood Hazard Areas (new information)

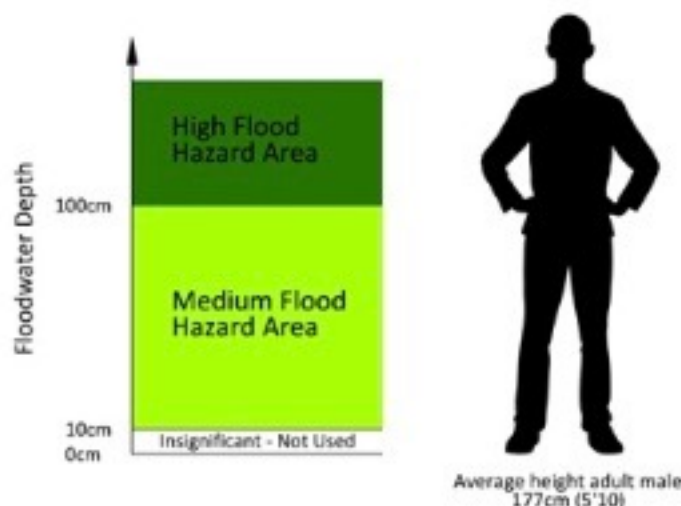
These areas have been identified from computer modelling as part of Council’s ongoing Catchment Management Plan programme. The areas have been identified on maps which have been produced by modelling and flood hazard experts.

This modelling creates a picture of what flooding may look like from an extreme rainfall event (i.e. a 1 in 100 year event). Two sets of modelling is used, one for the Waikato River corridor dealing with river flooding and another for sub-catchments in the City dealing with overland flowpaths and ponding flooding. The land affected has been divided and mapped into high, medium and low categories, according to the different flood water depths and velocities that the model shows could occur in an extreme rainfall event.

The flood hazard areas for **overland flowpath** and **ponding flooding** elsewhere in the city are defined by the following depths and velocities:



Flood hazard areas in the **Waikato River corridor** are defined using the following depths:



Depth and velocity (speed) are the key factors in determining the effect of flood water on people and property, this is summarised in the table below.

| Floodwater depth | Floodwater velocity (metres per second) | Depth x velocity | Effect on people and property |
|------------------|---|------------------|--|
| 0 to 10cm | Any velocity | - | At this depth, surface water is unlikely to be a hazard to people and unlikely to cause damage to property. |
| 10 to 50cm | <1.0m/s | - | At this depth and velocity flood hazards are normally traversable by emergency vehicles and damage to property is minor to moderate. People can usually stand but more vulnerable people can be more significantly affected (e.g. children, elderly, injured, physically disabled). Scour/erosion of building foundations are unlikely to occur. |
| 50 to 100cm | <2.0m/s | - | At this depth and velocity the stability of people in water is at risk. Damage to property can be financially significant. |
| >100cm | >2.0m/s | >1 | At velocities greater than 2 metres per second the stability of buildings and their foundations can be significantly affected, as the force of the water can scour building supports. At depths greater than 1m significant damage to building and risk to life is very likely. |

Ike Kleynbos

From: Steve <steve@codesignarchitects.co.nz>
Sent: Monday, 8 May 2017 1:16 p.m.
To: UHCC Planning
Subject: PC42 submission from SOH
Attachments: PC42_Submission_Save Our Hills.pdf; Hamilton City Council website_Flood hazard mapping.jpg

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Copied to SharePoint

To Upper Hutt City Council

PLAN CHANGE 42 – MANGAROA AND PINEHAVEN FLOOD HAZARD EXTENTS

Submission from Save Our Hills (Upper Hutt) Incorporated, including official Form 5 (attached), **OPPOSING** the adoption of PC42 flood maps into UHCC District Plan.

This cover email forms part of Save Our Hills (SOH) submission. Please attach this email to our Form 5 submission.

The specific parts of PC42 which we oppose are:-

1. COUNCIL claims on its website (PC42 Consultation) that its all about “the identified Flood Hazard Extent” and that “PC42 addresses the risk from flooding.” However, PC42 only deals with “development undertaken ... within ... these Flood Hazard Extents [that] could unacceptably increase the risk to people and property from flooding.” PLAN CHANGE 42 FAILS TO ADDRESS THE RISK TO PEOPLE AND PROPERTY FROM FLOODING THAT COULD ARISE FROM FUTURE DEVELOPMENT ON THE HILLS AROUND BLUE MOUNTAINS, PINEHAVEN AND SILVERSTREAM, AND SPECIFICALLY FROM PROPOSED DEVELOPMENT ON THE GUILDFORD LAND (referred to in the Section 32 report as “The Southern Growth Area”). This is a major deficiency of PC42.
2. COUNCIL claims on its website (PC42 Consultation) in each of two Q & A Information Sheets (for Mangaroa and Pinehaven respectively) - Q: "If I live in a flood hazard extent, how does that affect my property value? A: “The flood hazard exists regardless of whether it is shown on the District Plan maps or not. The risk associated with the hazard may have the effect of reducing property values. However, it is not the hazard maps that cause this effect, it is the risk from the flood hazard itself.” This statement by Council is only true if the flood hazard maps are accurate. However, if the flood hazard maps are inaccurate, inflated, and/or misleading, WHICH THEY ARE, then Council’s above statement is NOT true – IT IS THE HAZARD MAPS THEMSELVES THAT CAUSE THE EFFECT OF REDUCING PROPERTY VALUES AND NOT THE RISK FROM THE FLOOD HAZARD ITSELF!
3. COUNCIL claims via its website (PC42 Consultation) via the link to GWRC’s web page for Pinehaven Stream, in the document “Pinehaven Stream – Building a Flood Map” - in “Map 0 – Flood Map” for the Pinehaven Stream, that *“this map is the standard style of flood map ... a property can quickly be determined as either within or outside of the mapped flood area.”* Whilst this statement would be true if the flood maps were accurate, it is grossly misleading given the inaccurate and inflated flood maps that the public are being presented with in Plan Change 42. This is definitely NOT the so-called “standard style of flood map” that the community has asked for. Have a look at a “standard style” flood map referred to in BECA’s audit report for the Pinehaven Stream, July 2015, page 23, [included as Appendix D in GWRC’s “Pinehaven Stream – Floodplain Management Plan Volume 1”, which can be accessed via COUNCIL’s website (PC42 Consultation) via the link to GWRC’s web page for Pinehaven Stream, being the document titled “Pinehaven-printing-FMP-volume-1-update-6-September-2016.pdf”]. In the BECA report, in Section 6 titled “Presentation of Flood Hazard Information” (p19ff), the Auditor identifies 4 alternative ways of presenting flood hazard information (the examples being flood maps by Christchurch City Council, Auckland Council, and Environment Agency in England, and Hamilton City Council). UHCC’s so-called “standard style of flood map” corresponds to none of these examples. The Auditor advised that GWRC should *“provide true flood hazard maps, based on the combination of water depth and flow velocity at any location”* and

cites Hamilton City Council as an example (see Audit report p23 & Fig. 6.4). Also, see screenshot attached (taken today - <http://www.hamilton.govt.nz/our-council/council-publications/districtplans/flood/Pages/Flood-FAQ.aspx>) from Hamilton City Council's webpage, which clearly explains Hamilton City's method for doing exactly what the Auditor advised GWRC to do, but which GWRC has failed to do with the Pinehaven Stream flood maps. This mapping method identifies low, medium and high hazard extents based on a "combination of water depth and flow velocity", as suggested by the Auditor in 2015, and as requested by residents as the preferred way of presenting flood hazard, a request which both GWRC and UHCC have repeatedly ignored, but which we are still asking for. And the reason for asking is a very good reason – it is because much of Council's so-called flood hazard extent shown in the PC42 flood maps is actually "insignificant", i.e. the depth of water is too little, regardless of velocity, to represent a hazard, and therefore should NOT be mapped. Yet GWRC/UHCC have mapped such areas as part of the hazard extent in the PC42 maps, which is why we are saying that the PC42 hazard maps themselves will be responsible for causing the effect of reduced property values, and not the actual flood hazard risk. Therefore we reject the PC42 flood hazard maps because they are inaccurate and misleading, showing properties, or parts of properties, as being within the flood hazard extent that are not actually in a flood hazard at all - the water depth x flow velocity is insignificant!

4. By showing "insignificant" areas as flood hazard, the Plan Change 42 flood maps actually "inflate" the true picture. This in turns allows additional run-off from any future development on the hills, such as is proposed on the Guildford land, to be discharged into streams undetected by Council's so-called "hydraulic neutrality" provisions, because the base information for assessing hydraulic neutrality is inflated by the PC42 flood maps. This will result in increased flooding in Pinehaven and Silverstream, causing increased risk to property and people. Therefore these PC42 maps must be rejected.
5. PC42 fails to publish known baseline or benchmark data against which future developments will be assessed for hydraulic neutrality. The community has repeatedly requested of birth GWRC and UHCC to publish this known data, as a guide for developers, and protection for the community. This request still stands.
6. Where are the definitive GWRC flood hazard maps for Pinehaven Stream and Mangaroa River? They don't appear to be in any of the tomes of information released by Council in connection with PC42, yet are the most basic information the public has a right to see and consider. Where are the current GWRC flood maps that PC42 flood hazard extents are based on? And where are the consultants who produced them? Who/which organisations are accepting any responsibility and/or liability for the base maps? SKM, who produced the original flood maps, no longer exist a such, and all GWRC and UHCC flood maps are issued with DISCLAIMERS. So who is taking responsibility for the base flood extent information?
7. The BECA Auditor for the Pinehaven Stream Flood maps, identified (July 2015 Report – see Appendix D in "Pinehaven-printing-FMP-volume-1-update-6-September-2016.pdf" reference in Item 3 above) stated: *"SOH's concerns are upheld that the effects of future development on flood extent are not modelled correctly. However, because the peak flow has been increased, and because there is freeboard incorporated into the results, the flood maps are unlikely to be materially affected by this apparent anomaly."* SOH appreciates the fact that the Auditor upheld our concerns about incorrect modelling of the impact of future development on flooding (Fig. 15, p23), but we do not accept the Auditor dismissing the problem with the comment that *"the flood maps are unlikely to be materially affected by this apparent anomaly."* The Report clearly states (p9) that the GWRC flood maps are NOT FIT FOR PURPOSE for assessing the impact of future development, and that *"SKM's flood model are potentially compromised in this regard."* This problem with GWRC's flood maps has never been adequately addressed, so as to give the public confidence in the veracity of GWRC's flood maps for the Pinehaven Stream, therefore, SOH repeats, yet again, our request to Council that GWRC's flood maps be further investigated by a truly independent expert, particularly with respect to the impact on flooding in Pinehaven and Silverstream of potential future development on the hills around Pinehaven and Silverstream, including on the Guildford land.
8. There are several further reasons, in addition to the above, for rejecting the PC42 flood maps, including:
 1. Residents who were living here in 1976 when a 100+yr flood occurred, say that GWRC's flood maps are showing worse/higher levels of flooding on their properties than they witnessed in the 1976 flood;
 2. Extensive remedial drainage works, costing millions of dollars, were carried out in the 19080's to ensure that if a similar storm happened again it would not result in the same extent of flooding as experienced in 1976, yet GWRC/UHCC is trying to tell us, through the PC42 flood maps, that the remedial work carried out in the 1980's has made the situation worse, not better;

3. We have evidence of data in GWRC's flood maps being tampered with to produce the inflated picture that the flood maps paint;
4. We have evidence that insignificant areas have been mapped in PC42 as hazard areas;
5. Council has refused, at every request, to further investigate the known problems with the flood maps, making the accuracy of the flood maps look all the more dubious.

If Council continues to push ahead with these current flood maps by adopting them into the District plan, then Council may be exposing itself to the risk of allegations of chicanery to achieve Council's goal of developing the so-called "Southern growth Area".

Stephen Pattinson
President
SAVE OUR HILLS (Upper Hutt) Inc.
Pinehaven
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