

# Pinehaven Summary of Submissions

Submitter Number	Submitter Name	Support Oppose Neutral	Heard Yes/No	Grant Decline Conditional	Submission Summary
1	Karyn Mills	Oppose	Yes	Decline	<ul style="list-style-type: none"> <li>&gt; Submitter lives in close proximity to the works.</li> <li>&gt; WWL have previously removed two trees which has caused erosion and slumping of back yard and fence.</li> <li>&gt; Willow Park is a beautiful area used by many people. It has also been home to a goose for about a year. Concerned the willows are being cut down and no replacement apple or plum trees are being planted, and the plans for concrete areas.</li> <li>&gt; Doesn't agree with plans for new concrete areas, new playground or that a local walkway will disappear. Would like council to sign a document where no development takes place on Pinehaven hill area.</li> <li>&gt; Submitter is concerned that the ecology of the stream is under threat - the thin finned eels have been fished out, no concern for eels, native fish, spotted trout, and removal of trees from fenceline.</li> <li>&gt; Considers there is no reason to complete major works.</li> </ul>
2	Lloyd May	Support	No	Grant	<ul style="list-style-type: none"> <li>&gt; Submitter lives in close proximity to the works and considers it is a well-planned, common-sense approach to a long-term issue.</li> </ul>
3	Jayne Roberts	Support	Yes	Grant	<ul style="list-style-type: none"> <li>&gt; Submitter lives in close proximity to the works and has experienced flooding on their property.</li> <li>&gt; Works should be done now, it is a shame it has taken so long to get to this point.</li> <li>&gt; Proposed improvements will enhance Pinehaven/Silverstream as a place to live.</li> </ul>
4	Deborah Griffiths	Support	No	Grant	<ul style="list-style-type: none"> <li>&gt; Submitter lives in close proximity to the works and has experienced flooding on their property.</li> <li>&gt; Agrees with the widening of the stream to accommodate flooding that may occur as a result of further development and logging up the Pinehaven catchment.</li> <li>&gt; Proposed works includes removal of many small trees and three 70 year old specimens of sentimental significance (oak, ash, black beech) from submitter's property. Removal of these trees will have visual effects on the submitter's aspect to the west, remove view and privacy. Removal of old trees will have serious effect on bird and fish life along the stream.</li> <li>&gt; Submitter has engaged an arborist who disagrees that the black beech tree is unsafe (reason for proposed removal), and considers it a healthy and safe specimen with no reason to be removed. They also commented it was appalling the ash tree was to be removed as it is a magnificent specimen.</li> <li>&gt; Submitter requests WWL revisit planning to save the black beech tree which is a protected species.</li> </ul>
5	Graeme McCarthy	Support	Yes	Grant	<ul style="list-style-type: none"> <li>&gt; Submitter lives in close proximity to the works and has experienced flooding and flood damage on their property. Flood events causing stress.</li> <li>&gt; Want project to go ahead, happy to work with parties to sort whatever disruptions will occur during the project.</li> </ul>
6	Steve and Kate Hunt	Support	No	Grant	<ul style="list-style-type: none"> <li>&gt; Submitter owns home (now rented out) in close proximity to works, has experienced flooding on their property.</li> <li>&gt; Want works to progress now to see flood mitigation work underway.</li> <li>&gt; Happy with necessary impacts on their property and restoration of native green corridor along stream channel, which will maintain the green character of the environment.</li> <li>&gt; Strongly supports application and considers work to be essential to safety of people, property and community.</li> </ul>
7	Peter and Rosalyn Ross	Oppose	Yes	Decline	<ul style="list-style-type: none"> <li>&gt; Submitter lives in close proximity to the works and has experienced flooding on their property.</li> <li>&gt; Described events on property during 8 December 2019 flood, which was supposedly a 1 in 30 year flood event. Considers that this event indicates the flood maps are exaggerated and too conservative (treating the catchment as bare). Using this baseline, considers the size of the flood relief requirements are 'over engineered' for a 25 year flood.</li> <li>&gt; Application proposes 'secure overland flow path along driveway' and 'channel walls' within the Submitters property, however no details provided as yet regarding the actual overland flow path works (if any) and the channel geometry. Submitter considers they cannot comment on or agree to something they are yet to be advised of.</li> <li>&gt; Submitter considers that the plans are excessive and will cause public disruption and additional ratepayer expense than is necessary. Submitter requests flood baseline be recalculated and peer reviewed by an independant company with experience with a heavily wooded catchment. Does not agree with the current plans.</li> </ul>
8	Sharlene Olsen	Support	Yes	Grant	<ul style="list-style-type: none"> <li>&gt; Submitter lives in close proximity to the works and has experienced flooding on their property.</li> <li>&gt; Would like flooding to cease due to substantial damage and stress caused.</li> </ul>
9	David Kyle	Oppose	Yes	Decline - conditional	<ul style="list-style-type: none"> <li>&gt; Submitter is concerned about proposed disposal of excavations from streamworks onto the Silverstream Reformed Church site and opposes consent until these items are addressed:               <ol style="list-style-type: none"> <li>1. Whether stormwater runoff from the newly elevated ground will affect neighbouring properties</li> <li>2. Identification of the amount of excavations to be dumped and expected height of the section after dumping</li> <li>3. Consultation with neighbouring properties regarding the change in land use and how this may affect neighbouring properties (e.g. privacy).</li> </ol> </li> </ul>

10	Alexander Ross	Oppose	Yes	Decline	<p>&gt; Submitter opposes application, however does not oppose stream improvements in principle when further work is done on the model.</p> <p>&gt; Submitter considers the flood modelling is flawed due to the hydrological model not taking into account the high infiltration of the forest and bush areas of the catchment (thus leading to over-estimation of the 25year stream works).</p> <p>&gt; Flood protection works for the upper reach of the catchment has been ignored.</p> <p>&gt; Submitter considers the rain event on 8 December 2019 was close to a 30 year event and the majority of the stream channel coped with the peak flow.</p> <p>&gt; Submitter has provided maps comparing the modelled 25-year event (GWRC document), 25-year event (UHCC document), 10-year (unreferenced document), with the observed flooding from 8/12/2019. Submitter notes the 10% map shows more inundation, 4% map shows less inundation and the observed storm map shows less again - the discrepancy renders the flood modelling suspect and does not give confidence in the hydraulic modelling.</p> <p>&gt; Submitter considers the works are probably well over designed for the 4% flood due to ignoring the high infiltration capacity of the forested and bush clad hills reducing the peak flow that the works need to accommodate. Streamworks could be reduced in size, with consequent saving in environmental damage and council funds. Submitter has carried out field testing in catchment that showed forest and bush clad sections has a large infiltration capacity.</p> <p>&gt; Reference to RJ Hall and Associates review and review by BECA. Catchment characteristics have not been revisited since model developed in 2008. Model is out of date and needs to be revisited to quantify the pre- and post-development catchment characteristics.</p> <p>&gt; Submitter requests:</p> <ol style="list-style-type: none"> <li>1. The base hydrological model is fixed to incorporate increased infiltration on the forest and bush catchment areas</li> <li>2. Flood model is re-run with above parameters to work out new design flood flows</li> <li>3. Hydraulic model and calculations are re-run to redesign the channel works and reassess the need for culvert/bridge upgrades for a 25-year storm</li> <li>4. The overtopping at 122 Pinehaven Road is addressed with a suitably sized culvert and vegetation clearance work.</li> </ol>
11	Save Our Hills	Oppose	Yes	Decline	<p>&gt;Submitter strongly supports objective of the application in principle, however, considers that the basis on which the proposed stream improvements have been assessed is flawed because the base hydrology is not correct.</p> <p>&gt;Submitter therefore opposes this application because the proposed improvements have been assessed incorrectly.</p> <p>&gt;In the 1 in 30 year rainfall event that occurred in Pinehaven on the 8 December 2019 the flood extents were far less than GWRC's 1 in 10 year flood maps (i.e. this indicates GWRC's flood maps are grossly inflated) - see the Storm Report and "Flood Extent Maps" included in this submission.</p> <p>&gt; Submitter commissioned a technical review by R J Hall and Associates Ltd of the Jacobs' (2016) reworkings of GWRC's Pinehaven flood modelling. RJ Hall's review found that Jacobs did not correct the future development hydrology error by SKM (2010) in GWRC's Pinehaven flood modelling. RJ Hall found that (contrary to Beca's 2015 audit) GWRC's Pinehaven flood modelling and mapping is not fit for purpose and cannot be relied upon.</p> <p>&gt;The RJ Hall report also found that GWRC's inflated flood extents are due to GWRC modelling the forested hills in the upper catchment as impervious, i.e. as if they are covered with concrete.</p> <p>&gt; The RJ Hall report concludes: "The results of the earlier studies by MWH, SKM, Beca and Jacobs were used to provide and validate hydrological inputs to hydraulic models in order to demonstrate the likely scale of effects on the distribution and passage of flood water arising from an ARI 100 year rainstorm in the Pinehaven catchment. "Given the substantive discrepancies in those earlier studies in the hydrological pre- and post-development runoff values for peak flow and runoff volume that have been revealed in this present study, no reliance should be placed on the efficacy of the flood mapping results that were associated with that earlier work by MWH, SKM, Beca and Jacobs. "We conclude Jacobs' error [in the Pinehaven flood modelling] can only be remedied by rejecting the hydrological and hydraulic modelling to date and doing it again using reasonable and representative runoff hydrographs for pre- and post-development situations."</p> <p>&gt; Submitter commissioned a peer review of the RJ Hall report. The peer reviewer wrote, "I have carried out calculations to check [Mr Hall's] results ... I concur with Mr Hall's conclusions that ... [GWRC's] hydrological model ... assumed an exceptionally impervious catchment."</p> <p>&gt;Submitter considers that because the GWRC/MWH hydrological model of stormwater runoff is wrong, then so is the SKM/Jacobs hydraulic model of flood extents (grossly inflated). These models were used to determine the stream improvements, therefore the stream improvements are also incorrect (over-engineered).</p> <p>&gt;WWL claim the improvements are required to increase the stream channel from less than a 5-year capacity to a 25-year capacity, however the 8 December 2019 storm demonstrated that much of the Pinehaven Stream already has a 25-year flow capacity.</p> <p>&gt; Submitter considers building extra capacity would normally be a good thing if the base model was accurate, however the outcome of GWRC's unreliable baseline model is that it will actually allow bigger floods to occur more regularly in Pinehaven and Silverstream due to large volumes of extra stormwater runoff from future development on the Pinehaven hills. GWRC's baseline model will fail to control this extra runoff because GWRC's baseline model already assumes the hills to be covered with concrete, therefore it won't detect extra runoff from steel roofs, asphalt roads, and concrete driveways and footpaths that will replace forest and bush.</p> <p>&gt;The submitter considers the solution is that GWRC's baseline hydrological model and hydraulic model must both be done again.</p> <p>&gt;Submitter requests the following:</p> <ol style="list-style-type: none"> <li>1. Hydrological model be done again using inputs that are representative of the actual catchment, in particular, with infiltration losses representative of the forested and bush-clad hills in their current</li> </ol>
12	Elaine Alsop	Support	No	Grant	<p>&gt; Submitter lives in close proximity to the works and has experienced flooding on their property.</p> <p>&gt; A large amount of bamboo on the stream banks which results in loss of sun.</p> <p>&gt; In favour and look forward to project being completed</p>
13	Bob [unknown surname]	Support	No	Grant	<p>&gt; In favour of works going ahead.</p>
14	Robyn Hickson	Support	Yes	Grant	<p>&gt; Submitter lives in close proximity to the works and has experienced flooding on their property, causing significant damage and stress.</p> <p>&gt; Submitter is concerned that a few people can hold up the process, and considers council has an obligation to protect the properties which is not being met.</p>
15	Bryan Powell	Support	No	Grant	<p>&gt; Submitter understands why the work has to be done.</p>