

SUBMISSIONS RECEIVED ON ŌPĀWAHO/HEATHCOTE RIVER BANK STABILISATION – STAGE 2

August 2018

Submission ID	Do you have any feedback on the proposed tree planting and landscaping?	Do you have any general comments or feedback?	Name
17539	<p>1. I defer to the expert advice with regards the urgency and methodology to stabilise the riverbanks and increasing the river capacity and flow parameters to help reduce flooding.</p> <p>2. I am disappointed that the urgency and lack of a designated budget means that the Heathcote Opawaho Linear Park Plan cannot be consulted on and implemented at the same time. There would have been synergies and savings if the construction could have been planned for the same time.</p> <p>3. An important aspect of the Linear Park is the narrowing of the road carriage to allow the construction of a riverside walking and cycling path. The extra width also allowed the return of big trees to the banks, such as willows.</p> <p>4. Thank you for taking the opportunity to remove weed trees and potential weed trees.</p> <p>5. I am very pleased to see that mainly native trees have been planted along this stretch of the riverbank to date. This is the chance to balance up the tree stock so that there is at least half the trees are local indigenous trees. In fact, to achieve the balance required by the Linear Park objectives I suggest that only indigenous trees be planted, with the addition of a few willows. The community wished to see willows along the river and it was agreed they could be planted in suitably wide berms.</p> <p>6. Last year I did a stock-take of the recent (defined as trees with new stakes and bark still in place) tree plantings in the Linear Park envelop. I was disappointed to discover that the Linear Park plan had not been followed. Almost all the trees were exotic. Out of 41 trees planted, 4 were local natives, and 1 non-local native. None of the native trees were specimen species (long-lived podocarps, pokaka). So this time, there needs to be a conscious implementation of the Linear park objectives (see paragraph 14 for relevant extracts about achieving a mix of exotic and indigenous trees).</p> <p>7. It is important for future habitat for hardy bush birds that big podocarp trees are planted. They will eventually provide a vast quantity of fruit to boost bird numbers. That is, kahikatea on the deep, damp soils, totara and matai further up the banks. There is now evidence (Dr Jon Sullivan, ecologist Lincoln University pers.comm.) that hardy bush birds are associated with native trees. He is not sure why - is it the evergreen canopy to shelter in? The complex architecture that gives sufficient warning when cats come after their nests? Or, is it the native insects associate with native trees? Whatever it is, I want to see more kereru, korimako/bellbirds, piwakawaka, tatou waxeyes, and riroriro grey warblers in my back yard. A native tree-rich river corridor will help them get to my place.</p> <p>8. The local indigenous tree stock needs to be chosen to provide year-round food resources for birds. In other words, trees need to be mixed up and not planted in block of same species, as favored by landscapers. Thinking ahead, the tree mix needs to provide all-round food resources and habitat for tui, NZ robins, tomtit, pipipi, and pukeko. Aspirationally, I would like to plan ahead for the river corridor to support kaka, rifleman/titipounamu, kakariki.</p> <p>9. Please plant specimen kahikatea. The 3 kahikatea in Ernle Clark reserve are stable, require no maintenance and top over 15 m tall. They have been planted as stand-alone specimen trees in the Linear park and have a good form and shape (see attached photos down-stream and on the true left bank past Waltham swimming pool). So far rimu have not fruited in the City so I do not wish to see more rimu being planted along until there is evidence that they will produce fruit for birds. We have</p>		Alice Shanks

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	<p>sufficient specimens planted for their beauty.</p> <p>10. Please remove the two trees randomly planted 5m downstream from the Bowling Club bridge in Waimea Terrace. I complained to the Community Board about their inappropriate placement last year and got a sympathetic hearing. These are both exotic, too big for the site and will create a sight hazard for cars on the corner.</p> <p>11. Trees need to be eco-sourced, that is, be grown from local wild trees to retain the local genetic diversity (this is not so important for podocarps and ferns as their fine pollen and spores fly in on the Nor-West winds from the West Coast). Right now there are very few native trees of the grade required to plant on the riverbank due to heavy demand from Earthquake remediation, new parks, and the restoration of the Port Hills after the 2017 Christchurch fires. In 2010 the arborist were given a budget at the end of the financial year to take down trees along the Linear park in anticipation of replanting. That was stymied by the Earthquakes and the consequent lack of funding for the Linear Park. I have waited 8 years for the Park Plan to be implemented. I am willing to wait longer till the native trees, especially podocarp trees, are large enough to plant out. They can live as long as 600 years (Riccarton Bush) so what is another 5-10 years in the lifetime of the tree. Plonking a fastigiate oak in now just to fulfill a contract is something the future citizens will rue for 150 years (or replace in a few years time).</p> <p>12. The change in attitude towards all things Natural Aotearoa is happening apace. Almost all the people I meet at Ernle Clark reserve think the City is planting only native trees so don't disappoint them! There is a Renaissance in the value citizens are placing on indigenous trees, plants, weta and bats as people increasingly identify their sense of belonging to NZ through its unique natural assets. This planting is your chance to create what citizens want. Please consult the "Life in Christchurch" surveys to corroborate the current residents request for more native trees in our neighbourhoods (and not just out there on the Port Hills and at the Groynes).</p> <p>13. The Linear park requires the Council to balance up the tree stock in this stretch of the river. I would like the 39 exotic trees planted in the past few years on deep damp river soils to be removed and replaced with kahikatea and pokaka, both swamp trees that will thrive on these soils. If the trees are not well-matched to the soils the tree will not thrive. For example, a copper beech planted 2.5 m from the river at the end of Ernlea Terrace did not thrive as it did not like wet feet. There is now a kahikatea in its place doing well. My neighbour planted an oak in peat soil by the river and now has a huge problem as it has grown too well, too fast.</p> <p>14. The Opawaho river corridor is part of an identified "stepping stone" native copse to help native bush birds fly into the City from the Port Hills.</p> <p>15. Returning local native trees to the river banks is also a part of the Ngāi Tūāhuriri aspiration to see the Opawaho once gain provide mahinga kai - birds, tuna eels, whitebait inaka, harakeke. This has been adopted by the 8 groups who look after early plantings by the Clark and Smart family, 1990 and Year 2000 plantings, and subsequent school and community plantings along the river plantings. It would be great to get a few more clumps of harakeke in sites that do not compromise the flood capacity of the stream.</p> <p>16. The tree list is short. I suggest it could be expanded. Kowhai and lemonwood are not specimen</p>		

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	<p>trees (they are not tall, nor long-lived). Beech trees are arguably not indigenous to the Port Hills Ecological District so I would not classify them as a local indigenous tree. They are suitable for parks but not for a river restoration. The tree that is missing is five-finger (<i>Pseudopanax arboreus</i>). This is a key winter food resource for birds, insects and over-wintering monarch butterflies, as it flower in June onwards. Broadleaf, kanuka, rohutu, turepo, and the taller coprosmas (<i>C. wallii</i>, <i>C. virescens</i>) for drier sites and the tree daisy <i>Olearia lineata</i> and <i>Olearia bullata</i> for wetter sites to increase the diversity of food resources for birds.</p> <p>17. Relevant extracts from Mid Heathcote Masterplan https://ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/Park-management-plans/MidHeathcoteRiverOpawahoMasterplan-Part5.pdf Linear Park Canopy Tree replacement objectives are: To provide a long term sustainable schedule of</p> <ul style="list-style-type: none"> • canopy tree species appropriate to the range of river bank types, road edges and adjacent reserves of the Heathcote River/Ōpawaho corridor from Colombo Street to Hansen Park/Opawa Road. • To provide a mix of exotic and indigenous tree species reflective of both community values and site specific issues such as bank stability, bank width, proximity to road edge, bank steepness, and • maintenance requirements. • To ensure the tree species used are reflective of, or contribute to, the six values of the Christchurch City Council Natural Asset Management philosophy: Culture, drainage, ecology, heritage, landscape and recreation. <p>To provide a sound basis for:</p> <ul style="list-style-type: none"> • short-term (0-3 years) maintenance and renewal of the existing tree stock; • medium term (3-10 years) planning with specific attention to key node planting (e.g. bridges, intersections, traffic calming points); • a long term (10+ years) cohesive vision allowing for a co-ordinated approach to the planning and implementation of replacement and new tree planting. <p>Deciduous trees in riparian margins should be replaced with evergreen species, to reduce excessive amount of leaf litter input into waterways, which affects water quality. Page 35: Increase native planting of trees and shrubs that once grew along the Heathcote River / Ōpawaho to create a balance between exotic and native plants, and to reflect the natural heritage of the area Page 45: Anticipated outcomes Areas of native planting will feature along the river banks, including the large forest trees that historically grew along the Heathcote River/ Ōpawaho.</p> <ul style="list-style-type: none"> • The ecological health of the river will gradually be restored through management practices that reduce sediment inputs and improve water quality and instream habitat. • There will be more areas of indigenous planting along the banks of the river. • The cultural and heritage values of the river corridor will be acknowledged <p>I have been impressed with the open consultation within the short-timeframe allowed and now I have every confidence in the Implementation team to get it right for our river and trees!</p>		
17512	<p>The Opawaho-Heathcote River Network (OHRN) is an umbrella organization that facilitates and supports the values, efforts, and needs of our community along the river. The OHRN is made up of a number of representatives from community groups in the Opawaho-Heathcote catchment and estuary. Our purpose is to 'facilitate a collaborative network which advocates for the regeneration of</p>	<p><i>Contract Implementation and Maintenance</i></p> <p>In Stage 1, some of the low riparian planting was planted directly into grassy banks. This is going to be a maintenance problem in both the short and long term. It will also result</p>	<p>Elisabeth Bertollett - Opawaho</p>

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	<p>the whole of the Opawaho-Heathcote River’.</p> <p>Firstly, we would like to acknowledge the work done by the CCC to date on this project, especially in providing ongoing information and consultation with the community. We appreciate the involvement of EOS Ecology working with the CCC to develop solutions for habitat restoration within the detailing and solutions for the bank remediation such as tuna hotels, stepped bank treatments, and vegetation.</p> <p>The OHRN recognizes that Stage 2 of the Banks Stabilisation works is a huge opportunity and that it is important to build the ecological integrity of the Opawaho-Heathcote River. It is important that the type of stabilisation works and plantings reflect the authenticity of place and our native vegetation within it. Therefore, it is important that the majority of large trees proposed are to be some of NZs large native trees and appropriate for the various site conditions along the river. This is crucial (as native trees provide food and habitat) in establishing a native corridor from the estuary to the Port Hills for our native birds, insects, and lizards to become a substantial part of our collective vision and heritage. Additionally, appropriate planting will encourage the movement of people along the river in recreation, community building, and mahinga kai.</p> <p>In respect to the planting proposal, the OHRN would like to make two points:</p> <ul style="list-style-type: none"> - That a set number of native plants to be planted be explicitly stated. This serves two purposes; 1) to allow adequate time and planning for nurseries to stock the required native plants to 2) ensure that a truly significant amount of native vegetation is planted along the OHR. The OHRN is concerned that the clause ‘final species selection will be dependent on potential variations in site conditions, and availability of tree stock’ will allow a disproportionate number of large exotic trees to be planted, especially as many nurseries are low in stock due to the long propagation period and the low stock after the Port Hills fire. The OHRN would rather see the planting of appropriate native trees when they can be sourced rather than planting of readily available exotic species. - That all native plants selected are appropriately eco-sourced. Eco-sourcing is important for biodiversity (making individual specimens as well as whole species more resilient to predation, climate change, and extinction), supporting local business, and providing a strong message of commitment to intelligent ecological restoration. Eco-sourcing requires that native species are grown from the seed of plants that are indigenous to the Canterbury and Banks Peninsula region. The proposed planting needs to be ecologically appropriate. A general planting sequence as suggested by Colin Meurk should include the following species: <p>Riverbank - sedges, rushes, harakeke, toetoe, mikimiki, manuka</p> <p>Floodplain - Kahikatea, pokaka, kaikomako, turepo, cabbage tree, mikimiki</p> <p>Medium moist- matai, ribbonwood, lacebark, broadleaf, lancewood, marbleleaf, rohutu</p> <p>Drier - Totara, kowhai, lacebark, broadleaf, kanuka, fivefinger.</p>	<p>in the unnecessary loss of plants. It is important to ensure that this planting practise is not carried out in Stage 2.</p> <p>Furthermore, maintenance teams need to be properly briefed on what plants are wanted and what are not to avoid the wholesale spraying and weeding of reserves and community group-planted plants that has recently occurred.</p>	<p>Heathcote River Network</p>

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17411	<p>The plantings that have been done look completely inadequate for the health of the river ecology, the amenity value for residents and bank stabilisation. On the stretch of river I live on the nature of the river has been destroyed from what it was and from what residents moved here to enjoy. The current and future plantings will not soften the hard engineered result of the work done so far. There are NO! natural values supported or remaining in this area.</p>	<p>Just to emphasise - There are NO! natural values supported or remaining in this area. I have spoken to long time residents who are very disappointed at the change to the nature of the river. The cost must be enormous to do this work where a change to the use of adjoining roads to a narrower one way system and letting the banks look after themselves would have been cheaper and less disruptive to the river and the residents. There is nothing but engineering involved in this project, there needs to be much more environmental emphasis in future work!!!</p>	Colin Brookland
17401		<p>My feedback is based on the completed Stage 1 works rather than on plans. The reality always looks different.</p> <p>Generally in my view the amenity of this area has been compromised by this work. In the consultation documents it sounded great that so many new trees were proposed. Seeing them planted was a disappointment as at this point they resemble sticks in the mud rather than trees. I am wondering if more mature trees could be planted to provide an instant boost of amenity. It is a bit sad to think that many residents that still remember the lovely lush tree lined riverbanks will not be able to enjoy anything comparable again during their life time.</p> <p>The amount and size of rocks and the vertical stacking of those is looking very brutal and unnatural. Was there really no way they could be stepped or minimised? The same applies to the gabion baskets. Why are they so large and stacked up in vertical walls? Debris and rubbish are already collecting in them. An especially appalling reach of gabion baskets is just upstream of the Malcolm Ave foot bridge. These baskets have been placed in a perfectly straight line. Nature does not produce perfectly straight lines.</p> <p>As for the flatter grassed areas, they need to be protected from parking vehicles. Parking vehicles are really destructive and damage the work that has been done. Protection of these areas could be achieved by strategic planting or some bollards and ropes or similar. I have seen tyre marks in a freshly grassed new bank area on Hunter Terrace. In the past cars have severely damaged the banks along the Heathcote River. The retained existing storm water outfalls are an eyesore. Can they be disguised or cut back?</p> <p>I am opposed to any potential fencing of riverbanks.</p> <p>I still think better results could be achieved if the roads were cut back a bit. All in all I am disappointed by the works and just hope it gets better over time with some greenery. It is a missed opportunity in many ways!</p>	Iris Brookland

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17393	I would prefer less plantings from outside 90 Riverlaw Tce to Wilson Rd Bridge as this is where there is already a restriction in river which causes the river to back up & flood around us up past 80 on the big bend there should be more room for plantings as river & bank is wider.	<p>We have 2 Drains 1 at 90 & 1 up from 80 (75 St Martins Rd, Merchiston) which we would prefer to be stepped back from river. These have a constant flow of water From Natural Springs & Artesion bores from our properties.</p> <p>We don't mind our clean water backing up when flooding occurs but prefer flap valves that work to hold muddy water to River as much as possible the top drain has issues with roots getting in under foot path mainly (old cracked pipes) & River side of manholes lower pipe being blocked by your Rocks you put in.</p> <p>A higher new pipe was put in a few years ago going above sewer pipe runing down the Rd but as we told workers then was not suitable as would only work when water backed up at least another 500mm over our garden. (luckily for us they left old pipe in but left it filtering through the new rocks)</p> <p>So all this should be looked at when bank work is being done!</p> <p>I still think a path by the Rivers edge should be part of this work & not up by the Road!</p>	Sam Beaumont
17389	I would prefer more native trees where there is a proposed choice, in Riverlaw Tce as there are already large exotics. This would also assist reducing the blockage of drains with deciduous leaves during flooding. I am in favour of the smaller tree and native plant selection for the bank stabilisation	The first point of flooding in this section of Riverlaw Tce is opposite my house at No. 40. I am hopeful that the increasing of the waterway area by battering and also small rock walls to improve the river flow, will assist in increasing access to my property during low level flooding	Christine Bridgman
17349	Plans look good. However, I think there could be more native planting included in the designs.	There doesn't appear to be (or there is no mention of) any ecological design features in the plans. For example, is any work going to be done to improve native fish habitat/spawning? I believe this is a good opportunity to help improve the ecological health of the river alongside repairing/stabilising the banks.	Will Keay
17294	It looks good	<p>My house is downstream from this area, and flooding occurs outside my house a lot more since the earthquakes.</p> <p>My concern is; is this work upstream going to create more flooding downstream as the water may flow downstream faster and then flood more just before Hansens Park as the Heathcote River banks have definitely slumped in that area.</p>	Lesley Anderson

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17117	<p>Preferred species - Rimu (<i>Dacrydium cupressinum</i>) - damp areas, Nikau palm (<i>Rhopalostylis sapida</i>) - damp areas, Red beech (<i>Nothofagus fusca</i>), Matipo (<i>Pittosporum tenuifolium</i>), Lemonwood (<i>Pittosporum eugenoides</i>), variegated lemonwood, Kowhai (<i>Sophora tetraptera</i>), Broadleaf (<i>Griselinia littoralis</i>), Lancewood (<i>Pseudopanax crassifolium</i>). Groves of tree ferns - damp areas. Cabbage trees and flax - their leaves are messy so very few of these. Some exotics - weeping willow, cherry (for spring blossoms), also some rhododendrons for spring flowers. Please also plant some areas of daffodils around the South Library for example.</p> <p>No ake-ake or alder (<i>ailanthys altissima</i>) - boring trees</p> <p>Please get rid of all the (Trees of Heaven) on the river banks from Malcolm Avenue around Waimea Terrace and Eastern Terrace to Tennyson Street bridge. Seedlings are coming up everywhere - they are a pest, banned in many USA states.</p> <p>Vegetation at the rivers edge will only impede the flow of flood water and will also gather rubbish such as cabbage leaves etc, as the flood waters pass by and humans rubbish.</p>		Marie Mackley
17081	<p>Plan 5: removal of trees in front of #63: Centaurus Rd has become quite busy in the years that we have lived here. The trees when they have leaves act as a sound barrier. You are removing these trees without putting anything back in its place in front of our house. The one big tree that is left has a big canopy on paper (plan) but its canopy is only high up so does nothing for sound at car level. So we are going backwards with this plan. So far we keep paying more and more rates, none of the flood measures do anything for the flooding where we are and now you are also taking away the little sound barrier that we have? Can we please have low evergreens planted back?</p>		Jacqueline de Jongh
16979	<p>The river has already been planted out outside our place</p> <p>If there are any trees to be planted we would like see Kowhai, Pin Oak, Liquid Amber or Maple trees</p> <p>Please can we not have any more Cabbage trees or flaxes</p>	<p>We are pleased with the riverbank outside our place. It took a lot of work but it has been worthwhile and the crew (Chris and his team) have been very helpful and responsive</p> <p>Hopefully it will avoid flooding at the other end of the street</p>	John Horgan
16959	<p>I would like more native planted with berries to feed the birds on waimea terrace, those planted on the donkey track seem to be ideal - I'm not sure what they were but in the summer some of them were covered with flowers which encourages bees. I would like the 2 small exotic trees by the waimea footbridge removed as they both will grow very large and will ruin the look over time. if the appropriate trees and low plantings not available due to the replanting of the port hills I would suggest we wait until they are.</p>		Susan Grant

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16951	I agree that this needs to happen. I would like all tree plantings to be native.	<p>Have the impacts of climate change including rising sea levels, changes to rainfall patterns, rising water table been modelled and taken in to account? If not, then they need to be to ensuring that this plan is fit for many decades rather than just the short term.</p> <p>Has the impact of storm water run off due to additional housing development in the south east of Christchurch (Hoonhay) and the Port Hills, also been accounted for?</p>	Rachel Depree
16937	Trees should be planted clear of a floodplain otherwise they will obstruct flood flows and increase flooding upstream.	The proposals do not do enough to mitigate flooding in the Heathcote River. The opportunity should be taken to widen the waterway and flood plain while work is being done. The benefit in flood mitigation is small compared to the cost. The benefit in flood mitigation could be at least doubled by very little extra cost by increasing the width of the floodplain by at least 30%. Such widening is required now. I don't want the council to miss this chance and have to be reminded of this missed chance by future flooding after the work is complete.	Warren Lewis