

## Submissions received on the draft Ōtākaro Avon SMP, February - April 2024

### Would like to speak to the hearings panel

ID	Do you have any feedback on the proposed goals?	Do you have any other comments?	Name - Organisation
15341	The Waitai Coastal-Burwood-Linwood Community Board fully supports the proposed goals and actions.	<p>However, the Board wishes to emphasise that development along the river corridor prioritises river water quality and ecological health. The Board strongly supports the use of wetlands and swales to keep stormwater out of rivers.</p> <p>The Board would like to see dredging to remediate flooding be undertaken if that would be beneficial to the river (as long as it is not counterproductive).</p> <p>The Board supports that high risk industrial sites are audited regularly.</p> <p>The Board also would like the Council to continue to advocate for restrictions on the use of pollutant materials, such as zinc and copper.</p>	Paul McMahon – Waitai Coastal Burwood Linwood Community Board
<b>Staff response 15341</b>  The Board is thanked for the positive feedback. The SMP does not drive development along the river corridor other than to provide for stormwater treatment basins & wetlands within the OARC. Treatment facilities improve the health of the river but with a downside of accumulating contaminants. Dredging is undertaken in the Ōtākaro Avon River from time to time when channel surveys indicate that there is a buildup of sediment.			
15377	The Waihoru Spreydon-Cashmere-Heathcote Community Board agrees with the goals and actions contained in the plan. In particular taking action on controlling the zinc and copper contaminants of storm water, which are the predominant source of concern in the Board's waterways in this plan.	<p>1. The Community Board is pleased to see that the Addington Brook catchment has been prioritised for retrofitting of a high level of treatment, via biofiltration, in the near term.</p> <p>2. The other waterway in the Community Board area, Baxter's Creek, presumably has similar issues in terms of stormwater levels of zinc and copper, as it shares a similar environmental geography. The Community Board is interested to understand whether similar treatment will be applied to Baxter's Creek in the future?</p>	Callum Ward - Waihoru Spreydon-Cashmere-Heathcote Community Board
<b>Staff response 15377</b> Ther is no plan to treat stormwater in Baxters Creek within the LTP term. However Baxters Creek is a possible candidate for treatment in the next Ōtākaro Avon SMP.			
15388	<p>The Board generally supports the proposed goals and actions proposed for the Ōtākaro Avon Stormwater Management Plan, subject to the points offered below. The Board recognises the importance of controlling the contaminants in stormwater in reference to the key environmental objectives sought to be achieved.</p> <p>Water quality is important, not just to ecological health, but also to the cultural values, which the Board supports being acknowledged.</p> <p>The Board considers that having such a Stormwater Management Plan is worthy of tremendous support because restoring clean, clear water and natural environment complete with native aquatic life will be a huge attribute to the future of Ōtautahi.</p> <p>The Board generally agree with mitigating the major sources of contaminants using the methods marked as effective and practical, but with the following recommendations:</p> <p>Copper:</p> <p>The plan advises that copper surfaces, spouting and downpipes are currently a very low</p>	<p>The "red zone" river area from city to sea is a golden opportunity to create a world class natural environment that serves the many life forms including the people who live there by providing a healthy and recreative space to commune with nature.</p> <p>There are residents who feel strongly that this can be achieved by a simple approach - native plantings, reviving riparian flood areas, and limiting human intervention to bike paths, bird stands, and toilets (i.e.: minimum cost, maximum effect) - particularly in the area between Fitzgerald Ave and Gloucester St/Gayhurst Rd. It is strongly felt that commercial farming leases and practices should be reduced or eliminated, and thereby aid the reduction of nitrogen and phosphorus runoff (among other things).</p> <p>Finally, the Board has particularly heard from residents in recent years around the issue of surface flooding and has made it a priority to advocate for them in its Community Board Plan 2023-25. Specifically, the Board highlighted the below points in its Plan as reflecting what it has heard, seeking that any opportunities to reflect these aspects be addressed where possible in this context.</p> <p>"Flooding in the Waipapa Papanui-Innes-Central Board</p>	Emma Norrish – Waipapa Papanui-Innes-Central Community Board

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	<p>contributor to copper contamination, but are a fast-growing source (albeit from a low base).</p> <p>Most of the existing copper parts were probably built before this was a known problem.</p> <p>For these two reasons it would seem unfair to apply Goal 3.2 (“The Council does not permit stormwater discharges into the network from unprotected copper cladding, spouting or downpipes”) to those structures. The cost of compliance could significantly outweigh the small proportion of contamination that this source contributes.</p> <p>For reasons of fairness and affordability it may be appropriate to exempt existing structures, but stridently apply this rule to new builds and upgrades.</p> <p>The plan advises that brake pads are a high source of contaminant city wide, so moves toward copper-free brake pads are encouraged.</p> <p>However, care should be taken not to impose a regressive “tax” upon low-income car owners if copper-free pads become significantly more expensive than what they are replacing. It is encouraged that this be part of the conversation with the motor trade and regulators.</p> <p>E.Coli:</p> <p>Support the reduction and/or elimination of introduced invasive species including ducks and geese.</p> <p>Would furthermore add measures to reduce (introduced) pigeons and reduce or discourage European starlings, which are both resident contributors of significant density of faecal defecation on and around their nesting sites. (Central city buildings from pigeons, and seasonal nesting sites like Dudley Street from starlings). Encourage creative community approaches to achieve these.</p> <p>Nitrogen and Phosphorus:</p> <p>There are residents who feel strongly that commercial farming leases and practices should be reduced or eliminated from the Ōtākaro Avon River Corridor “red zone”.</p> <p>Flooding:</p> <p>Apply ample consideration to previously discussed ideas of holding lakes in the lower reaches of the catchment to provide flood ‘overflow’ storage, wetland habitat, recreational resource and added water security.</p>	<p>"Why this matters:</p> <p>"The community board is well aware of the community concern about localised surface flooding experienced in parts of the board area and across the city caused by the record-breaking rain events of July 2022, and indications that with climate change such events may become more frequent. At a community meeting the residents sought assurances from the community board that the drainage network is working and being maintained as effectively as possible to drain stormwater away rapidly during and after significant rain events. Residents also expressed the need for quicker road closures and more education about the effects on drinking water in flooded areas.</p> <p>"What the board will do:</p> <p>Advocate for the prioritisation and inclusion of required flood mitigation projects by identifying in the board submission what options for flood mitigation represent the best value for money, prioritising community safety and wellbeing while recognising that some street flooding in significant rain events is part of a functional drainage network that avoids inappropriately creating property flooding downstream.</p> <p>Advocate for a community adverse-weather resource which will be available for residents to download showing what flooding plans are already in place, what would trigger a Civil Defence response, and what the responsibilities of other government agencies are.</p> <p>Advocate for a resource that helps communities understand what to do, what not to do, and support them more generally in flood events.</p> <p>Advocate for mitigation options to be considered ahead of significant rain events especially around, but not limited to, Francis Avenue, Edgeware Village, Emmett Street, and Harris Crescent.</p> <p>Advocate that all residential and commercial impacts are considered when flood mitigation projects are being considered, including in setting levels of service.</p> <p>Advocate that the Council continues to investigate the use of permeable surfaces/rain gardens where applicable.</p> <p>Re-engage with business owners and residents to see what is required from the Edgeware Village Master Plan looking at streetscape improvements in Edgeware Village.</p> <p>Explore options for an initiative to provide advance notifications to residents in advance of any significant rain events.</p> <p>Consider the goals of the Ōtautahi Christchurch Climate Resilience Strategy in all decision making.</p> <p>"We will measure our success by:</p>	

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		<p>The inclusion of flood mitigation projects in the LTP.</p> <p>The creation of a resource to assist the community in responding to flooding and measure the number of downloads.</p> <p>Residents will be well informed and understand the flooding response in their area, and where they can find information about what may be planned or is outside the scope of work.</p> <p>The number of temporary pumps deployed during a rain event and frequency.</p> <p>The introduction of an alert system before any significant rain events.</p> <p>The goals of the Ōtautahi Christchurch Climate Resilience Strategy has been considered."</p> <p>Finally, this Stormwater Management Plan's scope is by-and-large the CSNDC targets. There are other contaminant and management considerations beyond what is stipulated in the CSNDC (including, but not limited to, plastic particulates). The Board hopes that Council's ambitions for restoration of the river corridor's ecology will expand beyond this plan, and that support and resources will be used to encourage the many community led-initiatives (including those within the Ōtākaro Avon River Network) that will help our city restore this priceless asset.</p>	
<b>Staff response 15388</b> The Board is thanked for the feedback. 1. Restrictions on uncoated copper cladding and spouting apply to new copper surfaces and are not applied retrospectively. Staff are aware that elected members have a strong interest in flooding and the Council's flood response. It is important that operational (i.e. on-the-ground) responses are prioritised before and during events. Capital projects to alleviate flooding arise out of flood responses and flood modelling. Projects considered to have priority are put to the Council for funding decisions and this can result in priorities changing.			
15392	See submission attachment 15392	See submission attachment 15392	Colleen Philip – Sustainable Ōtautahi Christchurch
<b>Staff response 15392</b> Thank you for your submission. You comment that an implementation plan (the proposed Surface Water Implementation Plan) has not yet been completed. It would assist with planning and prioritising. SOC may be aware that the Council employs a full-time person (Georgina St John-Ives) to run engagement and education programmes and maintain the Community Waterways Partnership. This person engages in a wide range of activities. Your suggestion to make citizens aware of positive solutions for individuals is a good one and will be followed up with Georgina. A booklet of interventions/options is a possibility. The Council agrees with SOC about nature-based solutions. However, the use of wetlands is problematic because of the deliberate accumulation of toxins in these facilities. Ecologists advising the Council are moving to exclude freshwater life from treatment facilities.			
15389	See submission attachment 15389	See submission attachment 15389	Hayley Guglietta – Avon Ōtākaro Network INC
<b>Staff response 15389</b> AvON is thanked for a thoughtful submission. Firstly, a link between the SMP and the OARC will become apparent in the final SMP; the final SMP will contain 4 additional facilities that will be within the OARC – on sites in Avondale, Wainoni, Pages Road (Knights Basin) and Waitaki Street. These facilities are provided for in the LTP although the link to the LTP is not made explicitly in the SMP. A further 20-something facilities will be developed in time.			

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<p>Secondly, a comment about what a stormwater management plan is. “Stormwater Management Plans” (SMPs) are generated from a consent condition and the name is conferred by a consent condition and the content of a SMP is determined by consent conditions. The name is misleading in that SMPs could but do not necessarily deal with everything related to stormwater. Consent conditions allow for a wide range of potential content addressing a potentially wide range of activities. However, the actual content of SMPs is constrained by the (staff and capital and maintenance) resources the Council is able to dedicate to them and by the limits of the Council’s powers to regulate under the Local Government Act. The scope of SMPs has limits and it is the intention that other Council plans and activities should also contribute to healthy environmental outcomes. Funding constraints may mean that progress is slower than many would like. Funding priorities will result in many issues being addressed over a longer term than many would prefer. As your submission points out this puts a heavier reliance on the community to assist with education and resourcing.</p> <p>Matters such as addressing public awareness of sediment and erosion control, controls on sources of contaminants, and education generally are considered by the Council against a wide range of Council activities and determinations about resourcing are made at Annual Plan and Long Term Plan stage. The submitter may (and likely does) submit to these planning processes.</p> <p>The Council employs a full-time person to run engagement and education programmes and maintain the Community Waterways Partnership. This person engages in a wide range of activities.</p> <p>The Council is making steady progress in some areas including erosion and sediment control on building sites: inspectors are being trained in sediment control methods and enabled to monitor sites.</p> <p>The submission requests further funding to support a range of projects. Funding community projects is not the role of SMPs and this still needs to be addressed through applications for funding which may be contestable.</p>			
15386	See submission attachment 15386	See submission attachment 15386	Jesse Aimer – Christchurch International Airport Limited
<p><b>Staff response 15386</b></p> <p>See staff response attachment 15386</p>			
14160	<p>The addition of benchmarking and data collection tools such as Contaminate sensors will be extremely beneficial in the monitoring requirements to support your plan. I would love to see more emphasis on the digital tools used to capture this information and be shared to the public. I.e. Connection to the Otakaro Digital Twin program lead by CCC and University of Canterbury.</p> <p>This will then be able to demonstrate how the proposed improvements to filtering and reducing contaminants to progressing.</p> <p>Community health and Mauri as indicators of improvement need to be included in the plan. Ngatahi Research Institute have specific tools that help identify the Mauri of a waterway in relation to the Te Mana O Te Wai frameworks that must be considered in a holistic approach. People eat from the river affecting health of people and species biodiversity.</p>	<p>There is a great program of work lead by Michael Healy in CCC that have tools to promote this work but needs funding to support ambitions like the Stormwater plan.</p> <p>Stronger emphasis on how the public will know the stormwater plan is working must be demonstrated. The Otakaro Digital Twin project will be able to do this.</p>	Kerri Gray – WSP
<p><b>Staff response 14160</b></p> <p>There is a good deal of interest in new means of data collection. Reliable, low-maintenance monitoring instruments are likely to be implemented when they become available and approved.</p> <p>Mana whenua indicators of ecological health are being collected under the Environmental Monitoring Programme.</p>			
15375	<p>My submission would be simple. Get on with it. Don't do what was done in Harewood, spending \$4.3 million on arguments. We have to just agree to agree. To be quite honest, I don't know much about this space but I am quite confident that some of you do. I saw some plans presented by CCC staff at the car boot sale, they look amazing. We do need to manage storm water moving forward, that is obvious. We do need to stop the talk and actually pick up shovels, that's my only objection. I leave it up to others of you who have been working on this for years to hone the detail, but I ask you to agree, to concede where needed and get focus on getting moving on the ground a bit faster.</p>		Don Gould

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<b>Staff response 15375</b> Thank you for your submission			
15395	<p>I think it is a good plan for addressing the consent conditions, but good go further. (For example, contaminants like plastic micro-particles appear not to be a condition of the consent and are not addressed in this plan.</p> <p>I think that existing copper building surfaces (currently a very minor contributor to this particular contaminant) should be exempted, but new copper surfaces be discouraged or mitigated as per the plan. Similar consideration might be applied to zinc surfaces, especially if there is a risk that painting them will replace one contaminant (zinc) with another (plastic paint particles).</p>	<p>There are community initiatives toward restoring the river corridor's ecology. I'd like to see these plans and initiatives supported. We have a golden opportunity to have a world-class natural and native environment in the east, where such an asset would deliver massive amenity and improvement to wellbeing for flora, fauna and people.</p> <p>I'm concerned about commercial farming leases and effects on the river and riparian zones.</p>	John Miller
<b>Staff response 15395</b> The Council has limited knowledge about microplastics and their prevalence in stormwater and has not included microplastics in the SMP. There is some monitoring for microplastics in stormwater but more is being done elsewhere (internationally) than in Christchurch. A similar comment applies to other emerging contaminants. Council staff are aware of microplastics and some other substances as emerging issues and thank you for your comments. Existing buildings with copper cladding are exempted, at least for now. New copper cladding must be coated to avoid copper leakage into stormwater runoff. The Council has its own river corridor ecology initiatives and supports community initiatives, although at a modest scale.			
10004		See submission attachment 10004	Gregory Partridge
<b>Staff response 10004</b>  Thank you for your submission. Your concerns about land stability and loss of trees are understood. At this time the proposed facilities are still more than 10 years in the future and are not being dealt with by the SMP which has a 10 year term. The issues are equally relevant to planning for the Ōtākaro Avon River Corridor and future SMPs and may be dealt with under either programme. Stability and tree cover will be taken into account when the proposed Avonside Drive facilities are designed. Liquefaction and lateral movement is considered in geotechnical analyses, and basins may be stabilised or relocated if stabilisation is not possible. The loss of trees will also be considered and discussed with city arborists and possibly the wider community.  These matters do not form part of the current SMP because they are not funded to occur within the 10 year term of the SMP. They will be dealt with in planning for the OARC or in a subsequent Ōtākaro Avon SMP at a time that will coincide with funding provision in the Long Term Plan.			

Organisations / Businesses

ID	Do you have any feedback on the proposed goals?	Do you have any other comments?	Name - Organisation
10001	See submission attachment 10001	See submission attachment 10001	Andy Thompson – DOC



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<b>Staff response 10001</b> The Department is thanked for the submission. The Council looks forward to engaging with the Department on activities that affect conservation values.			
10002	See submission attachment 10002	See submission attachment 10002	Tanya Jenkins – Avon-Heathcote Estuary Ihutai Trust
<b>Staff response 10002</b> The Trust is thanked for the submission. There is awareness both within the Council and generally about the effects of various contaminants and methods that could be used to reduce contaminant discharges. As the Trust has indicated there are many other ways to reduce contaminant discharges. The SMP deals with contaminants mostly by planning to treat stormwater in basins and wetlands. Construction of basins is something the council can and must do, and is able to do effectively. As can be seen in the Long Term Plan there is significant funding for stormwater treatment. Other means of contaminant reduction are expected to take longer to bring into effect and involve ongoing costs that must share funding with many other activities. The Council employs a full-time person to run engagement and education programmes and maintain the Community Waterways Partnership. This person engages in a wide range of liaison and education activities. Sediment discharged from construction sites is receiving attention and is being addressed through erosion and sediment control plans and onsite sediment mitigation. This is an important activity for the Council. The Trust's comments about metals, pathogens, organic material and nutrients are noted. The Council liaises with the Ministry for the Environment, in conjunction with other councils, regarding urban metals. Stormwater contamination generally is important but may be addressed over time as one of many priorities for the Council.			
10003	See submission attachment 10003	See submission attachment 10003	Brendon Liggett – Kainga Ora
<b>Staff response 10003</b> Thank you for your submission. Bird strike provisions in the draft plan were inserted at the request of Christchurch International Airport Ltd on the basis of reducing a risk for airport users who include Christchurch citizens. It is acknowledged that the provisions could be onerous if applied inequitably or without regard to the size or location of an individual basin. You will be contacted about the basin referred to in the submission with a view to reviewing how the bird strike provisions were applied in the situation you refer to.			
15399	Reducing Vehicle Kilometres Travelled (VKT) would reduce the amount of contamination from vehicles getting into our waterways. Spokes encourages the Council to prioritise active and public transport as an effective way to reduce zinc, copper, rubber, PM2.5, oils, grease, rust, sediments, heavy metals, and the many other contaminants from vehicles that pollute our water. Another large source of water contamination is leaking underground fossil fuel storage tanks which is not mentioned. Nitrates are also not mentioned. Both should have associated actions. In general, preventing water pollution from motor vehicles by prioritising and appropriately funding cycling and walking is much cheaper than cleaning up the pollution itself.		Anne Scott – Spokes Canterbury
<b>Staff response 15399</b> Your submission presumably refers to research which suggests a close relationship between VKT and metals emitted from vehicles. Reducing the amounts of vehicular pollutant emissions is a desirable source control. The Council addresses this to a small extent by installing cycleways, as you will know. However, the SMP deals with contaminants mostly by planning for the treatment of stormwater. Controls at source are affected through other means including a stormwater bylaw, a Sediment Discharge Management Plan and a Community Waterways Partnership that encourages community action and education. The SMP does not address contamination from underground tanks because this activity is regulated by Environment Canterbury. Nitrates may have little mention in the SMP because they are not thought of as a contaminant of stormwater and the Council is not required to deal with them. It appears more likely that nitrates arise from groundwater and nutrients applied to lawns and gardens. It is acknowledged that nitrates appear to be contributing to eutrophication in the Estuary and that either the Council or Environment Canterbury should be taking some action toward reducing nitrate use or discharges.			

## Individuals

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ID	Do you have any feedback on the proposed goals?	Do you have any other comments?	Name
14150	Hi there - love the graphic, very helpful! Could Council also look at the possibility if implementing nets such as these on stormwater pipes that lead to the ocean? Seems like a simple way to reduce the amount of litter going into the ocean/waterways. I've seen them in Sydney. <a href="https://www.uscargocontrol.com/collections/stormwater-system-drainage-nets">https://www.uscargocontrol.com/collections/stormwater-system-drainage-nets</a>		Naomi Ambrose
<b>Staff response 14150</b>  The Council manages litter by providing and emptying litter bins, street sweeping, street sum grates and bylaws. The council organisation is aware of nets such as those suggested but has not implemented them for reasons that include the cost of installation and maintenance, and the perceived negative appearance of nets within river/stream corridors.			
14153	<p>I support the goals and actions.</p> <p>In particular, auditing of high risk industrial sites needs to be a well-resourced &amp; ongoing focus in order to help clean up the city's waterways, and minimise the introduction of new contaminants into them.</p> <p>Goal 2 (control zinc contaminants) is also a very worthwhile goal, even if it will be challenging given existing galvanised zinc roofs.</p> <p>Community education is also important to help protect our waterways - including letting people know they can contact council if they see any chemicals/paint etc. being discharged into waterways.</p>	<p>Managing flooding and ensuring we don't allow new developments in flood-prone areas needs to be a priority. We're a low-lying swampy city, and are particularly vulnerable to the coming sea-level rises.</p> <p>Related to this, liquefaction prone areas (such as Bexley) need to remain as areas where no development (or only small numbers of very well-engineered buildings with minimal horizontal infrastructure is installed - i.e. no subdivisions) is allowed to occur.</p>	Robbie Peacocke
<b>Staff response 14153</b> Council planning is generally carried out in a way that aligns with this submission			
14163	<p>Focusing on reducing vehicle safety (by reducing the effectiveness and life of brake pads) is not something I will ever support. Moving roads away from rivers is a better option.</p> <p>I also would support having a very specific and detailed long-term plan for agreed before too much money is spent (e.g. retreat vs Holland style)</p>	<p>Biofilters are a really expensive long term option, I would rather more land was taken up by wetlands to achieve this effect.</p> <p>I am also concerned that stopbanks will block the rainwaters path to the sea and result in the need for multiple pump stations to get the water out. all will need back up diesel generators because if they fail the city will flood.</p>	Mark Penrice
<b>Staff response 14163</b> The submission is acknowledged. A Coastal Hazard Adaptation Planning project is under way to consider community responses to the sea level rise and provision for protection or retreat. Biofilters are a good option in areas where space for a wetland is unavailable. The submitter raises a good criticism of stop banks, which have both benefits and drawbacks.			
14174	The proposed plan appears well grounded despite the limited actions Council can take alone in some areas. I support it.	I'd be interested to know what I can do as a homeowner/car owner to support this.	Andrew D
<b>Staff response 14174</b>  A homeowner can make a positive contribution; you can: <ol style="list-style-type: none"> <li>1. Keep your roof paint in good condition (to reduce the amount of zinc leaking into stormwater),</li> <li>2. Ultimately, choose a non-metal roof type,</li> </ol>			

## Submissions received on the draft Ōtākaro Avon SMP, February - April 2024

<p>3. Replace vehicle brake pads with non-copper or low-copper brake pads,</p> <p>4. Wash your car in a place where the dirty water runs onto a lawn</p> <p>5. Ensure that moss killers and exterior house surface cleaners do not run down the downpipe and into the stormwater network (although this may not be easy to achieve)</p>			
14186	<p>Goal 5.1 By 2025.. 'to enable the public to take action to stop contaminants at source'. Let's start today.</p> <p>"Community education" is going to be part of the solution. That's good as I have been awaiting exactly this education.</p> <p>Twice I have asked Council to report back on the weight of heavy metals that are released during the excessive fireworks displays over Hagley Park, The Avon and surrounding properties.</p> <p>Apparently, fireworks can contain Zinc, Copper, Lead, Titanium, Strontium, Aluminium, Lithium, Magnesium, Barium and Sodium.</p> <p>So far, Council has not replied to either of my requests as to how many kilos of each element has been released in the past six months. Or even just the total tonnage of fireworks released.</p> <p>It's great that Council has chosen to release some of the toxins directly into the ocean at the end of November, rather than firstly into the groundwater and stormwater systems. That saves it contaminating to our roofs, car and bicycle brake pads and tyres.</p>	<p>Walking my dog in Hagley Park, I have to watch that he doesn't chew on firework debris. Scattered to the four winds are plastic firework tubes and caps that he is very fond of chewing. He also likes the big (12cm across) charred cardboard fireworks balls. The clay plugs..not so much. I don't want him eating sharp plastic, but I guess the fall-out on the ground is just as bad.</p> <p>The debris gets cut up by the mowers and disappears into the turf. Out of sight, out of mind.</p> <p>Judging by the volume of spent fireworks cylinders and balls, I expect that North Hagley Park will qualify for your proposed list of contaminated industrial sites. Perhaps the topsoil on the playing fields should be removed?</p> <p><i>See submission attachment 14186</i></p>	Vanessa Merritt
<p><b>Staff response 14186</b></p> <p>The council does not have this information because it has not considered that the information needs to be requested from fireworks contractors. Among other things the byproducts released by fireworks would be thought to fall mainly onto land and to be adsorbed into soil. The information is likely to be difficult for any person in this country to obtain. The submission has been passed on to the Council's Events Team which contracts fireworks displays. The Events Team may contact you to discuss your information, or alternatively you may like to contact the Events Team. Fireworks will not be considered in the SMP because the contaminants are mostly not contaminants the council is required by consent conditions to deal with.</p>			
14322	<p>I'm assuming this is user error but I couldn't find the full SMP. So my comments may be covered. in the full document.</p> <p>I think the Flooding management and contamination control could be directly aligned (for certain contaminant sources). It's well known that planting can be used to help control contaminants, this may require special treatment of plant material, but it can also work as flood protection which would result in increase cost/benefit.</p> <p>Related, contamination control could also be used to guide types of verge plantings as well as roadway trees as they will help with air/soil contamination. I understand that will be in the investigation stage but think it's important to link the public's knowledge that certain plants help solve multiple problems. There is opportunity for community members to easily contribute with education.</p> <p>If it is wetland planting/removal of stopbanks it may also have a benefit on sea level rise.</p>		Carissa Ptacek



## Submissions received on the draft Ōtākaro Avon SMP, February - April 2024

	<p>I'd like to see the stopbanks removed and a more natural wetland network returned, this is likely to mitigation multiple future problems. It's likely if this approach is taken that an alternative for rowing would need to be provided to ensure buy-in from key stakeholders.</p> <p>For flood management is restricting build infrastructure being considered? Or an offset scheme? Increased footprints will impact the function of available floodplain which at a certain point will endanger older homes that were built to a now outdated flood level. Also it's unclear to me how the types of fencing used in NZ may impact the damage of flooding.</p> <p>I welcome more control on construction activities, but if there is no enforcement this is unlikely to improve sediment/contaminant control. Funding would need to be set aside for enforcement.</p>		
<p><b>Staff response 14322</b></p> <p>Flood management and contaminant control are aligned in greenfields developments where basins and wetlands serve both purposes. It is doing so in the Heathcote, Halswell and Styx catchments. Large facilities are more difficult to install in built-up areas. However, building densification near the city centre is in line with a Council strategy intended to keep the city centre alive, make efficient use of infrastructure and potentially to reduce vehicle use. Contaminants and increased stormwater runoff from intensifying areas will need to be managed. The Council is more likely to introduce offset scheme (i.e. flood storage elsewhere) than to restrict building development and intensification. A likely future strategy in the Avon catchment will be to obtain land within built-up areas and create new stormwater storage areas. Sediment control on construction sites is controlled via a Sediment Discharge Management Plan 2022. Inspectors and enforcement officers are being trained to maintain effective sediment controls.</p>			
14539	<p>Is any thought being given to controlling the ballooning numbers of Canadian Geese that are now in &amp; around the river in there hundreds especially with the redzone , there faeces cover the ground in these area's &amp; also local parks.</p> <p>They are a listed "pest" but it appears that no action is being taken to reduce the impact .</p>		Darryl Freeman
<p><b>Staff response 14539</b></p> <p>Faecal matter from geese does affect rivers but is judged not to be a component of stormwater and is not controlled by the Council's discharge consent. The Parks Unit works in co-operation with other organisations to manage Canada Goose populations in Christchurch. This mostly happens by rendering eggs non-viable with some targeted control of adult and immature birds. In most years more than 1000 are removed from the population, as well as a large number of eggs controlled in their breeding areas at larger wetlands. However large numbers of geese migrate to the city as part of their annual cycle. These originate from upcountry areas where there are fewer controls. Canada Geese are not listed as a pest; they would be easier to control if that were the case.</p>			
15324	<p>I doubt that public education on many of these issues would be as effective as working with designers, architects, garages, ie gatekeepers.</p> <p>Interesting that all the s not covered by the SMP/consenting requirements. So where is this issue dealt with?</p>	<p>Please integrate this SMP with the OARC plan and initiatives. The CCC staff at the briefing I went to had no idea what was in the OARC plan: doesn't anyone at CCC talk to people in other teams?</p>	Eric Pawson
<p><b>Staff response 15324</b></p> <p>Designers and architects get exposure to these matters through Council feedback and consent conditions on projects. However it is probably correct that a one-on-one approach could be more effective. The second part of your submission is unclear, sorry. The SMP is integrated quite well with the OARC Plan. The SMP plans for treatment facilities within the OARC and funded in the Council's Long Term Plan.</p>			
15376	<p>It is so important that we protect our river as it is one of the most important natural assets we have!</p>		Stephen East

## Submissions received on the draft Ōtākaro Avon SMP, February - April 2024

<b>Staff response 15376</b> Thank you for your submission			
15378	In principle I agree with the plan but I do not think it goes far enough, we have a biodiversity crisis in our waterway, this body of water starts at the fringe of the city and runs through the heart of the city we need to do better. Nothing has been done to manage the Urban pollutants, yes there has been work to manage the flooding in Flockton basin but we are still not seeing investment in the key management infrastructure for a number of years. There is no alignment with the work being done on the OARC which suggests that there is not a joined up approach and it does not appear to be much alignment with the LTP	Additional things I would like to see progressed with haste. Investment in greater compliance to fine the developers who are breaching the standards More funding and resources to support community groups doing the lions share of the work on riparian, rubbish collection and education More effective control of the Canadian Geese population Important Infrastructure to manage pollutants brought forward	Hayley Guglietta
<b>Staff response 15378</b> Thank you for your submission. There is a great deal to be done to improve ecological values and biodiversity in the city's waterways. The Council is aware of the need to reduce or capture urban contaminants and has assigned considerable funds toward that activity in the Long Term Plan. Water quantity and quality mitigation projects to a combined value of approximately \$100 million per year are installed. However it is agreed that the task is large and that some may consider that progress could be faster. The scope of SMPs has limits and it is the intention that other Council plans and activities should also contribute to healthy environmental outcomes. However, Council programmes over a wide range of activities are prioritised according to community wishes and values and funding constraints may mean that progress is slower than many would like. Funding priorities will result in many issues being addressed over a longer term than many would prefer.			
15379	Happy to see my money go towards stormwater quality improvement and indigenous ecosystem restoration initiatives across Ōtautahi. Great mahi with so many secondary benefits for our people and ecosystems. As long as our waterways are in a more degraded state than before people arrived here then there is work to be done.	While it would be challenging to achieve, I would love to see incentives for use/installation of residential stormwater treatment systems. People wash down cars, do home diy, cleaning with miscellaneous chemicals etc which all also contribute negatively. Many people want to do the right thing and periodically have the opportunity to re-landscape and install new treatment systems on their property.  Living next to the Ōtākaro, I'm very aware of the coarse (mainly plastic packaging) rubbish strewn through the river when Kayaking and walking alongside it. Would love to see greater control to limit the entry of this rubbish into the stormwater network.  Kia ora,  As a follow up to my submission, here is a photo I took in 2020 on the Ōtākaro highlighting the importance of minimising human waste entering the waterways. Tragic.  <i>See submission attachment 15379</i>	Sam Millar
<b>Staff response 15379</b> Thank you for your submission			
15398		- I think that to reduce the run off from large vehicles such as cars we should be prioritising more cycleways and active travel improvements which will get those vehicles off the road (reducing VKT) Not only that, but there are multiple other benefits to leading a more active lifestyle and reducing cars on the roads so this is a WIN - WIN - To manage flooding, we should be encouraging more rain barrels off roofs to reduce the amount of water heading into our storm water drains. Supporting local groups and funding/subsidising this by using the money that is being collected through the excess water charge would be a good start too. - Ensuring that businesses are doing the right thing by encouraging. Finding what we can	George Laxton

Submissions received on the draft Ōtākaro Avon SMP, February - April 2024

		do to encourage them to do the right thing, while still auditing too. - It is much cheaper to prevent contamination than to clean it up afterwards so the majority of our efforts should be in the prevention space (ie ambulance at the bottom of the cliff vs the guard rail at the top vs building and alternate route that doesn't go near the cliff edge...)	
<b>Staff response</b> 15398 Your submission presumably refers to research which suggests a close relationship between VKT and metals emitted from vehicles. Reducing the amounts of vehicular pollutant emissions is a desirable source control. The Council addresses this to a small extent by installing cycleways, as you will know. However, the SMP deals with contaminants mostly by planning for the treatment of stormwater. Rain barrels collecting roof runoff should divert contaminants onto land where they could be absorbed by soil. However small storage devices are generally not found to play a significant role in reducing flooding due to their limited capacity. It is agreed that controls at source are considered more effective than stormwater treatment.			
15393	looks like y'all have done the research, looks good, just please make more wetlands :)		Layling Stanbury
<b>Staff response</b> 15393 Thank you for your submission			



DOC-75687659

12 March 2024

Paul Dickson  
Drainage Engineer  
Christchurch City council  
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Email: [paul.dickson@ccc.govt.nz](mailto:paul.dickson@ccc.govt.nz)

Tena koe Paul

### **Comments on the Draft Ōtākaro-Avon Stormwater Management Plan**

Thank you for your emails dated 13 and 23 February 2024 and the opportunity to provide feedback on the “*Draft Ōtākaro-Avon Stormwater Management Plan*” (SMP). I note Christchurch City Council is also undertaking public consultation on the SMP at this time, so a copy of this letter has been emailed to the “LetsTalk” contact as well.

Department of Conservation (DOC) has no major issues with the draft SMP and provides the following high-level comments:

#### **1. Executive Summary (page 10)**

DOC supports in general the purpose of the SMP “*to reduce the adverse effects of stormwater discharges on surface water quality and quantity.*” However, DOC seeks that ‘groundwater’ is also included in the purpose statement so as to align with the aim of the Comprehensive Stormwater Network Discharge Consent (CSNDC) as stated in the second paragraph of Section 2.1 “Purpose and Scope” (Page 12):

*“The aim of the CSNDC is to limit the adverse effects of stormwater discharges on surface and groundwater quality and quantity.”*

#### **2. Surface Water Implementation Plan (SWIP) (page 12)**

DOC seeks that the Surface Water Implementation Plan (SWIP) aligns with the various ecological restoration initiatives that play an important part in the restoration and protection of biodiversity across Christchurch city. This includes the Ōtākaro Avon River Corridor.

#### **3. 6.4 Aquatic and Riparian habitat, 6.5 Aquatic Invertebrates and 6.6 Fish (pages 34-38)**

DOC acknowledges that there is a breadth of freshwater values that are of interest to DOC across the catchment, including Threatened and At Risk species of flora and fauna, as well as public conservation land. As such, DOC welcomes the continued engagement with the Council on any particular activities that may affect conservation values.

#### **Mahaanui Office**

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Sockburn 8443  
Christchurch

**4. 6.7 Actions to Improve Waterway Health (pages 38-39)**

DOC supports the comments from the ecological information reviewer and the suggested areas where further investment can be considered. As such, DOC considers that any ecological issues will be resolved at Council level through the engagement with Council's Principal Ecologist and Ornithologist with respect to the development of the protection and mitigation measures from indigenous freshwater values, including those of fish and bird habitats, etc. If there are any matters or outstanding issues that arise, DOC is happy to engage with the Christchurch City Council to help resolve these.

As a matter of courtesy, a copy of this letter has also been provided to Te Ngāi Tūāhuriri Rūnanga for their information.

Please contact Michelle Lambert, Ranger Lead Community, in the first instance if you wish to discuss any of the matters raised in this feedback (cellphone: [REDACTED] or email: [mlambert@doc.govt.nz](mailto:mlambert@doc.govt.nz)).

Naku noa, na

Andy Thompson  
Operations Manager, Mahaanui

cc. Samantha Smith  
Engagement Advisor  
Christchurch City Council  
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Avon-Heathcote Estuary Ihutai Trust



Draft Ōtākaro-Avon Stormwater Management Plan  
April 2024

Foreword

1. The Avon Heathcote Estuary Ihutai Trust (AHEIT, The Estuary Trust) is a charitable society registered in 2003. It was formed as a result of community requests for an organisation committed to environmental improvement and with representation from the community, statutory bodies, tāngata whenua and other agencies.
2. The vision of the Trust is -
- |                                   |                             |
|-----------------------------------|-----------------------------|
| Communities working together for  | Toi tū te taonga ā iwi      |
| Clean Water                       | Toi tū te taonga ā Tāne     |
| Open Space                        | Toi tū te taonga ā Tangaroa |
| Safe Recreation,                  | Toi tū te iwi               |
| and Healthy Ecosystems            |                             |
| that we can all enjoy and respect |                             |

General remarks

1. The Estuary Trust appreciates that within the Draft SMP the Avon-Heathcote Estuary/Ihutai is recognised as the receiving environment of the Ōtākaro-Avon River and that the reduction or capture of contaminants within the river catchment could improve the ecological state of the estuary.
2. The Trust congratulates the council in producing clear consultation documents. In particular we appreciated the tables on pages 10 to 13 in the summary publication “Korero Mai; Let’s talk about improving our waterways – The Draft Ōtākaro-Avon Stormwater Management Plan”.
3. The objectives (and goals and actions) as presented on page 82 to 90 of the full document are laudable and are all supported by the Trust. In addition, we have listed below ;
- a. specific new actions that the Council should undertake
  - b. or priorities for action.



## Specific Remarks

Our comments as below reflect the headings used in the consultation summary document (pages 10 to 13).

### Sediment

1. Sedimentation (the settlement of fine sediment particles to the seabed) as evidenced by the area of soft and very soft sediment (Hollever and Bolton-Ritchie, 2016) and the monitoring data (Berthelesen et al, 2022) is occurring within the estuary. Terrestrial sediment, monitored as TSS (total suspended solids), is a significant contaminant within the stormwater with multiple sources within the catchment (Draft SMP Table 5). There are also a range of potential TSS mitigation methods (Draft SMP Table 5) including catchpit filters and street sweeping. We note that these two mitigation measures provide good removal of sediment particles larger than 100 µm (sand size) (Draft SMP Table 6). However, it is the sediment particles smaller than 100 µm that settle and accumulate on the river and estuary bed that are contributing to their degradation in ecological health.

**We would like to see CCC investigate methods to minimise the quantity of sediment particles smaller than 100 µm being discharged via the stormwater into the freshwater within the Ōtākaro-Avon River Catchment.**

2. Construction sites (including housing) are a recognised source of the terrestrial sediment that gets into stormwater (Draft SMP Table 5). Based on personal observations of the efficacy of the erosion and sediment control measures that are put in place at these sites, these control measures leave a lot to be desired (even on flat land) especially as the state of them typically breaks down/declines through the period of construction.

**We would like to see CCC undertake frequent monitoring of the erosion and sediment control measures at all construction sites throughout the construction period.**

### References

- Berthelsen A, Clark D, Pavanato H. 2022. The sediments and biota within Te Ihutai/Avon Heathcote Estuary 2007-2021. Prepared for Environment Canterbury. Cawthron Report No. 3825. 89 p. plus appendices.
- Hollever, J. and Bolton-Ritchie, L. 2016. Broad scale mapping of the Estuary of the Heathcote and Avon Rivers/Ihutai. Environment Canterbury unpublished report.

### Zinc

We strongly suggest the Council

1. Seek ways to work with architects, designers and the building industry in general, to encourage the use of mitigation methods
2. Treat runoff from high-usage roads and other hard surfaces; this treatment may include using existing wetlands or creating new wetlands

### **Copper**

We strongly suggest the Council.

1. Be active in advocating for legislation to ban copper in brake pads.
2. Work with the automobile industry to encourage use of copper-free brake pads.
3. Treat runoff from high-usage roads and other hard surfaces; this treatment may include using existing wetlands or creating new wetlands .
4. Be active in advocating for legislation to reduce the contamination from copper roofs, cladding, spouting and downpipes.
5. Introduce rules in the District Plan to restrict copper roofs, cladding, spouting and downpipes, or at least to confine contaminants from those sources.

### **Pathogens/bacteria**

We strongly suggest the Council

1. Work with other agencies to reduce the number of non-indigenous waterfowl.
2. Continue improving waste-water networks so as to reduce overflows.

### **Other organic material**

We strongly suggest the Council

1. Work with other agencies to reduce the number of non-indigenous waterfowl

### **Nitrate and nitrite**

1. There is eutrophication in the Avon-Heathcote Estuary/Ihutai. The Ōtākaro/Avon and the Ōpāwaho/Heathcote rivers are a significant source of the dissolved inorganic nitrogen (DIN) concentrations within the estuary. While we acknowledge that the groundwater feeding the rivers has elevated nitrate concentrations, we note that CCC do not have data on the stormwater contribution of nitrogen (and phosphorus) to river water (SMP Table 5)

**We urge the CCC to quantify the stormwater contribution of nitrogen (from industrial and urban fertiliser sources) to the river.** Having such data could help with the long-term management of DIN concentrations in the river water and hence into the estuary.

Yours sincerely, Kit Doudney

Chair, Avon Heathcote Estuary Ihutai Trust

Contact details for the Estuary Trust are

[info@estuary.org.nz](mailto:info@estuary.org.nz) Cell phone; [REDACTED]

22 April 2024

Samantha Smith

Ōtākaro Avon Stormwater Management Plan

Christchurch City Council

*Feedback provided via email: [letstalk@ccc.govt.nz](mailto:letstalk@ccc.govt.nz)*

### Feedback on the Ōtākaro Avon Stormwater Management Plan

Kāinga Ora – Homes and Communities (“**Kāinga Ora**”), at the address for service set out below, thanks Christchurch City Council for the opportunity to submit on the **Ōtākaro Avon Stormwater Management Plan “Ōtākaro Avon SMP”**). This letter provides the substantive detail of Kāinga Ora’s submission on the **Ōtākaro Avon SMP**.

### Background

1. Kāinga Ora was established in 2019 as a statutory entity under the Kāinga Ora-Homes and Communities Act 2019 and is required to give effect to Government policies. Kāinga Ora has two core roles:
  - a) Being a world class public housing landlord; and
  - b) Leading and co-ordinating urban development projects
2. Kāinga Ora’s statutory objective requires it to contribute to sustainable, inclusive, and thriving communities that:
  - a) Provide people with good quality, affordable housing choices that meet diverse needs; and
  - b) Support good access to jobs, amenities and services; and
  - c) Otherwise sustain or enhance the overall economic, social, environmental and cultural well-being of current and future generations.
3. Kāinga Ora is focused on delivering quality urban developments by accelerating the availability of build-ready land, and building a mix of housing including public housing, affordable housing, homes for first home buyers, and market housing of different types, sizes and tenures.
4. Kāinga Ora owns or manages approximately 63,800 properties throughout New Zealand comprising of rental properties, community group and transitional housing.

5. Despite consenting several hundred new dwellings in the past three years in Christchurch City, the current wait list in Christchurch continues to grow and there are now approximately 1,998 applicants<sup>1</sup>. Christchurch City is identified as an area to reconfigure and grow Kāinga Ora's housing stock to provide efficient and effective public and affordable housing that is aligned with current and future residential demand in the area, and the country as a whole.
6. In terms of its role as a public landlord, there has been a marked change in the type of housing that is required by Kāinga Ora's tenant base:
  - a) Demand in particular for the Christchurch City area has increased for apartments, terraced housing and for single and 2 bedroom housing required for single persons/couples. Currently the demand for a 1 bedroom typology sits at 62% of the waiting list total. The demand for a 2 bedroom typology sits at 23% of the waiting list total<sup>2</sup>. This means that some 85% of wait list demand is for 1-2 bedroom units.
  - b) As a result, the size of many public houses does not match the changing demand for public housing, with a large proportion of the Kāinga Ora's current housing typologies comprising of 3-4 bedroom homes on large lots; this can be too large for smaller households and potentially considered not fit for purpose for some tenants.
7. As such, in addition to its role as a public housing provider, landowner, landlord, rate payer and developer of residential housing, Kāinga Ora will play a greater role in urban development more generally. The legislative functions of Kāinga Ora illustrate this broadened mandate and outline two key roles of Kāinga Ora in that regard:
  - a) Initiating, facilitating and/or undertaking development not just for itself, but in partnership or on behalf of others; and
  - b) Providing a leadership or coordination role more generally.
8. Notably, Kāinga Ora's statutory functions in relation to urban development extend beyond the development of housing (which includes public housing, affordable housing, homes for first home buyers, and market housing) to the development and renewal of urban environments, as well as the development of related commercial, industrial, community, or other amenities, infrastructure, facilities, services or works.
9. Kāinga Ora is interested in all issues that may affect the supply and affordability of housing and has a shared interest in the community as a key stakeholder, alongside local authorities. These interests include:
  - a) Minimising regulatory barriers that constrain the ability to deliver housing development;
  - b) The provision of public housing to persons who are unable to be sustainably housed in private sector accommodation;
  - c) Leading and co-ordinating residential and urban development projects;
  - d) The provision of services and infrastructure and how this may impact on Kāinga Ora's existing housing, planned residential and community development and Community Group Housing ("CGH") providers; and

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<sup>1</sup> As at December 2023

<sup>2</sup> As at March 2022

- e) Working with local authorities to ensure that appropriate services and infrastructure are delivered for its developments.

#### Outline of Submission on the Ōtākaro Avon SMP

10. Kāinga Ora thanks the Council for the opportunity to provide submission on the **Ōtākaro Avon SMP**.
11. In particular, Kāinga Ora supports:
  - a) The Council's goals to reduce contaminants entering waterways and improve the ecological health of waterways within the Ōtākaro Avon Catchment.
  - b) The recognition in the Ōtākaro Avon SMP of the importance of the cultural values associated with the Ōtākaro Avon Catchment.
  - c) The Council's goal to improve the management of stormwater across the city and agrees that effective stormwater management is an important tool in managing flood risk.
  - d) Continued reference, and use of the Christchurch City Council's 'Onsite Stormwater Mitigation Guide'.
12. Kāinga Ora has some concerns, and would like to work with Council further on:
  - a) Management options for specific contaminants.
  - b) Preference for on-site attenuation. Generally, all stormwater management options should be considered on comprehensive development sites, and the best solutions are selected as appropriate to that site.
  - c) Practicalities around the establishment of stormwater basins on non-Council land by developers (including Kāinga Ora), in relation to ECan's approach to groundwater/ stormwater basins.
13. The aspects of the **Ōtākaro Avon SMP** that Kāinga Ora does not support relate specifically to the extent of the 13km Bird Strike Management Area shown in Figure 12 of the **Ōtākaro Avon SMP**. Kāinga Ora notes that the 13km radius includes multiple waterways such as the Waimakariri River, The Groynes, Brooklands Lagoon, Travis Wetland, Council Oxidation Ponds, Heathcote River, Ōtākaro Avon River and the Heathcote/ Ōtākaro Avon Estuary. These are large waterbodies where there is significant bird life already. Kāinga Ora does not consider that smaller scale stormwater basins or stormwater management areas on development sites alongside these existing significant water bodies would materially increase the risk of bird strike overall. In light of this the effectiveness of the current practice of imposing onerous bird strike management conditions for stormwater basins should be reviewed.
14. Recently, Kāinga Ora has received conditions on a subdivision consent (where a stormwater basin was being constructed) relating to bird strike for a development located in Opawa, some 12km from the airport and in close proximity to both the Heathcote River and Avon Heathcote estuary. It is the view of Kāinga Ora, that conditions to manage bird strike in suburbs such as Opawa are both unnecessary and overly restrictive. The reasons for this are outlined in (13) above.
15. Overall, Kāinga Ora is supportive of the approach taken in the **Ōtākaro Avon SMP** and want to work with Council on the issues discussed in paragraphs 12-14.



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16. Should you have any questions in relation to the matters outlined above, please do not hesitate to contact me.

Dated 22/04/2024

**Brendon Liggett**

Manager – Development Planning

National Planning, Urban Design and Planning Group

**Kāinga Ora – Homes and Communities**

**ADDRESS FOR SERVICE:**

*Kāinga Ora – Homes and Communities*

*PO Box 74598, Greenlane, Auckland 1546*

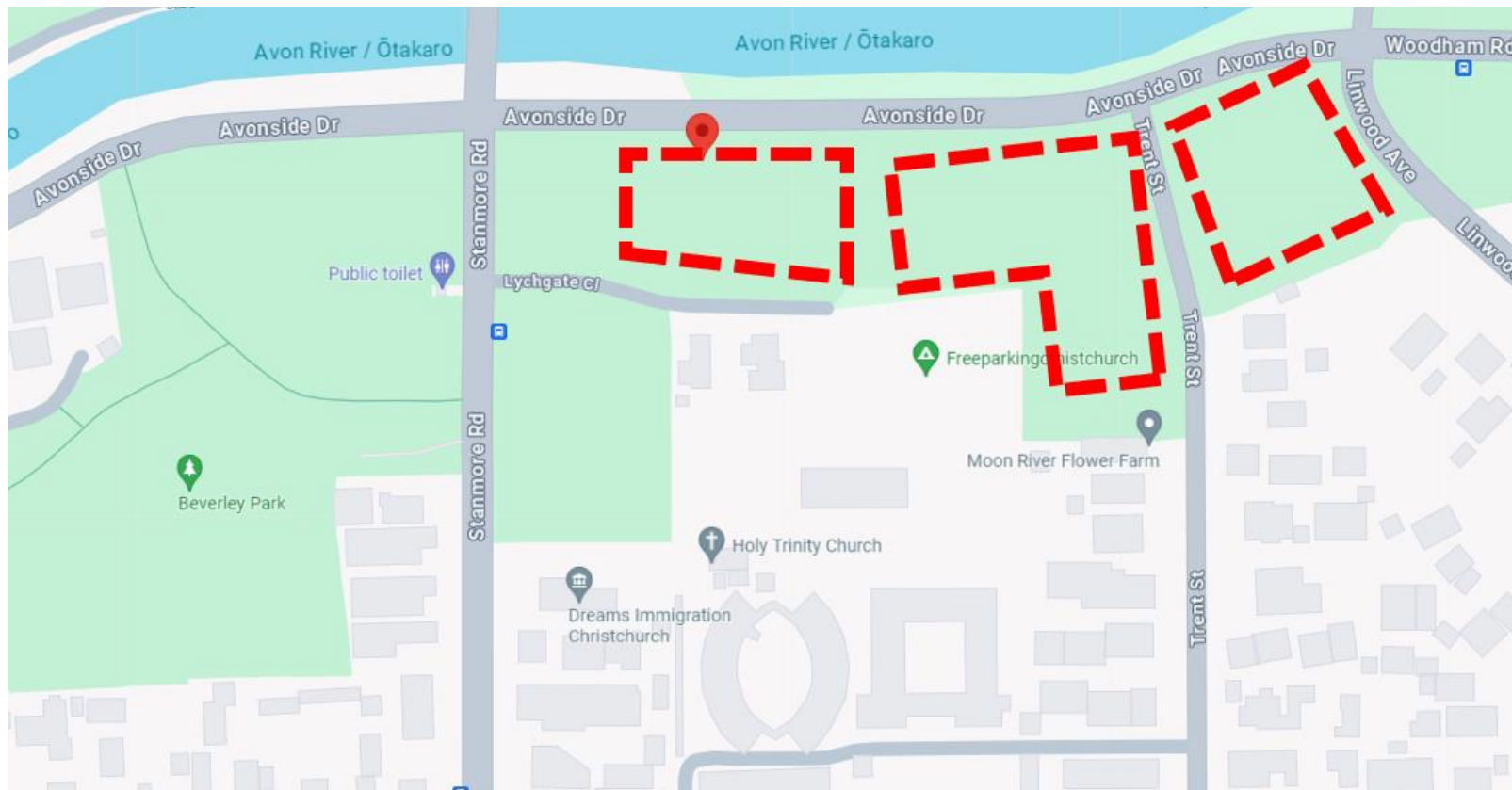
*Email: [developmentplanning@kaingaora.govt.nz](mailto:developmentplanning@kaingaora.govt.nz)*



## Submission to the Otakaro Avon Stormwater Plan

By: Greg Partridge, Richmond, Christchurch

The CCC have proposed to construct stormwater detention ponds on the southern side of Avonside Drive, between Stanmore Road and Linwood Avenue, as indicated approximately by the red dotted shapes on the following map, according to Council information.



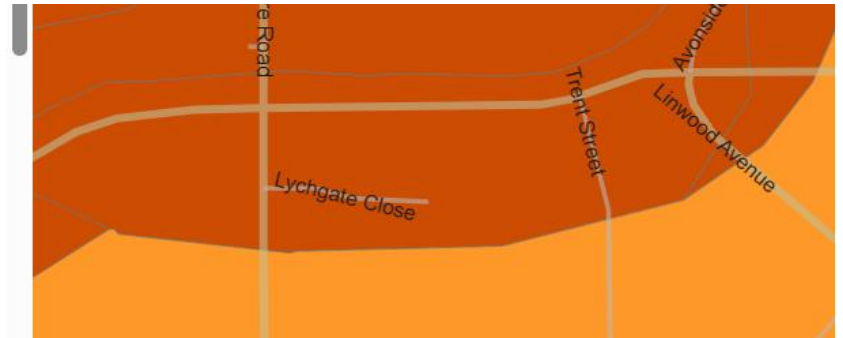
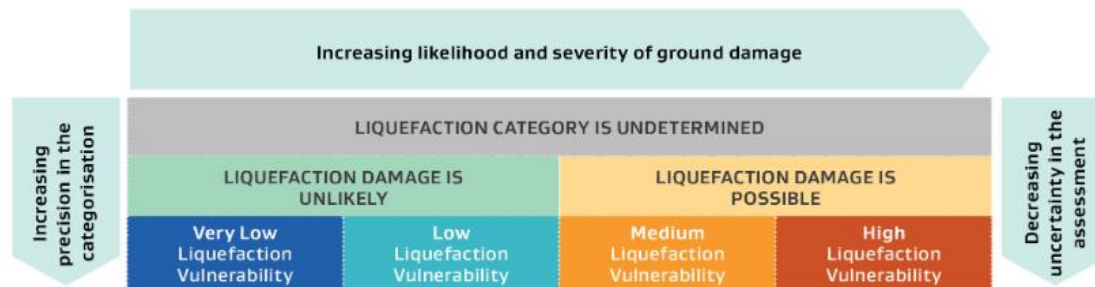
## Submission attachment 10004

The land beneath the earmarked location for these ponds has however, as you can see in the following map where it is a dark orange colour, has been identified as being of **High Liquefaction Vulnerability** and of **increased likelihood and severity of ground damage**.

For reference purposes, the Christchurch Liquefaction Information map from which this information was sourced, was compiled by Tonkin + Taylor, and it was commissioned by the Christchurch City Council.

For reference the Christchurch Liquefaction Information map can be readily accessed through:

- the following link [Christchurch Liquefaction Information \(canterburymaps.govt.nz\)](http://canterburymaps.govt.nz)
- or via the website <https://apps.canterburymaps.govt.nz/ChristchurchLiquefactionViewer/>



Situating the stormwater detention ponds, or other Council owned infrastructure on this type of land, fully exposes the Council to future financial risk.

In addition to that, constructing detention ponds on the indicated land, which again has been currently earmarked by the CCC for that purpose, will result in numerous established trees and shrubs being clear-felled or removed at considerable expense to Christchurch Rate Payers, and be detrimentally costly to the natural environment.

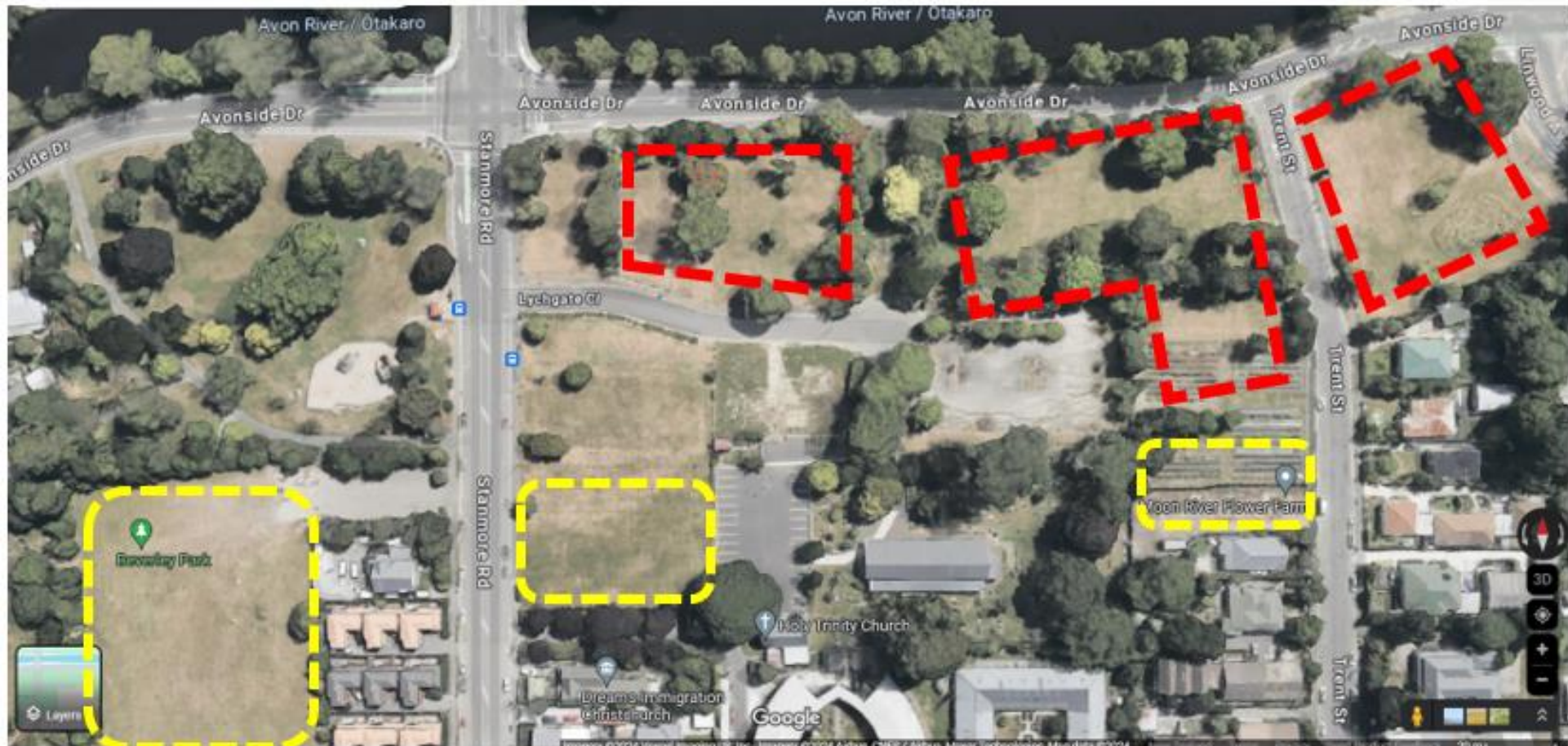


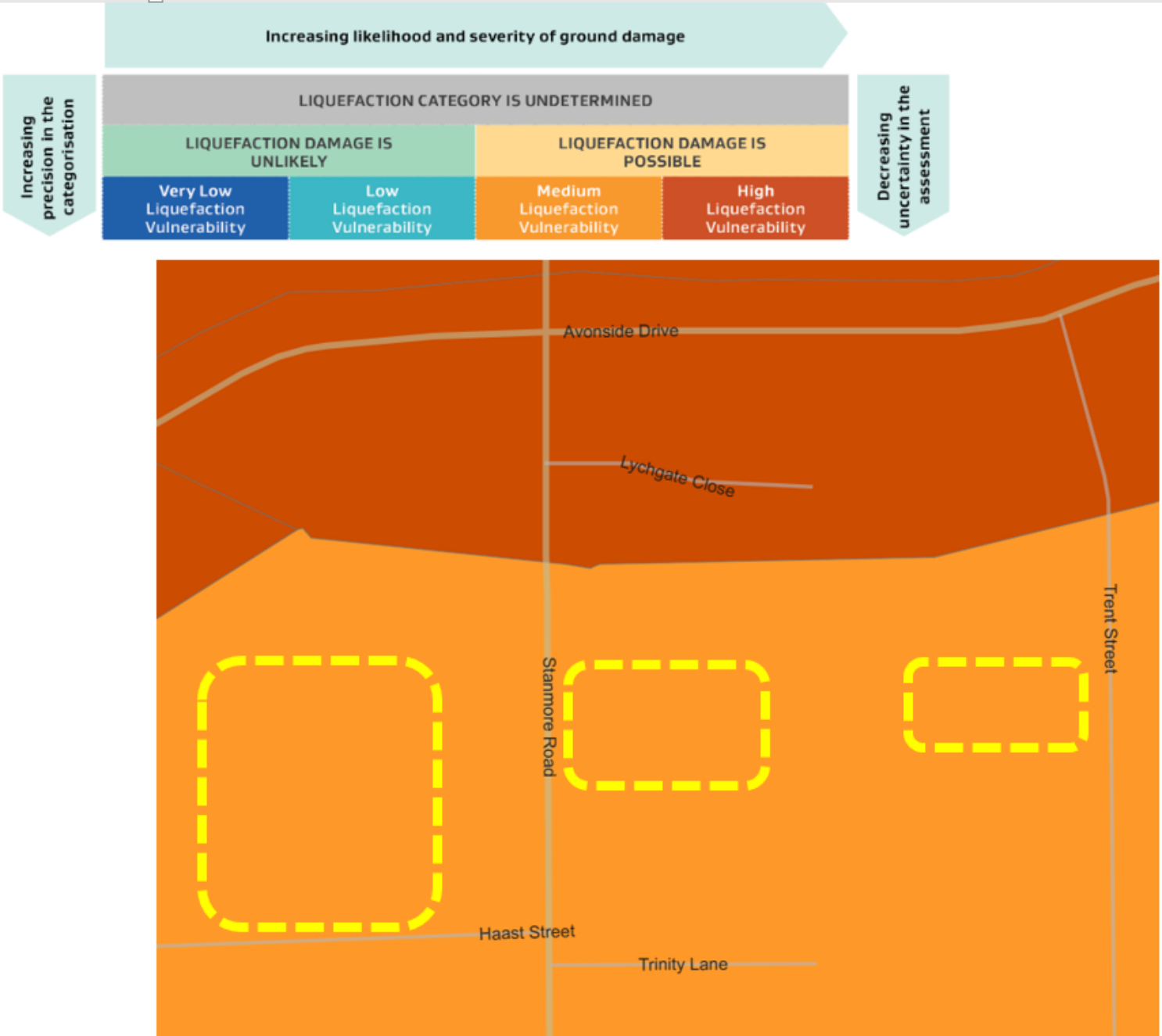


## Submission attachment 10004

In order to avoid future financial risk to the Council, and to retain the existing tree canopy coverage of the area, there are several viable alternative locations for the stormwater detention ponds to be located quite nearby, as demonstrated with the three yellow rectangles depicted on the following map.

Not only are these locations blocks of land publicly owned but they are completely barren of existing trees. In addition to that, as you can see on the map on the Christchurch Liquefaction Information Map on the following page, the land has been identified as being of only medium risk to liquefaction vulnerability, meaning there is less likelihood and severity of ground damage, therefore minimising the financial risk to which the CCC would be exposed as well as possible damage to the stormwater detention ponds in future seismic events, of which Christchurch is vulnerable.

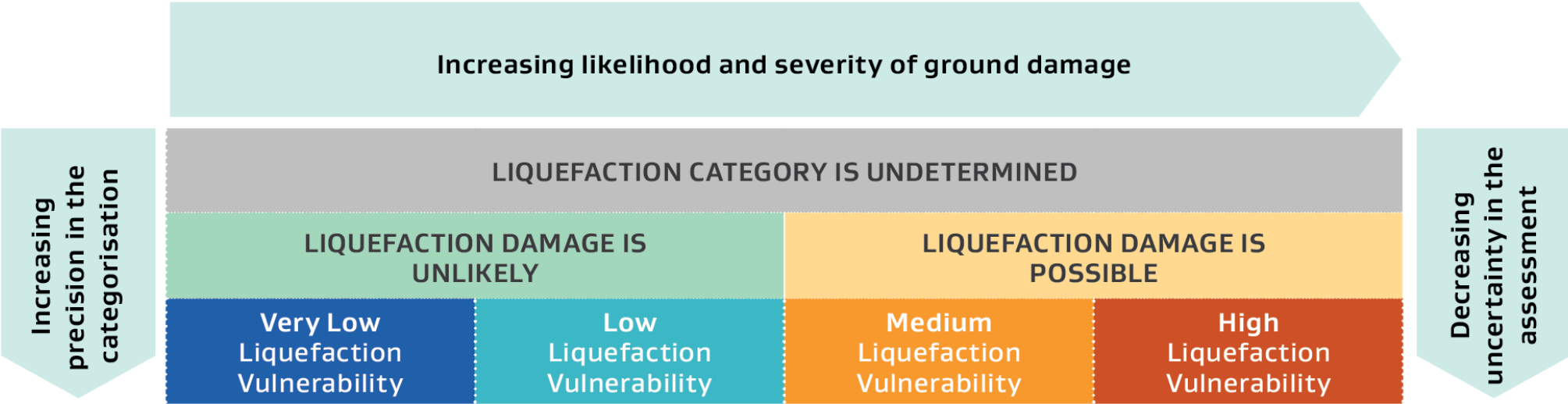




Plan indicating alternative, and arguably environmentally better locations for stormwater detention ponds to be situated that expose the CCC to less financial risk.

In relation to the Christchurch City Council commissioned Tonkin + Taylor Liquefaction Vulnerability Map, it is important to note that it follows the most recent national liquefaction guidance.

The map uses the seven categories shown in the table below to describe the vulnerability of the land to liquefaction-induced damage. As well as describing the likelihood and severity of ground damage, the categories also show where there is more or less certainty about the ground conditions. For example, in some areas there is enough information to distinguish between areas of “Medium” and “High” vulnerability. But in other areas where there is less information it might only be possible to conclude that “Liquefaction Damage is Possible”. When more detailed information becomes available in future (e.g. new ground investigations), this might show that the actual vulnerability is “Medium” or “High”, or in some cases perhaps even “Low”.



There was already a substantial amount of previous information available about the liquefaction hazard in Christchurch, and the results of this latest assessment broadly align with what was previously known. This updated map makes improvements to the previous understanding of liquefaction vulnerability by:

- Analysing the extensive collection of ground investigation data now available on the New Zealand Geotechnical Database.
- Using observations of land damage caused by the Canterbury earthquakes to help calibrate predictions of future land damage.
- Drawing on improved scientific understanding for analysis of liquefaction triggering and the resulting consequences.
- Using the improved geology and groundwater maps that are now available, to better define areas of similar land performance.
- Providing coverage of the entire Christchurch City territorial land area.
- Using the consistent framework from the new national guidance to standardise the assessment methodology.

## Submission attachment 10004

It is important that the Christchurch City Council give serious consideration to these facts, and to not put its financial stability, nor publicly owned infrastructure at risk when it can be avoided unnecessarily at risk.

I support the aspiration of the CCC to improve the Stormwater Management Plan for the Otakaro Avon River catchment, but I do not agree with the exposing itself or publicly owned infrastructure which is yet to be constructed, at risk, therefore do not construct the stormwater detention ponds along Avonside Drive on land that is susceptible to high liquefaction vulnerability.

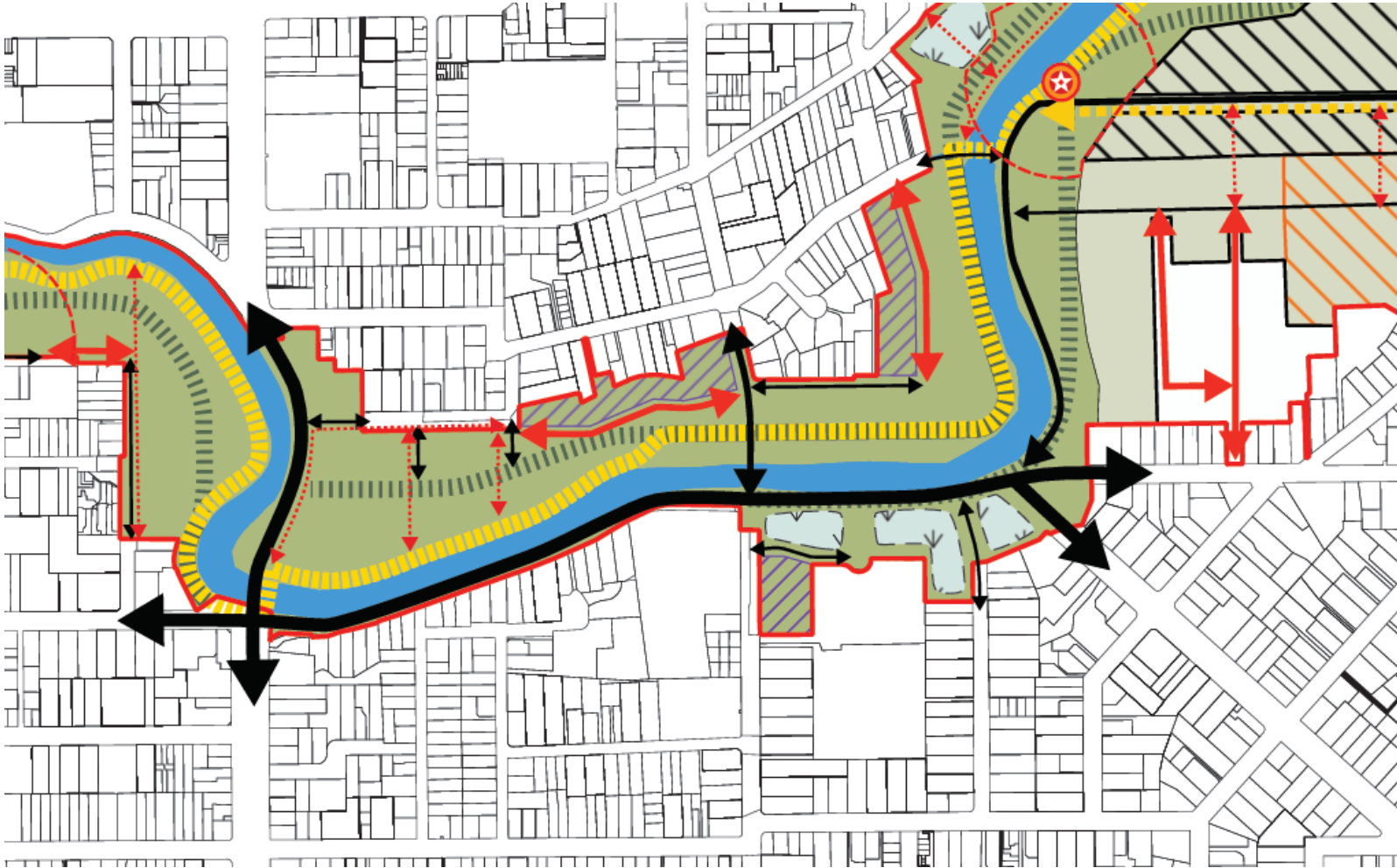
I also wish to point out that if the CCC are wanting to adhere to the Community Outcomes and the Councils Strategic Framework of wanting to protect and regenerate the environment, especially our water bodies and tree canopy, the Council should not be constructing the proposed Stormwater detention ponds on the land currently earmarked by the Council due to the fact it will result in established trees being felled when there is vacant, barren publicly owned land within very close proximity on which the stormwater detention ponds could be constructed without any further reduction of the existing tree canopy cover of the area.



# Community Outcomes and Strategic Framework

A green, liveable city	<p>Our neighbourhoods and communities are accessible and well-connected, supporting our goals to reduce emissions, build climate resilience and protect and regenerate the environment, especially our biodiversity, water bodies and tree canopy.</p> <p>What this means for our district:</p> <ul style="list-style-type: none"><li>• We have well-connected communities and neighbourhoods: Our city is designed so people can take fewer and shorter trips to access goods and services and have access to safe and reliable low-emission travel choices.</li><li>• We reduce emissions: Christchurch has net zero emissions by 2045.</li><li>• We build climate resilience: We understand and are preparing for the ongoing impacts of climate change; we have a just transition to an innovative, low-emission economy.</li><li>• Biodiversity is supported: Ecosystems supporting biodiversity are protected and restored.</li><li>• We improve the water quality of water resources to protect ecosystem health and provide for contact recreation, food gathering, mahinga kai and cultural values.</li><li>• Our urban forest thrives with healthy, diverse and resilient trees.</li></ul>
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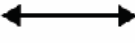


## CCC's proposed plan for the Otakaro Avon River Corridor







Key on the following page

KEY

	Development Plan boundary
	Open Space Community Park Zone
	Water bodies
	Stormwater Management Areas *
	Green Spine
	Ōtākaro Loop Reach
	Horseshoe Lake Reach
	Eastern Reaches
	No change to zoning

	City to Sea Path ***
	Proposed new roads
	Proposed new road and bridge
	Indicative pedestrian/cycle linkages
	Indicative cycle commuter linkage
	New pedestrian/cycle bridges (accessible)
	Existing State Highway 74
	Potential road linkage
	Existing minor arterial
	Existing collector road
	Existing local roads **
	Stopbank ***

OVERLAYS

	Activity Area
	Trial Housing Area
	Edge Housing Area
	Landing

\* Indicative size and shape.  
\*\* These are the minimum number of local roads that are required to be retained. Others may also be retained.  
\*\*\* Indicative alignments.







**Written Submission on Draft Ōtākaro Avon Stormwater Management Plan**

**To: Christchurch City Council**

- 1. Name of submitter:** Christchurch International Airport Limited (“CIAL”)
- 2. This is a submission on the** Draft Ōtākaro Avon Stormwater Management Plan (Draft OASMP) 2024.
- 3. Submitter Details:**

Christchurch International Airport Limited  
PO Box 14001,  
Christchurch 8544.

Attention: Jesse Aimer, Senior Environment and Planning Advisor.

Phone: [REDACTED]

Email: jesse.aimer@cial.co.nz

Signature:

Dated: 17 April 2024.



## **Introduction**

CIAL owns and operates Christchurch International Airport (Christchurch Airport). Christchurch Airport is the largest airport in the South Island and the second largest airport in New Zealand. It connects Canterbury and the wider South Island to destinations in New Zealand, Australia, Asia and the Pacific. Accordingly, it has national, regional and district social and economic significance.

Just under seven million travelling passengers and their associated “meeters and greeters” passed through Christchurch Airport annually prior to the Covid-19 pandemic. In 2022, Christchurch Airport had 4.6 million passengers, most of which were domestic passengers, as the recovery of international travel only started in the second half of 2022 with the reopening of New Zealand’s borders. All projections are that pre-pandemic numbers will return to Christchurch Airport.

Over 9,000 people are employed on the Christchurch Airport campus in full-time, part-time or casual roles, making it the largest single centre of employment in the South Island. Christchurch Airport also facilitates various non-passenger services, including as the primary freight hub for the South Island, playing a strategic role in New Zealand’s international trade as well as the movement of goods domestically. Airfreight is becoming increasingly important due to decreased viability, considerable delays and record high prices associated with land transport.

CIAL welcomes the opportunity to submit on the Draft Ōtākaro Avon Stormwater Management Plan.

## **Summary of Key Submission Points**

Christchurch International Airport Limited’s interests within the area of land covered by the Draft Ōtākaro Avon Stormwater Management Plan (draft OASMP) relate to consideration of bird strike in the planning for, and specific design of, stormwater management basins within the area covered by the draft OASMP. CIAL is supportive of the references to bird strike within the Plan, and is appreciative of the ongoing dialogue between CCC and CIAL in respect of bird strike issues.

Given the location of the Ōtākaro Avon catchment directly underneath the flight path of departing and arriving aircraft to Christchurch Airport, CIAL has a particular interest in ensuring that bird strike risk is effectively managed. The key relief that CIAL seeks on the draft OASMP is:

1. Recognition of the bird strike risk within the catchment
2. Specific reference to bird strike be made in the objective and policy framework.
3. The inclusion of bird strike risk within the summary document (if this is intended to be available post completion of the final management plan).

A table setting out the full package of relief sought by CIAL is set out in **Appendix A**.

CIAL considers that the Plan is an important tool for educating and informing persons undertaking stormwater management within the Ōtākaro Avon catchment of bird strike risk and how it can be avoided or mitigated appropriately. CIAL also sees the OASMP as providing a pathway whereby CIAL can work with CCC and landowners/ developers to address this issue. It considers that this is particularly critical given the number of treatment facilities proposed within the catchment.

Overall, CIAL strongly supports the recognition of bird strike within the draft SMP.

CIAL wishes to acknowledge CCC for recognising the importance of including information and design guidance to raise awareness, and reduce the risk, of bird strike in the stormwater management plans that have been developed for the various catchments within the City.

## **Bird Strike**

### *Introduction*

Bird strike is defined in the Christchurch District Plan as when a bird or flock of birds collide with an aircraft. This can cause damage to the aircraft, which compromises safety and, in many instances, forces an emergency landing.

It is of concern in the Ōtākaro Avon catchment, as the majority of the catchment falls within the 3km, 8km and 13km radii from the airport runway thresholds.

#### *Bird Strike Risk*

Bird strike risk is increased by flocks of birds flying across flight paths between different parts of the city. Birds fly across the city every day between roosting areas, feeding areas, and areas of standing water. The more activities / sites near the Airport that attract birds, the more likely it is that birds will fly across flight paths between these activities / sites and increase the risk that bird strike will occur at or near the Airport. New activities which will attract birds may need to be managed to ensure that they will not increase bird strike risk at the Airport. There are three main elements to how an off-airport bird attracting land use contributes to strike risk:

- a) *Identification of air space aircraft share with bird (3, 8 and 13km radii)*
- b) *Identification of high – risk bird species (size and behaviour of species), and*
- c) *Identification of where there is potential for collision with aircraft.*

Given the location of the catchment directly within flight paths, planes and birds in this area will share airspace. Therefore, it is critical for the safety and function of CIAL's operations that bird strike risk within the Ōtākaro Avon catchment is managed appropriately, and any risk is avoided and minimised as far as possible.

The CAA data (which includes a review and update to include CIAL's records) shows monthly strikes and near strikes at CIA from 2013 to June 2021. Statistics for the three years ending 31 December 2020 indicate that Christchurch has higher levels of bird strike than Auckland or Wellington airports<sup>1</sup>.

#### *Management of Bird Strike Risk*

Bird strike is a significant safety risk which requires diligent management and CIAL collaboration with local government and surrounding landowners. CIAL has a responsibility (including legal duties as in CAA Rule 139.71) to provide a safe airport operating environment and therefore must actively work to minimise the threat and incidence of bird strike around Christchurch Airport as well as on the airfield and land controlled by CIAL. Bird strike that occurs, for example through the creation of water bodies, refuse dumps, landfills, sewage treatment and disposal and agricultural activities, will affect the ability of CIAL to provide this safe environment.

The Council is required under the CSNDC to manage bird strike risk. Condition 28 of CRC 231955 states:

*'To ensure the risk of bird strike is minimised, the following design requirements shall apply to facilities within 3 kilometres of Christchurch International Airport:*

- a) *Stormwater infiltration basins shall fully drain within 48 hours of the cessation of a 2% AEP stormwater event;*
- b) *Sufficient rapid soakage overflow capacity shall be provided to minimise the ponding of stormwater outside of the infiltration area(s); and*
- c) *Landscape design shall limit attractiveness to birds through the use of suitable nonbird attracting species.*

Condition 6 of this consent, which prescribes the purpose of Stormwater Management Plan (SMP's), requires Council to *'Implement the conditions of this consent as they apply to each catchment'*.

CIAL consider that Condition 28 expressly requires CCC, through this SMP, to ensure that the risk of bird strike is minimised through appropriate acknowledgement and reflection of Condition 28.

In addition, Condition 7 of the consent requires that SMPs shall include, but not be limited to, the information set out in Schedule 2. Schedule 2(t) states *'Procedures, to be developed in consultation with Christchurch International Airport Limited, for the management of the bird strike for any facility owned or managed by Christchurch City Council within 3 kilometres of the airport'*.

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<sup>1</sup> Evidence of F Blackmore, Hearings on Proposed Selwyn District Plan, September 2021.

### *National Airports Safeguarding Framework*

The Australian Government has developed a National Airports Safeguarding Framework (NASF)<sup>2</sup> which is considered to be the most comprehensive guide to incompatible land uses around airports. This categorises land use types into wildlife attraction risk categories (high, moderate, low and very low) and determines actions (incompatible, mitigate, monitor, no action) for existing and proposed developments within radial distances from the aerodrome (3, 8 and 13kms).

The 13-km circle was originally based on a statistic that 95% of bird strikes occur below 2,000 ft, and that an aircraft on a normal approach would descend into this zone at approximately 13-km from the runway. An assumption was made that birds would remain overhead the attraction (at up to 2,000 ft) and that overflying aircraft would be at risk. In essence, this only looks at the site risk which is only one of the three elements of an off-airport hazard. Like the site risk, the flight path risk will generally become greater the closer the bird attracting habitat is to the airport<sup>3</sup>. CIAL considers that the NASF guidelines provide appropriate guidance for the management of the risk of bird strike.

To this extent, the CCC District Plan includes specific planning provisions to assist with managing off airport bird strike risk. CIAL has also worked with an Ecologist with Ornithological expertise in birdstrike risk management and with CCC in the development of a CCC internal practice note which is intended to provide assistance to planning staff and application of the birdstrike provisions within the CDP. It outlines the need, and how to consider bird strike when processing applications within proximity of CIAL, for the types of land uses that have the potential to create or increase bird strike risk.

### **Conclusion**

CIAL consider it an integral part of its function to be involved in matters relating to bird strike risk in a strategic manner, to ensure the development of land uses (such as stormwater retention basins) in specific areas are designed in such a way as to limit attractive habitat to birds. CIAL are happy to work with CCC and landowners/ developers in this area to manage any bird strike related risks appropriately.

CIAL supports the recognition of bird strike within the draft SMP.

### **CIAL's Detailed Submission**

CIAL's detailed submission is contained as **Appendix A**.

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<sup>2</sup> DIRD [Department of Infrastructure and Regional Development, Australian Government] (2012) NASF Guideline C. [https://www.infrastructure.gov.au/aviation/environmental/airport\\_safeguarding/nasf/nasf\\_principles\\_guidelines.aspx](https://www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/nasf_principles_guidelines.aspx) Accessed 19/7/21 (as referred to in the evidence of P Shaw, referenced above).

<sup>3</sup> Source: Extracts of Evidence of P Shaw, Hearings on the Proposed Selwyn District Plan

## Appendix A: CIAL's Detailed Submission

Text changes to the draft OASMP (Draft Ōtākaro Avon Stormwater Management Plan) sought as part of this submission are shown as **strikeout** for text to be deleted and **bold underlined** for text to be added. CIAL also request that any other related and appropriate amendments are made to the Plan to give effect to this request.

Chapter / provision	CIAL's reasons for submission	Relief sought
Overall	CIAL is a nationally significant facility located within the area covered by the provisions of the draft OASMP. CIAL acknowledges and is supportive of the recognition of bird strike, which is an issue which has the potential to affect the safe and efficient operation of the airport and the aircraft which utilise this. The majority of the catchment falls within the 8 or 13km radii of the airport runway threshold, with some also falling within the 3km radii. CIAL requests that the references to bird strike within the Plan are further extended to provide clarity and consistency for plan users.	Retain and expand upon references to bird strike within the Plan.
Terminology/ abbreviations	The Plan does not contain any reference to bird strike in the terminology/ abbreviations. This is inconsistent with the recent SMPs, such as the Pūharakekenui Styx SMP.	Include the term <b><i>'Christchurch International Airport Bird Strike Management Areas'</i></b>
Executive Summary	CIAL request that specific reference is made to bird strike in the Executive Summary to the document.	Add a new fourth paragraph to the Executive Summary as follows:  <b><u>'Considered design of stormwater facilities, as per Appendix I, within the identified Bird Strike Radii is required to ensure that these do not increase the risk of bird strike for aircraft use associated with Christchurch International Airport'.</u></b>
7 Land Use 7.1 Present Situation	CIAL requests that an acknowledgement of the location of the catchment within the 13km radii from the airport runway thresholds to acknowledged. It considers that this will aid in placing the bird strike issue in context. This would ensure consistency with section 12.2 and Figure 12, which reference the 13km radii.	Add the following sentence to the end of 7.1 Present Situation:  <b><u>'The catchment is located within the 13km radii of the airport runway thresholds'.</u></b>
Treatment Facilities 12.1 New facilities sizing and land contamination	CIAL requests that an additional sentence be added at the end of this section referencing the requirement to consider bird strike risk when designing new bird strike facilities.	Add a sentence at the end of section 12.1 stating:  <b><u>'Specific consideration should also be given to design requirements of such facilities to ensure that the risk of bird strike is minimised (see section 12.2 below)'.</u></b>
Treatment Facilities	CIAL strongly supports the inclusion of section 12.2 of the Plan. CIAL supports the reference to the importance of considering bird strike risk for	Retain section 12.2.

Chapter / provision	CIAL’s reasons for submission	Relief sought															
12.2 Designing basins to minimise bird-strike on aircraft	<p>any new stormwater basin within the 13km radii, and the recommendation that persons developing stormwater facilities within 13km of airport runway thresholds consult with CIAL.</p> <p>There is a minor error reference to the bird strike guidelines in the Plan – the section refers to an incorrect Appendix number within which the guidelines are contained.</p>	Amend the second to last sentence of the last paragraph of Section 11.6.2 as follows: ‘Guidance Material is contained as Appendix <u>H</u> ’.															
Figure 12 Bird Strike Management Zones	<p>CIAL supports the inclusion of the bird strike management guidelines in Figure 12. However, it requests that the 8km radii is also included in Figure 12.</p> <p>CIAL also notes that the text box containing the description of the 3km radii obscures part of the image showing the Ōtākaro Avon catchment, and request that this be moved to the right of the image to ensure that the Figure is user-friendly.</p>	<p>Add the 8km radii into Figure 12.</p> <p>Ensure that the text box descriptions of the radii do not obscure any part of the image within the Ōtākaro Avon catchment.</p>															
Appendix H	CIAL strongly support the inclusion of bird strike guidelines within the Plan.	Retain Appendix H.															
Section 13 – Plan Objectives New objective	CIAL consider that the bird strike provisions of the plan should be reinforced by the inclusion of an objective relating to bird strike.	<p>Add a new Objective 8 as follows:</p> <p><b><u>‘Our goals are</u></b></p> <p><b><u>1. To minimise the potential risk of bird strike to aircraft through consideration of the location and design of stormwater facilities.</u></b></p> <p><b><u>2. To collaborate with CIAL to ensure that (1) is achieved’.</u></b></p> <table border="1"><thead><tr><th colspan="5">Action Plan for Bird Strike</th></tr><tr><th>Goal</th><th>Action</th><th>Mechanism</th><th>Action Components</th><th>Timing</th></tr></thead><tbody><tr><td>8.1</td><td>Promotion of bird strike guidelines</td><td>Inclusion of guidance notes.  Referral of matters relating to stormwater facility design within 13km</td><td>Keep records of stormwater basins developed within catchment area.</td><td>Immediate and ongoing</td></tr></tbody></table>	Action Plan for Bird Strike					Goal	Action	Mechanism	Action Components	Timing	8.1	Promotion of bird strike guidelines	Inclusion of guidance notes.  Referral of matters relating to stormwater facility design within 13km	Keep records of stormwater basins developed within catchment area.	Immediate and ongoing
Action Plan for Bird Strike																	
Goal	Action	Mechanism	Action Components	Timing													
8.1	Promotion of bird strike guidelines	Inclusion of guidance notes.  Referral of matters relating to stormwater facility design within 13km	Keep records of stormwater basins developed within catchment area.	Immediate and ongoing													

Chapter / provision	CIAL's reasons for submission	Relief sought				
				radii of airport runway threshold to CIAL.	Provide records to CIAL at annual intervals upon CIAL request.	
14 Conclusion	CIAL considers that recognition of bird strike should be made in the conclusion section of the document.	8.2	Ongoing liaison with CIAL	Meetings with CIAL and CCC to discuss bird strike.		As above.
Summary document	CIAL appreciate the acknowledgement of bird strike within the Plan, however, note that there is no reference to bird strike within the summary document. If the summary document is intended to be utilised post the submission period on this plan (ie as a quick User Guide for CCC staff or persons wishing to utilise the CSNDC), CIAL requests that reference to bird strike is included in this document.	<p>Add an additional bullet point to the second paragraph as follows:</p> <ul style="list-style-type: none"> <li>• <b><u>'Reduce the threat of birdstrike through consideration of appropriate stormwater facility location and design'.</u></b></li> </ul> <p>(i) 'What we're going to do' section:</p> <p>Add a new sentence after the statement 'These options can be implemented by the Council using its powers under the Local Government Act':</p> <p><b><u>'We also need to ensure that the threat of birdstrike to aircraft operating in the airspace in the catchment is reduced through consideration of appropriate stormwater facility location and design'</u></b></p> <p>(ii) 'Our Goals' section:</p> <p><b>7. Bird Strike</b></p> <p><b>Our goals are:</b></p> <p><b>7.1 <u>To minimise the potential risk of bird strike to aircraft through consideration of the location and design of stormwater facilities.</u></b></p> <p><b>7.2 <u>To collaborate with CIAL to ensure that 7.1 is achieved'.</u></b></p>				



## **Submission to the Ōtākaro Avon Storm Water Management Plan**

**On behalf of Avon-Ōtākaro Network (AvON)**

**We wish to be heard**

Primary Contact: Hayley Guglietta, Network Manager, Avon-Ōtākaro Network



## AvON and our vision for the Ōtākaro Avon River Corridor

Avon-Ōtākaro Network (AvON) was founded in 2011 to promote a popular vision for the future of the Ōtākaro Avon River corridor (OARC), including what was formerly known as the Avon River residential red zone.

### **Our vision is for:**

A MULTIPURPOSE CITY-TO-SEA RIVER PARK THAT MEETS DIVERSE COMMUNITY NEEDS **WITH** THE MAXIMUM POSSIBLE RESTORATION OF INDIGENOUS ECOSYSTEMS

### **Our 2020 5 year strategic objectives are;**

1. Future governance of the Ōtākaro Avon River Corridor (OARC) that supports the Vision.
2. People, both locally and beyond, are connected with the OARC as a whole.
3. Organisational sustainability.

The level of support for this vision remains extremely high.

Now that the Red Zone has a District Plan project assessment framework in place and the co-governance committee is well underway, AvON has shifted its focus to the entire catchment area and how we can support, resource and fund communities, groups and individuals who are participating in rubbish collection, waterway health, riparian planting, advocacy and biodiversity projects around the catchment.

Our organisation alone in the last 12 months has achieved the following;

- We have lifted 5 tonnes of rubbish out of the river bed, 50% diverted from landfill and includes 120 road cones, 5 Trolleys, 3 lime scooters amongst an array of other interesting items. We work with other individuals who are active in this space and work with a school group at least once a month to help us with the sorting. We are collecting data to help inform the Christchurch City Council and Environment Canterbury about trouble spots and to build a picture of where the rubbish is coming from.
- We work with 7 schools currently in the catchment area to activate spaces, riparian planting and kaitiaki particular areas.
- We participate in the annual Mother of all Clean Ups organising committee and we are responsible for hosting and catering the health and safety and post clean up events.
- We participate in the Community Waterways Partnership and steering committee where we are currently working on an impact action plan.
- We hold regular network meetings to bring people together over submissions, challenges and a shared goal of a swimmable river.
- We support the Riverlution Ōtākaro Trapping project to create a virtual fence around our river network.
- We have 4 planting sites that we progress and maintain with volunteers.

- We have spoken about the OARC developments and education around Stormwater at 4 public groups, 4 events and 5 walking/cycling tours.
- We support 3 community gardens across the OARC in order for them to avoid setting up another committee and simply focus on their project.

For more info: [www.avonotakaronetwork.org.nz](http://www.avonotakaronetwork.org.nz)

## **The draft Ōtākaro-Avon Stormwater Management Plan (SMP)**

We are not doing a very good job as a city managing the health of our urban waterways therefore it is finally great to see some action on this issue. On principle, we support the concepts and regulation behind the draft Ōtākaro Avon Stormwater Management Plan, however we would like to see more reference and action to the following;

- The Ōtākaro-Avon (OA) catchment runs from Addington and Avonhead through to the estuary, although this draft plan outlines in some detail the management of sediment and contaminants upstream, there does not seem to be a joined up approach to the stormwater basins and stopbank work happening in the former Residential Red Zone (OARC) What happened to ICM? (Integrated Catchment Management).
- The OA is both a Taonga and centre of pride for the people of Christchurch and traditionally an important source of mahinga kai for local iwi, therefore we would expect that the critical treatment systems infrastructure that is required would be held in high priority and brought forward in the LTP rather than solely reliant on controlling contaminants at the source as is the focus of this management plan.
- As above there is nothing in this document tying to the LTP specifically, i.e. relying on it being the other way around.
- In our opinion the action items in this SMP are not specific enough and so do not set out aggressive enough targets for the elimination of sediment and contaminants.
- How will we address public awareness and response to flooding issues, sediment/erosion control, zinc, and copper contamination on private properties and the impact residents are having with use of house & garden products, property maintenance, driving etc.

- There is no implementation plan in place to deliver against the 'Engagement and Education' goal 5.1. Community education is mentioned but no action plan, funding, or resourcing to support this.
- There is a heavy reliance on the community to assist with education and resourcing without any explicit ways in which this plan will assist the key community groups with funding or resourcing.
- If treatment systems are pushed out in the LTP and this plan relies on control at the source, how will the quality and compliance team do this? What resources will be given to the compliance team to do this? This needs to be stated more clearly.
- Greater incentives put in place to stop developers and businesses releasing sediment and contaminants into the stormwater system.
- There is no connection between this plan and the Community Waterways Partnership, it would be great to see how the Community Waterways Partnership can be resourced to assist with the delivery of this plan.
- There was no community consultation to assist with the writing of this SMP.

## **Leadership role we (AvON) can take in this SMP**

As we have outlined at the beginning of this submission we (AvON) are already taking action on controlling contaminants at the source with our work streams and advocacy. We wish to take an even greater role in improving the health of our waterways with actions aligned to this plan, the Climate Action Strategy, Regeneration Plan and Strengthening Communities Strategy. To help us achieve this we wish you to consider;

- Supporting our In River Clean project for at least another 12 months so we can see a real shift from old rubbish to new and identify the next steps.
- Action any recommendations we have from the data we present from the In River Clean Project. (i.e additional smaller booms or catches, socks on outlets etc)
- Retain the Sustainability fund to help support the work and projects that we do and that align with this action plan, particularly when testing new ideas.
- Consider changing the criteria of the Urban Biodiversity fund to not be restricted to private land in order for organisations like ours to apply for funding.

- Consider a waterways non contestable fund to help long standing groups like AvON to consistently deliver the outcomes aligned with this plan and other council strategies listed above.
- Support us with resources to help educate the general public about our stormwater systems and how they interconnect with our waterways.
- Support and participate as we bring the entire catchment together regularly to form a shared set of goals to collectively improve the health of our waterway.
- Support further development of the Community Waterways Partnership to build capacity in undertaking the actions in this plan.
- Continue to support the Stormwater Super Hero Trailer.
- Continue to support the Mother of All Clean Up's and associated campaigns and projects.



## Submission to the Avon-Ōtākaro Stormwater Management Plan

From:

### **Sustainable Ōtautahi Christchurch (SOC)**

PO Box 1796

Christchurch 8140

[www.sustainablechristchurch.org.nz](http://www.sustainablechristchurch.org.nz)

SOC formed in 2005 from the merger of Sustainable Cities Trust and Christchurch-Ōtautahi Agenda 21 Forum. Former members of both those groups are involved, along with a new generation of Ōtautahi-Christchurch people, who work towards the bold vision of Ōtautahi-Christchurch people “practising, living and demonstrating sustainability in all that they do.”

### **We do wish to speak to our submission.**

Primary Contact:

Colleen Philip, Chairperson

[info@sustainablechristchurch.org.nz](mailto:info@sustainablechristchurch.org.nz)

Firstly, we wish to record our support for the submissions from The Avon-Heathcote Estuary Ihutai Trust and the Avon Ōtakaro Network.

We also wish to submit as follows...

As an organisation involved with education about sustainability issues including issues around water sensitivity we are very concerned at the lack of an implementation plan to deliver against the Engagement and Education goal 5.1.

Heavy reliance on the community/third sector for educating citizens must be matched by support for those you ask to help with this.

SOC have done education and awareness raising about on-site solutions (e.g rain gardens, collection tanks etc) to stormwater management and would like to see citizens more aware and more enabled to do things themselves on private property that are positive. Education needs to be about positive options, not just an attempt to stop the negative behaviours.

We found many people showed interest in and a real desire to progress these on-site solutions when they were made more aware of them. There are then the questions of how, and at what cost? SOC would like CCC to consider the “How can we help?” question in regard to this.

SOC strongly support nature-based solutions to be used wherever possible, when the evidence supports them. We note though that The Avon Ōtakaro SMP proposes a number of bio filters which are better than retention basins at removing metal contaminants. (90% as compared with 50-60%.) Both while necessary mitigation are less desirable than stopping contaminants at source hence the need for ongoing education and awareness raising.

When Council and developers do multipurpose things like wetlands however, we would ask that good design be provided not just for human need, but for the needs of the wildlife that we want to inhabit these places.

Circular paths around a full perimeter of e.g. a wetland where people and dogs can run and recreate at will is not an example of good design for wildlife, creating stress and disturbance. It is important that people have access to these sites and the opportunity to connect with nature. It is also fine to allow dogs to recreate with them. We just need to design these places more sensitively. We should also have more regulation in some places. The instruction "dogs under effective control" is a concern as it is overused and used in some very inappropriate places. We believe the instruction "dogs on lead" could and should be used more widely in ecologically sensitive places.

One of the best things you can do to improve the marine environment adjacent to our city is to sweep the streets more often.

Copper claddings. Just say NO! (3.2) But where it is already in situ we strongly support 2.5.

In conclusion ,there is the 'bigger conversation'. The city needs to be committed to building healthy thriving waterways. People need to understand what the issues are and how they can help and be able to access the tools to enable that.