

**Waitai**  
**Coastal-Burwood-Linwood Community Board**  
**MINUTES ATTACHMENTS**

---

**Date:** Monday 10 June 2024  
**Time:** 4.30 pm  
**Venue:** Boardroom, Corner Beresford and Union Streets,  
New Brighton

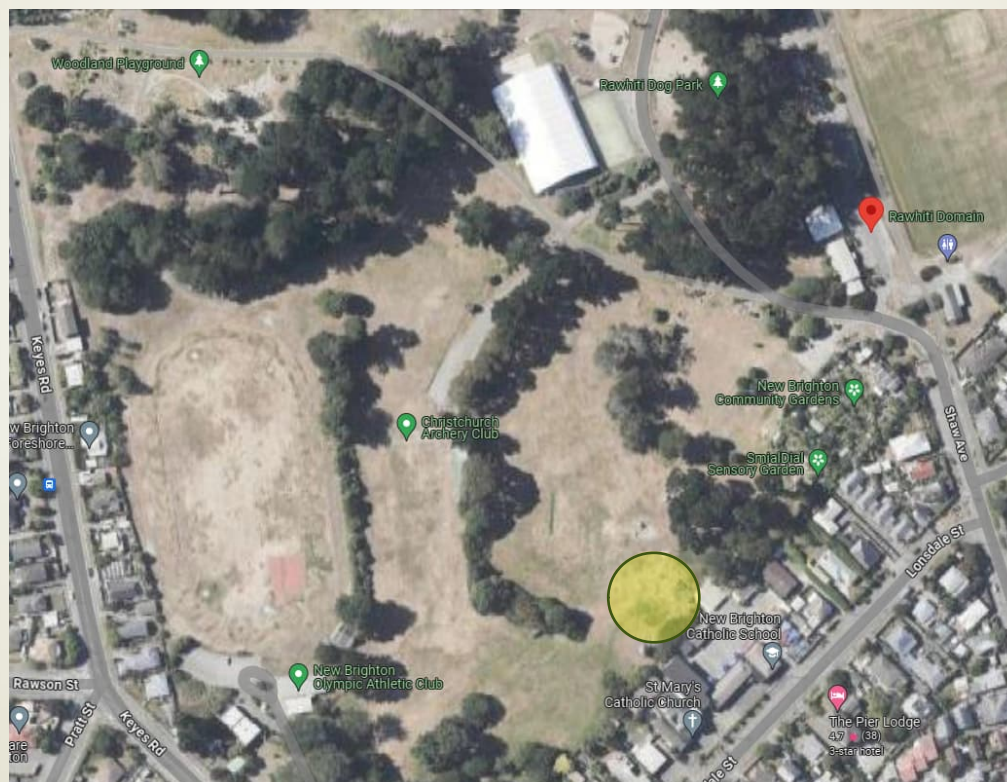
---

<b>TABLE OF CONTENTS NGĀ IHIRANGI</b>	<b>PAGE</b>
<b>4.2. Public Forum - James Ridpath - Rawhiti Domain Play Equipment</b>	
A. Rawhiti Domain Playground Presentation.....	3
<b>7. Briefings</b>	
A. Wastewater Treatment Plant Presentation .....	15
<b>11. Streets For People Aranui</b>	
A. Streets for People Aranui Project Presentation.....	45

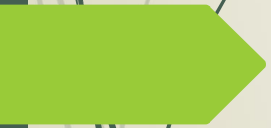
---



# New Play Area in Rawhiti Domain



# Request?



New Brighton Catholic School, with the support of Youth Alive Trust, is asking the Waitai Coastal-Burwood-Linwood Community Board to give remit to council parks staff to work on a concept for play in Rawhiti Domain beside the school.

# Why?

- 210 Children everyday
- Closest green space for YAT programmes
- School, Community, Council Partnership
- Suitable replacement for end of life playground beside Canopy
- Fundraised primarily by the school PTFA

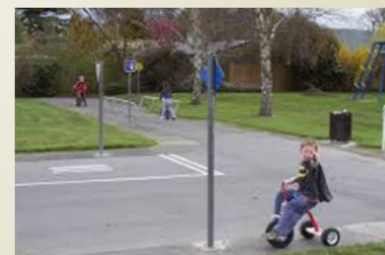
# Possible?

- Council lead and managed
- Long history, and areas already earmarked
- Examples in other areas such as Beckenham School and St Albans School
- Fundraising would be done through NBC PTFA as a registered charity





## Pump Track





## Gaga Pit



## Agility Course





## Whare



## Football Area





## Swings



## Outdoor Seating





# Community Liaison Group

CWTP Monthly Update – June 2024

## Introduction

---

- Monthly presentation to provide an update on the operation of the Christchurch Wastewater Treatment Plant
- Includes high-level information on the operational activities being undertaken on the site

### In Scope

- Operation of the interim solution
- Activities being undertaken to mitigate odours

### Out of Scope

- Implementation of the findings of the Independent Review
- Current status of the insurance claim
- Status of the permanent replacement solution

## Agenda

---

- Odour Monitoring Results
- Odour Management Action Plan Update
- Oxidation Ponds – Aerator Status
- Oxidation Ponds – Transition to Winter Mode
- Biological / Chemical Trials
- Midge Control – Native Plantings Update
- Midge Control - Bird Friendly Structure
- CWTP Fire Timeline Webpage Update
- Any Questions;
  - Future topics

## Odour Monitoring Results



- All data is continued to be provided on the CCC [webpage](#) from the four monitoring locations at the community sites

Christchurch City Council

Log in

Home > ... > Christchurch wastewater treatment plant > Wastewater treatment plant fire

### Christchurch wastewater treatment plant fire

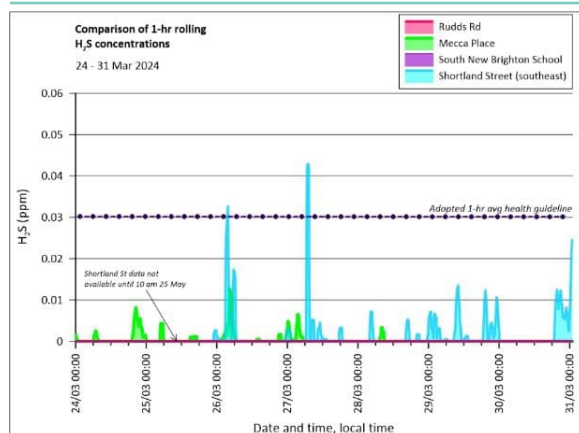
The wellbeing of our residents is our top priority.

#### Latest hydrogen sulphide levels

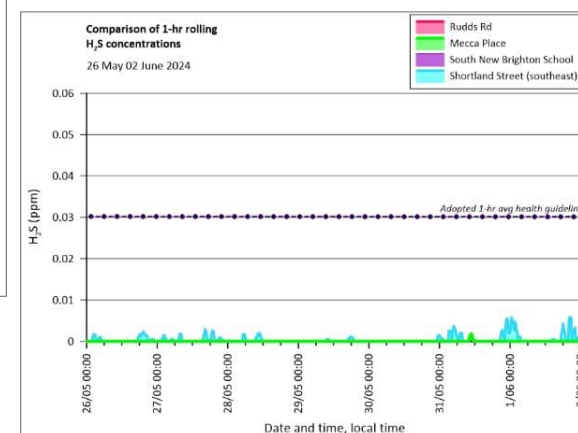
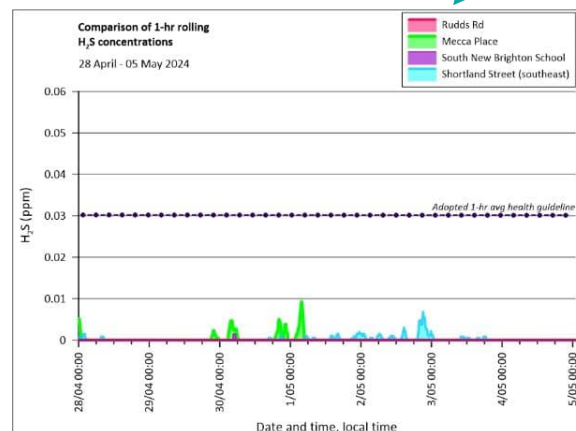
The latest monitoring results have shown that levels over the past month have been decreasing and are now well below the health guideline of 0.03ppm. At times light winds still carry odours, to nearby residential areas. [See the latest results.](#)

11 June 2024

## Odour Monitoring Results



- Graphs show the results from the four community sites over past three months; March, April & May



- The graphs show the last week for each month

11 June 2024

# Odour Management Action Plan

## Work to address odour

The interactive map below shows what we've got planned or underway to address odour at the Wastewater Treatment Plant. We'll keep this map up-to-date as our work changes.

Select a hot spot to see a description of what work is being done to address odour at different parts of the plant.

- Green: Good treatment stage process performance, the probability of odour is low.
- Orange: Average treatment stage process performance, the probability of odour is possible.
- Red: Poor treatment stage process performance, the probability of odour is high.



- [Wastewater treatment plant situation page](#) is being regularly updated



# Odour Management Action Plan



## × 1. Inlet screen room

- A project is underway to install a new ventilation system which complies with the hydrogen sulphide safe working limits

## × 2. Primary settlement tanks

- The primary settlement tanks are back within performance limits and achieving to the required level. The Standard Operating Procedure (SOP) has been reviewed and updated.
- A project request has been made to improve the automatic water spray scum removal system

## × 4. Odour control system

- All work on the odour biobeds has been completed and routine operation and maintenance is being undertaken as required.

# Odour Management Action Plan



## × 6. Digesters

- A project is planned to upsize the pipework, aiming to reduce the emergency release of biogas.
- We're doing more proactive maintenance, which reduces the amount of biogas being released.

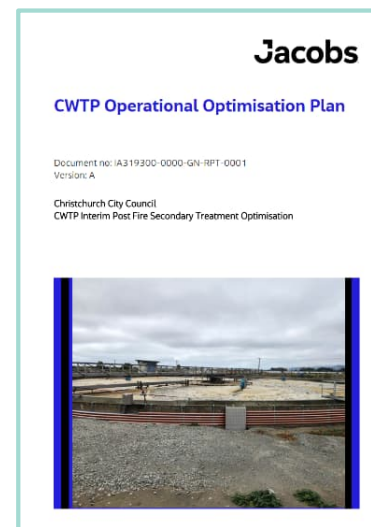
## × 7. Sludge dryer

- An extensive maintenance overhaul of the sludge dryer will be carried out to reduce wet biosolid accumulation on site.

# Odour Management Action Plan

## × 3. Temporary secondary treatment

- A first workshop between a consultant and site staff has been undertaken to review the operating parameters of the temporary activated sludge plant. Once the document has been updated, the new operating parameters will be implemented and trialed over the coming months.



11 June 2024

# Odour Management Action Plan

## × 5. Oxidation ponds

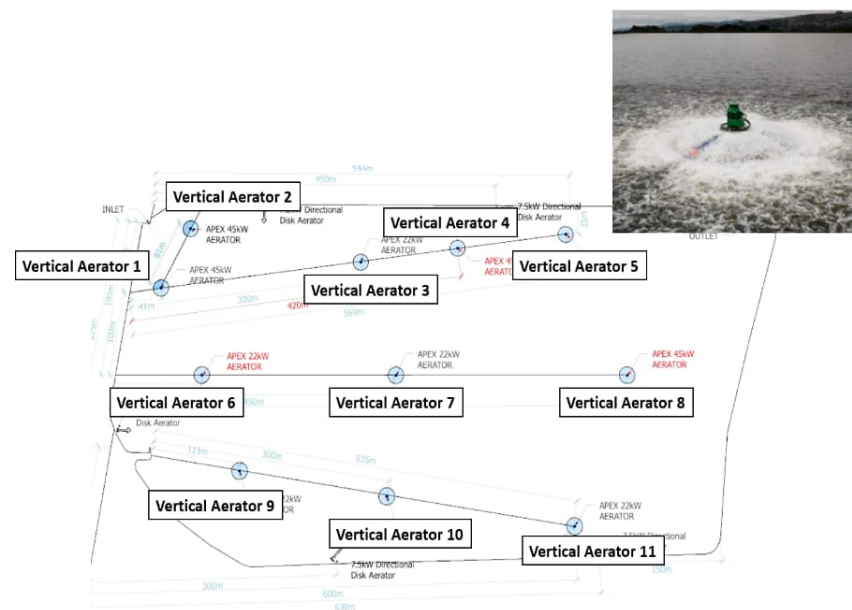
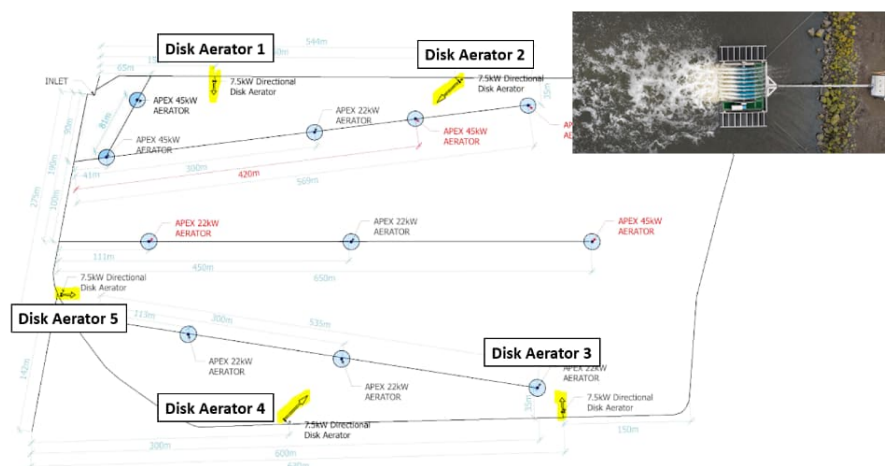


### Odours increasing as pond biology changes

- For the past two months we have been closely monitoring the oxidation ponds, looking for signs the ponds were changing from summer to winter mode. During this time, we were operating the ponds in a different way to try and minimise odours over this period.
- The biology of the oxidation ponds has now changed due to the drop in temperature as we move into winter. As expected, this has caused an increase in odour coming from the ponds.
- All the treatment processes at the wastewater treatment plant are working as well as can be expected, and the temporary activated sludge treatment plant process is also operating well. Based on our knowledge and experience from last year we expect that the increase in odour will last for a couple of weeks at most. The weather forecast for the coming week is cold, settled, and dry, which may make the odours worse in the short-term.
- We know that any increase in smell causes stress for the community and we're doing everything we can to reduce the duration and severity of odours. Keeping the damaged plant running is an ongoing challenge but our team is doing their best to respond quickly as conditions change.

## Oxidation Ponds – Aerator Status

- There are two types of aerators on Oxidation Pond 1;
  - Disc Aerators to provide directional flow
  - Vertical Aerators to provide oxygen



11 June 2024

## Oxidation Ponds – Aerator Status

- Performance Report for Disc Aerators for the past month;

Date	Disk Aerator 1 Running	Disk Aerator 2 Running	Disk Aerator 3 Running	Disk Aerator 4 Running	Disk Aerator 5 Running
8/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%
9/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%
10/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%
11/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%
12/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%
13/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%
14/05/2024	98.3%	98.5%	43.4%	98.5%	97.7%
15/05/2024	100.0%	100.0%	0.0%	100.0%	100.0%
16/05/2024	100.0%	100.0%	0.0%	100.0%	100.0%
17/05/2024	100.0%	100.0%	0.0%	100.0%	100.0%
18/05/2024	100.0%	100.0%	0.0%	100.0%	100.0%
19/05/2024	100.0%	100.0%	0.0%	100.0%	100.0%
20/05/2024	100.0%	100.0%	0.0%	100.0%	100.0%
21/05/2024	100.0%	100.0%	0.0%	100.0%	100.0%
22/05/2024	100.0%	100.0%	54.7%	45.4%	100.0%
23/05/2024	100.0%	100.0%	100.0%	0.0%	100.0%
24/05/2024	100.0%	100.0%	100.0%	0.0%	100.0%
25/05/2024	100.0%	100.0%	100.0%	0.0%	100.0%
26/05/2024	100.0%	100.0%	100.0%	0.0%	100.0%
27/05/2024	100.0%	100.0%	100.0%	0.0%	100.0%
28/05/2024	100.0%	100.0%	100.0%	0.0%	100.0%
29/05/2024	100.0%	100.0%	100.0%	0.0%	100.0%
30/05/2024	98.9%	100.0%	99.0%	49.7%	100.0%
31/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%
1/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%
2/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%
3/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%
4/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%
5/06/2024	100.0%	100.0%	100.0%	98.2%	100.0%
6/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%

11 June 2024



## Oxidation Ponds – Aerator Status

- Performance Report for Vertical Aerators for the past month;

Date	Vertical Aerator 1 Ri	Vertical Aerator 2 Ri	Vertical Aerator 3 Ri	Vertical Aerator 4 Ri	Vertical Aerator 5 Ri	Vertical Aerator 6 Ri	Vertical Aerator 7 Ri	Vertical Aerator 8 Ri	Vertical Aerator 9 Ri	Vertical Aerator 10 Ri	Vertical Aerator 11 Ri
8/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
9/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
10/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
11/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
12/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
13/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
14/05/2024	89.3%	99.5%	99.4%	99.4%	99.1%	98.8%	99.2%	99.2%	99.0%	98.1%	98.7%
15/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
16/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
17/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
18/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
19/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
20/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
21/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
22/05/2024	96.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	98.3%	99.6%
23/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
24/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
25/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
26/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
27/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
28/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
29/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
30/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
31/05/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
3/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
4/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
5/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
6/06/2024	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

11 June 2024

## Oxidation Ponds – Transition to Winter Mode



- Yellow arrow shows the full / normal route of effluent through the pond
- Takes 17 – 30 days and provide disinfection through;
  - UV exposure from sun
  - Natural predation by other biomass
  - Settles out
- In summer disinfection takes less time so less ponds are needed

11 June 2024

## Oxidation Ponds – Transition to Winter Mode



- In summer there is a lot of life in the ponds;
  - Water Fleas
  - Algae
  - Bacteria (too small to see without a microscope)
- As winter starts, a lot of the large biology dies off (sunlight and temperature drops)
- Bacteria continues and then pulls out more dissolved oxygen from the water with all this extra dead biomass, creating temporary anoxic conditions

11 June 2024

## Oxidation Ponds – Move to Winter Mode



- Red arrow shows the shortened transition mode route
- Theory is that we starve /reduce the algae from all the nutrient rich effluent in Ponds 2A & 2B (& 3), then flush through when algae has dropped
- Difficulty is knowing when to make the change,
  - in 2023 it happened end April
  - in 2024 it happened end May

11 June 2024



## Oxidation Ponds – Transition to Winter Mode



- Ponds are now back in normal flow mode
- This allows the full 17 – 30 days to provide disinfection (which takes longer in winter and requires all ponds)

11 June 2024

## Oxidation Ponds – Transition to Winter Mode



- In summer there is a lot of life in the ponds;
  - Water Fleas
  - Algae
- In winter, far less active life in the ponds;
  - No water fleas
  - No algae

## Oxidation Ponds – Transition to Winter Mode



- In summer there is a lot of life in the ponds;
  - Water Fleas
  - Algae
- In winter, far less active life in the ponds;
  - No water fleas
  - No algae

## Biological / Chemical Trials

---

- Over the past few years, over 10 suppliers have offered technological, biological and chemical solutions to the odour issues at CWTP
- A number were immediately discounted for various reasons, (incompatible, downstream effects on other processes, etc.) None have been discounted on cost
- However, five options could have an application
- To assess applicability and likelihood of success, 5 suppliers have been invited to have their products trialled and assessed via an external consultant
- The trial stages are;
  1. Confirmation of Product Information
  2. Small scale trial (nominal 20 litres)
  3. Medium scale trail (nominal 1,000 litres)
  4. Define parameters of a full-scale month-long trial (water/odour sampling, risks, dosing parameters, costs)



## Biological / Chemical Trials

- Progress report from consultant for stage 1 – Confirmation of Product

Contact	Supplier Name	Update
		Information provided – Will assess and determine if sufficient to proceed to small scale trial.
		Information provided – Will assess and determine if sufficient to proceed to small scale trial.
		Email response received – awaiting information as per our request. Expect this shortly.
		Email response received – not licensed to import the product to NZ. Therefore, will not be able to participate in next stage of the trial. Plan to ask for information as requested so that they might be considered in the future should they get license to import to NZ.
		Email response received – NDA required and as discussed; a trial cannot be run with this requirement in place. Therefore, they would not be able to progress to the next trial stage.

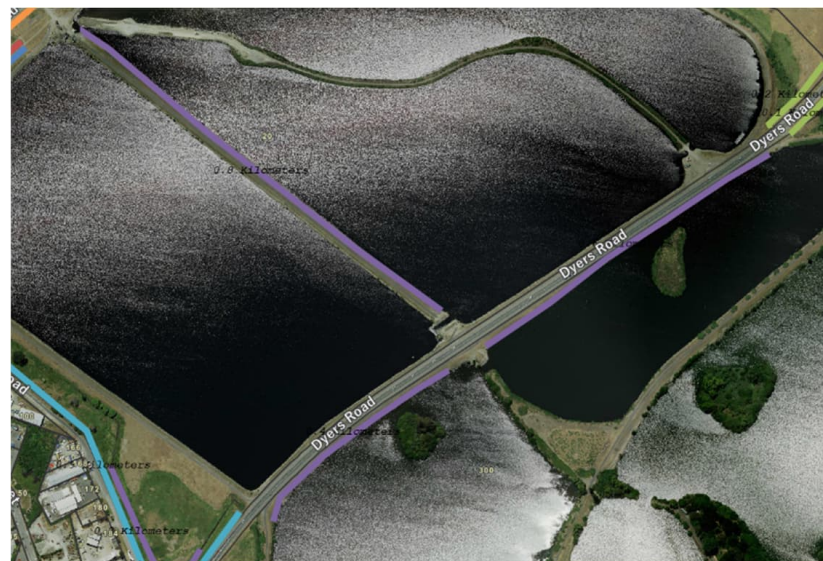
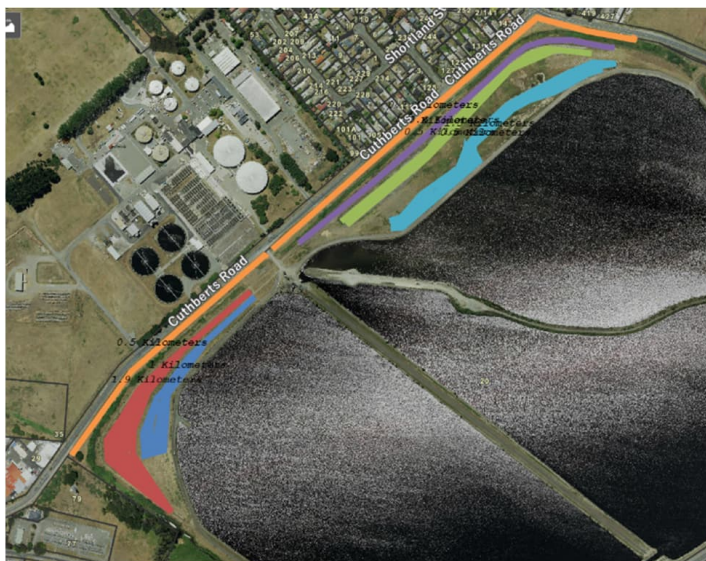
## Midge Control – Native Vegetation Plantings

- This year, 45,000 new native plants have been planted
- This builds on the 70,000 which have been planted since 2018



## Midge Control – Native Vegetation Plantings

- This year, 45,000 new native plants have been planted
- This builds on the 70,000 which have been planted since 2018





## Midge Control – Native Vegetation Plantings

- This year, 45,000 new native plants have been planted
- This builds on the 70,000 which have been planted since 2018





## Midge Control – Native Vegetation Plantings

Date	Plant Numbers (approx.)	Types	Area
2018	10,000	Mixed Natives	Pond 2 Paddock Eastern Edge
2020	10,000	Mixed Natives	Pond 2 Paddock Western Edge
2021	10,000	Mixed Natives	Pond 2 paddock Centre
2022	8,500	Mixed Natives	Cuthberts Fenceline
2022	10,000	Mixed Natives	Pond 1 Paddock Western Side
2022	10,000	Mixed Natives	Pond 1 Paddock Eastern Side
2023	2,076	Flax	Frontage of Ponds 3/4
2023	1,500	Flax	North Side of Centre Rd Between Pond 1/2
2023	3,060	Mixed Natives	Breezers Rd Paddock Fenceline
2023	2,275	Mixed Natives	Bridge St Paddock Fenceline
2024	1,750	Flax	Inaccessable Area Ponds 2/3
2024	510	Flax	Ruru Toe Drain
2024	2,612	Mixed Natives	Ruru Rd Fenceline
2024	1,900	Flax	Dyers Rd Banks (Ruru Rd)
2024	30,000	Mixed Natives	Around the ponds

## Midge Control – Bird-friendly structure



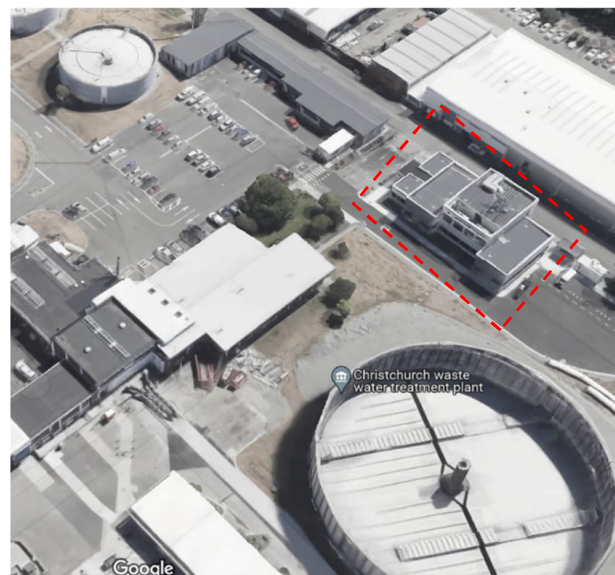
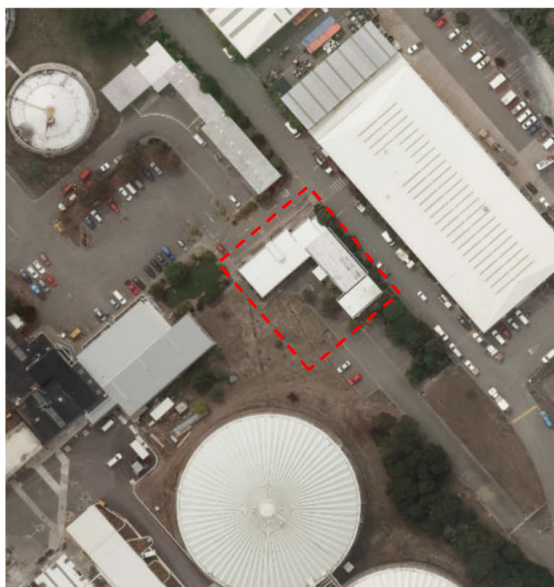
Birds have been identified as one of the multi-pronged approach to control midge numbers from the ponds

Structure was installed with bird-feeders to enhance the bird habitat

Funded from Midge Control Programme

## Midge Control – Bird-friendly structure

Between 2019-2022, the CWTP administration build was demolished (earthquake prone) and replaced with new laboratory



## Midge Control – Bird-friendly structure



The old admin building had a metal arch feature in entranceway which was saved during the demolition process.

The architectural feature is very similar to public toilets at Woolston & Windsports Park

Birds loved sitting on it



# CWTP Fire Timeline Webpage

## Christchurch wastewater treatment plant fire timeline

An overview of key events, decisions, and how the project is progressing.

### Timeline of key events and decisions

#### 28 March 2024

- New interactive map created showing odour mitigation work.

#### April 2024

- Ponds switched to winter operation mode. Adjustments made to our operations to reduce odours when the biology changes as weather cools.

#### 1 May 2024

- The Mayor and councillors approved a grant of \$130,000 to resource a project with the goal of strengthening and sustaining effective and respectful relationships with Eastern Communities.

#### Early May 2024

- Completed work to cover inlet chambers to contain odour.

#### 9 May 2024

- Completed replacement of the bio-bed material in the odour control system. Old material reused as soil conditioner for native planting areas.

- The [CWTP fire timeline webpage](#) has been updated

Questions?  
Topics for next time?

# Streets For People Aranui

10 June 2024

## Project timeline

Project started construction: February / March 2024

Trial period: March / April 2024

Public Consultation: March / April 2024

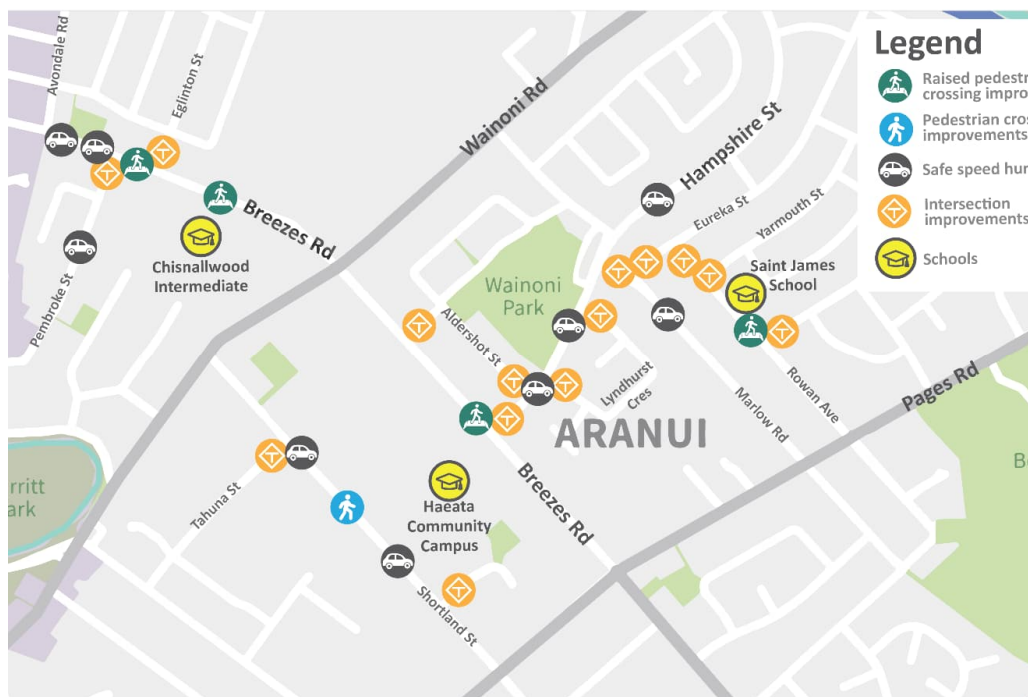
Adaptation: March/ April

Monitoring and Evaluation

11 June 2024



## Construction and Trial



11 June 2024

### Improvements installed

- 14 intersections
  - Narrowing
  - Speed humps
- 8 safer speed humps
- 4 safer speed platforms
- 3 pedestrian build outs
- 1 new raised pedestrian crossing

# Consultation

## Second stage of public feedback – during trial

Kōrero mai webpage	Consultation document delivery	ACTIS 'have your say' day	Door-knocking most affected residents	Token exercises	BBQ	In-person meetings
-----------------------	-----------------------------------	------------------------------	--	-----------------	-----	-----------------------

- 211 submissions + feedback from ~200 people at ACTIS's have your say day
- The majority of submitters were in favour of safe speed humps
- Intersection upgrades received mixed feedback (depending on location)
- Main concern – that the intersections feel too narrow, that drivers must cross the centreline.



## Other engagement Since we last checked in



11 June 2024



11 June 2024

# Adaptation

- Intersection of Breezes Road and Hampshire Street
- Intersection of Shortland Street and Tahuna Street
- Wainoni Park road art



# Safety Audit – Post construction

11 June 2024

## Post construction safety audit

- Parking within Eureka Street and Rowan Avenue intersection
- Side road intersection narrowing too narrow
- Effectiveness of raised safety platforms
- Shortland Street speeds and width of crossings
- Consistency of marking of speed humps

## What changes have been made

- Proposed new no stopping lines within Eureka Street and Rowan Avenue intersection
- Ensuring side roads are minimum of 7 Meters
- Intersection corners sharpness reduced

## What is recommended

- Option D has been safety audited
- Providing no stopping lines within Eureka Street and Rowan Avenue intersection
- Opening the intersections up by softening the cornering into them

Option A – All improvements retained with intersection adaptation.	Option B - Retain speed humps and safer speed platforms only.	Option C – Remove all safety improvements.	Option D – Speed humps and safer speed platforms and kerb buildouts. <i>Recommended option</i>
<ol style="list-style-type: none"> <li>Retains speed humps</li> <li>Retains Safer speed platforms</li> <li>Makes minor adaptation to the intersection by minimum of 1 meter</li> <li>Meets with the project objective and making streets safer</li> <li>Does not align with some of the community feedback that the bollard narrowing is too tight</li> <li>Has a highest cost for maintain over the next 10 years due to bollards \$498,000</li> </ol>	<ol style="list-style-type: none"> <li>Retains all speed humps</li> <li>Retains all safer speed platforms</li> <li>Removes all intersection narrowing and bollards</li> <li>This option meets with some of the project objective by slowing at crossing points only</li> <li>Low cost to maintain speed humps and platforms over 10 year period \$57,000</li> </ol>	<ol style="list-style-type: none"> <li>Removal of all trialed interventions and return road corridor to before the trial</li> <li>Does not meet with any project objective and feedback received during early engagement and consultation</li> <li>Cost for removal of all safety improvements \$956,917.24</li> </ol>	<ol style="list-style-type: none"> <li>Retains all speed humps</li> <li>Retains all safer speed platforms</li> <li>Intersection narrowing is replaced from bollards to permanent kerb buildouts.</li> <li>Widening of the intersection is made between 300 – 500mm</li> <li>Meets with the project objective and making streets safer</li> <li>Lowest cost to maintain over 10 year period \$177,000</li> </ol>

11 June 2024

## Next steps

- Funding cut off 30 June 2024
- Construction start is anticipated 17 June

11 June 2024

Questions ?