

## **Christchurch City Council**

### **MINUTES ATTACHMENTS**

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**Date:** **Wednesday 7 February 2024**  
**Time:** **9.30 am**  
**Venue:** **Council Chambers, Civic Offices,  
53 Hereford Street, Christchurch**

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# Public Health at Otago.

POSTGRADUATE



CHRISTCHURCH

## On-demand alcohol delivery and the Local Alcohol Policy (LAP)

Dr Rose Crossin & Dr Angela Curl, Department of Population Health, University  
of Otago Christchurch

Dr Sebastian Rauch, Institut für Geographie und Geologie, Universität Würzburg

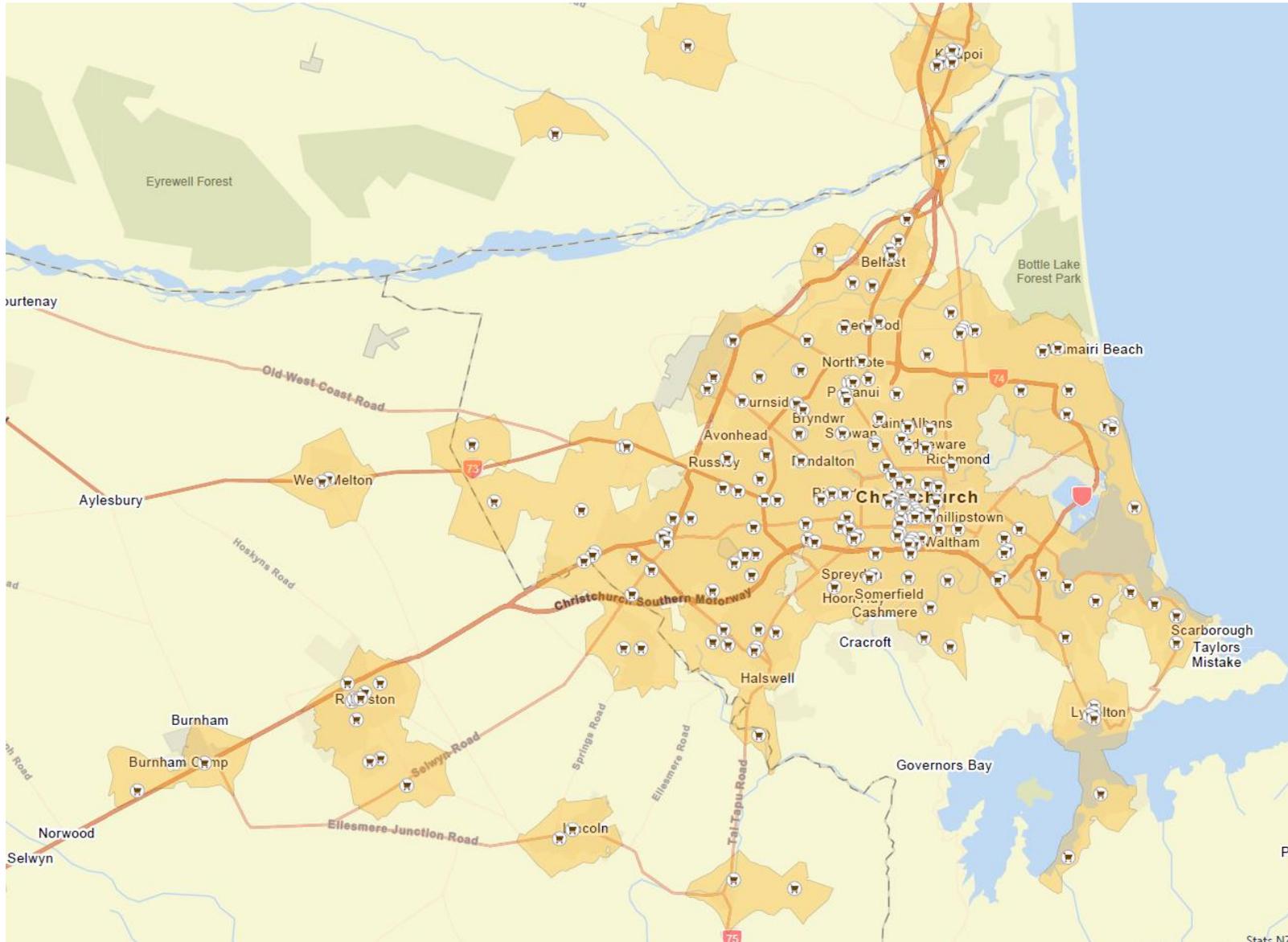
- We sampled 27 addresses in each city stratified by NZDep, physical outlet availability and Māori population
- At each address we measured the number of outlets delivering alcohol on-demand

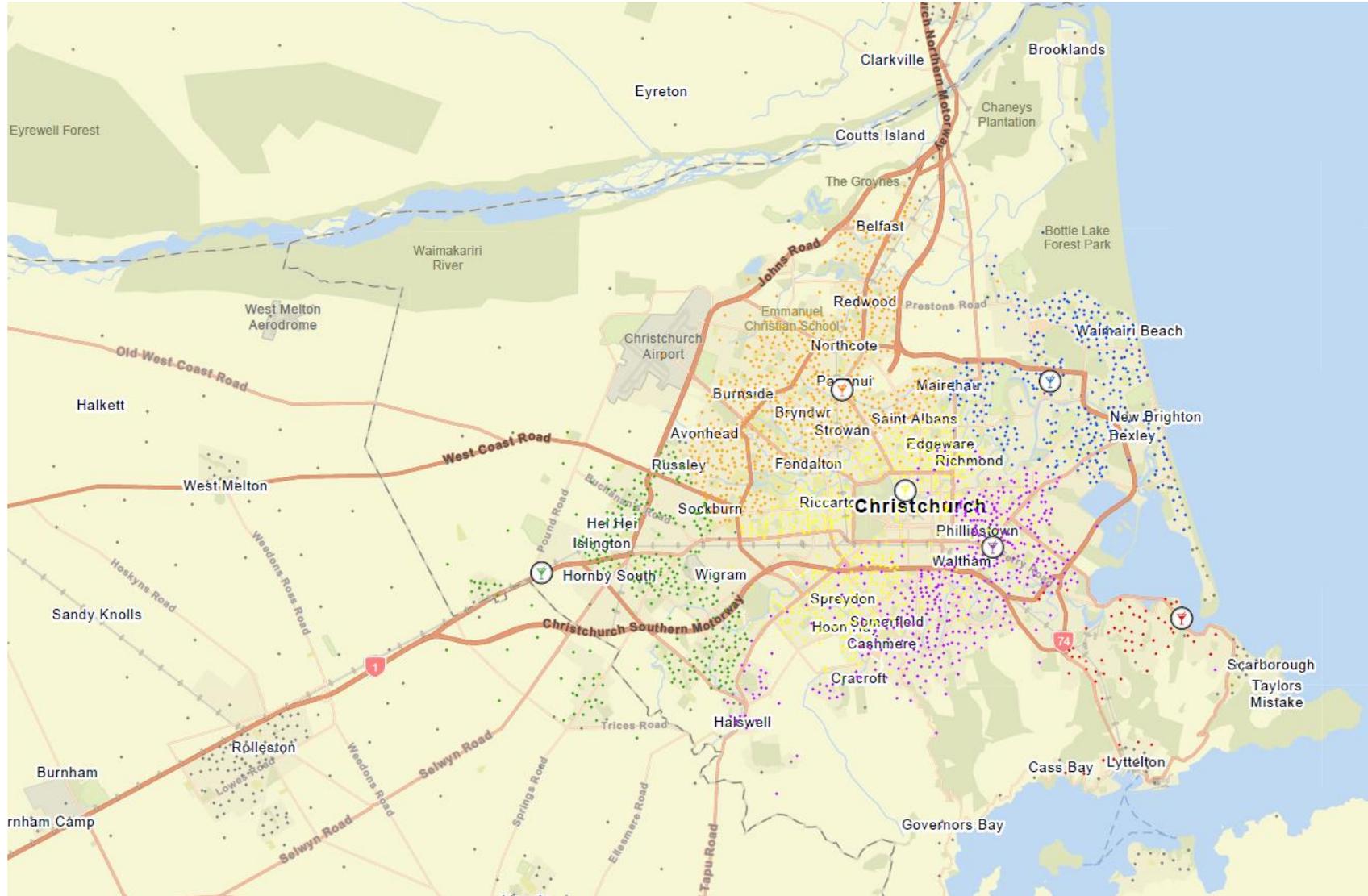
TABLE 2. Summary measures of access to on-demand alcohol.

	Combined		Auckland		Christchurch		Wellington	
	Median	Min-max	Median	Min-max	Median	Min-max	Median	Min-max
Number of outlets available on-demand	5	0-11	4	0-11	9	3-11	5	2-10

Note: Data were collected in October 2022.

- There is a slight association with physical outlet density and on-demand (not significant in Christchurch)
- There was no significant association between deprivation and on-demand availability
- In Christchurch, more services were available on-demand to the non-Māori population







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BRIEF REPORT



## Quantifying access to on-demand alcohol in New Zealand

Rose Crossin<sup>1</sup> | Dru Norriss<sup>1</sup> | Christina McKerchar<sup>1</sup> | Gemma Martin<sup>1</sup> |  
Tessa Pocock<sup>1,2</sup> | Angela Curl<sup>1</sup>

<sup>1</sup>Department of Population Health,  
University of Otago Christchurch,  
Christchurch, New Zealand

<sup>2</sup>School of Nursing, University of  
Auckland, Auckland, New Zealand

### Correspondence

Dr Rose Crossin, Department of  
Population Health, University of Otago  
Christchurch, 34 Gloucester St,  
Christchurch 8140, New Zealand.  
Email: [rose.crossin@otago.ac.nz](mailto:rose.crossin@otago.ac.nz)

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### Abstract

**Introduction:** On-demand delivery (<2 h from ordering) of alcohol is relatively new to New Zealand. We aimed to quantify the number of services available and the number of outlets available to purchase from within on-demand services. We then tested whether access differed by neighbourhood demographics.

**Methods:** We identified six on-demand alcohol services and quantified access to these in Auckland, Wellington and Christchurch. Eighty-one addresses were sampled according to three variables: (i) density of physical alcohol outlet tertile; (ii) socio-economic deprivation tertile; and (iii) areas within the top 20th percentile of Māori within each city.

**Results:** The median number of alcohol outlets to purchase from across all on-demand delivery services was five, though this was higher in Christchurch. For all three cities combined, and for Wellington, the number of outlets available on-demand was highest in areas with the highest density of physical outlets. However, the number of outlets available virtually was not associated with physical outlet density in Auckland or Christchurch. There were no significant differences in access observed for neighbourhood socio-economic deprivation.

**Discussion and Conclusions:** On-demand delivery services are changing local alcohol environments, and may be increasing overall access to alcohol at a neighbourhood level. On-demand access patterns do not consistently reflect the physical alcohol environment. The current legislative and policy environment in New Zealand pre-dates the emergence of on-demand alcohol services. Local councils need to consider 'virtual' access as well as physical access when developing Local Alcohol Policies.

### KEYWORDS

delivery, environment, local planning

### Key Points

- On-demand delivery is changing the way alcohol is accessed in New Zealand.
- On-demand access does not always reflect the physical alcohol environment.
- No evidence of socio-economic patterning in on-demand alcohol access was found.
- Local planning needs to consider virtual, as well as physical, alcohol access.

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## 1 | INTRODUCTION

On-demand delivery services provide rapid access to alcohol, intended for immediate consumption [1]. On-demand delivery is defined as being able to be delivered within 2 h of ordering [2, 3]. Some meal delivery apps include alcohol delivery, whereas other on-demand services only deliver alcohol. Some on-demand services connect customers with a range of physical outlets and others have their own warehouses that are not accessible for physical sales. Delivery is often contracted out to a third-party.

On-demand delivery services have the potential to increase access to alcohol; a key determinant of consumption, particularly for young people [4, 5]. An Australian study found that on-demand alcohol delivery was most popular among 18–25 year olds, and use of on-demand alcohol services was associated with more heavy drinking episodes [3]. This finding was expanded on in a subsequent study, which found that using on-demand delivery to extend a drinking session was associated with six times higher odds of hazardous drinking [6]. Therefore, on-demand alcohol may contribute to acute alcohol-related harms in youth such as injury [7]. Alcohol delivery was also associated with heavier drinking during the COVID-19 pandemic in New Zealand [8]. Another concern is the potential for alcohol to be sold and delivered to underage or intoxicated customers [3, 9]. In New Zealand, the *Sale and Supply of Alcohol Act 2012* states that it is an offence for a licensee or manager of a licensed premises to sell or supply alcohol to an intoxicated person [10], however, compliance is more challenging when alcohol is delivered, particularly when delivery drivers are independently employed and not alcohol licensees. Collectively, evidence suggests that increased access to alcohol via on-demand delivery services could have implications for alcohol consumption and hazardous drinking, particularly for young people.

People living in more deprived areas of New Zealand have greater access to physical alcohol outlets than those in less deprived areas [11]. Neighbourhood alcohol availability (both outlet density and proximity) is a strong determinant of hazardous drinking, particularly for younger Māori and Pacific peoples [4], and may therefore contribute to alcohol-related inequity. Physical alcohol access is regulated by local councils in New Zealand, but given the emergence of on-demand delivery services, it is important to determine how virtual access relates to physical access.

On-demand delivery of alcohol is relatively new to New Zealand, which already experiences high rates of hazardous drinking [12] and inequitable alcohol-related harm to Māori [13–15]. Therefore, we used exploratory methods and aimed to quantify both the number of services available and the number of outlets available to

purchase from within those on-demand services. This would provide a baseline of access to on-demand alcohol in New Zealand, which could be used to understand trends over time. We then sought to determine whether access differed by neighbourhood demographics.

## 2 | METHODS

### 2.1 | Service identification

To be considered an on-demand alcohol service, the service needed to: (i) offer delivery in less than 2 h from time of ordering [16]; and (ii) allow purchase of alcohol by itself (one service requiring bundling of food with limited alcohol was excluded on the basis of not meeting the second criterion).

Five services identified from our previous study (completed May 2021) [16], which were verified as being still operational, met the above criteria. We updated the search using the previous method [16], which yielded one further service. The search strategy was conducted independently by two researchers; no discrepancies were identified.

Six on-demand alcohol services were identified (Table 1). These included both vendor and intermediary services; ‘intermediary’ services connect customers with multiple physical alcohol outlets, whereas ‘vendor’ services have their own supply of alcohol that it is delivered to customers on-demand but do not have a store to physically purchase from.

### 2.2 | Address sampling

The study area was limited to the three largest cities in New Zealand (Auckland, Wellington, Christchurch), covering approximately 45% of the New Zealand population.

To get a broad coverage of on-demand alcohol available on-demand in each city we used stratified sampling of neighbourhoods, building on the approach of Poelman et al [17]. We sampled 27 addresses in each city, stratified by physical access to alcohol outlets and the New Zealand socio-economic deprivation index (NZDep), and ensuring that one-third of addresses were in areas with a high Māori population.

Eighty-one addresses were sampled according to two stratification variables: (i) density of physical alcohol outlet tertile; and (ii) socio-economic deprivation tertile. We also sampled to ensure that one-third of addresses were areas within the top 20th percentile of Māori within each city. The stratified sampling method enabled evaluation of each variable in isolation of the others, similar to the approach taken previously for a study of on-demand food

TABLE 1 Properties of and data collection procedure for on-demand alcohol services.

On-demand service	Service type	Market presence	Date and time of data collection	Collection method	Output
Uber Eats (desktop web)	Intermediary	Auckland, Wellington, Christchurch	Friday, 28/10/2022, 13:06 to 14:16	Search address, browse to 'Alcohol' category (if present), count vendors.	Count of available alcohol vendors
Deliveasy (desktop web)	Hybrid; intermediary for food, vendor for alcohol	Auckland, Wellington, Christchurch	Friday, 14/10/2022, 12:50 to 13:30	Search address, record presence or absence of 'Drinks' vendor.	Binary (0 = alcohol not available, 1 = alcohol available)
Gimme (Android)	Intermediary	Christchurch	Friday, 28/10/2022, 14:16 to 14:41	Search address, select alcohol category, count vendors.	Count of available alcohol vendors
Bevee (desktop web)	Vendor	Auckland	Monday, 17/10/2022, 17:50 to 18:00	Search address, record service availability.	Binary (0 = alcohol not available, 1 = alcohol available)
Drinks Mate (desktop web)	Vendor	Auckland	Friday, 14/10/2022, 13:30 (based on listed suburbs)	Evaluated addresses against supplied list of delivery suburbs.	Binary (0 = alcohol not available, 1 = alcohol available)
Doordash (desktop web)	Intermediary	Wellington, Christchurch	Friday, 28/10/2022, 15:14 to 16:30	Search address, search 'alcohol', 'beer', 'wine', 'spirits', count the number of unique vendors selling alcohol.	Count of available alcohol vendors

Note: 'Intermediary' services connect customers with multiple potential alcohol vendors, whereas 'vendor' services have their own physical supply of alcohol that it is provided to customers on-demand.

TABLE 2 Summary measures of access to on-demand alcohol.

	Combined		Auckland		Christchurch		Wellington	
	Median	Min-max	Median	Min-max	Median	Min-max	Median	Min-max
Number of on-demand services	6	5-6	6	5-6	6	5-6	6	6-6
On-demand services with one or more outlets	3	0-4	1	0-4	4	3-4	3	1-3
Number of outlets available on-demand	5	0-11	4	0-11	9	3-11	5	2-10

Note: Data were collected in October 2022.

access [18]. The density of physical alcohol outlets [19] was substituted for the density of unhealthy food outlets from a prior study.

To complete the sampling process, the following data were imported into ArcGIS Pro (version 2.9.2):

- The feature layer 2018 Census Individual New Zealand by Statistical Area 1 [20] (SA1; the smallest publicly available aggregated data output from the census).
- The table 'Statistical Area 1 Higher Geographies 2018' [21], which includes labelling of Auckland, Wellington and Christchurch.
- The standard NZDep by SA1 [22].
- Data on the locations of alcohol outlets from the University of Canterbury GeoHealth Laboratory were added as a feature layer of physical alcohol outlets [19]; this dataset is publicly available and is geocoded, cleaned and validated by the data owners with data derived from current and active on and off-licences for the period 2015–2018.
- Locations of New Zealand street addresses sourced from Toitū Te Whenua Land Information New Zealand [23].
- SA1s were filtered to only include those in Auckland, Wellington or Christchurch.
- SA1s were classified into tertiles of physical access to alcohol by counting the number of outlets within an 800 m straight line buffer of the centroid of each SA1.
- SA1s were classified into tertiles of socio-economic deprivation within their respective cities by NZDep score.
- SA1s were classified into those with a higher proportion Māori population, which was defined as having a proportion of the Māori population in the top quintile among the SA1s for that city; this was a binary variable.

This process resulted in 54 groups of SA1s to sample from, that is, three cities × three physical access tertiles × three NZDep tertiles × two ethnicity classifications. Two SA1s were randomly sampled from each city-access-deprivation-other ethnicity group and one SA 1 from each city-access-deprivation-Māori group, which resulted in a final sample of 81 SA1s. Address data [23] were linked to the sampled SA1s, and one address was randomly sampled from each SA1, to provide a physical address from which on-demand access could be searched. This created the final address list from which on-demand alcohol availability were assessed.

### 2.3 | Data collection and analysis

Each service was evaluated for the availability of on-demand alcohol for each of the 81 addresses, using online methods (i.e., no addresses were physically

visited). The exact method varied depending on the nature of the service (Table 1). Timing for data collection was weekday afternoons, between approximately 13:00 and 18:00. All data were collected in October 2022.

Three access measures were collected for each address:

1. Number of on-demand services available;
2. Number of on-demand services with at least one open outlet to purchase from;
3. Total number of outlets available to purchase from via on-demand services.

Analyses were conducted in Stata/SE (version 16.1 for Windows) [24]. For access measures 1 and 2, only descriptive statistics are provided. For access measure 3 (number of outlets available), data were analysed to test for differences by each of the three demographic variables. Medians and inter-quartile ranges are reported, and Kruskal–Wallis *H* test was used as an omnibus test of group differences, and Dunn's test with Bonferroni correction was used post-hoc to determine differences between groups for significant omnibus results. Analyses were repeated for all three cities combined, and for each city separately.

## 3 | RESULTS

A summary of the three access measures is shown in Table 2. All sampled addresses had access to between five and six on-demand delivery services, however, the number of on-demand services that had at least one outlet available to purchase from was lower, ranging from zero (three addresses only, and all in Auckland) to four. The median number of alcohol outlets to purchase from, across all on-demand delivery services was five, though this was higher in Christchurch with a median of nine (range 3–11).

Access to on-demand alcohol (as measured by the number of outlets available to purchase from) by neighbourhood demographics (physical outlet density, socio-economic deprivation and proportion of Māori population) is shown in Table 3.

For all three cities combined, and for Wellington, there was a statistically significant association between the number of outlets available on-demand and the density of physical outlets. For the three cities combined, the neighbourhoods with the highest tertile of physical alcohol outlets had a median of 10 on-demand outlets available to purchase, compared to a median of 5 in tertile 1 and a median of 4 in tertile 2. Post-hoc testing showed no significant difference between tertiles 1 and

**TABLE 3** Number of alcohol outlets available on-demand by neighbourhood demographic variables.

All three cities combined					
Number of outlets available on-demand	By physical outlier availability tertile <sup>a</sup>				
	1 Median (IQR) 5 (3,8)	2 Median (IQR) 4 (3,7)	3 Median (IQR) 10 (5,10)	Chi <sup>2</sup> (2 df) 10.67	p-value 0.0048
	By deprivation tertial <sup>b</sup>				
Number of outlets available on-demand	1 Median (IQR) 5 (3,10)	2 Median (IQR) 6 (3,9)	3 Median (IQR) 5 (3,10)	Chi <sup>2</sup> (2 df) 0.24	p-value 0.8859
	By proportion Māori population <sup>c</sup>				
	0 Median (IQR) 6 (4,10)	1 Median (IQR) 4 (3,9)		Chi <sup>2</sup> (1 df) 1.59	p-value 0.2078
Number of outlets available on-demand Auckland	By physical outlier availability tertile <sup>a</sup>				
	1 Median (IQR) 4 (2,4)	2 Median (IQR) 4 (2,6)	3 Median (IQR) 5 (3,6)	Chi <sup>2</sup> (2 df) 2.75	p-value 0.2526
	By deprivation tertial <sup>b</sup>				
Number of outlets available on-demand	1 Median (IQR) 5 (3,7)	2 Median (IQR) 4 (2,6)	3 Median (IQR) 4 (2,5)	Chi <sup>2</sup> (2 df) 2.56	p-value 0.2774
	By proportion Māori population <sup>c</sup>				
	0 Median (IQR) 4 (2,6)	1 Median (IQR) 4 (2,5)		Chi <sup>2</sup> (1 df) 0.1	p-value 0.755
Number of outlets available on-demand Christchurch	By physical outlier availability tertile <sup>a</sup>				
	1 Median (IQR) 8 (7,9)	2 Median (IQR) 8 (7,10)	3 Median (IQR) 10 (10,10)	Chi <sup>2</sup> (2 df) 4.76	p-value 0.0927
					(Continues)

**TABLE 3** (Continued)  
**All three cities combined**

Number of outlets available on-demand	By deprivation tertile <sup>b</sup>	2	3	Chi <sup>2</sup> (2 df)	p-value
	Median (IQR)	Median (IQR)	Median (IQR)		
	8 (8,10)	9 (8,10)	10 (7,10)	0.13	0.9395
Number of outlets available on-demand Wellington	By proportion Māori population <sup>c</sup>	1		Chi <sup>2</sup> (1 df)	p-value
	Median (IQR)	Median (IQR)			
	10 (8,10)	7 (4,9)		4.62	0.0316
Number of outlets available on-demand	By physical outlet availability tertile <sup>a</sup>	2	3	Chi <sup>2</sup> (2 df)	p-value
	Median (IQR)	Median (IQR)	Median (IQR)		
	4 (3,9)	3 (2,4)	10 (5,10)	9.35	0.0093
Number of outlets available on-demand	By deprivation tertile <sup>b</sup>	2	3	Chi <sup>2</sup> (2 df)	p-value
	Median (IQR)	Median (IQR)	Median (IQR)		
	4 (3,5)	4 (3,5)	10 (3,10)	1.41	0.4938
Number of outlets available on-demand	By proportion Māori population <sup>c</sup>	1		Chi <sup>2</sup> (1 df)	p-value
	Median (IQR)	Median (IQR)			
	5 (3,10)	4 (3,9)		0.08	0.773

Note: Post-hoc test results for significant results in the omnibus result are reported in text, noting that a Bonferroni correction for multiple comparisons was used in this instance. Data were collected in October 2022.

Abbreviation: IQR, interquartile range.

<sup>a</sup>1 is lowest density of physical alcohol outlets, 3 is highest.

<sup>b</sup>1 is lowest deprivation, 3 is highest.

<sup>c</sup>1 is neighbourhoods with highest 20% of Māori population (by city).

2, however, tertile 3 (with the greatest proportion of physical outlet density) was significantly higher than both tertile 1 ( $p = 0.0166$ ) and tertile 2 ( $p = 0.0034$ ). In Wellington, the neighbourhoods with the highest tertile of physical alcohol outlets had a median of 10 on-demand outlets available to purchase, compared to a median of 4 in tertile 1 and a median of 3 in tertile 2. However, post-hoc testing only showed a significant difference between tertiles 2 and 3 ( $p = 0.0035$ ). In contrast, the number of outlets available on-demand was not associated with physical outlet density in Auckland or Christchurch.

There were no significant differences observed between the number of outlets available to purchase from and neighbourhood socio-economic deprivation. Christchurch was the only city where an association was observed between the number of outlets available on-demand and the proportion of Māori population. It showed there was a higher number of outlets available on-demand in areas with a lower proportion of Māori population, with a median of 10 outlets, compared to a median of 7 in the areas with a greater proportion Māori population.

#### 4 | DISCUSSION

The availability of on-demand alcohol is relatively new to New Zealand and may have implications for consumption and alcohol-related harm. To the best of our knowledge, this is the first study to quantify access to on-demand alcohol in New Zealand, and determine whether access differs by neighbourhood characteristics. There is wide coverage of on-demand services, with every address sampled having at least five services available, although, a small number of those had no outlets available to purchase from. Christchurch had the greatest access to on-demand alcohol when considering the number of outlets available to purchase from on-demand.

Physical alcohol outlet proximity and density is associated with increased alcohol-related harm [4, 25]. Physical outlet density was only associated with 'virtual' on-demand access in Wellington with the highest tertile of physical alcohol outlets having more on-demand outlets available to purchase from. In Auckland and Christchurch, the number of on-demand outlets available was not associated with physical outlet density. The number of on-demand alcohol outlets to purchase from in these cities was similar across the three categories of low, medium, high physical alcohol outlet access. On-demand delivery may be changing the nature of the alcohol environment, in neighbourhoods which previously had relatively lower levels of access to alcohol. It has been

previously established that alcohol-related harms, such as increased hazardous drinking and crime [4, 25], are associated with living in areas with high physical outlet density. Future research should aim to understand whether these harms are also impacted by on-demand alcohol access, and how this intersects with the physical alcohol environment, and other risk and protective factors. These findings suggest that efforts to regulate or limit physical outlet density will have limited effectiveness without simultaneous regulation of virtual access. Local regulation (e.g., via Local Alcohol Policies) will be challenging, given that currently it is possible for delivery services to be licensed in different jurisdictions from which they actually provide delivery services. Addressing this inconsistency will require an amendment of the New Zealand *Sale and Supply of Alcohol Act 2012*, and highlights the importance of coordinated regulation at national and local levels.

Physical alcohol outlet density is higher in socio-economically deprived areas, and the effects of alcohol outlet density on hazardous consumption are particularly apparent among Māori and Pacific peoples [4]. However, we found no evidence for socio-economic patterning in access to on-demand alcohol, and did not find that on-demand alcohol access was higher in areas with a greater proportion of Māori population. This finding is in contrast to studies of online food delivery. A study in England found evidence of socio-economic patterning, with greatest access to online food outlets in the most deprived districts [26]. Similarly, in Auckland New Zealand, there were more unhealthy food outlets offered via on-demand delivery service in areas with increased socio-economic deprivation [27].

Limitations of this study are that we focussed on on-demand alcohol delivery services operating across the three largest cities in New Zealand (i.e., we excluded individual liquor stores that may offer delivery). Therefore, we are likely underestimating access to on-demand alcohol in New Zealand. Our access measures were limited to the number of outlets available to purchase from; we did not investigate the types or prices of alcohol available within those outlets. We were unable to simultaneously sample all on-demand services, and limited our sampling to weekday afternoons (to avoid both the best and worst-case scenarios for access), but cannot determine if access shows temporal changes. The secondary data sources used for analysis were primarily from 2018, but represented the most current data available at the time of analysis. The analysis represents quantification of availability at a single point in time, acknowledging that this could change as new businesses enter or leave the market. This was an exploratory study and, as such, used a relatively small sample size, limiting the ability to detect small

differences. However, this study provides a baseline from which temporal changes could be assessed and a method for ongoing quantification, which could be repeated with a larger sample size in the future. A strength of our approach was using three measures of virtual access to on-demand alcohol, and testing for associations with neighbourhood demographics; a more nuanced approach than averaging access across a city. In doing so, this study provides a baseline from which temporal changes to on-demand alcohol access can be measured.

## 5 | CONCLUSIONS

We demonstrate that on-demand services are changing the nature of alcohol access in New Zealand. Given our finding that on-demand 'virtual' access does not consistently reflect the physical alcohol environment, it is therefore important to consider both forms of access when seeking to understand the alcohol environment at a neighbourhood level. The impact of this changing access to alcohol on individual or population-level consumption patterns are as yet unknown, and is an important avenue for future research. The current legislative and policy environment in New Zealand pre-dates the emergence of on-demand alcohol services and local councils should be aware of on-demand alcohol services, and to consider virtual access as well as physical access when developing Local Alcohol Policies.

### AUTHOR CONTRIBUTIONS

Rose Crossin—conceptualisation, methodology, formal analysis, investigation, writing (original draft), writing (reviewing and editing), supervision, project administration, funding acquisition; Dru Norriss—methodology, software, validation, investigation, data curation, writing (reviewing and editing); Christina McKerchar—conceptualisation, writing (reviewing and editing), funding acquisition; Gemma Martin—validation, investigation, writing (original draft); Tessa Pocock—writing (reviewing and editing); Angela Curl—conceptualisation, methodology, writing (reviewing and editing), funding acquisition. Each author certifies that their contribution to this work meets the standards of the International Committee of Medical Journal Editors.

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### CONFLICT OF INTEREST STATEMENT

The authors declare no competing interests, and the funders had no role in the study or the decision to publish.

### ORCID

Rose Crossin  <https://orcid.org/0000-0003-1814-1330>

Tessa Pocock  <https://orcid.org/0000-0002-7692-2031>

### REFERENCES

1. World Health Organisation. Slide to order: a food systems approach to meal delivery apps. WHO European Office for the Prevention and Control of Noncommunicable diseases: Geneva World Health Organisation; 2021.
2. Duthie C, Pocock T, Curl A, Clark E, Norriss D, Bidwell S, et al. Online on-demand delivery services of food and alcohol: a scoping review of public health impacts. *SSM Popul Health*. 2023;21:101349.
3. Mojica-Perez Y, Callinan S, Livingston M. Alcohol home delivery services: an investigation of use and risk. Australia: Centre for Alcohol Policy Research and Foundation for Alcohol Research and Education; 2019.
4. Ayuka F, Barnett R, Pearce J. Neighbourhood availability of alcohol outlets and hazardous alcohol consumption in New Zealand. *Health Place*. 2014;29:186–99.
5. Huckle T, Huakau J, Sweetsur P, Huisman O, Casswell S. Density of alcohol outlets and teenage drinking: living in an alcohol environment is associated with higher consumption in a metropolitan setting. *Addiction*. 2008;103:1614–21.
6. Colbert S, Wilkinson C, Thornton L, Feng X, Campaign A, Richmond R. Cross-sectional survey of a convenience sample of Australians who use alcohol home delivery services. *Drug Alcohol Rev*. 2023;42:986–95.
7. Swahn MH, Simon TR, Hammig BJ, Guerrero JL. Alcohol-consumption behaviors and risk for physical fighting and injuries among adolescent drinkers. *Addict Behav*. 2004;29:959–63.
8. Huckle T, Parker K, Romeo J, Casswell S. Online alcohol delivery is associated with heavier drinking during the first New Zealand COVID-19 pandemic restrictions. *Drug Alcohol Rev*. 2021;40:826–34.
9. Van Hoof JJ, Van Den Wildenberg E, De Bruijn D. Compliance with legal age restrictions on adolescent alcohol sales for alcohol home delivery services (AHDS). *J Child Adolesc Subst Abuse*. 2014;23:359–61.
10. Sale and Supply of Alcohol Act, (2012).
11. Hay GC, Whigham PA, Kypril K, Langley JD. Neighbourhood deprivation and access to alcohol outlets: a national study. *Health Place*. 2009;15:1086–93.
12. Ministry of Health. Annual Update of Key Results 2020/21: New Zealand Health Survey New Zealand: Ministry of Health; 2021. Available from: <https://www.health.govt.nz/publication/annual-update-key-results-2020-21-new-zealand-health-survey>
13. Marie D, Fergusson DM, Boden JM. The links between ethnicity, cultural identity and alcohol use, abuse and dependence in a New Zealand birth cohort. *Alcohol Alcohol*. 2012; 47:591–6.
14. Crossin R, Cleland L, Beauvais A, Witt K, Boden JM. Acute alcohol use and suicide deaths: an analysis of New Zealand coronial data from 2007–2020. *N Z Med J*. 2022;135:65–78.

15. Maynard K. Te Tiriti o Waitangi and alcohol law. Wellington, New Zealand: Te Hiringa Hauora | Health Promotion Agency; 2022.
16. Miles H, Apeldoorn B, McKerchar C, Curl A, Crossin R. Describing and characterising on-demand delivery of unhealthy commodities in New Zealand. *Aust N Z J Public Health*. 2022;46:429–37.
17. Poelman MP, Thornton L, Zenk SN. A cross-sectional comparison of meal delivery options in three international cities. *Eur J Clin Nutr*. 2020;74:1465–73.
18. Norriss D, Crossin R, Curl A, Bidwell S, Clark E, Pocock T, et al. Food outlet access and the healthiness of food available 'on-demand' via meal delivery apps in New Zealand. *Nutrients*. 2022;14:4228.
19. Deng BY, Wiki J, Hobbs M, Marek L, Campbell M, Kingham S. In: University of Canterbury, editor. *GeoHealth laboratory dataset: cleaned nationwide alcohol outlets 2015–2018*. 1st ed. New Zealand: University of Canterbury; 2020.
20. Stats NZ. *Statistical Area 1 2018 (generalised) 2017*. Available from: <https://datafinder.stats.govt.nz/layer/92210-statistical-area-1-2018-generalised/>. Accessed 8 August 2022.
21. Stats NZ. *Statistical Area 1 Higher Geographies 2018 (generalised) 2018*. Available from: <https://datafinder.stats.govt.nz/layer/92206-statistical-area-1-higher-geographies-2018-generalised/>. Accessed 8 August 2022.
22. Atkinson J. *Socioeconomic Deprivation Indexes: NZand NZiDep: Health Inequalities Research Programme (HIRP)*. Wellington: University of Otago Wellington; 2019. Available from: <https://www.otago.ac.nz/wellington/departments/publichealth/research/hipr/otago020194.html>. Accessed 8 August 2022.
23. Toitū te Whenua/Land Information New Zealand. *NZ street address 2022*. Available from: <https://data.linz.govt.nz/layer/53353-nz-street-address/>. Accessed 8 August 2022.
24. StataCorp. *Stata statistical software: release 16*. College Station, TX: StataCorp LLC; 2019.
25. Hobbs M, Marek L, Wiki J, Campbell M, Deng BY, Sharpe H, et al. Close proximity to alcohol outlets is associated with increased crime and hazardous drinking: pooled nationally representative data from New Zealand. *Health Place*. 2020;65:102397.
26. Keeble M, Adams J, Bishop TR, Burgoine T. Socioeconomic inequalities in food outlet access through an online food delivery service in England: a cross-sectional descriptive analysis. *Appl Geogr*. 2021;133:102498.
27. Partridge SR, Gibson AA, Roy R, Malloy JA, Raeside R, Jia SS, et al. Junk food on demand: a cross-sectional analysis of the nutritional quality of popular online food delivery outlets in Australia and New Zealand. *Nutrients*. 2020;12:3107.

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# WATER AND WILDLIFE HABITAT TRUST with WGA

## Ōtūkaikino Catchment

Preservation and resilience of groundwater  
dependent wetlands, waterways and lakes for  
recreational use and enjoyment



WATER & WILDLIFE  
HABITAT TRUST

**WGA**



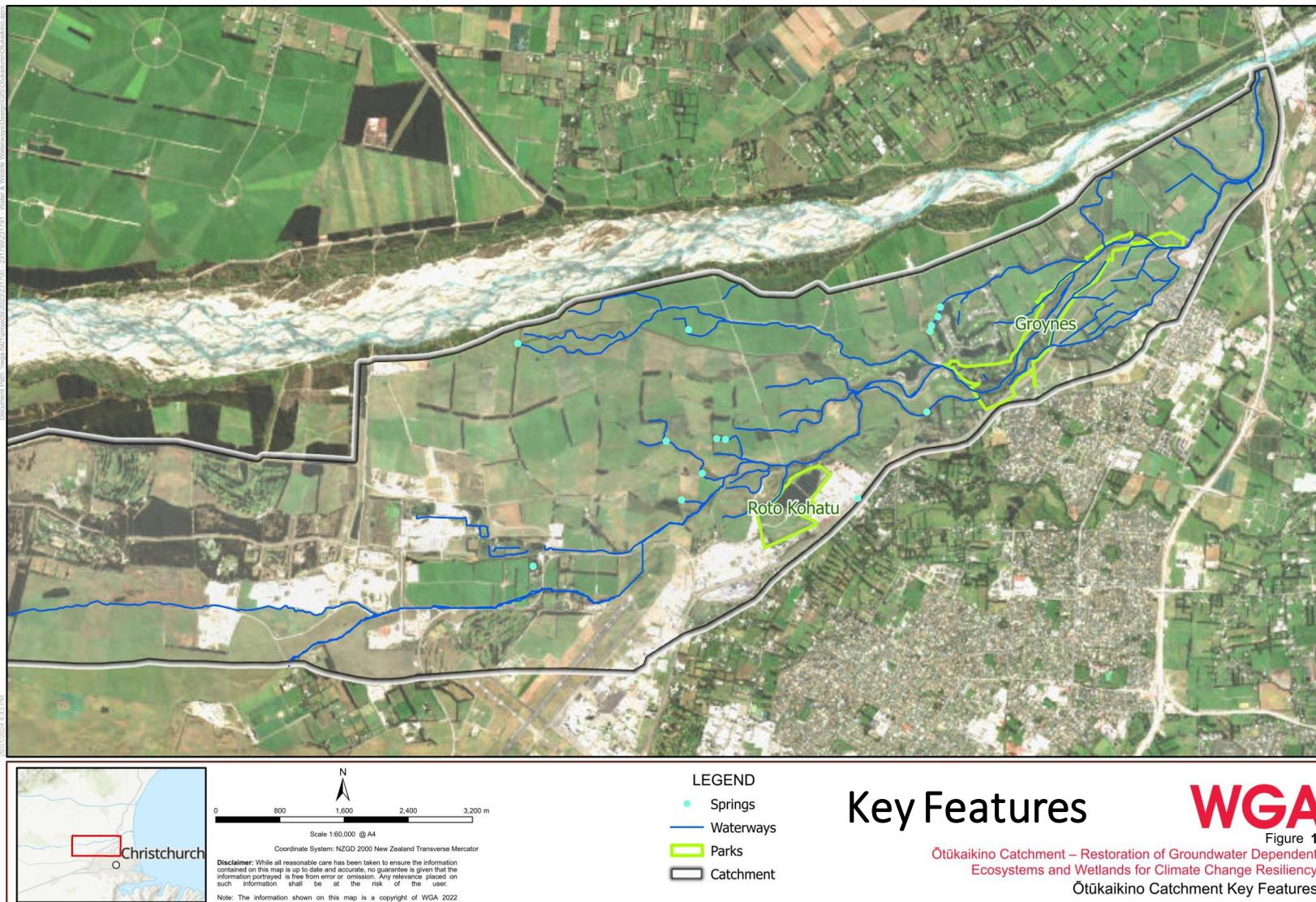
# Objective

*Roto Kohatu Recreational Reserve*

## Te Mana o Te Wai – Ōtūkaikino -

### Healthy waterways, wildlife and landscapes for recreational use and enjoyment

- By adopting an integrated water management approach to maintain healthy ground and surface waterbodies using Natural based Solutions with a changing climate
- Providing for social, environmental and cultural well-being of our community
- Conserving rare and threatened flora and fauna





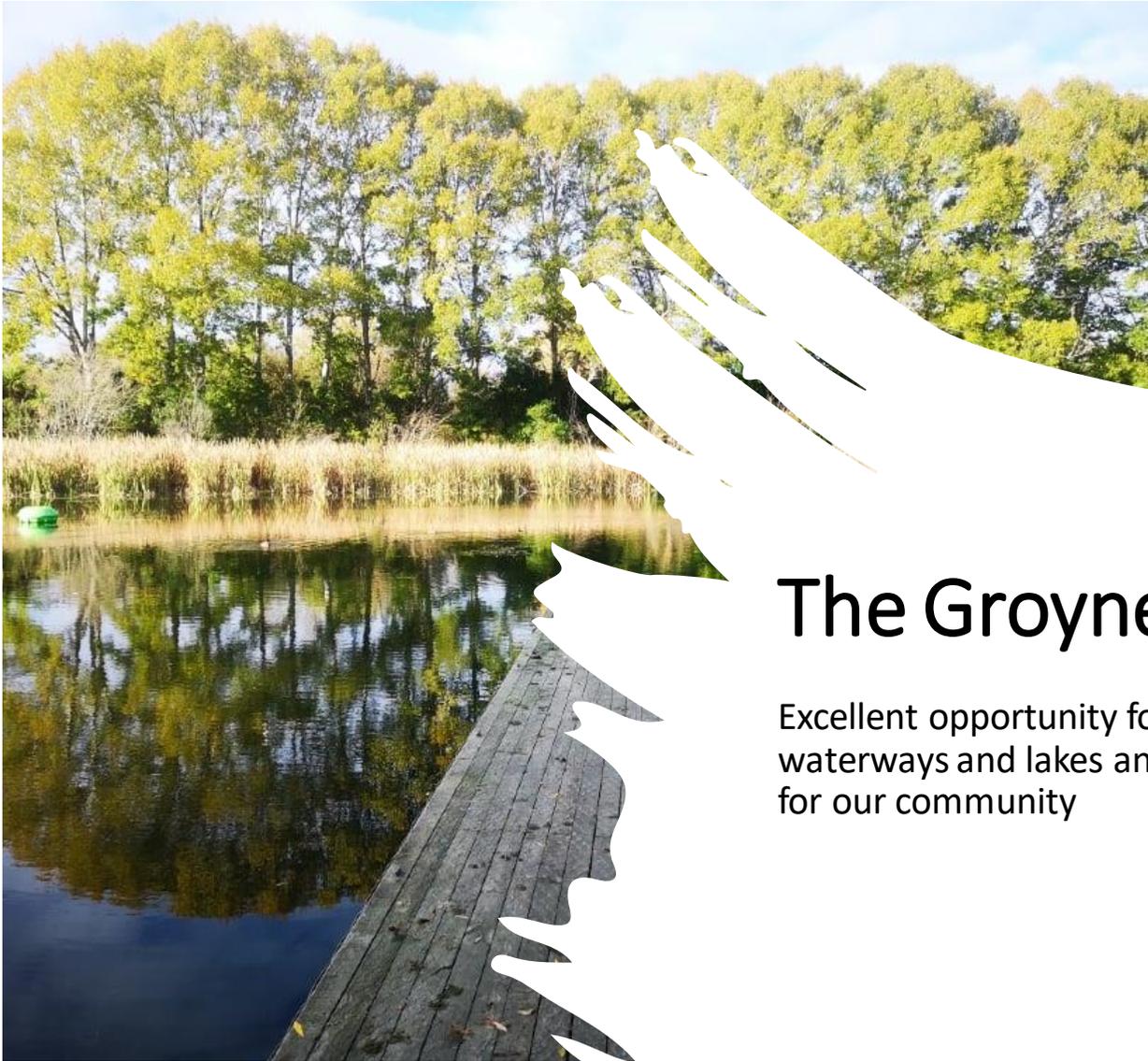
*The Groyne Regional Park*

## Ōtūkaikino Catchment High Environmental, Social and Cultural Values

- Good to fair ecological health, water quality good to best in Christchurch
- Connected springheads, wetlands, streams and lakes
- Significant ecological values with rare & threatened wildlife
- Productive land uses - grazing, cropping, urban, industrial
- Mahinga kai and wai tapu values for tangata whenua
- Facilities and amenity for open space recreational use and enjoyment

### Threats:

- Declining groundwater level, climate change, weed and pest infestation, pollution loads
- Damaging land uses, pathogens and toxic algal blooms



# The Groynes Regional Park

Excellent opportunity for healthy and diverse wetlands, waterways and lakes and wonderful open space recreation for our community



# Roto Kohatu Recreational Reserve

# Project proposal

- **Stage 1 Momentum Building and Conceptualisation**

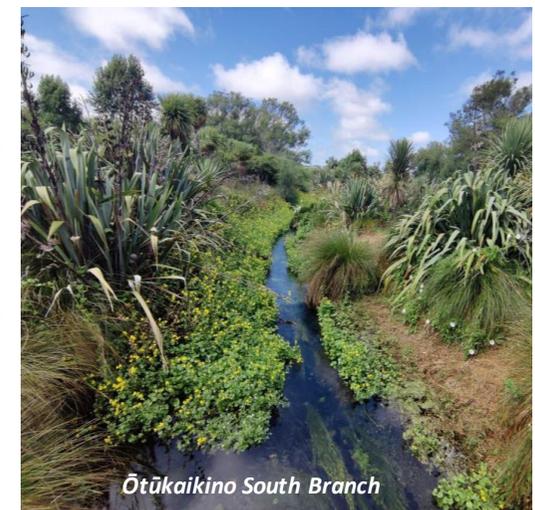
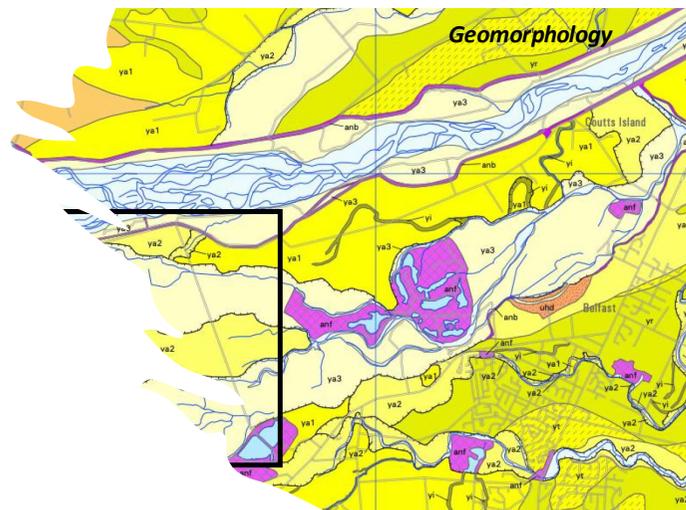
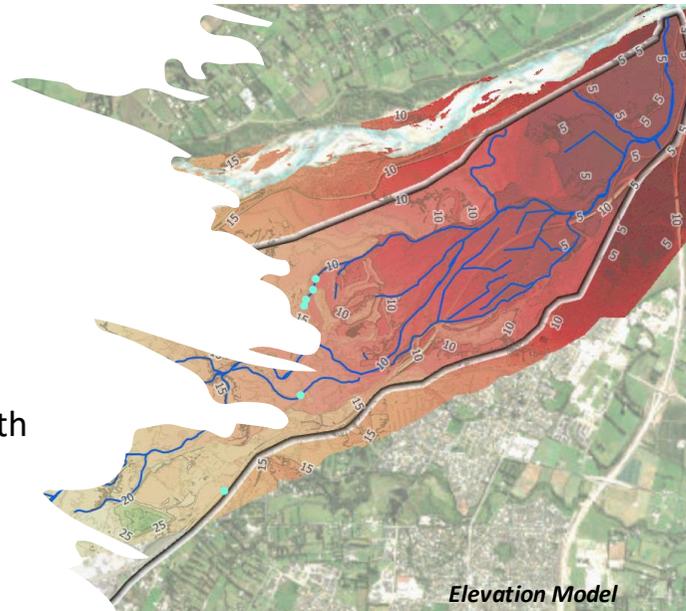
Scope the project concepts, gather external advice, and form a collaborative partnership with WWHT, WGA, CIAL, ECan, CCC, Runanga, QEII and Isaacs CWT

- **Stage 2 Feasibility Study Report**

Identify and assess the feasibility of options for management of surface water and groundwater supporting the Ōtūkaikino

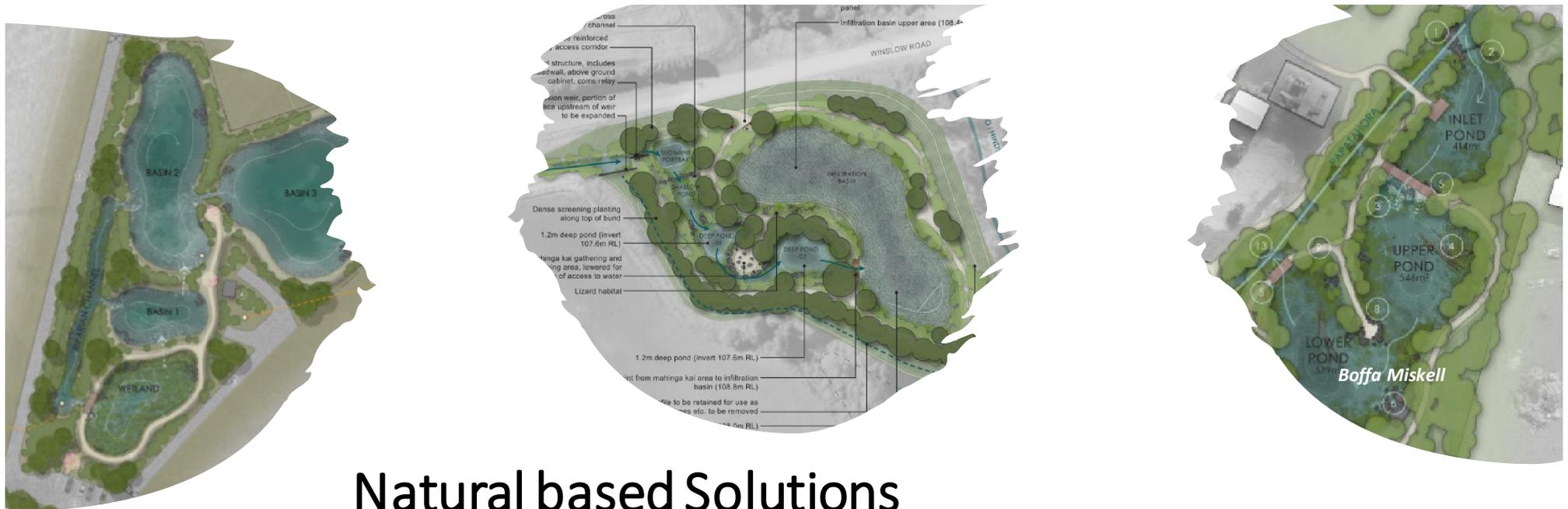
- **Stage 3 Funding and Implementation**

Design, consenting, implementation, and monitoring to manage the enhancement and resiliency of the Ōtūkaikino



# Natural based Solutions as Project Guiding Principle





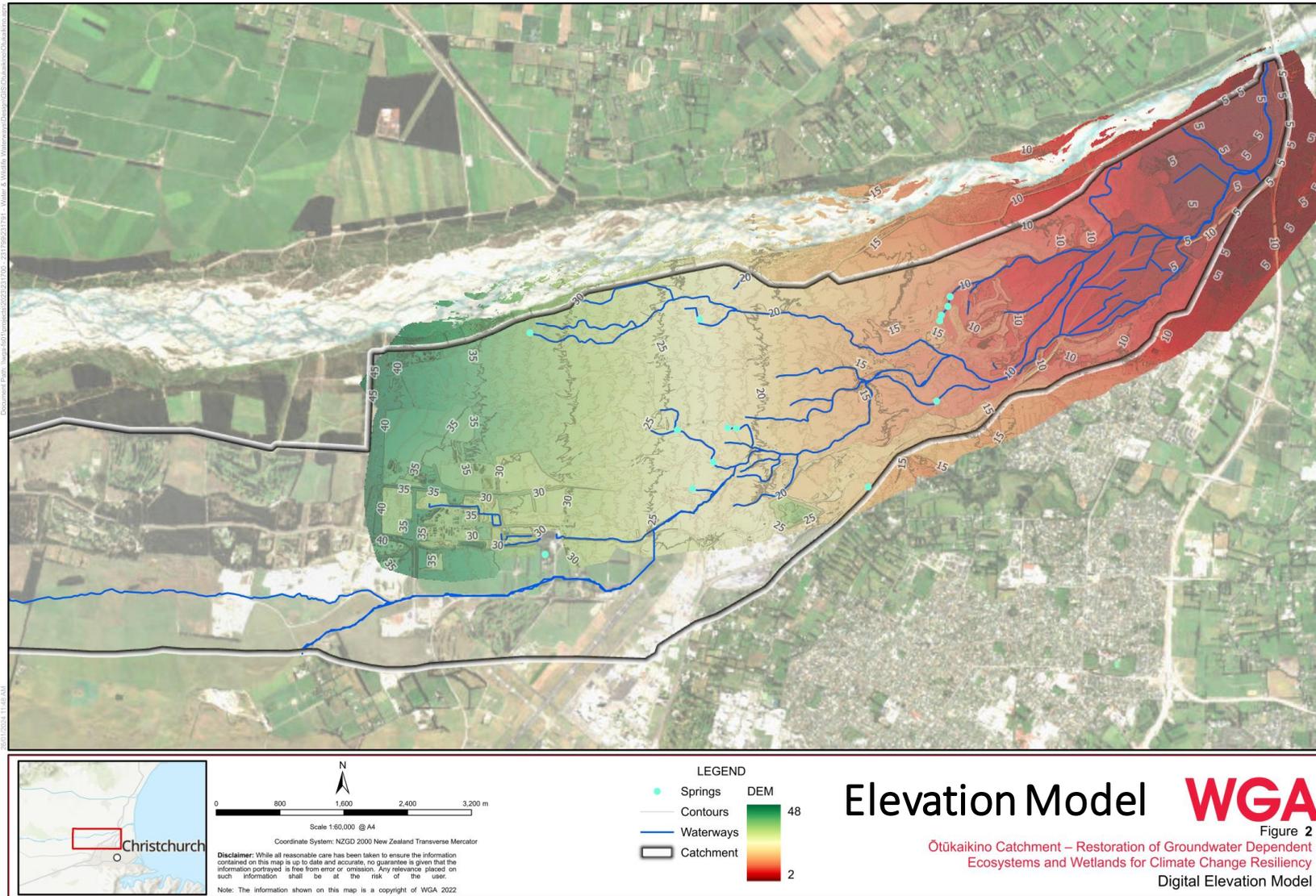
## Natural based Solutions

- **Slow Water Down**

Infiltration ponds recharge groundwater for storage and release to downstream springs. Water treatment is provided by sedimentation ponds, riparian channels, wetlands, and natural attenuation in soil and aquifers.

- **Provide Ecological, Amenity, and Cultural Value**

Managing a more consistent water source contributes to the resiliency and future-proofing of existing streams and wetlands. Creation of new habitat with constructed wetlands adds amenity, mahinga kai, and wai tapu values.



# Stage 1 – Conceptualisation

- Ōtūkaikino Catchment Project  
Conceptualisation Mapping
- Restoration Wetland Options Development
- Sustainable Groundwater Management  
Options Development
- Stage 1 Reporting
- Community and Stakeholder Presentations

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Stage 2: prepare Feasibility Report on favored  
management options



WATER & WILDLIFE  
HABITAT TRUST

**WGA**

# CCC Interests and Opportunities

- Adapting to a changing climate to maintain lake levels and stream flows in the Ōtūkaikino
- Healthy waterways, lakes and wetlands for the Ōtūkaikino
- Support Community open-space recreation – Roto Kohatu Recreational Reserve and the Groyne Regional Park

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Join a collaborative partnership with WWHT, WGA, CIAL and hopefully ECan and Isaacs C&W Trust to implement the project proposal.



WATER & WILDLIFE  
HABITAT TRUST

**WGA**

# Waitai Coastal-Burwood-Linwood Community Board

## Report to Council – February 2024



**Presenters: Paul McMahon, Chair and Jackie Simons, Deputy Chair**

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# Summer Events in the Ward Area

## Santa Parade

This well-loved event took place on Saturday 9 December 2023



## Kite Day 2024

This well-loved event took place on Saturday 13 January 2024



# Highlights from the Ward Area

## New Brighton Museum Commonwealth Games 50<sup>th</sup> Anniversary

New Brighton Museum's Commonwealth Games 50<sup>th</sup> Anniversary display was officially opened on Saturday 13 January 2024 by Bruce Ullrich of the NZ Olympic Committee and the Mayor. The exhibition, marking the historical hosting of the British 1974 Commonwealth Games at QEII among other venues. The exhibition features a huge collection of memorabilia including badges, uniforms, magazines, books, newspaper clippings, souvenirs, medals and lots more with people donating and lending items from right across Aotearoa. Some of the memorabilia has been donated permanently and so in keeping with it's kaupapa, the Museum will be able to preserve and showcase the items for the future.

The Museums' volunteers have worked countless hours to get all the displays ready in time for the opening. The main attraction, a rare 1974 Holden Kingswood car used by the Games officials to drive around VIPs.



## Highlights from the Ward Area

### Southshore Estuary Edge

The highly anticipated work along the estuary edge in Southshore and South New Brighton has reached another milestone.

The project consent has now been lodged with the landscape plans and technical assessments available on Environment Canterbury's website.



## Advocacy

- Tsunami Evacuation Planning



- Eastern Priority (Relationship Management Plan)



Thank you!

# Te Pātaka o Rākaihautū Banks Peninsula Community Board Report to Council – December 2023



**Presenters:** Lyn Leslie, Board Chairperson & Penelope Goldstone, Community Governance Manager Banks Peninsula

# Community Engagement

## Send Snap Solve success

- A Customer Service Request positive result.
- A piece of land investigated by staff, uncovered to be a plantation reserve from the BPDC days
- An asset which had never made it onto the Parks register.
- Now included in the asset register, staff will maintain the walkway.

## Live at the Point

- Free music event, located at the Godley House Grounds in Diamond Harbour.
- Sessions every Sunday beginning mid-January until 18 February.
- A chance for the community to gather, indulge in local treats and enjoy some good tunes.



# Community Focus

## Little River Toilet Issue

- Port-a-loos have been placed in Little River due to the ladies' toilets being out of order.

## Cruise Update

- Affordable shuttles being offered from ship to Christchurch
- Passengers encouraged to respect local public transport, and utilise shuttles instead
- Voluntary 'City Champions' stationed around to welcome and offer guidance for passengers



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## Community Focus

### Unformed legal roads – Okuti track

- Huge volume of paper roads in Banks Peninsula
- Issues include locked and/or closed gates on these paper roads

### Waitangi Day Okains Bay Ceremony

- The Governor General, Dame Cindy Kiro, in attendance
- Watch this space... pictures to come next month!

4



**Thank you!**  
**Ngā mihi nui**



# Waihoru Spreydon-Cashmere-Heathcote Community Board Report to Council

Te kaipāhō (Presenters):  
Callum Ward, Chairperson  
Keir Leslie, Deputy Chairperson



# 2023 Community Service Awards



# Neighbourhood Building Project



# Rebuild of South Library



**Our Board's ambition is  
liveable communities!**

# Waimāero Fendalton-Waimairi-Harewood Community Board

Report to Council – 7 February 2024



**Presenter:** Bridget Williams (Chair)

## Decisions made under delegations

- Approved No Stopping Restrictions on Stanleys Road, Harewood
- Approved No Stopping Restrictions on Tulett Park Drive & Glenturret Drive, Harewood
- Approved P60 Parking Restrictions and No Stopping Restrictions at 3-7 Normans Road, Strowan
- Approved three applications to the Discretionary Response Fund
- Approved an application to the Board's Youth Development Fund

### Public Forum

The Board had a public forum item from a group of four local residents, expressing concerns regarding potential asset sales as part of the LTP process.

## Bryndwr Banter – Summer Edition

The second edition of our new Bryndwr Banter went out to over 3,400 homes in the Bryndwr area.

We are getting a lot of positive feedback and interest from groups wishing to share information about their activities/service.

The next edition will be going out in March 2024.



## Durga Puja 2023 Event

Durga Puja is a Hindu festival which celebrates bringing the community together and spreading the value of heritage, culture, art, cuisine and diversity in Christchurch.

The event was held on over Labour Weekend at Ōrauwhata: Bishopdale Library and Community Centre.



## Unity Under the Sun – Bryndwr Event

This inaugural event was held on 27 January to bring together local Bryndwr residents and representatives from a range of community organisations providing services and activities to the area.

The event was held in partnership with the local Community Governance Team, Fendalton Library, St Aidan’s Church, The Village, New Generation Church, Bryndwr Community Gardens, Bryndwr Chapel, Bryndwr Vege Co-op, Kainga Ora, North Christchurch Community Patrol, and Nor'West Brass Band.





Join us on 17 February at Ray Blank Park in Ilam to celebrate the wonderful diversity of our city!

Thank you!



# Waipapa Papanui-Innes-Central Community Board

## Report to Council for February 2024



**Presenters:** Emma Norrish and Simon Britten  
7 February 2024

## Decisions made under delegations

- **Joint Meeting of the Waimāero Fendalton-Waimairi-Harewood and Waipapa Papanui-Innes-Central Community Boards – 4 December 2023**
  - **Part A** - Greers/Langdons Roads Traffic Lights (Four deputations)
- **Reports to the Board:**
  - Tour Coaches in the West End
  - Proposed Lane Names – 35 Hawkins Road
  - **Part A** - Consider Revocation of Portion of Recreation Reserve – 119 Petrie Street, Richmond
  - Waipapa Papanui-Innes-Central Community Board Area Report – December 2023
- **Discretionary Response Fund allocations:**
  - \$1,500 to Christchurch Spikers Volleyball Club for operational costs
- **Better-Off Fund Application**
  - \$40,000 to The Women’s Centre Inc. for relocation and associated costs

## Decisions made under delegations continued

### ▪ Public Forum

- Peter Beck and David Colyer – City Asset Sales
- Lynne O’Keefe and Jared Lane – St Albans Pavilion and Pool Inc. – Edgware Pool
- Tim Frank – Traffic issues in the Papanui area

### ▪ Deputations

- Rob Giller from Bus and Coach Association NZ – Tour coaches in the West End



# Community Liaison

## School Awards for Community Service Champions

Board member, Sunita Gautam, presented Smriti Parajuli from Te Aratai College and Mahdi Alizada from Pareawa Banks Avenue School with their Rangitahi awards at the end of year huis.



# Community Liaison

## Craft Stash Swap – Papanui Library

Saturday 28<sup>th</sup> October Papanui  
Library held the first Stash Swap  
since before Covid.

A BIG thank you to the Papanui  
Community Governance Team  
who allowed us to borrow their  
Board Room for the day.



## Community Liaison

### Santa Claus Workshop

**Charitable Trust** – Staff picked up six boxes of wooden toys from Martin Thompson who leads a group of volunteers at the Santa Claus Workshop Charitable Trust.

The wooden toys including stacking blocks, toy boats, trains, tractors and cars are all produced by volunteers and are crafted using top quality pine.



# Community Liaison

**Blessing of the New Marian College** – The blessing of the new premises for Marian College took place 24 November 2023.

The nearly-completed project is a transformation of a warehouse into a vibrant, clever space, reflecting the hard work put in by a huge number of people over a number of years.



# Community Liaison

## Papanui-Innes-Central

**Community Liaison** – The final meeting for 2023 was held at Kohinga with organisations sharing their current mahi, highlights and learnings from the year and what’s on the horizon for 2024.

This was followed by ongoing discussions and networking over kai.



## Community Liaison

**House of Hoopz** – Council is partnering with Youth and Cultural Development to deliver events for rangatahi such as this. The Shirley event for young basketballers to compete, and catering for other youth with fades and braids, music and a sausage sizzle, took place at MacFarlane Park on 26 January, attracting over 150 people.



# Community Board Plan

Petrie Park Planting BBQ – Through the facilitation of We are Richmond, and with Community Partnerships Ranger in support, the local community came together on the evening of 21 November 2023 in Petrie Park for a barbeque and to experiment with plantings and community planning for the space.



Thank you!



# Waipuna Halswell-Hornby-Riccarton Community Board Report to Council – 7 February 2024

**Te kaupāhō (Presenters):** Helen Broughton, Chairperson  
Marie Pollisco, Deputy Chairperson



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## Decisions made under delegation

### Reports to the Board

- New road name for Halswell Junction Road cul-de-sac
- Proposed Lane Names - 24 Amyes Road and 48 Quaifes Road
- Riccarton CRAF - Bradshaw Terrace street renewal
- Proposed No Stopping Restrictions - Kinsella Crescent & Sir James Wattie Drive
- Waipuna Halswell-Hornby-Riccarton Recess Committee 2023/24
- Better-Off Fund Application – Upper Riccarton War Memorial Library Pocket Park Development

### Discretionary Response Fund allocations

- Canterbury Westland Kindergarten Assn (Kidsfirst) – Avonhead
- Sockburn Residents' Association

2

## Decisions made under delegation

### Off the Ground Fund allocations

- Geoffrey Siave towards the Carols, Chaos, and Kai Community event
- Lorraine Rycroft towards the Kennedys Bush Road Neighbourhood Christmas event

### Youth Development Fund allocations

- Flynn Gunther - FIG Trampoline World Age Group Championships in Birmingham, England
- Anna Lee School of Dance to support Ella Caldwell - She Shines On Dance Tour in New York and Orlando, USA
- Isabella Brindley - Outward Bound Teen Course at Anakiwa, Marlborough Sounds
- Cooper Paulo - Canterbury Under 14 Touch Team tournament in Oamaru

### Swimming Accessibility and Activation Fund Allocation

- Youth and Cultural Development Society Inc towards YCD – FRESH Pop Up Activations @ the CCC Summer Splash Event

3



*Kennedys Bush Road Neighbourhood  
Christmas event*

## Progress on Community Board Plan Priorities

**Riccarton** - *Support initiatives that provide for social cohesion, community connectedness and safety in the Riccarton Ward*

- **Better-Off Fund Grant** – Upper Riccarton War Memorial Library Pocket Park Development
- **South Express Cycleway Light Phasing** – Following a Public Forum presentation expressing concerns about the effects of the phasing of the lights at the South Express Cycleway at the intersection of Mandeville and Lowe Streets, the Board referred the matter to staff for advice on any improvements that can be made to the travel experience and safety of pedestrians and cyclists.
- **Discretionary Response Fund Grant** - Sockburn Residents' Association's Connecting Sockburn Project

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## Progress on Community Board Plan Priorities

**Halswell** - Support initiatives that provide safe recreation spaces and opportunities for youth in Halswell to come together

- **Swimming Accessibility and Activation Fund Grant** - Youth and Cultural Development Society Inc towards YCD FRESH Pop-Up Activations @ the CCC Summer Splash Event.

The Huritini Council also supported the event on Saturday 13 January. The students provided games for event, cooked and gave away 450 sausages, and did some engagement on what other events and activities young people would like to see in Halswell.



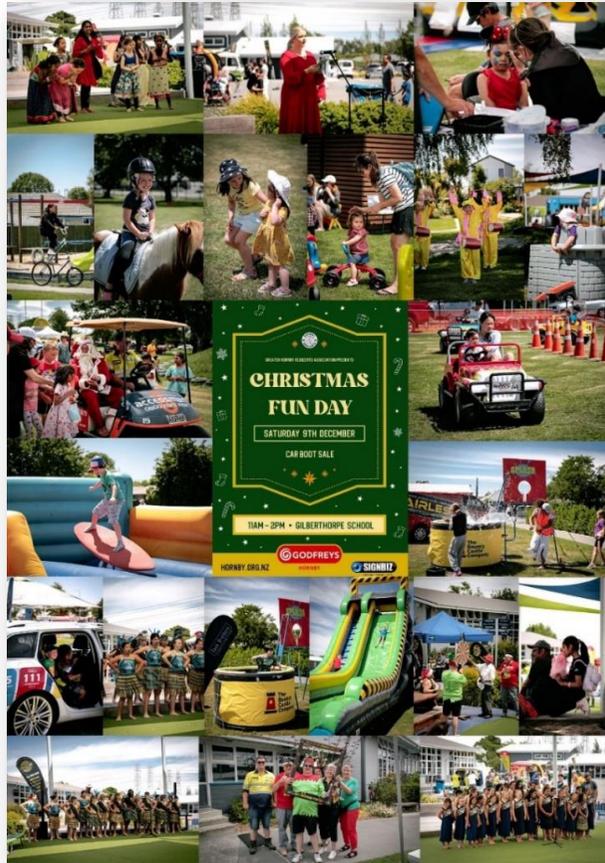
## Getting prepared for the fire season



The Halswell Residents' Association with assistance from local Council staff organised a Halswell Community Presentation on getting prepared for the fire season.

The community were able to hear from Fire and Emergency NZ supported by Te Whatu Ora, Civil Defence Emergency Management and NZ Police regarding what people can do to best protect themselves, their families and property from wildfires.

## Greater Hornby Christmas Fun Day



Another successful Greater Hornby Christmas Fun Day, organised by the Greater Hornby Residents' Association, was held on 9 December 2023 at Gilberthorpe School.

This popular annual event offered a wide range of activities, food and market vendors and entertainment for the community to enjoy.

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## Matatiki Hornby Centre



Construction of the Matatiki Hornby Centre is progressing with an aim of completion in April 2024. The Board have received regular updates.

Thank you!