



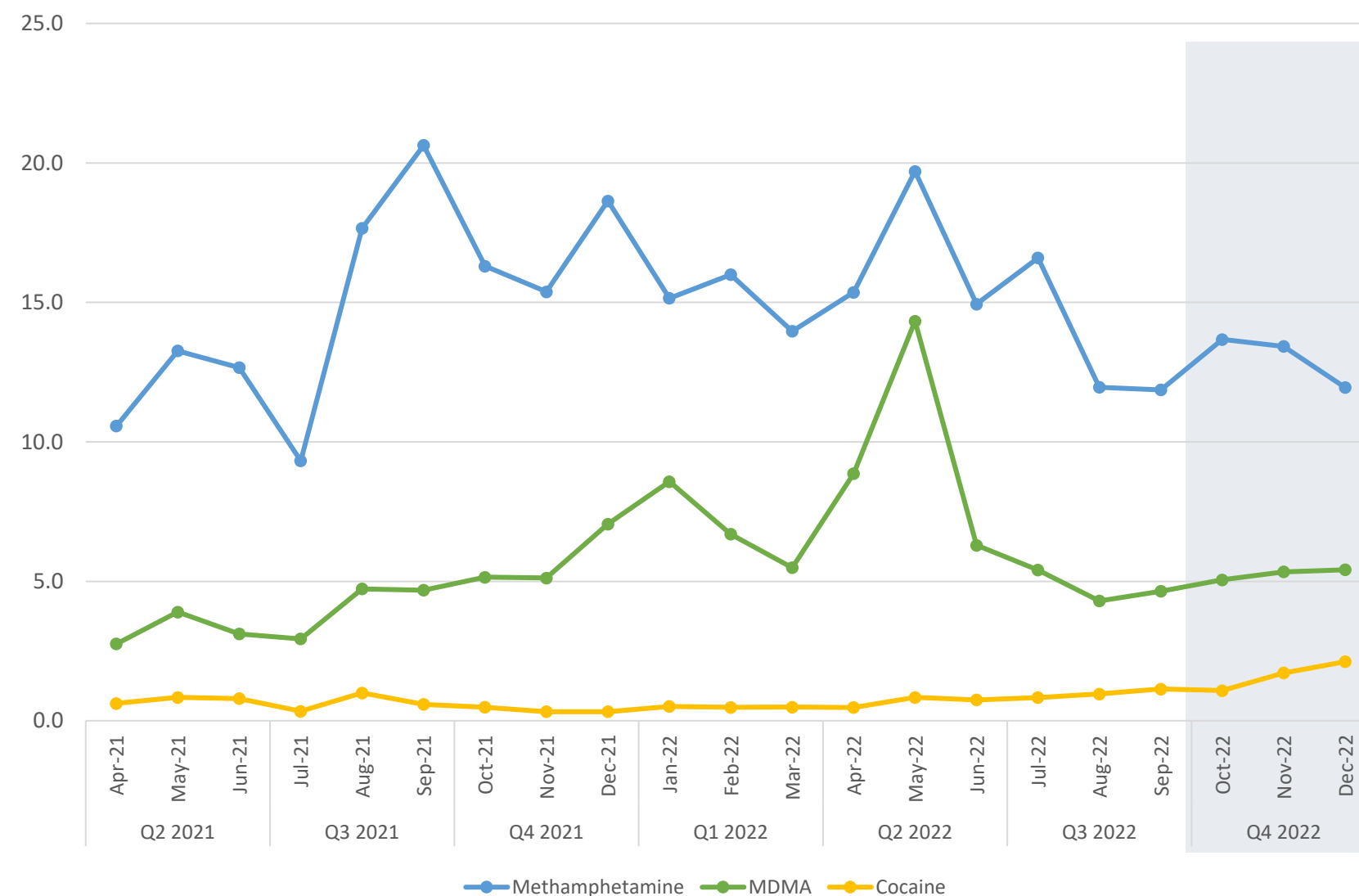
# Wastewater Drug Testing in New Zealand: National Overview

## Quarter Four: October – December 2022



- Wastewater testing occurs during one week each month, however the frequency of testing varies between sites. Nationwide testing started in November 2018, with current testing sites covering up to 75 percent of the total New Zealand population. While the nationwide programme tests for indicators of consumption of methamphetamine, MDMA, cocaine, heroin, and fentanyl, the three commodities routinely detected in sufficient quantities to accurately report on are methamphetamine, MDMA and cocaine.
- Q4 2022 covers the three month period between October and December 2022 (inclusive).
- All data is representative of the sites tested only. It is not possible to extrapolate this data to nearby communities that are not tested.
- Drug use is calculated from the concentration of each drug biomarker detected in the wastewater. This is reflective of the amount of pure drug being consumed and does not include fillers, binders or adulterants.
- The estimated dollar value generated from illicit drug distribution takes into consideration the estimated drug use across all sites and the typical street price (per gram) of each commodity.
- The social harm cost estimates are derived from the New Zealand Illicit Drug Harm Index 2020 (DHI 2020). The DHI 2020 provides a conservative measure of the harms associated with the use of illicit drugs in New Zealand and considers both personal and community harms.

Estimated Drug Use Across All Sites (kilograms/week)



### KEY FINDINGS

#### METHAMPHETAMINE

- Methamphetamine consumption across sample sites decreased in Q4 2022 to an average of 13.0 kilograms per week. This was below the average quantity consumed per week over the previous four quarters (17 percent or 2.7 kilograms below).
- Of the sites tested, Northland and Waikato Districts consumed the most methamphetamine per capita, consuming an average of 828 and 824 mg/day/1000 people respectively. This was above the average calculated from all sites (529 mg/day/1000 people).
- The 13.0 kilograms of methamphetamine consumed per week in Q4 2022 equates to an estimated weekly social harm cost of \$14.4 million.
- Approximately \$4.6 million per week was generated from methamphetamine distribution across New Zealand sample sites in Q4 2022.

#### MDMA

- MDMA consumption across sample sites increased in Q4 2022 to an average of 5.3 kilograms per week. This remained below the average quantity consumed per week over the previous four quarters (19 percent or 1.2 kilograms below).
- Of the sites tested, Southern and Wellington Districts consumed the most MDMA per capita, consuming an average of 306 and 298 mg/day/1000 people respectively. This was above the average calculated from all sites (214 mg/day/1000 people).
- The 5.3 kilograms of MDMA consumed per week in Q4 2022 equates to an estimated weekly social harm cost of \$0.73 million.
- Approximately \$1.6 million per week was generated from MDMA distribution across New Zealand sample sites in Q4 2022.

#### COCAINE

- Cocaine consumption across sample sites increased in Q4 2022 to an average of 1.6 kilograms per week. This was above the average quantity consumed per week over the previous four quarters (156 percent or 1.0 kilogram above).
- Of the sites tested, Tāmaki Makaurau continued to consume the most cocaine per capita consuming an average of 120 mg/day/1000 people. This was above the average calculated from all sites (67 mg/day/1000 people).
- The 1.6 kilograms of cocaine consumed per week in Q4 2022 equates to an estimated weekly social harm cost of \$0.49 million.
- Approximately \$0.66 million per week was generated from cocaine distribution across New Zealand sample sites in Q4 2022.



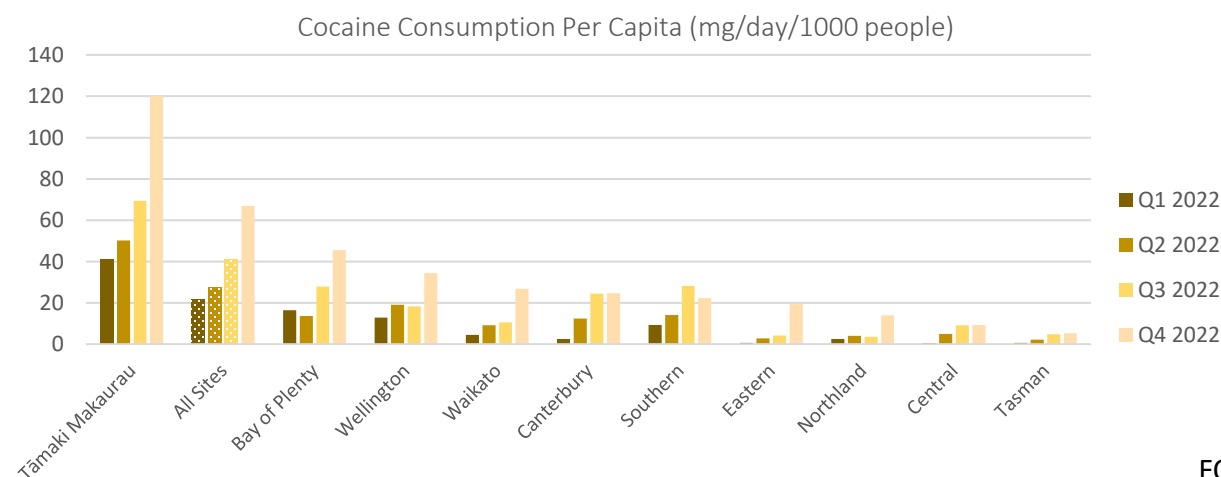
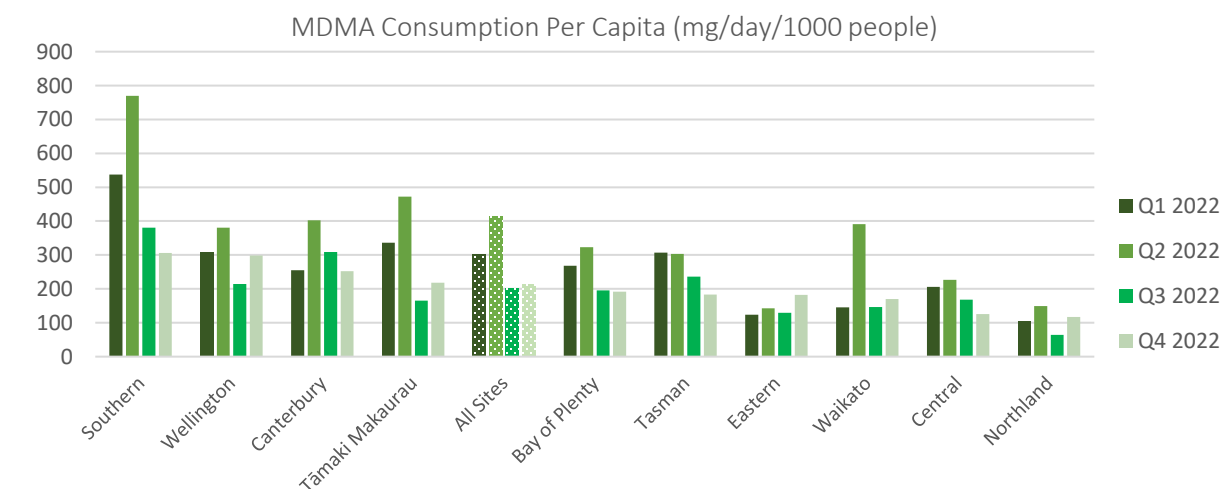
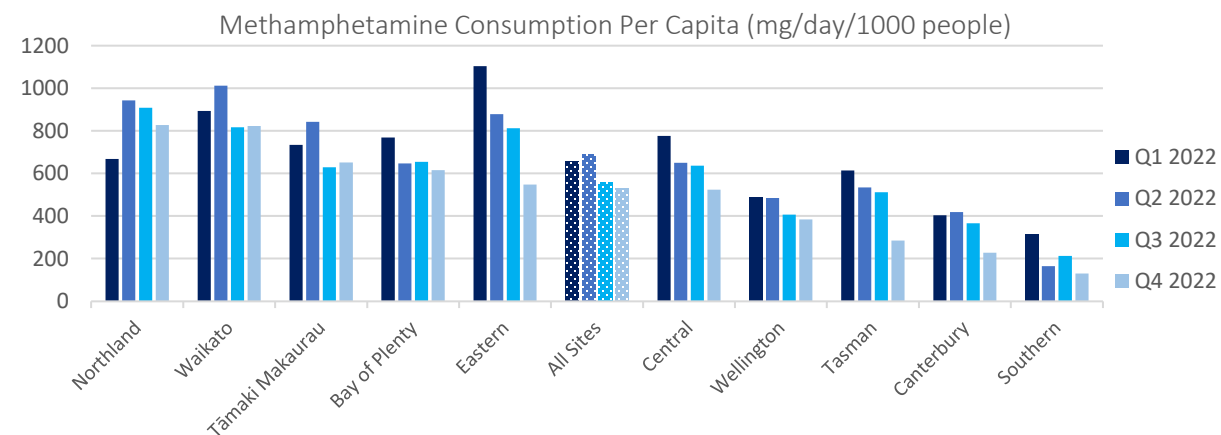
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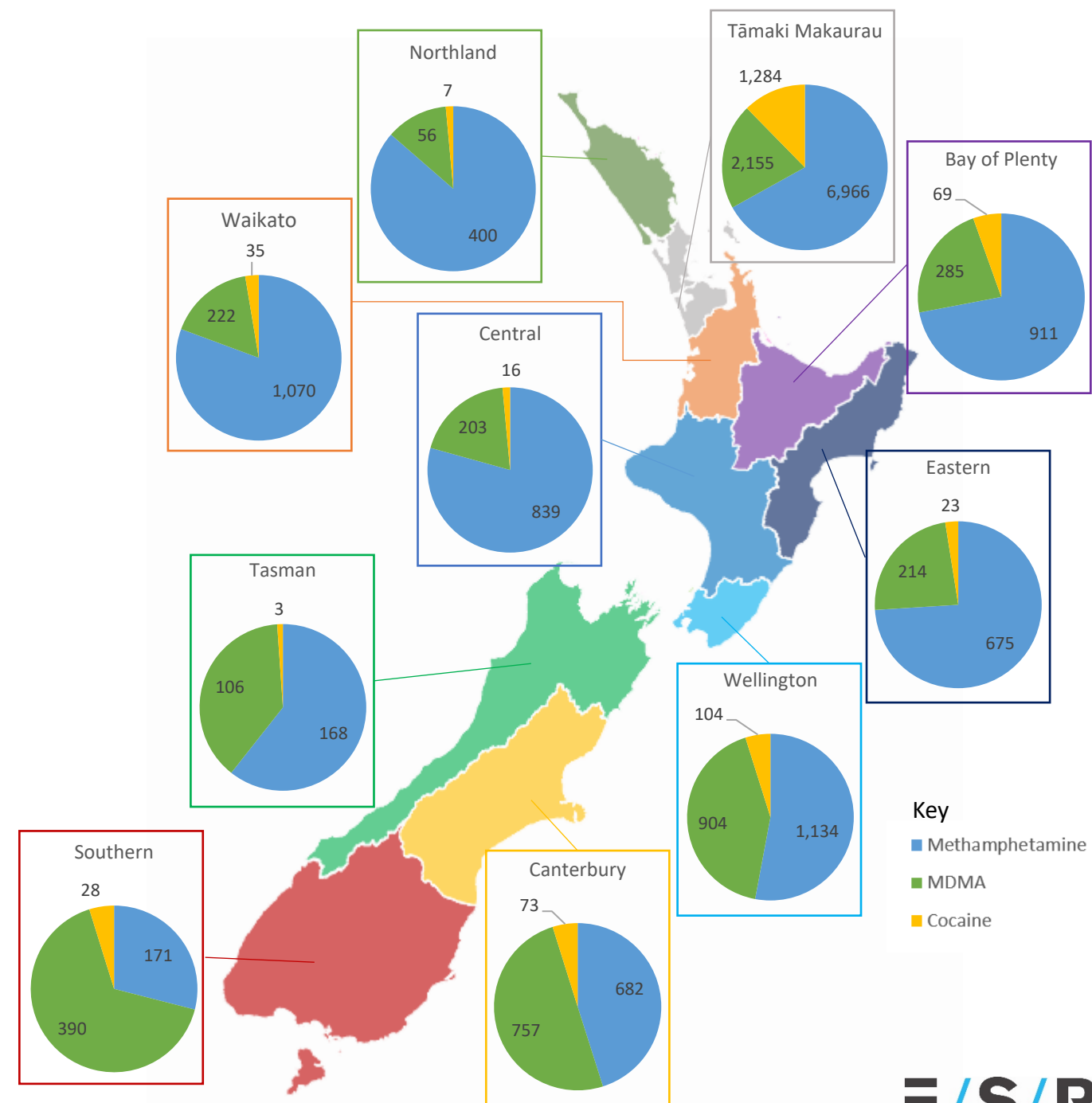


- Per capita drug consumption is shown as milligrams per day, per 1,000 people. As a number of locations are tested every second month, the presence or absence of data from some sites within a district will affect the total load and per capita consumption rates reported each quarter. *District relates to the sites tested within each district and should not be extrapolated to represent the entire district. All sites relates to the per capita consumption for all sites tested across New Zealand. In previous reports all sites has been called National. This terminology change has been made to improve clarity around the data and what it means.*
- The average weekly drug use pie charts show the average estimated drug use (in grams) for each commodity per district per testing week during Q4 2022. As this data is not adjusted for population, larger metropolitan areas record higher quantities of drug use per week due to the larger number of people in the catchment zone.
- Population updates were applied in January 2022, these have impacted the per capita data for some districts. Most notably, the population update for Northland district resulted in a 27 percent decrease in per capita consumption rates. This means the per capita results from Q1 – Q4 2022 cannot be directly compared with results from previous reports. Further information is available from the NDIB. Please note, Kaitiaia was unable to sample during Q1 2022. This has impacted the per capita consumption rates for Northland in Q1.

### PER CAPITA DRUG CONSUMPTION BY DISTRICT: Q4 2022



### AVERAGE WEEKLY DRUG USE BY DISTRICT SITES Q4 2022 (GRAMS)



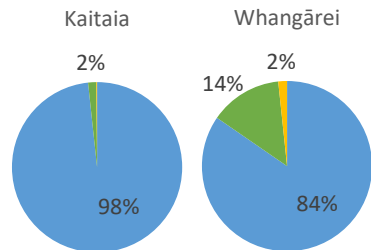


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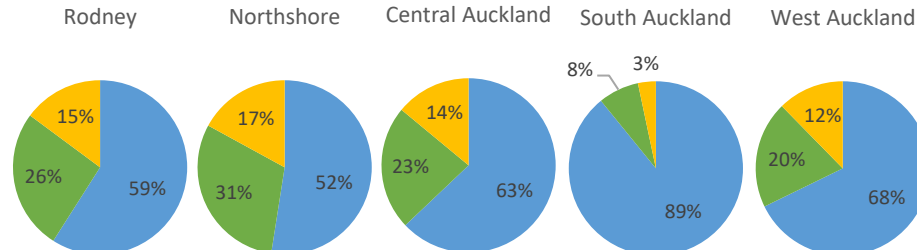
## Quarter Four: October – December 2022

➤ The graphs below illustrate the proportion of commodities detected within catchment areas during Q4 2022.

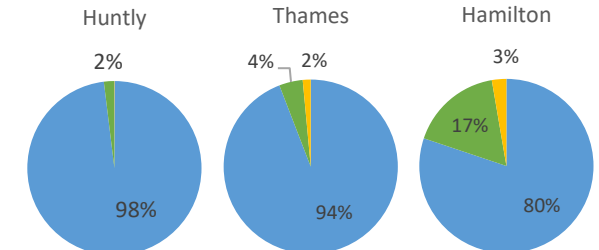
### NORTHLAND



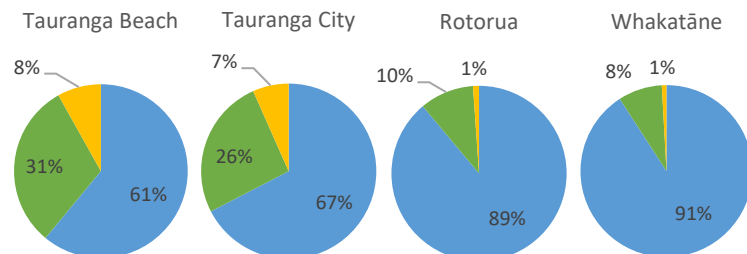
### TĀMAKI MAKAUURAU



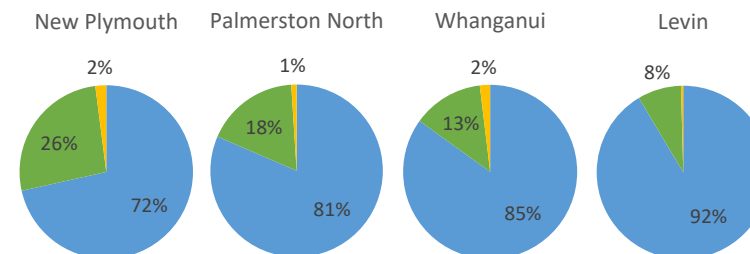
### WAIKATO



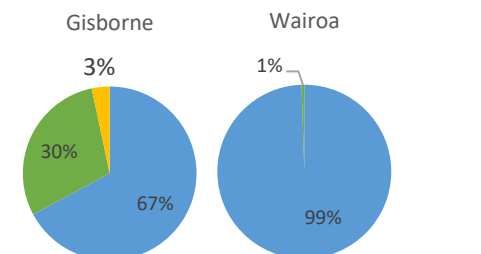
### BAY OF PLENTY



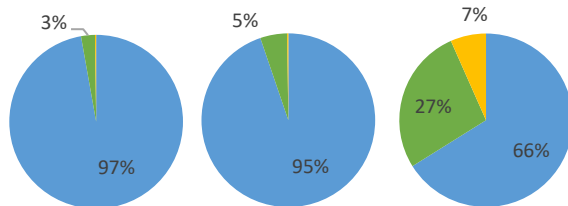
### CENTRAL



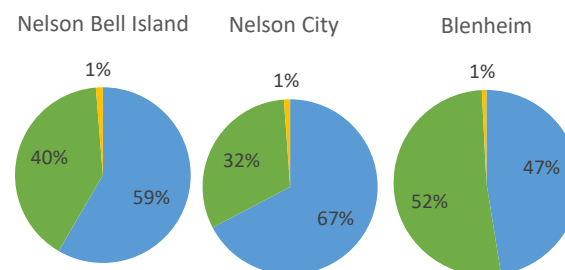
### EASTERN



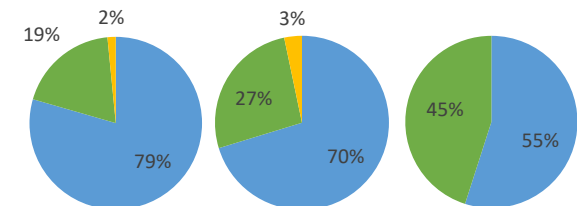
### ŌPŌTIKI



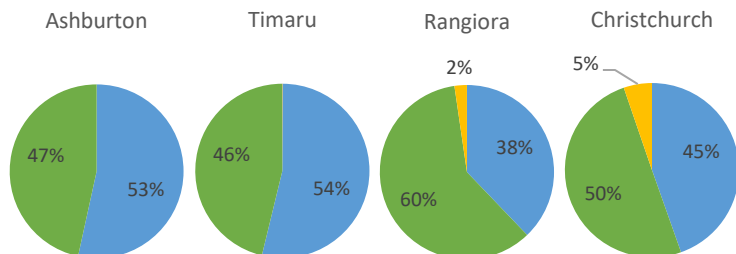
### TASMAN



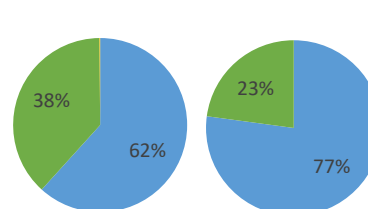
### HASTINGS



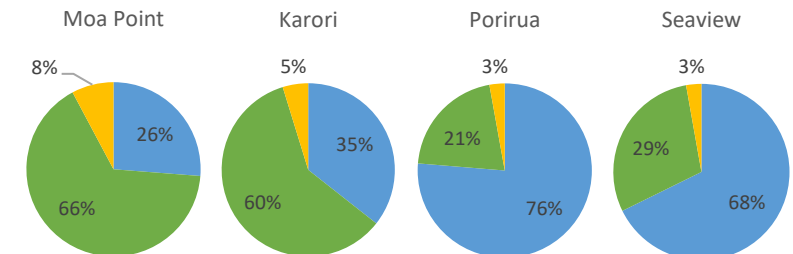
### CANTERBURY



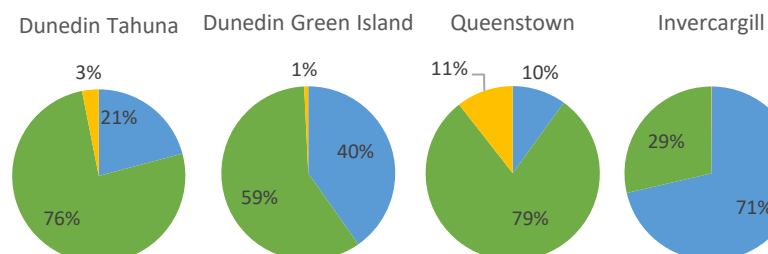
### GREYMOOUTH



### WELLINGTON



### SOUTHERN



#### Key

