



# **APPENDICES MINUTES**

**Climate and Environment Committee  
Meeting**

**Tuesday, 24 June 2025**



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# **Overview of the New Zealand Drugs in Wastewater Programme**

## **Kāpiti Coast District Council**

Institute of Environmental Science and Research (ESR)  
National Drug Intelligence Bureau (NDIB)

24 June 2025





**NDIB**

Strategic intelligence unit (est. 1972)

Multi-agency: Customs, Police and Health

House New Zealand's drug early warning system



MINISTRY OF HEALTH



## What we do

Monitor the New Zealand illicit drug environment

Provide strategic intelligence products to inform decision making and policy

Manage the National Drugs in Wastewater Testing Programme

Undertake international reporting and compliance with international conventions



# Overview of NZ drug environment



- Global manufacture and supply of illicit drugs like methamphetamine and cocaine has increased
- Organised criminal groups responsible for large scale supply to NZ
- Increasing availability online
- Numerous trafficking routes and sophisticated concealment methods
- Increase in supply of illicit drugs to NZ

Map 1. Identified trafficking routes of methamphetamine impacting the Pacific



Note: Flow arrows represent the general direction of trafficking and do not coincide with precise sources of production or manufacture; are not actual routes, and are not weighted for significance/scale. Boundaries, names and designations used do not imply official endorsement or acceptance by the United Nations.

Source: UNODC elaboration of national data and reports from origin, transit and destination countries.



# Drugs in Wastewater Testing Programme 2025

Partnership between NZ Police, ESR and city councils

## 62 SITES ACROSS NEW ZEALAND

Floating site X: can be deployed where required



50 participating councils



6+ years of data



76% of population



Daily and weekly trends  
collected monthly

### 10 DRUGS TESTED MONTHLY

Methamphetamine	Ketamine
MDMA	Dimethylpentylone
Cocaine	4-MMC
Fentanyl	PMA
Heroin	Eutylone

\*Cannabis tested at 5 sites



**E/S/R**  
Science for Communities

# Estimation of drug consumption

- Estimation of drug usage is based on analysis of wastewater and is dependent on the interaction of a number of factors:



## Sampling procedure



- 24 hour composite samples
- 7 consecutive days
- ESR supplies pre-labelled sample bottles
- ESR supplies prepaid courier tickets
- Council/operator provides flow data via a web survey

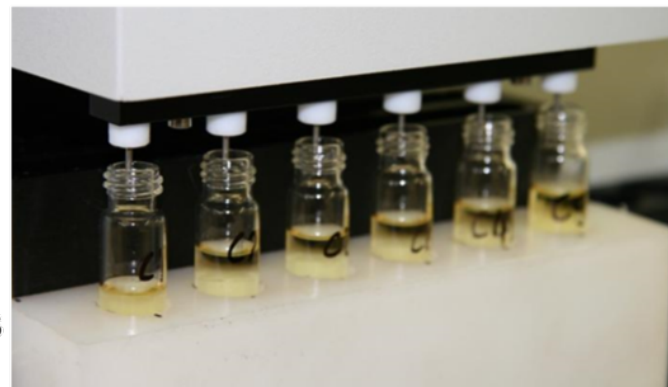




## Laboratory procedure



- Receive samples (up to 150 per week)
  - Filter samples
  - Adjust pH, and extract by SPE
  - Reconstitute and transfer to analysis vials
  - Analyse by LC/MS
- 
- Data analysis
  - Back calculations
  - Reporting



## Method sensitivity

- We have an instrumentation detection limit less than  $0.1 \mu\text{g/L}$ .
- During extraction in the laboratory, wastewater is concentrated 400 times.
- Therefore, we are able to detect drugs at concentrations lower than  $1 \text{ ng/L}$  in wastewater.



## What next?

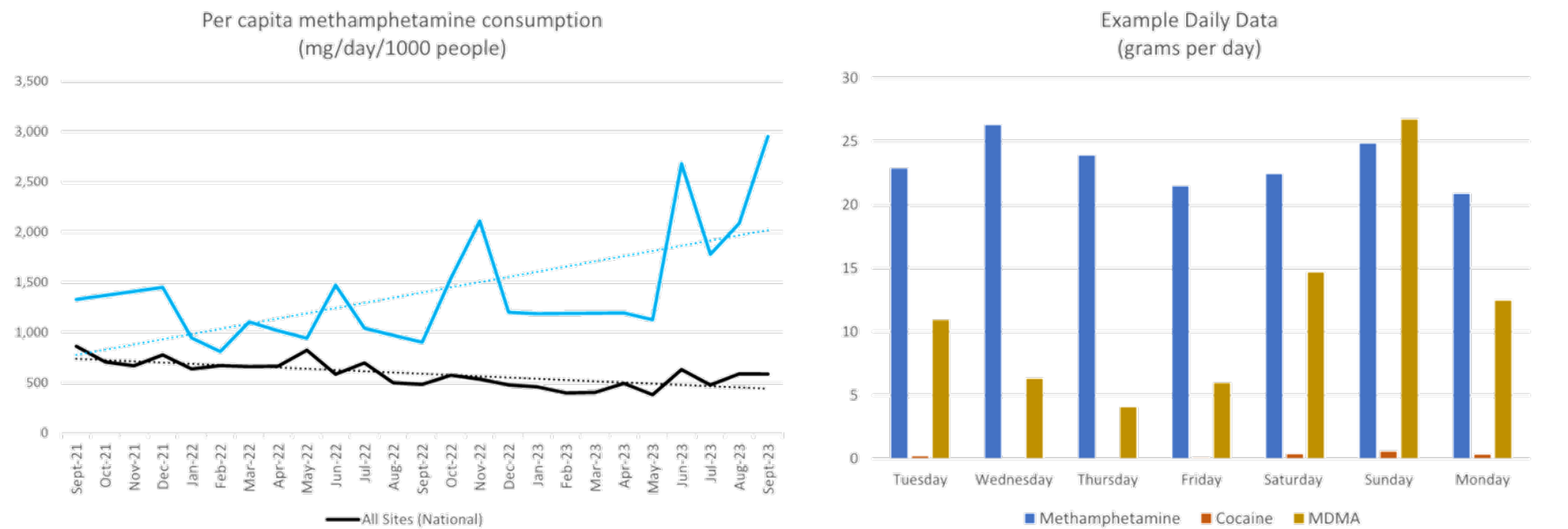


- New drugs, specifically NPS
- New ways to use the data – more publicly accessible?
- Measures of exposure related to human health
  - Antibiotics
  - Pesticides
  - Food toxins
  - Health/cancer biomarkers



# Drugs in wastewater data














# What it can't tell us



## What it tells us

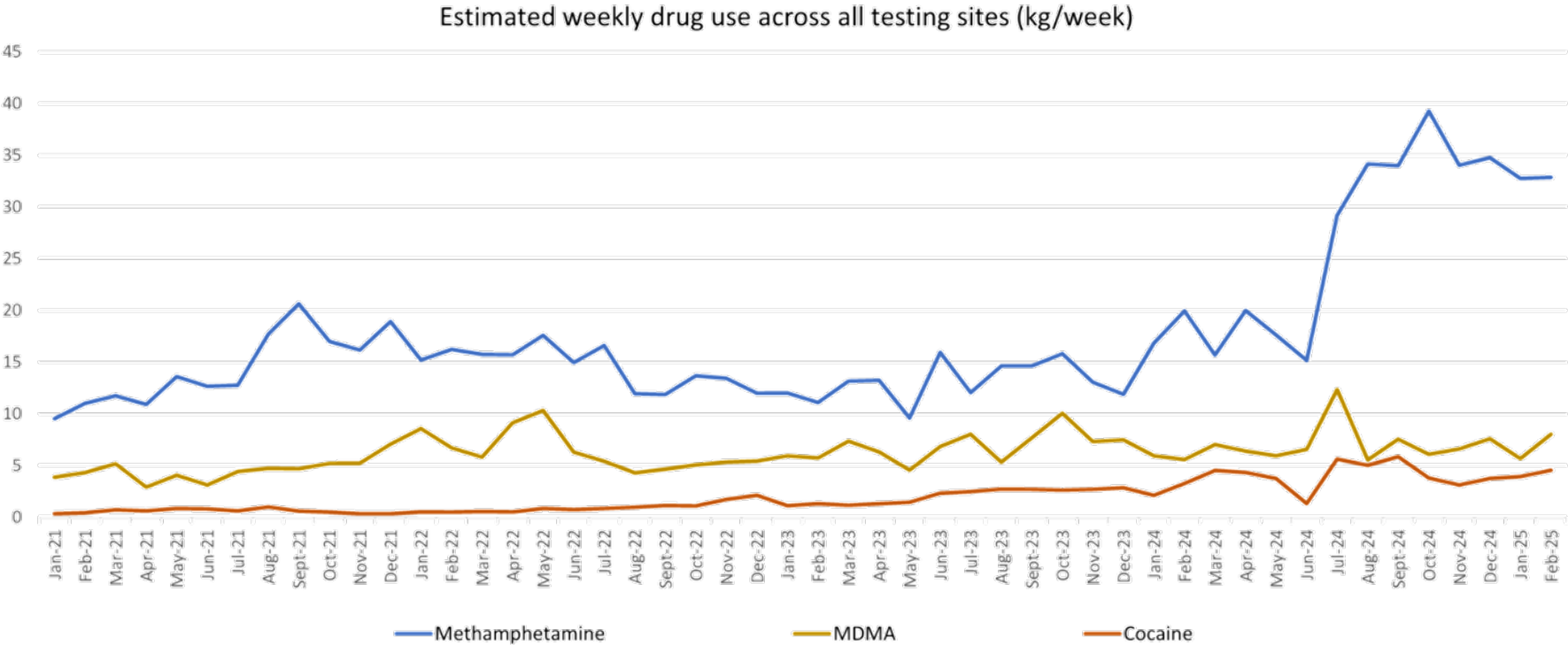
-  Non-biased and non-invasive method for understanding the health and wellbeing of a community.
-  Quantifiable information. Per capita consumption rates allow comparison across sites/locations.
-  Captures data from up to 75% of the population across 46 testing sites.
-  Tests for indicators of consumption of methamphetamine, MDMA, cocaine, fentanyl and heroin.

## What it can't tell us

-  Who is consuming drugs.
-  The number of people consuming drugs.
-  Why people are consuming drugs
-  If the drug use is harmful to the individual and/or community.
-  Cannot be extrapolated to represent other communities nearby that weren't tested.

# The national picture

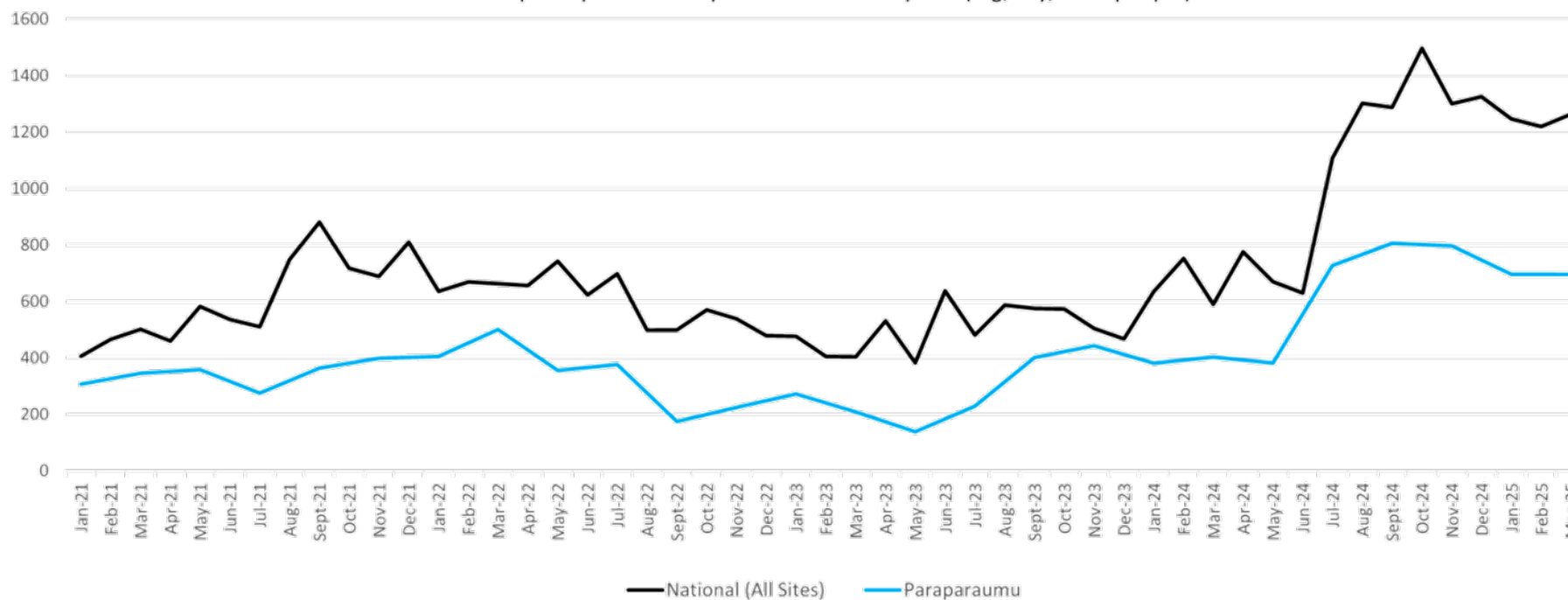




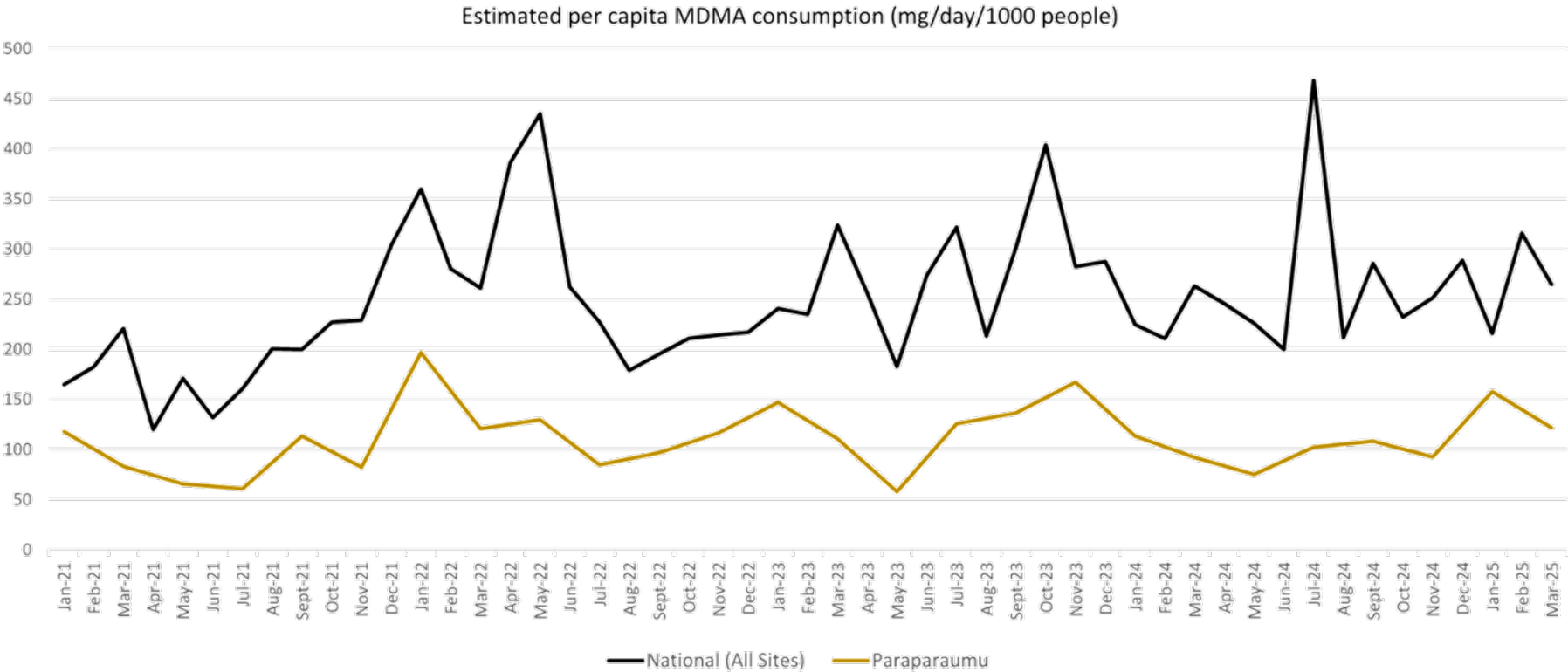
# Paraparaumu meth consumption



Estimated per capita methamphetamine consumption (mg/day/1000 people)

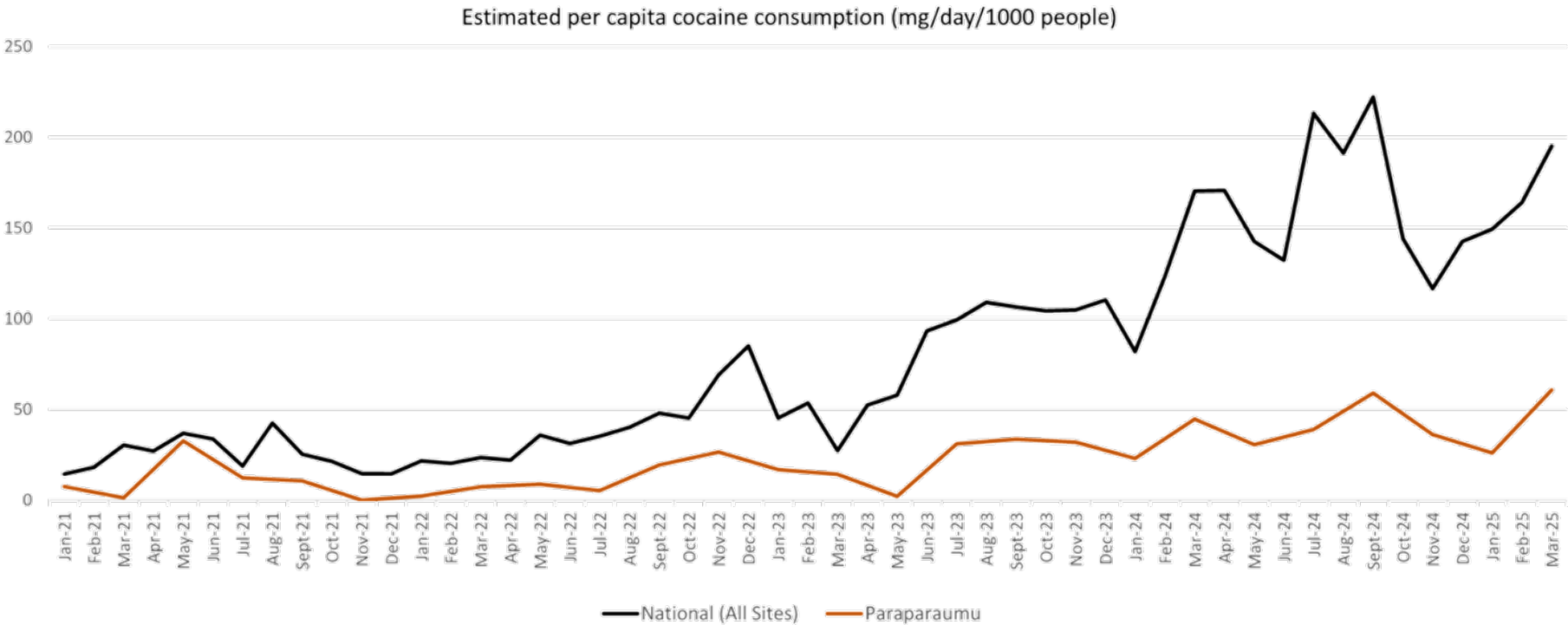


# Paraparaumu MDMA consumption



# Paraparaumu cocaine consumption

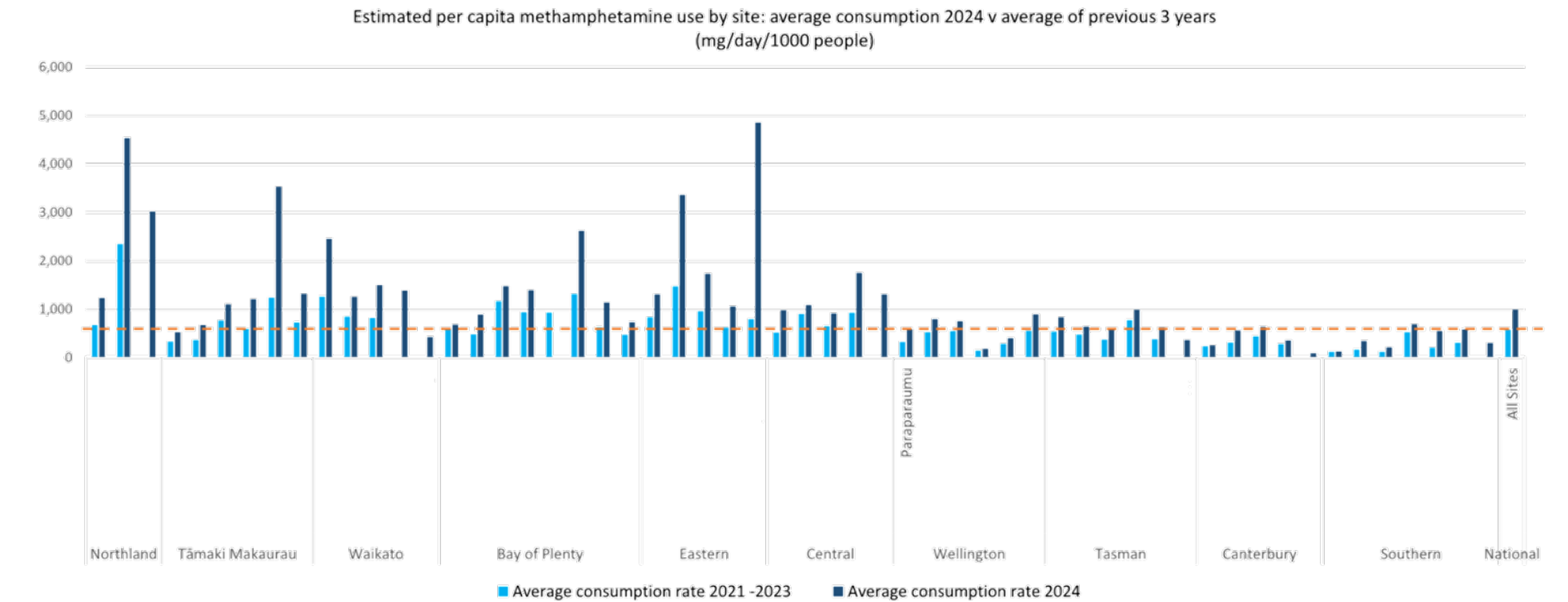




IN CONFIDENCE

# In comparison with other sites (meth)



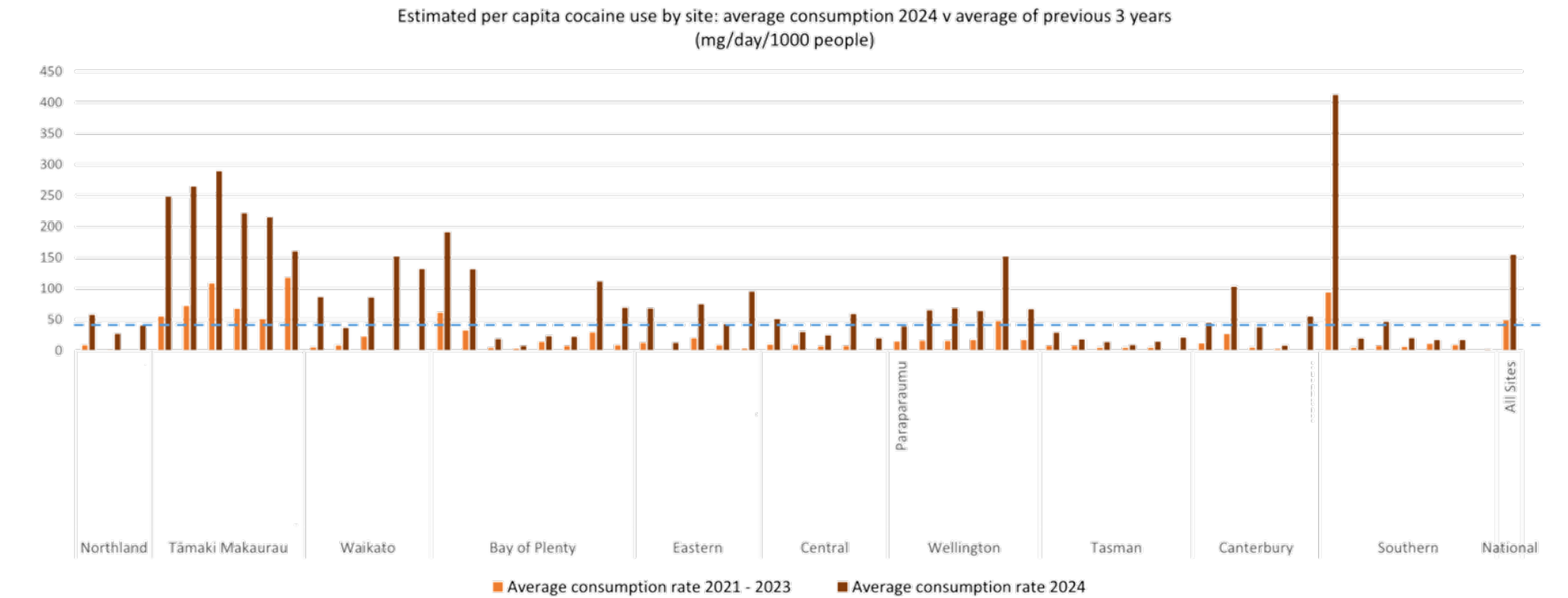


IN CONFIDENCE

IN CONFIDENCE

# In comparison with other sites (coke)





IN CONFIDENCE



# What does this mean?



Paraparaumu	Methamphetamine	MDMA	Cocaine
Estimated grams per week	235	38	14
Estimated doses per week	11,733	301	143
Estimated social harm cost	\$245,963	\$7,881	\$5,355
Estimated money spent on drugs	\$70,395	\$9,408	\$5,561

## How we use the data

- As an evidence base to support funding/resource allocation
- Inform government and organisational policy settings
- Understand illicit drug use trends, both temporal and geographic
- Provide per kilogram social harm cost estimates for the New Zealand Illicit Drug Harm Index
- Inform intelligence inferences around supply and availability
- Contribute to international data collection and understanding of drug trends



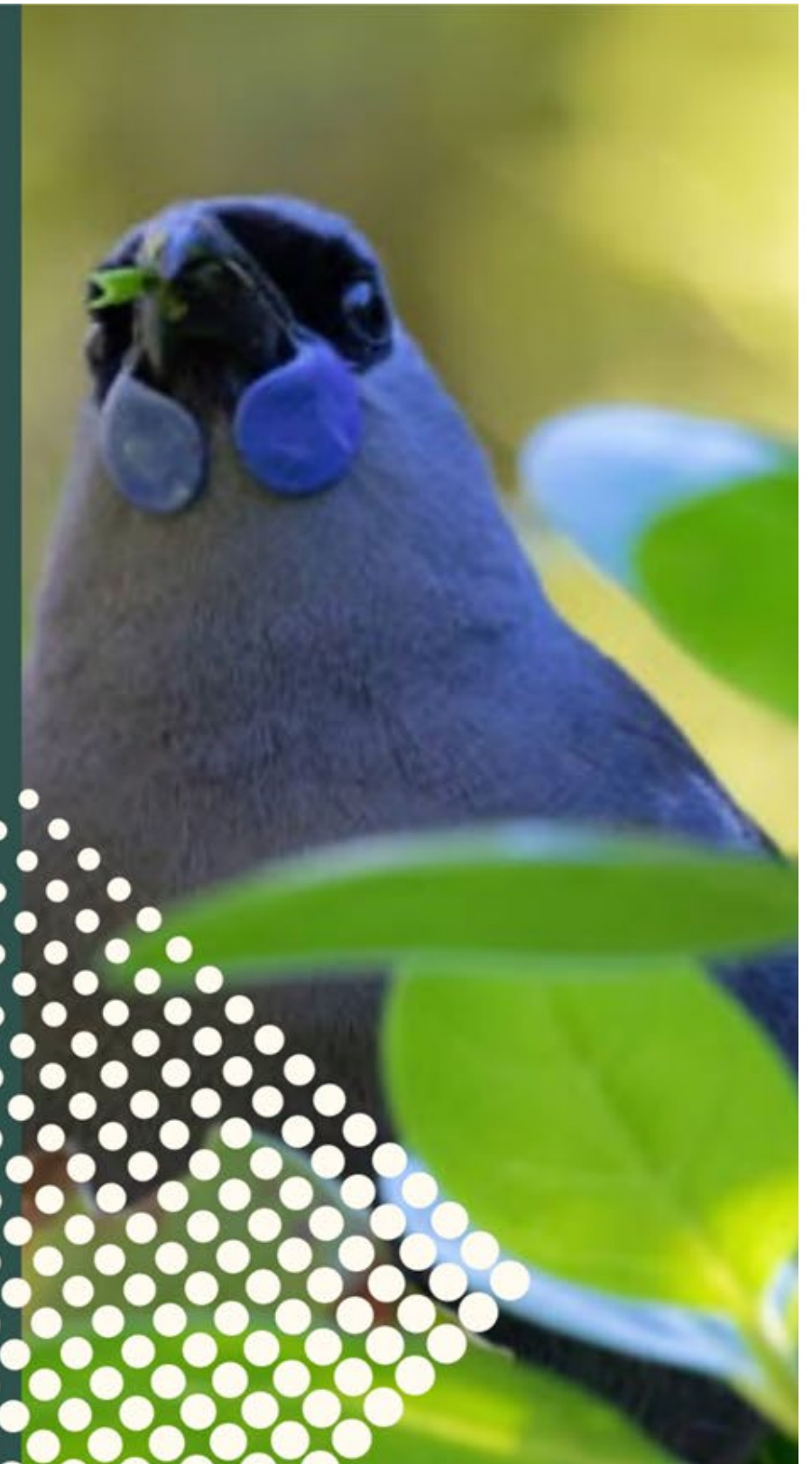
**Thank you**



**Any questions?**



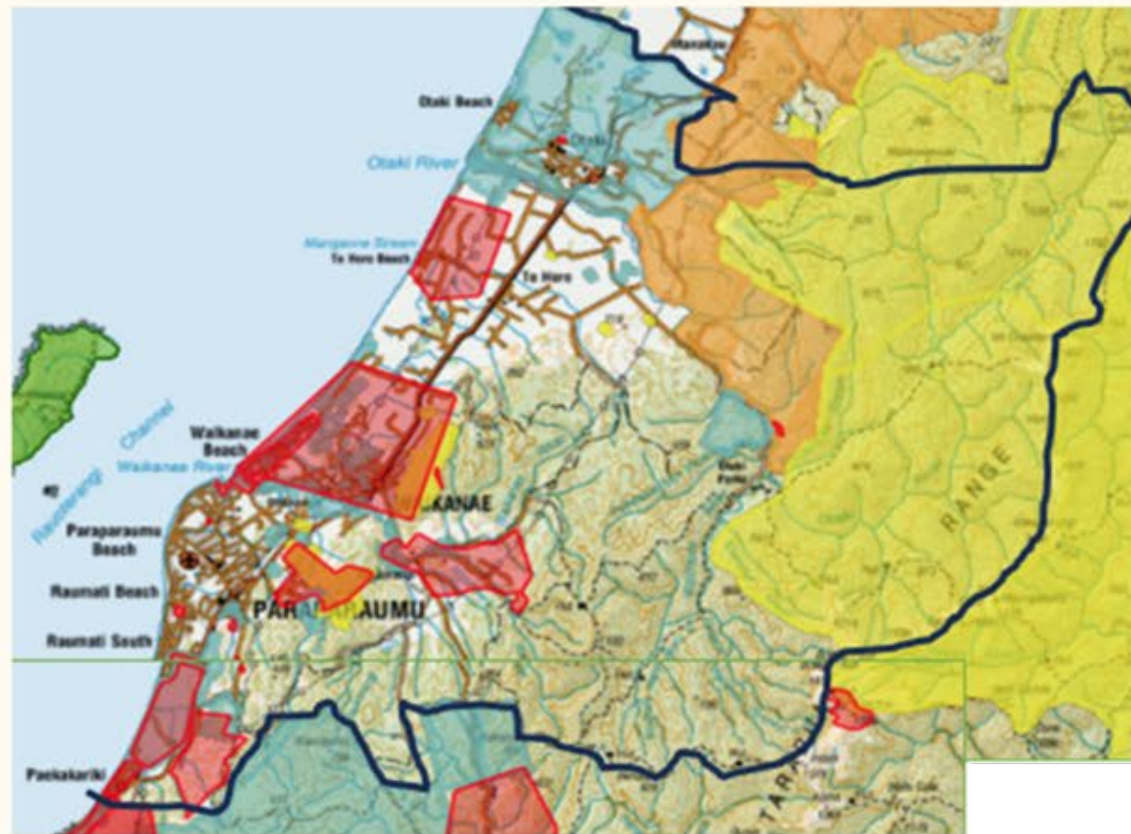
# INTRODUCING PREDATOR-FREE KĀPITI COAST (PFKC)



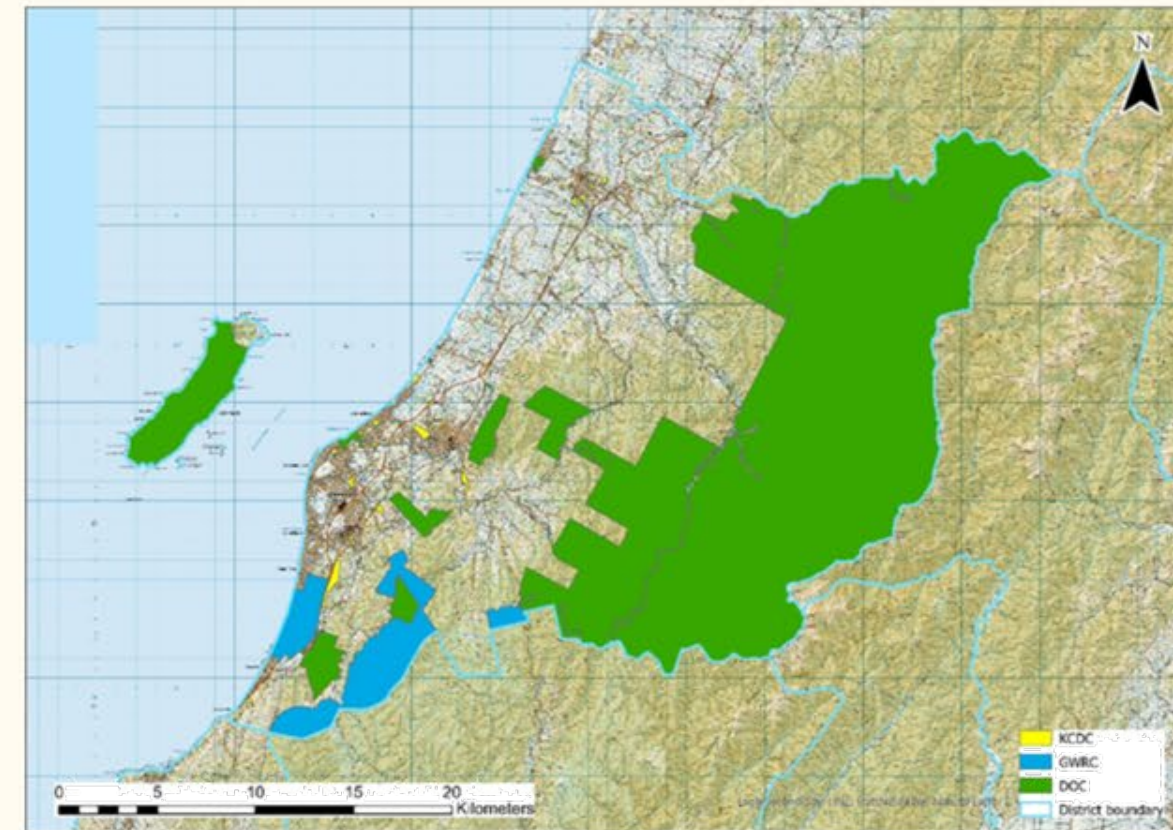


# WHY PFKC?

To share best practices, collaborate, fill in the gaps, and work towards landscape scale solutions.



Source: Trap.NZ



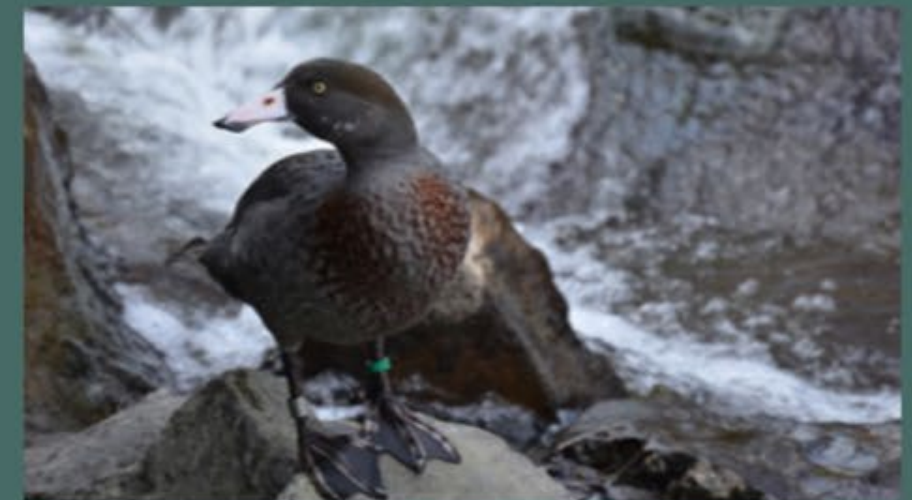
Source: GWRC



# VISION:

## A KĀPITI WHERE NATURE THRIVES

- Predator-free Kāpiti Coast by 2050
- Thriving indigenous wildlife, restored ecosystems
- Reconnecting community with nature through kaitiakitanga
- Uniting community, iwi and agencies



*Whio – thriving in fast-flowing mountain streams,. Image: Bing*





# **MISSION STATEMENT:** **COMMUNITY-LED, COMMUNITY-POWERED**

- To engage and mobilise the community and accelerate efforts to eradicate invasive predators.
- Become a central hub of expertise and connection

*Image: Wayne Mitchell*

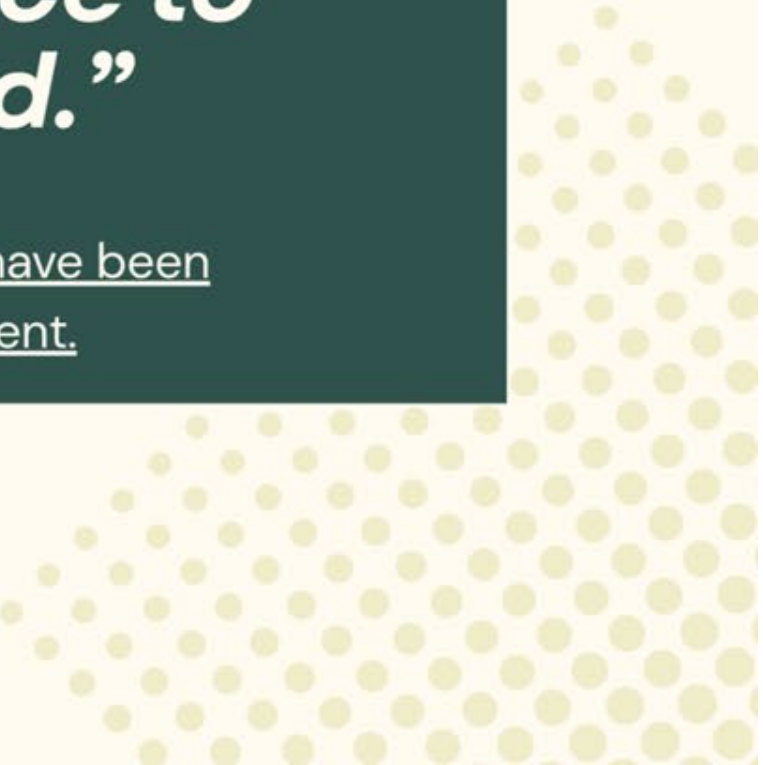




## Quote:

***“A project’s pre-operational phase can be long, but the time taken to obtain cultural and social licence to operate should not be rushed.”***

Predator Free 2050, “Learnings So Far”, P.10: Over 200 native species have been reintroduced or recovered due to successful predator management.





# MAKING IT HAPPEN

- Building a diverse leadership group
- Engaging with iwi, local PF groups, related community groups (eg trail building, replanting), KCDC, GWRC, and DoC.
- Hui: to be hosted in conjunction with KCDC



Wellington Green Gecko: Picture: Andrew Morrison (via Wikimedia Commons)



# OUR GAME PLAN

**Short term:**

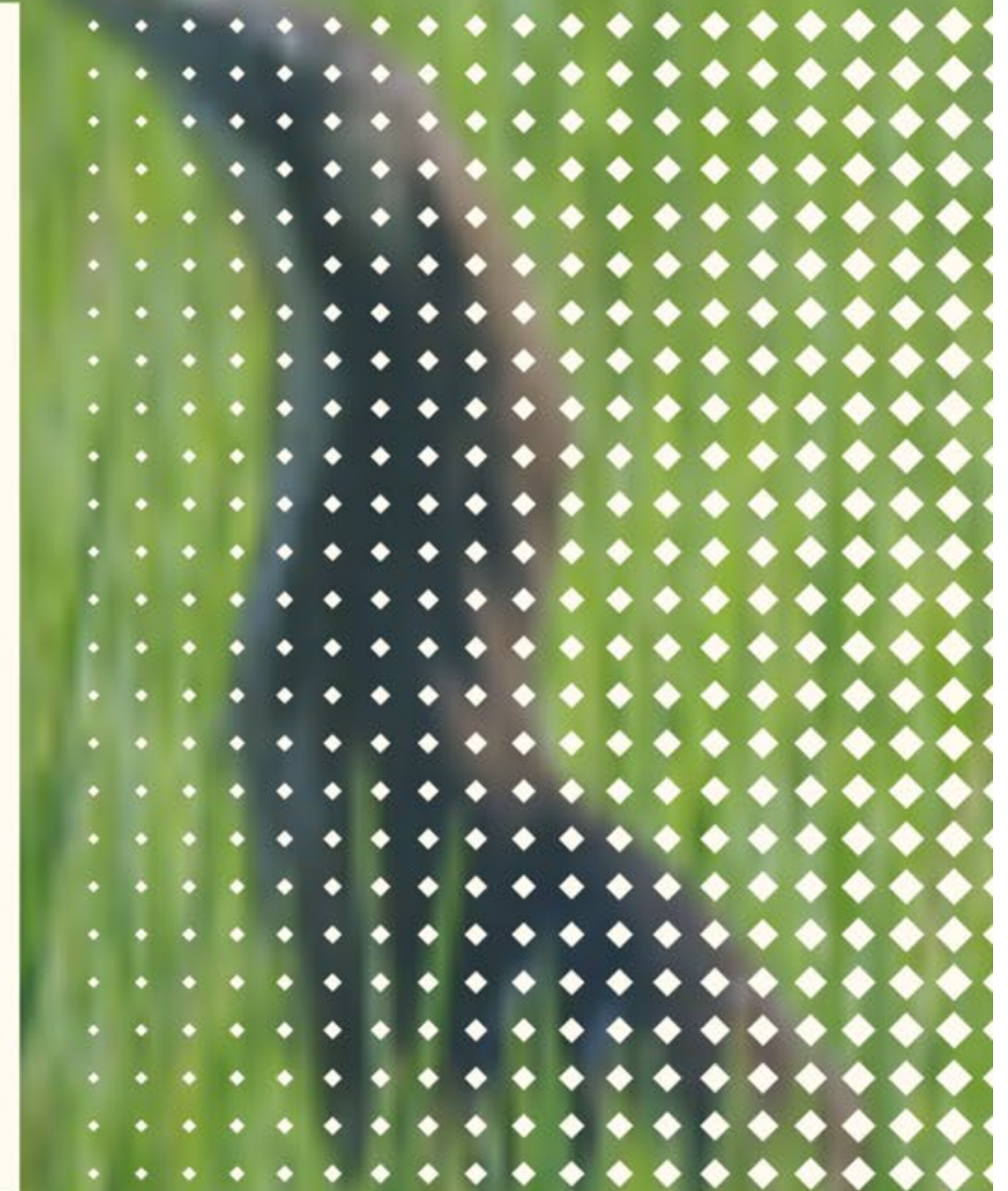
- Gain community support / build resources
- Connect and work with other groups
- Baseline monitoring
- Support/encourage start up PF groups

**Medium term:**

- Review interim PFKC/KCBP MoU structure
- “Gaps” to fill
- Boundaries and corridors
- Existing projects, “jewels,” KNEs, ki uta ki tai

**Longer Term:**

- Landscape-scale projects
- Species-specific operations.



*The Australian Bittern, Matuku-hūrepo – the voice of healthy wetlands, rarely seen but deeply felt. (Picture Bing Commons)*



# WHAT WE NEED TO SUCCEED

- Become a central hub of expertise: both internal and external
- Gain volunteer engagement and community support.
- Access to equipment, workspace, sustainable funding and good governance
- Maintain energy
- Support and advice from agencies: KCDC, GWRC, DoC

***“He waka eke noa” – We are all in this together.***

***Our commitment:*** Together, we will make Kāpiti a beacon of biodiversity, community resilience and pride.



# ***JOIN THE MOVEMENT***

## **THANK YOU**

### **The Steering Group of Predator Free Kapiti Coast:**

Peter Jones

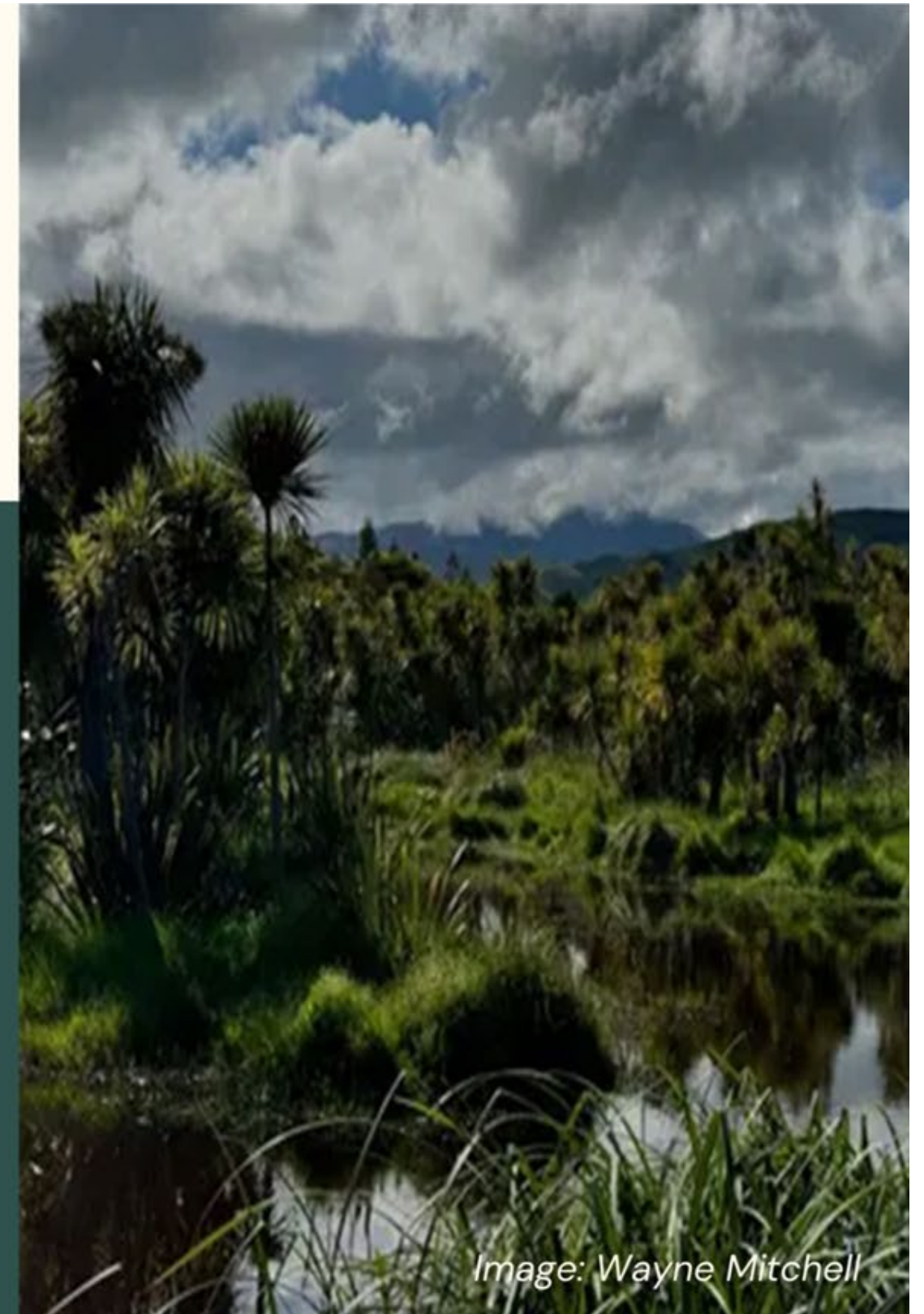
Shane Cave

Wayne Mitchell

Pattern Reid

Hayley Coetzee

Asher Wilson-Goldman



*Image: Wayne Mitchell*

