

Flying Blind on Fly Tipping

Revealing Aotearoa's Unmeasured Dumping Risk – A Waimakariri River Case Study


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Wednesday, 23 November 2022

ECan chases rubbish dumpers

Illegal dumping leaves Greater Christchurch ratepayers with almost \$3m cleanup bill

 **Luisa Girao** | THE PRESS

March 16, 2026

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Kaiapoi resident 'disgusted' after large illegal rubbish dump

 **Chris Lynch**

NOV 03, 2025 | NZ

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Illegally dumped asbestos beside the river leaves ratepayers with costly clean up bill



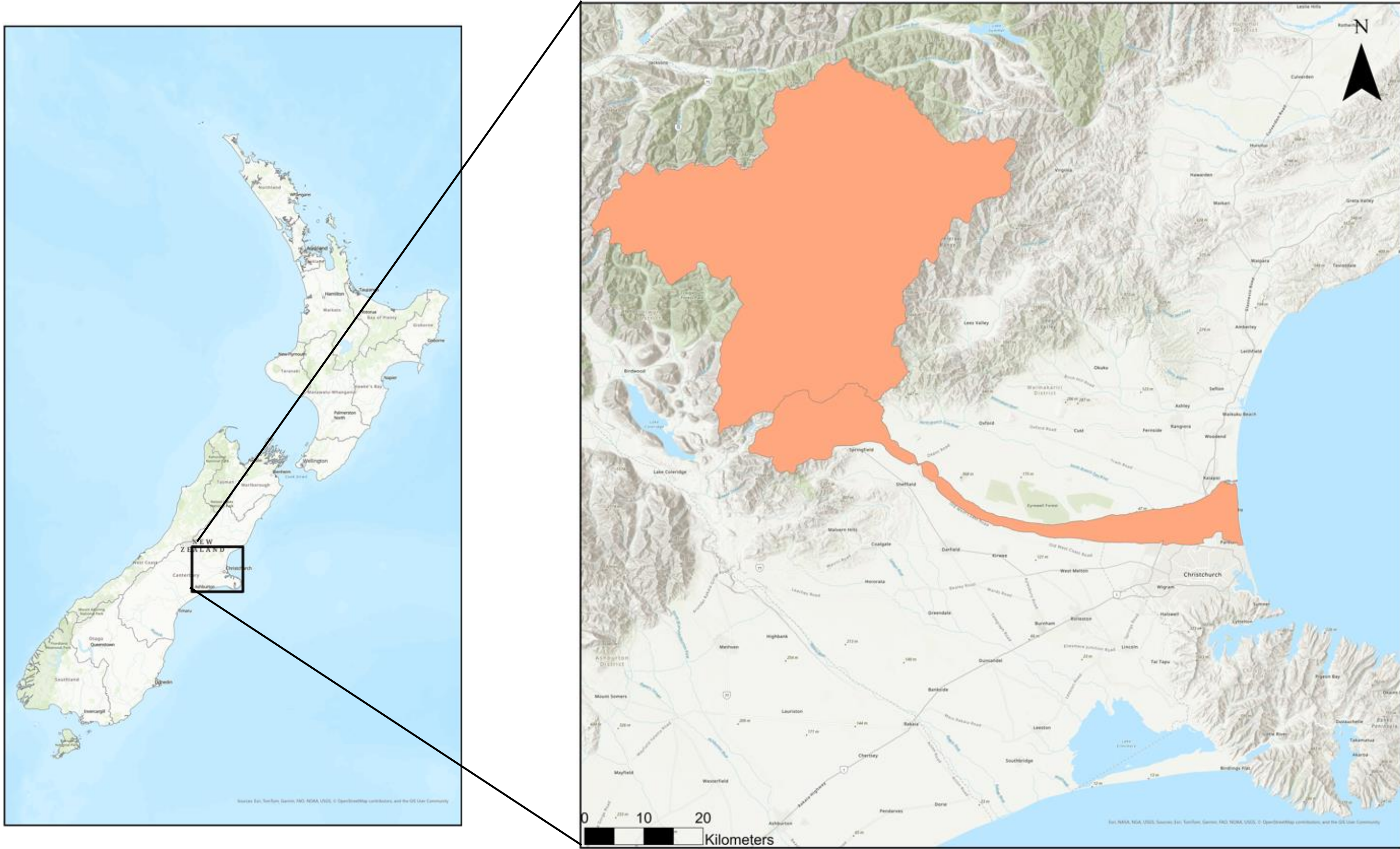
Rubbish in parks wastes ratepayers' money

Date: 10 Sep 2024

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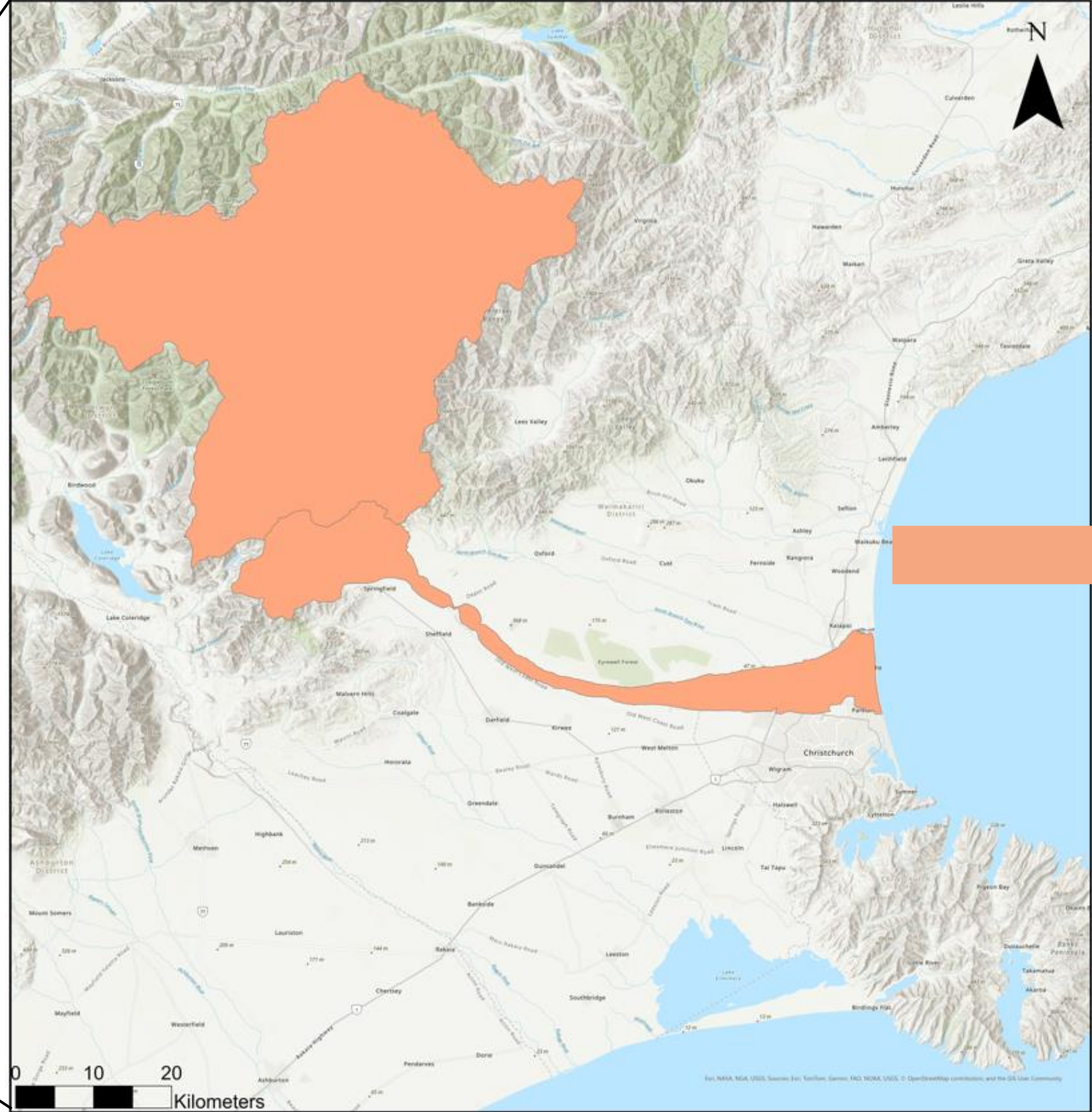
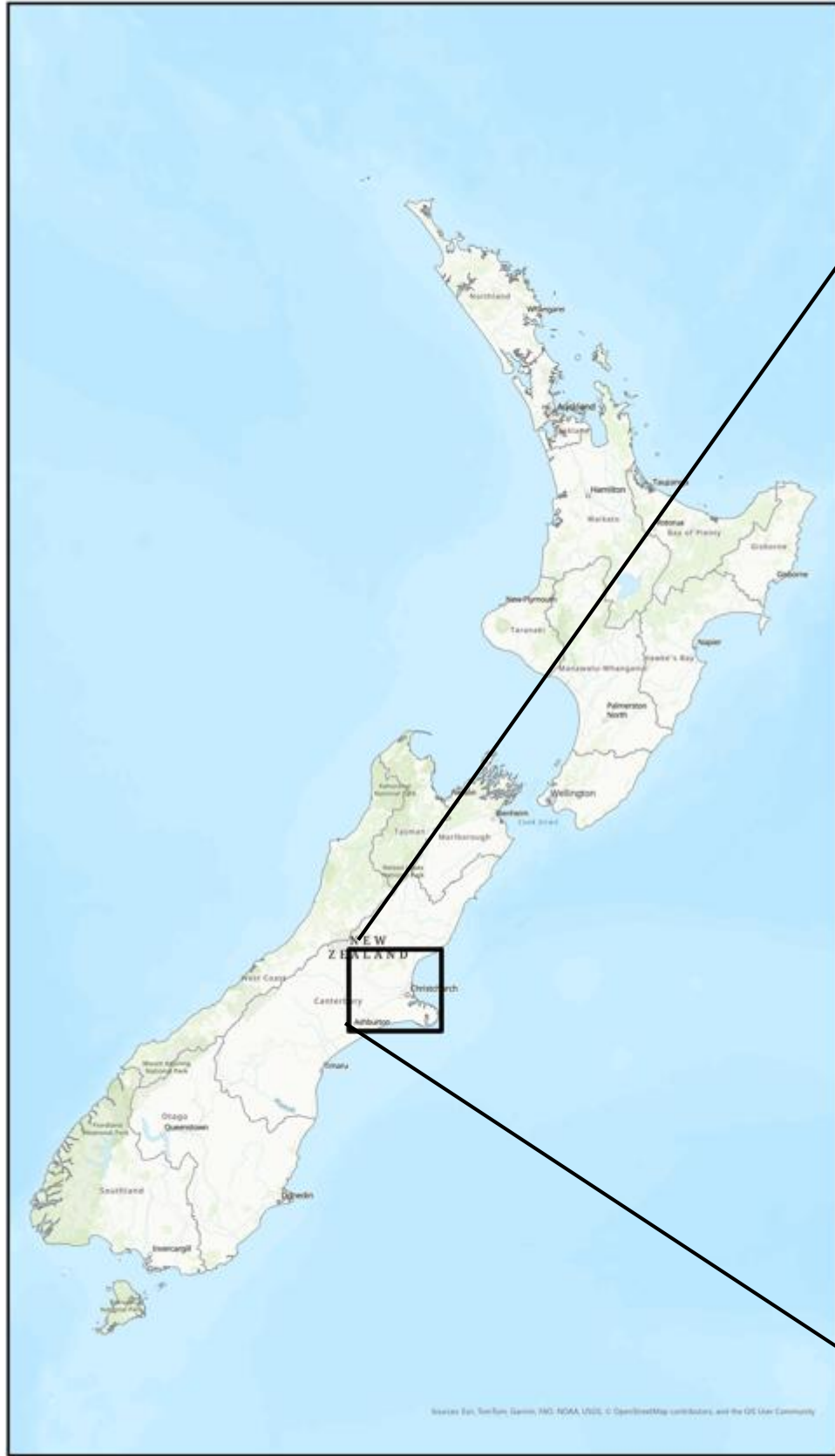
Site Location



Map of the Waimakariri river catchment in relation to New Zealand



Site Location

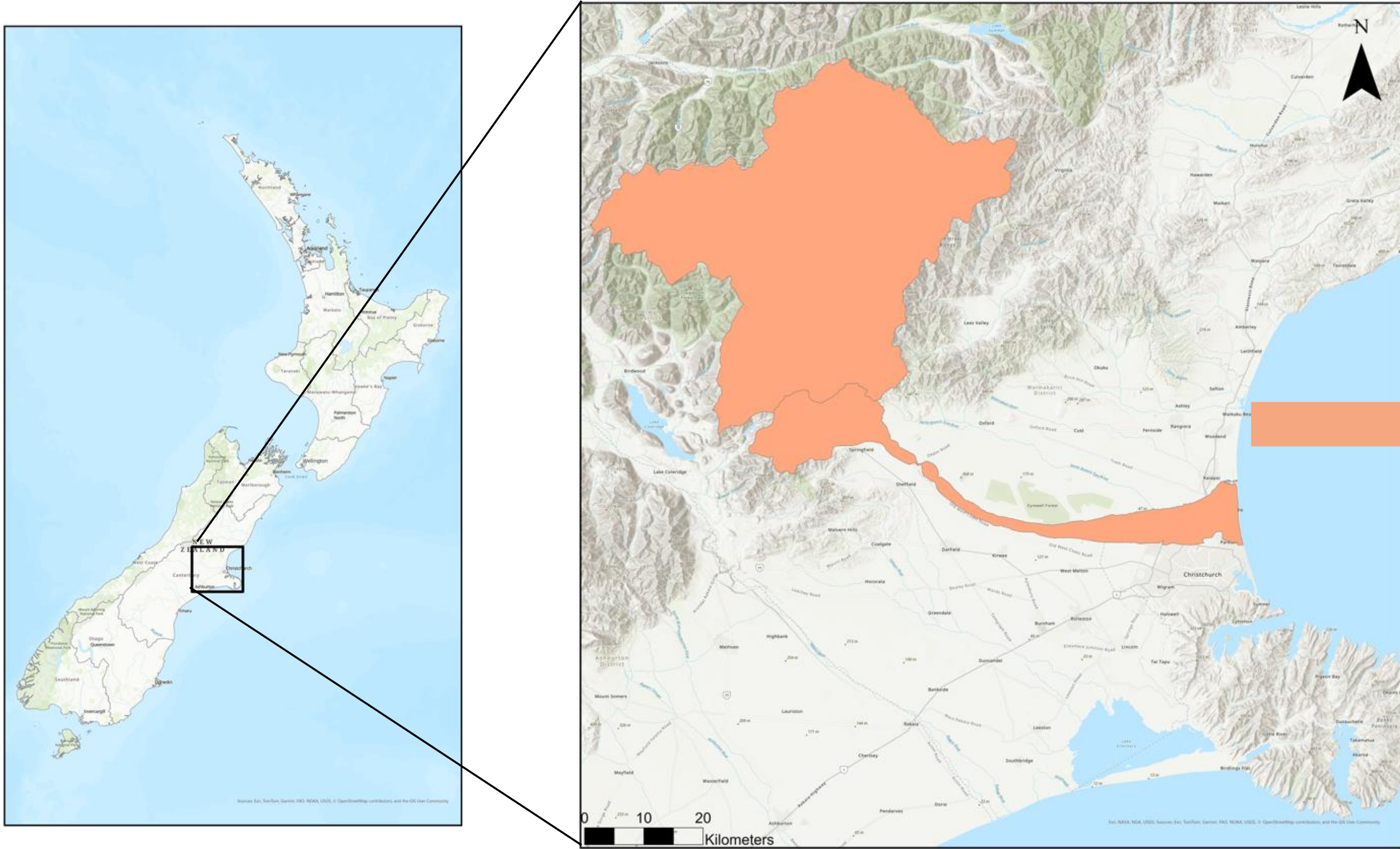


Map of the Waimakariri river catchment in relation to New Zealand

The Waimakariri on the ground



Site Location



Map of the Waimakariri river catchment in relation to New Zealand

The Waimakariri on the ground



Methods

1. Dumping sites identified opportunistically

2. Record GPS co-ordinates

3. Make general site observations

4. Collect pXRF



5. Gather soil samples

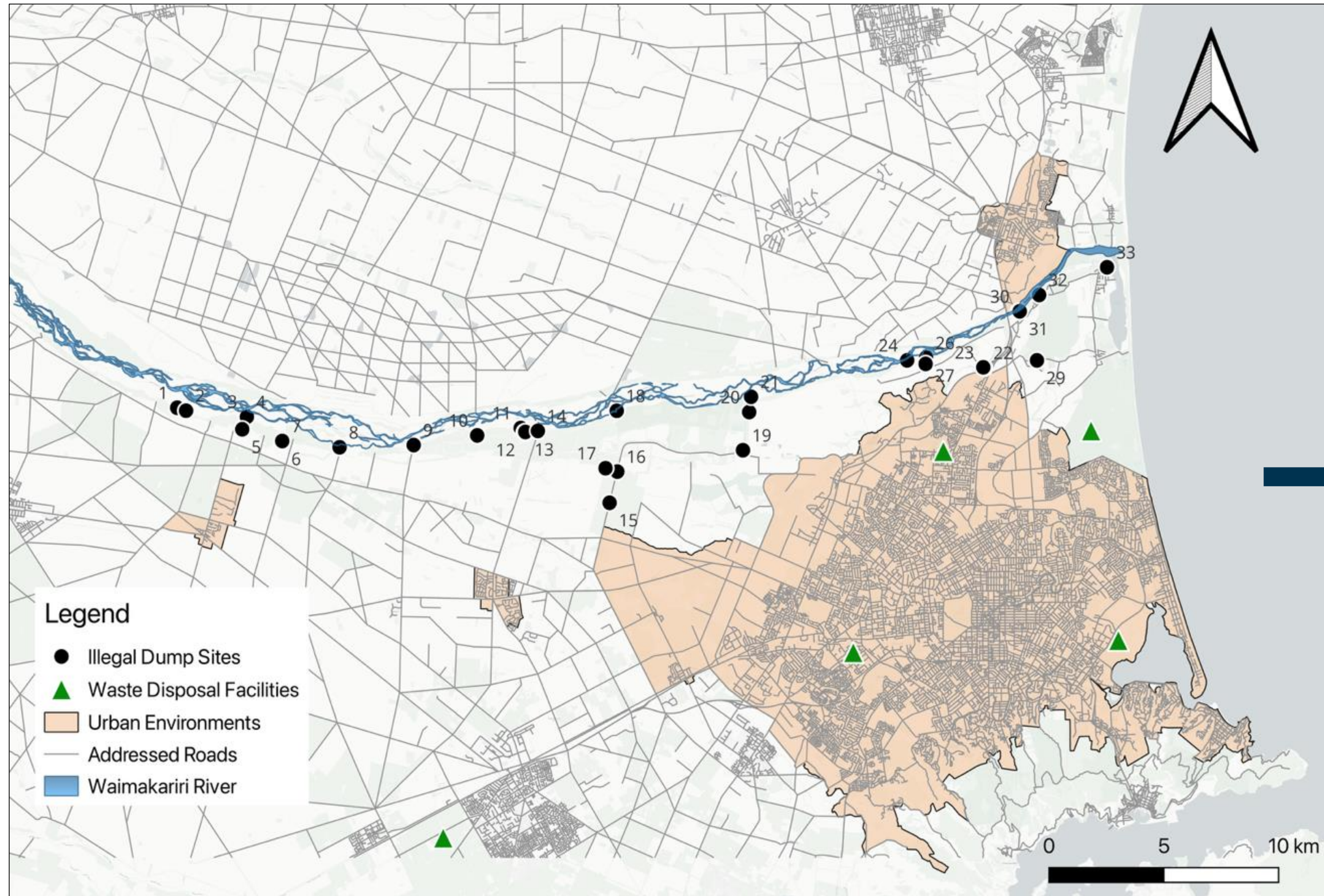


6. Log observations on iNaturalist

7. Samples prepared and undergo ICP-MS analysis

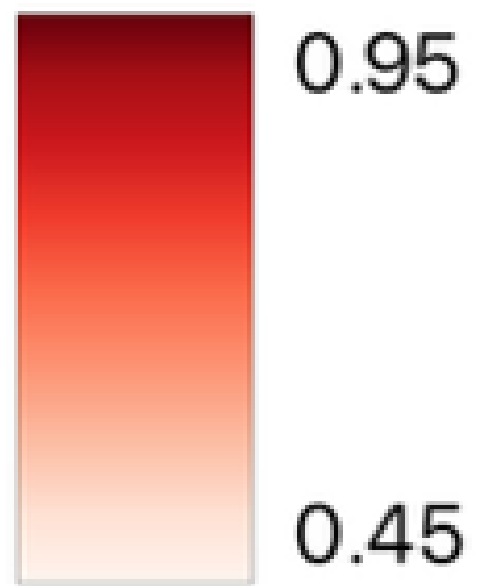


Distribution

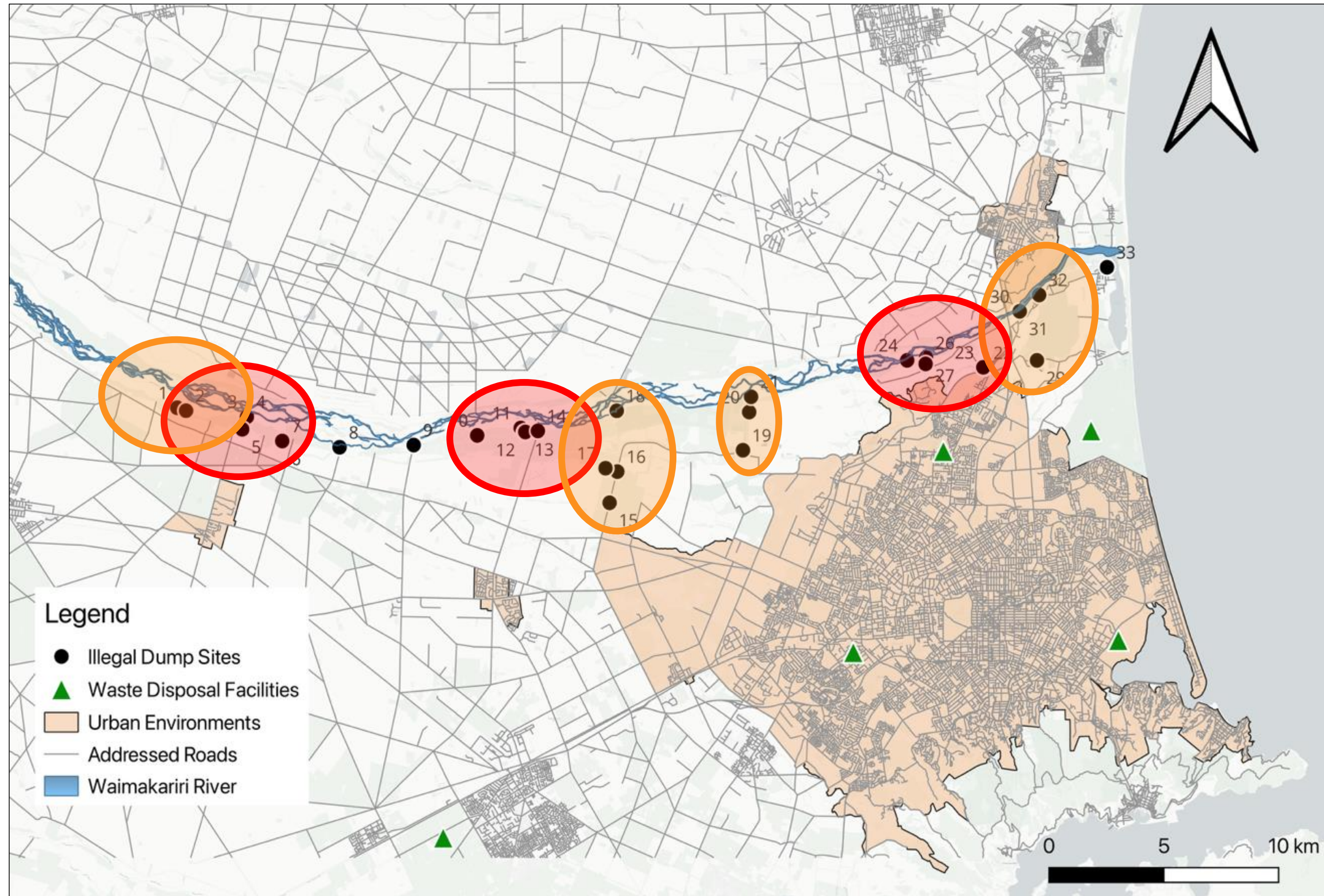


Legend

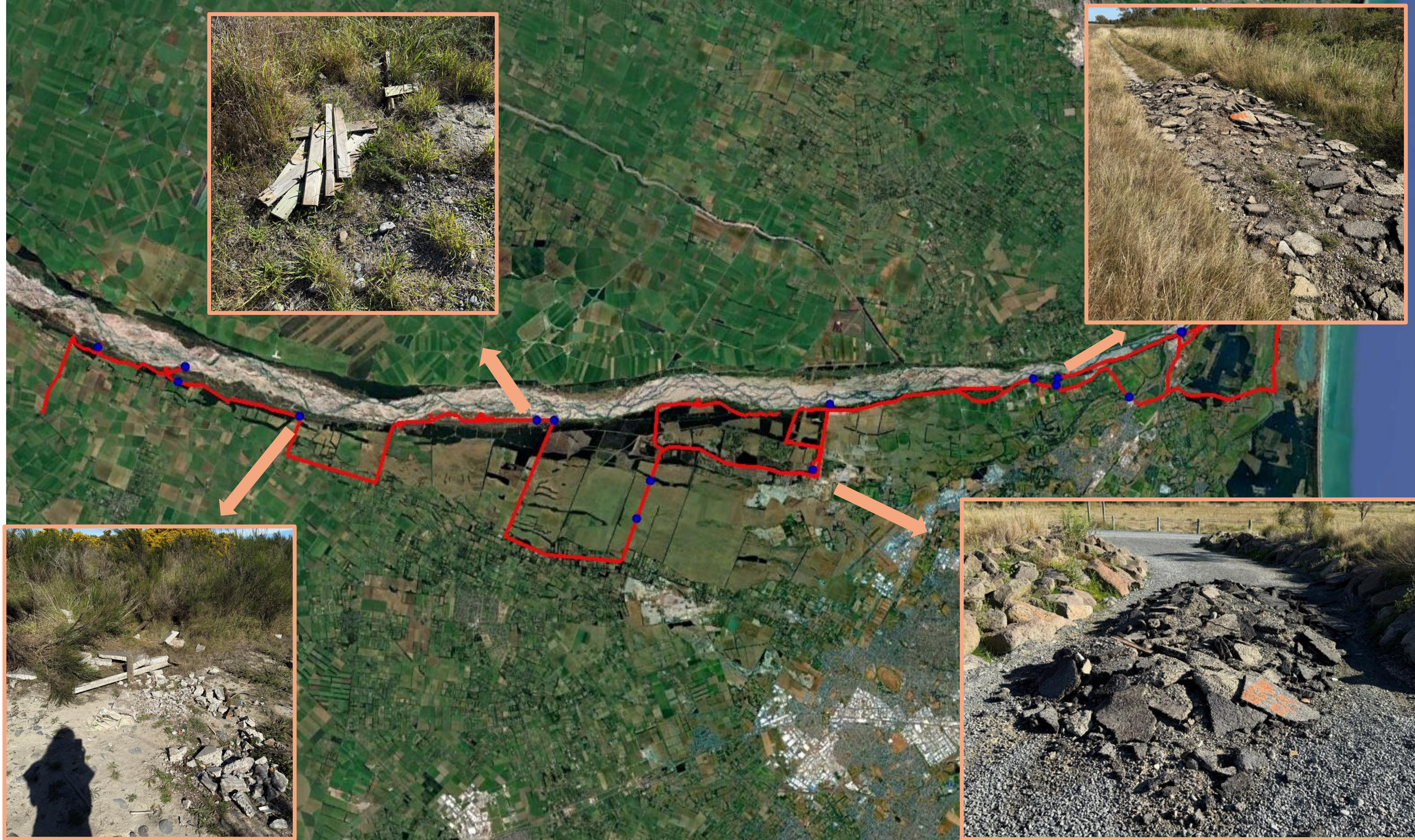
Risk Index



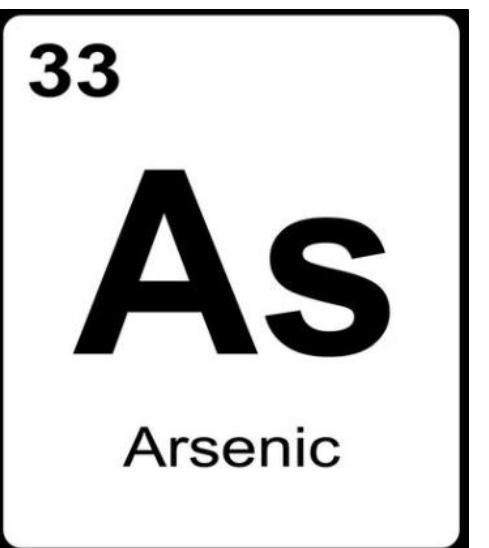
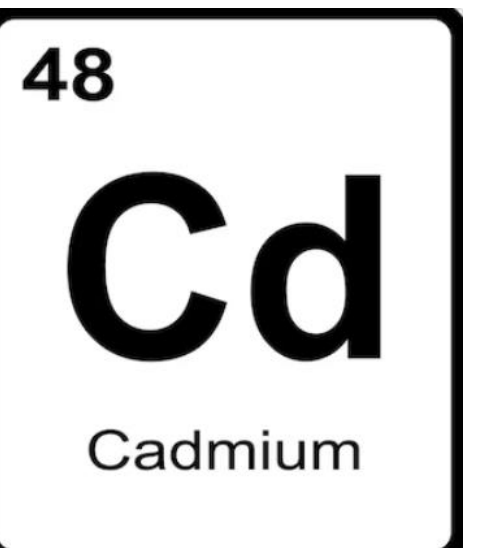
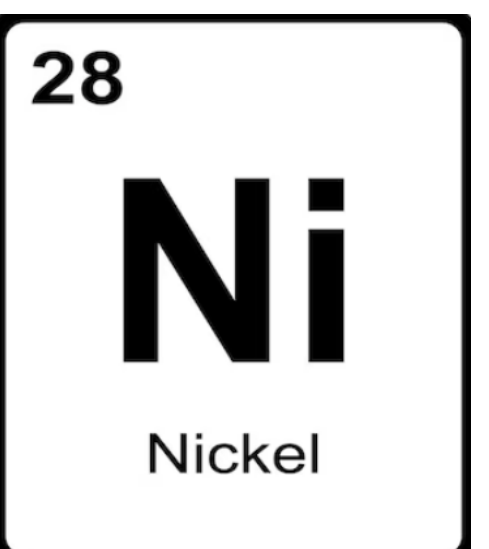
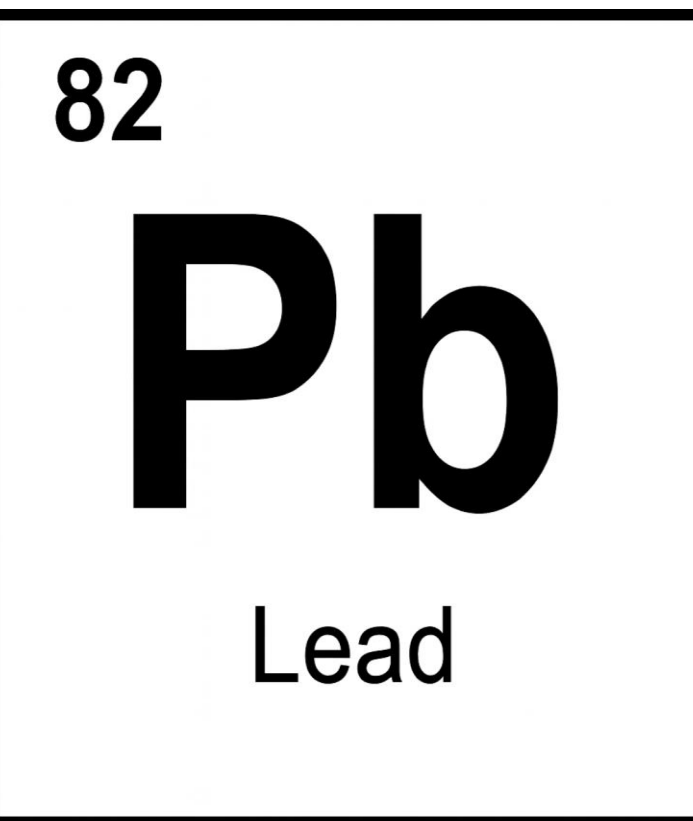
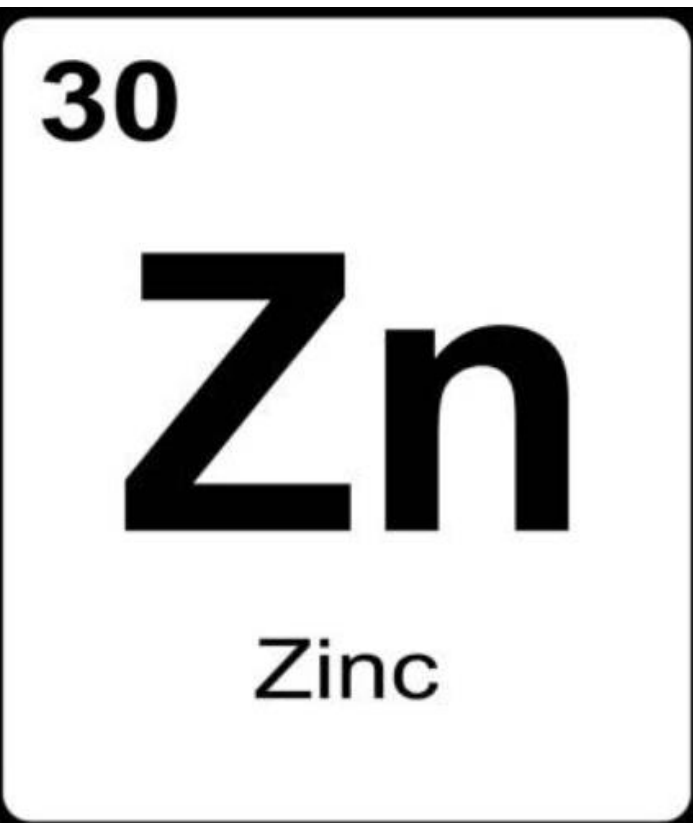
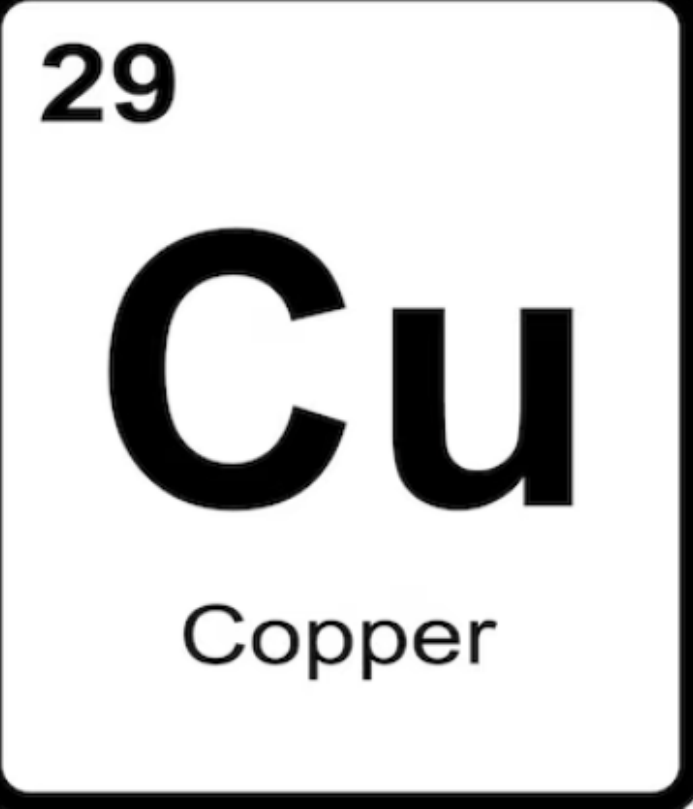
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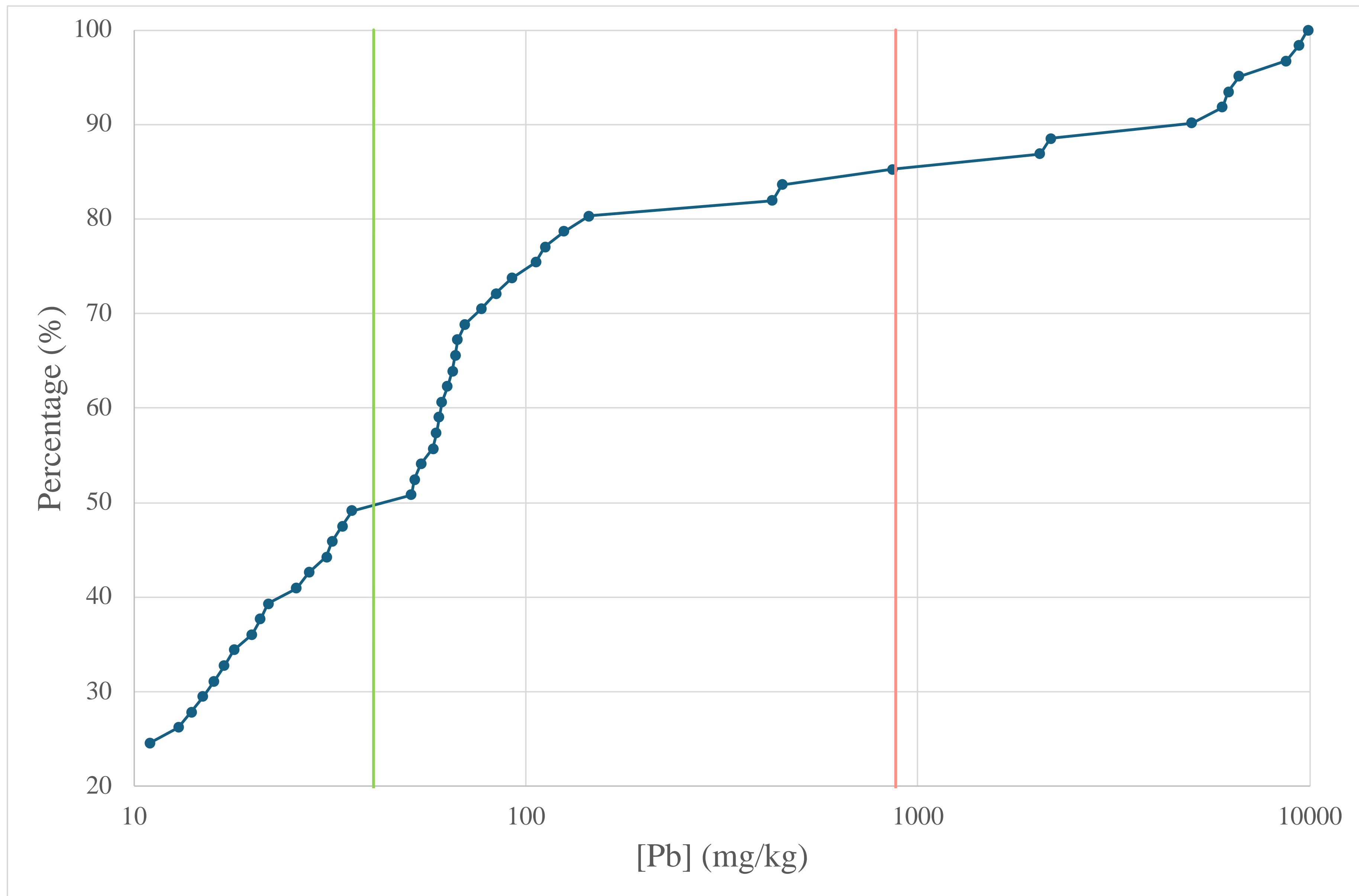






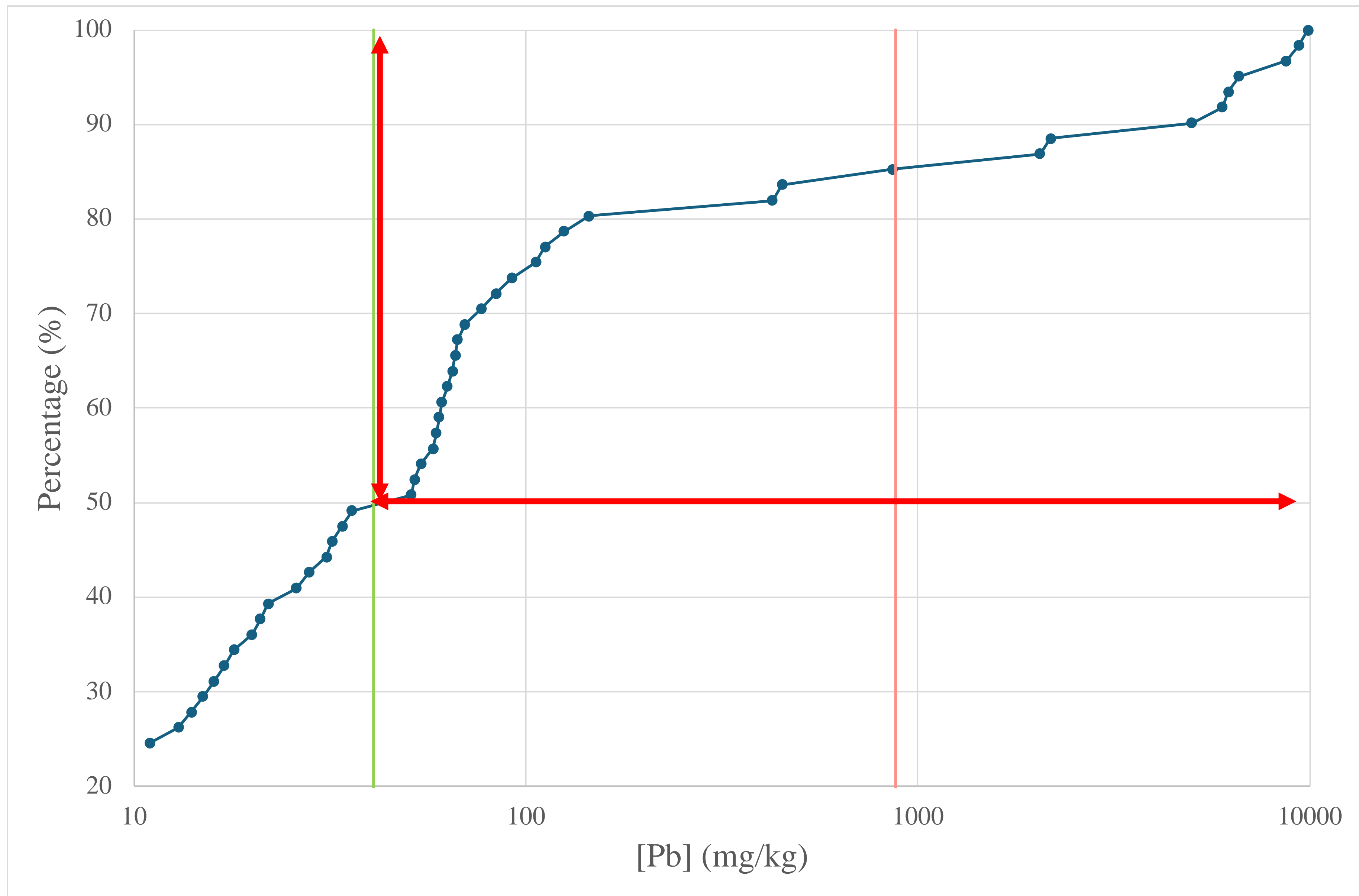






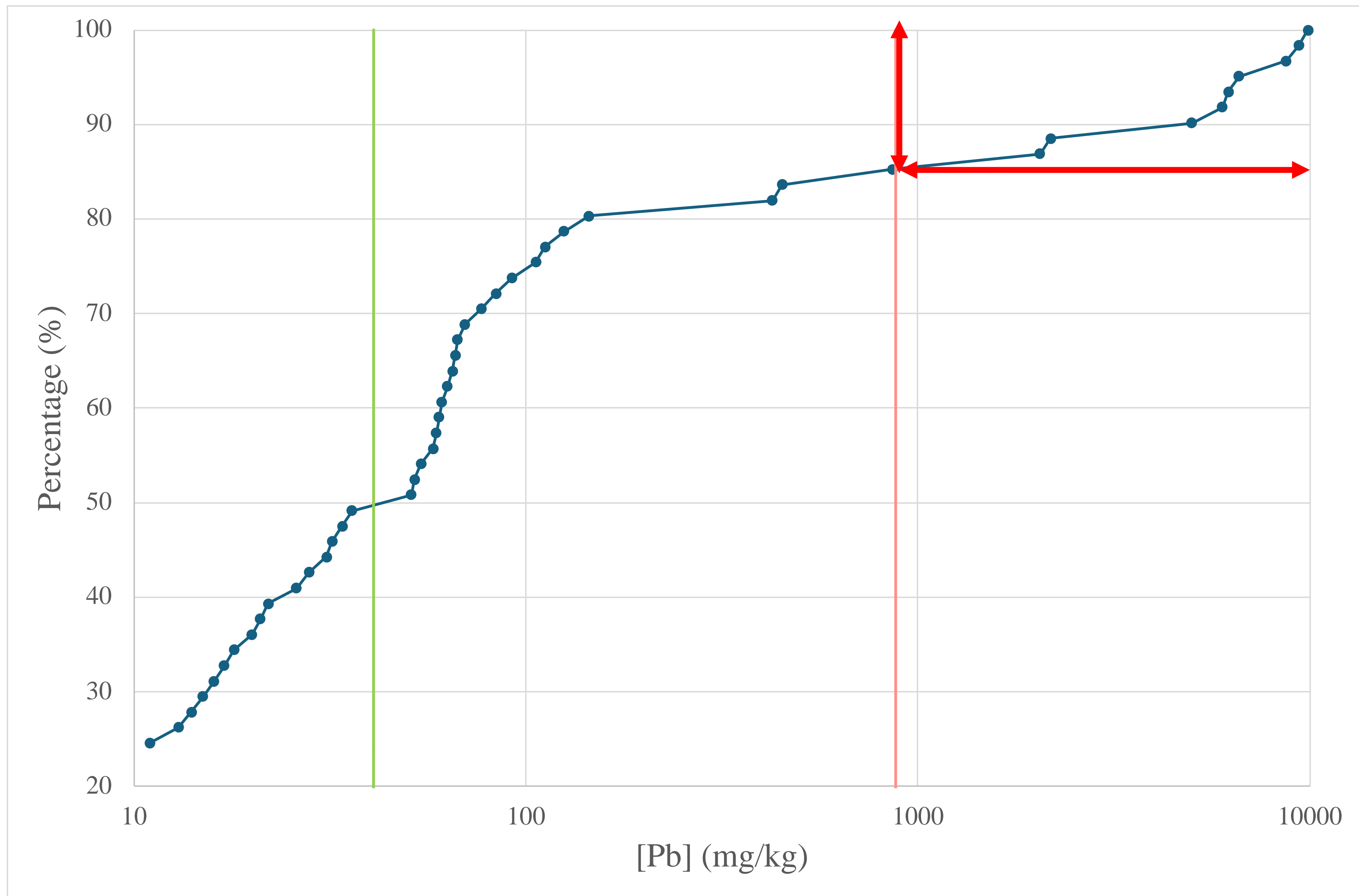
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 = SCSS(health) Recreation (Ministry for the Environment, 2012).





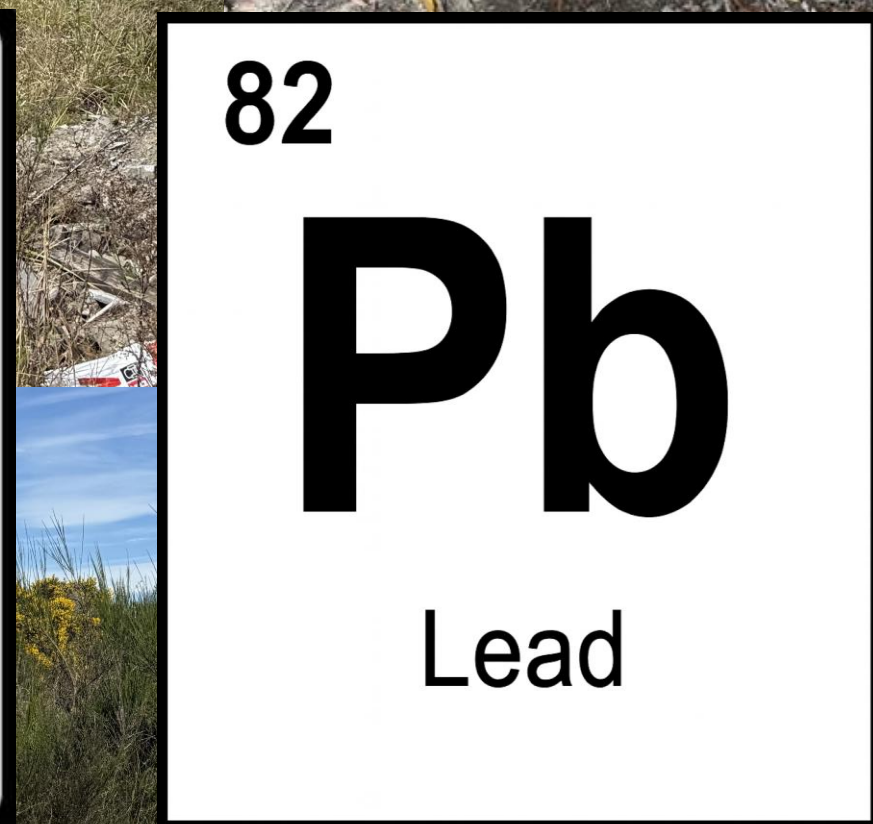
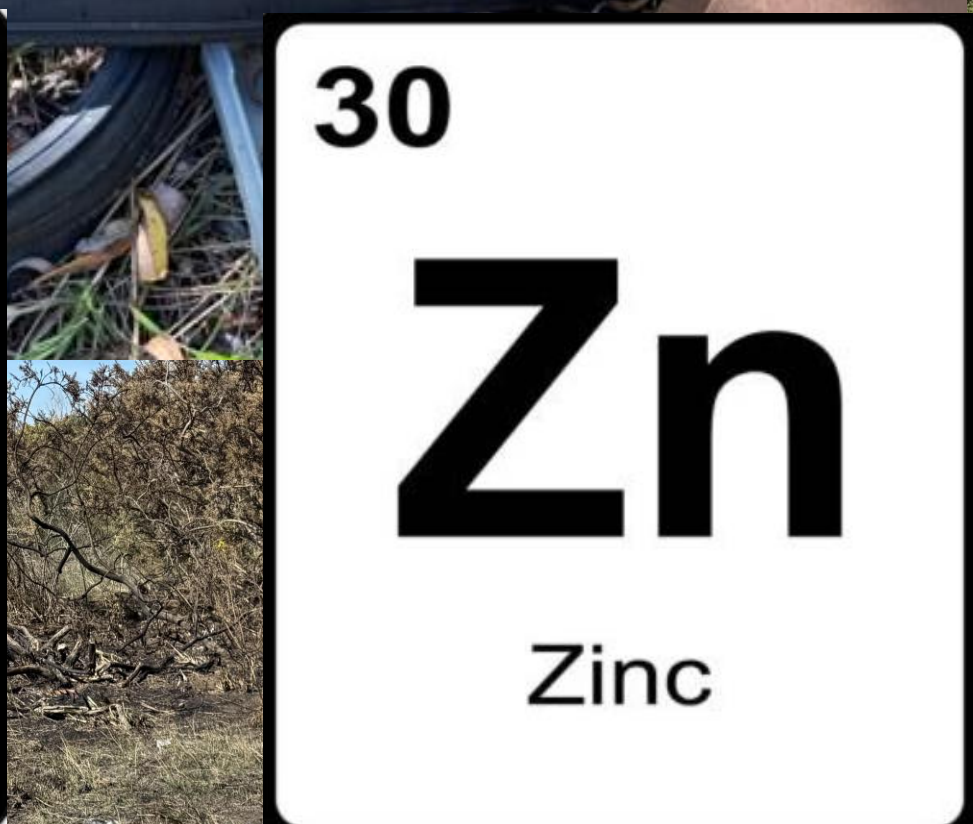
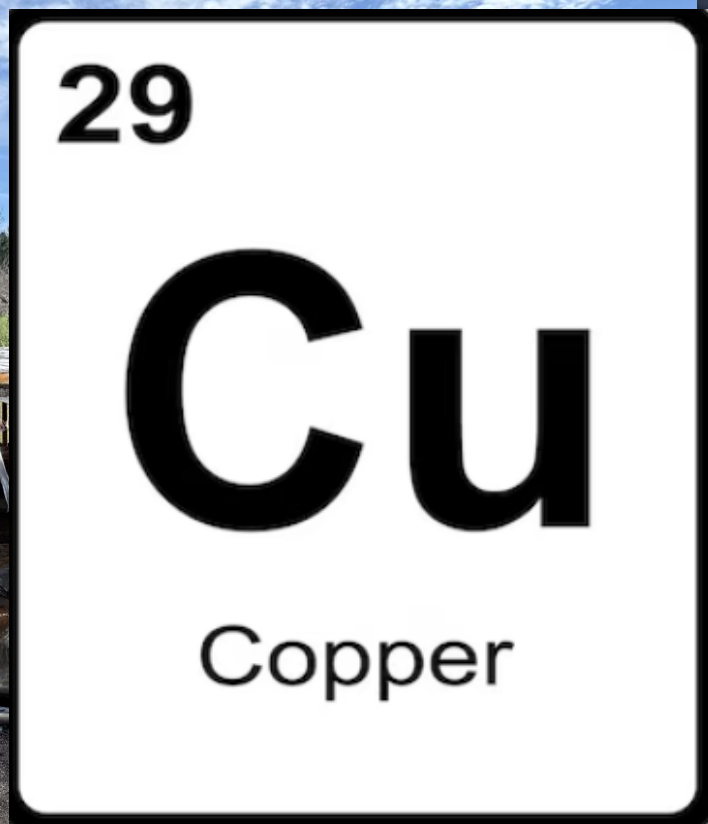
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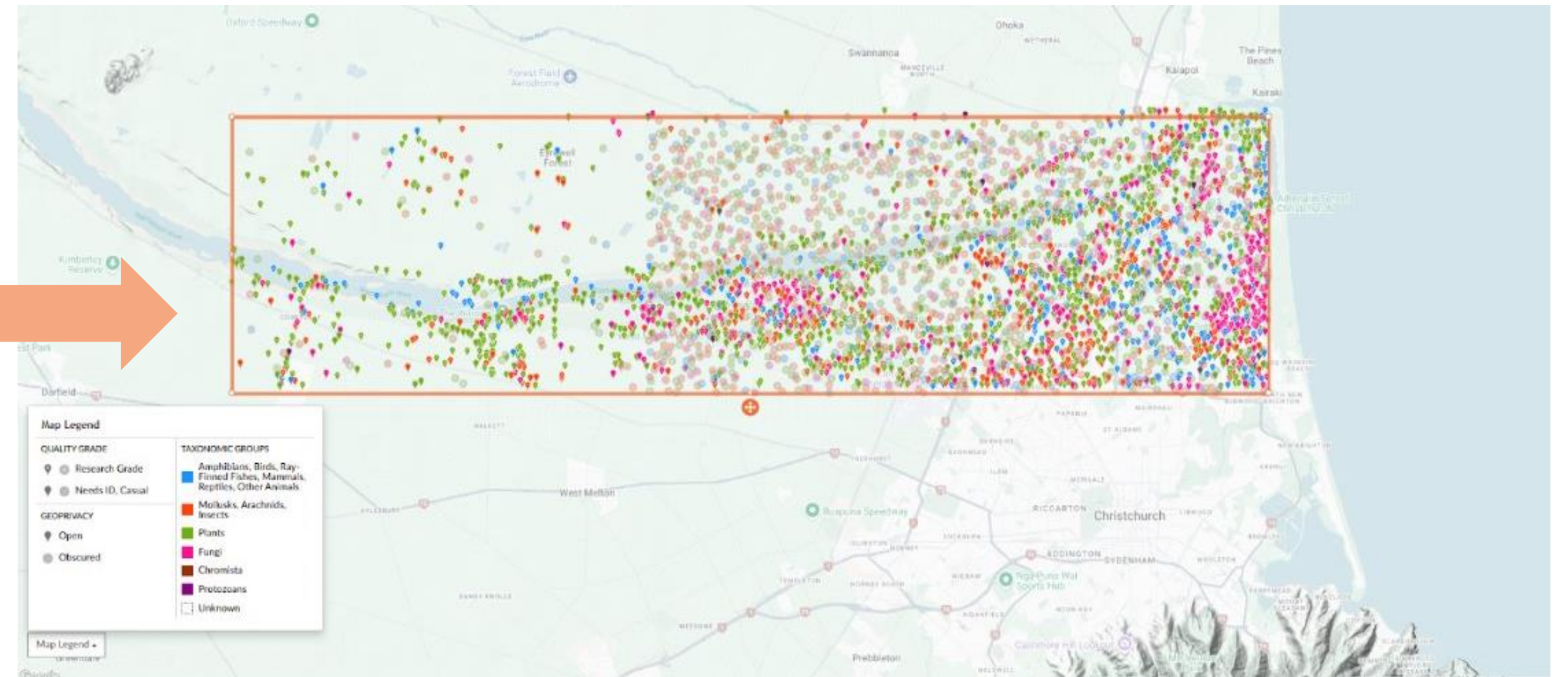


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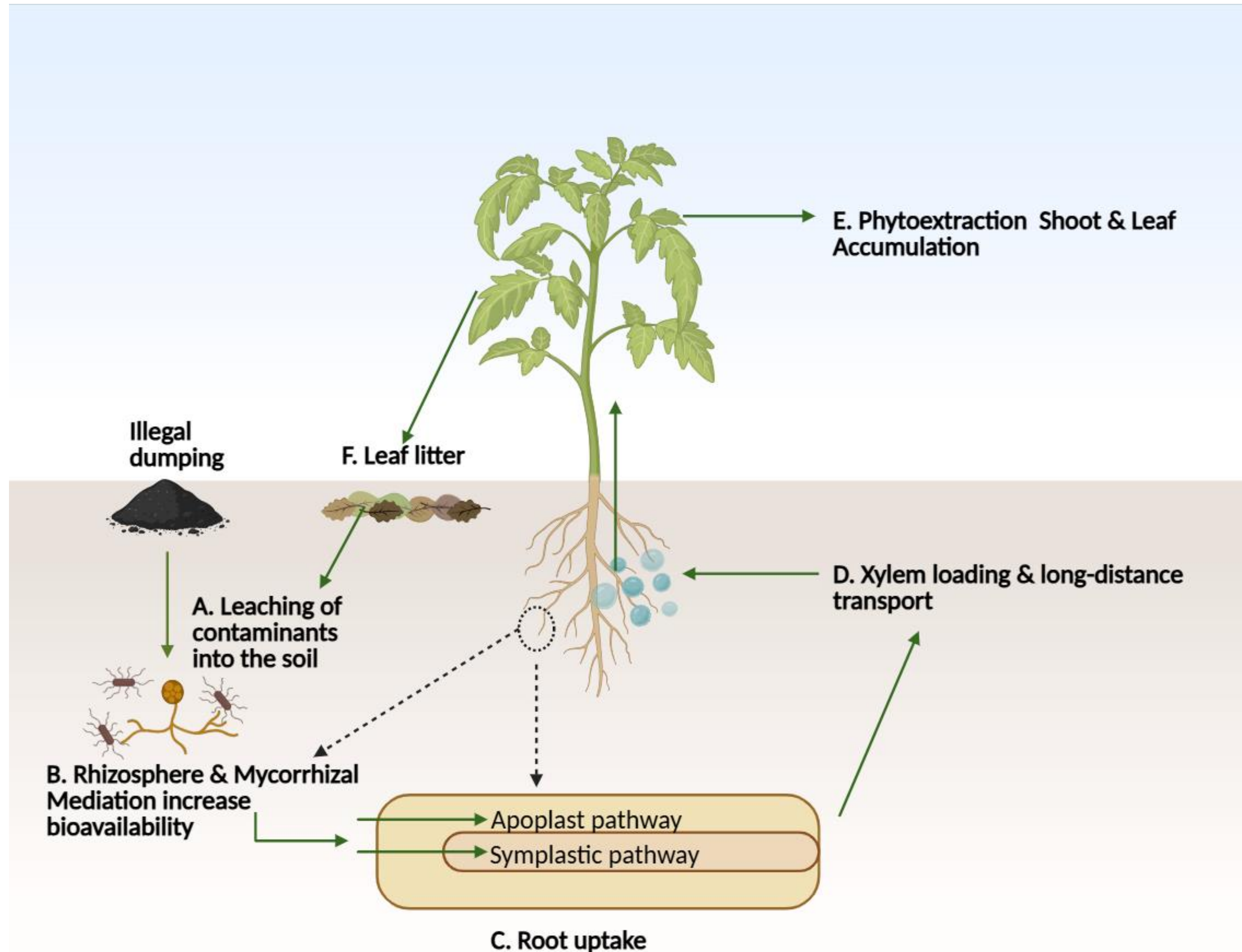




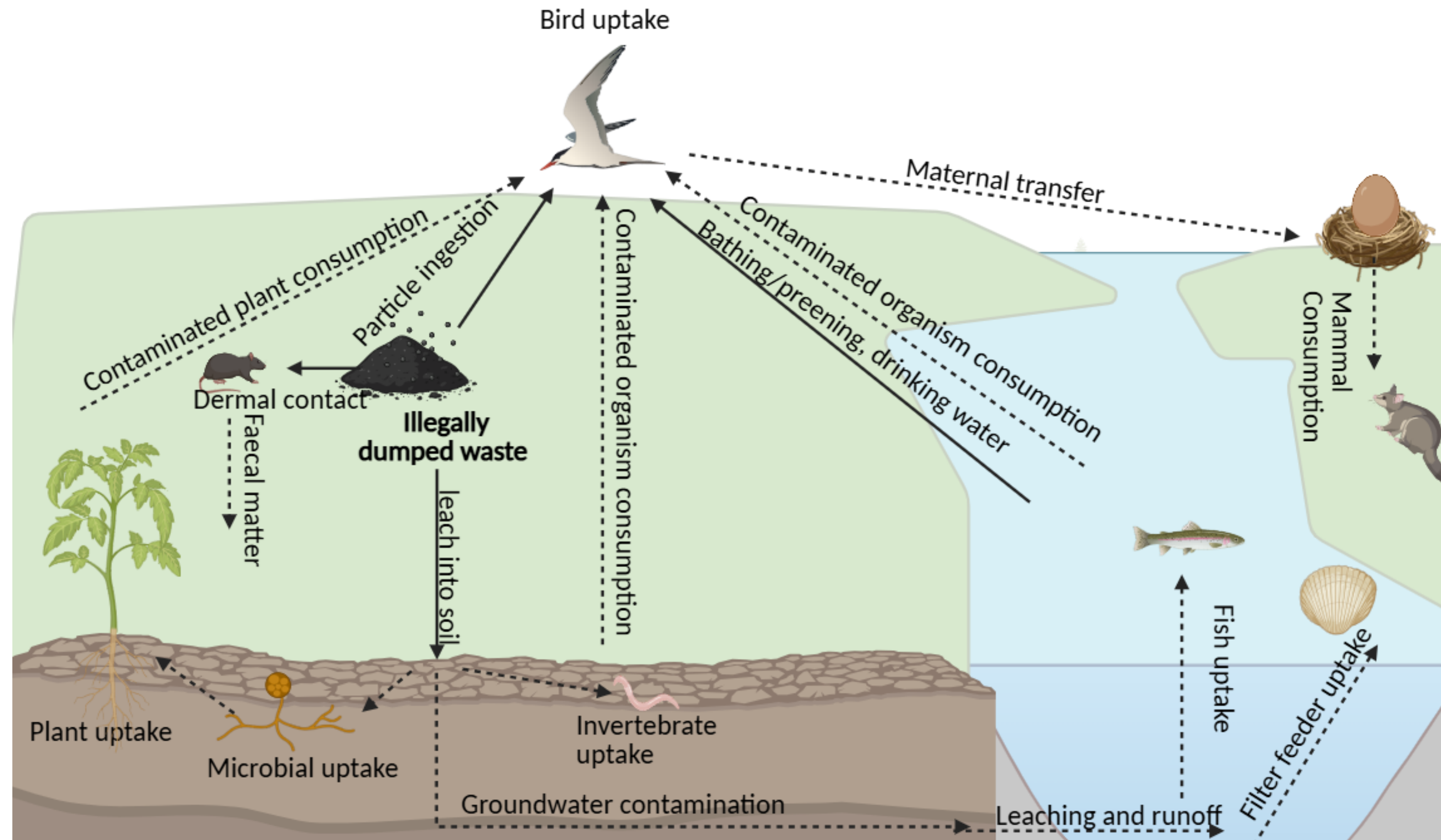
Effects



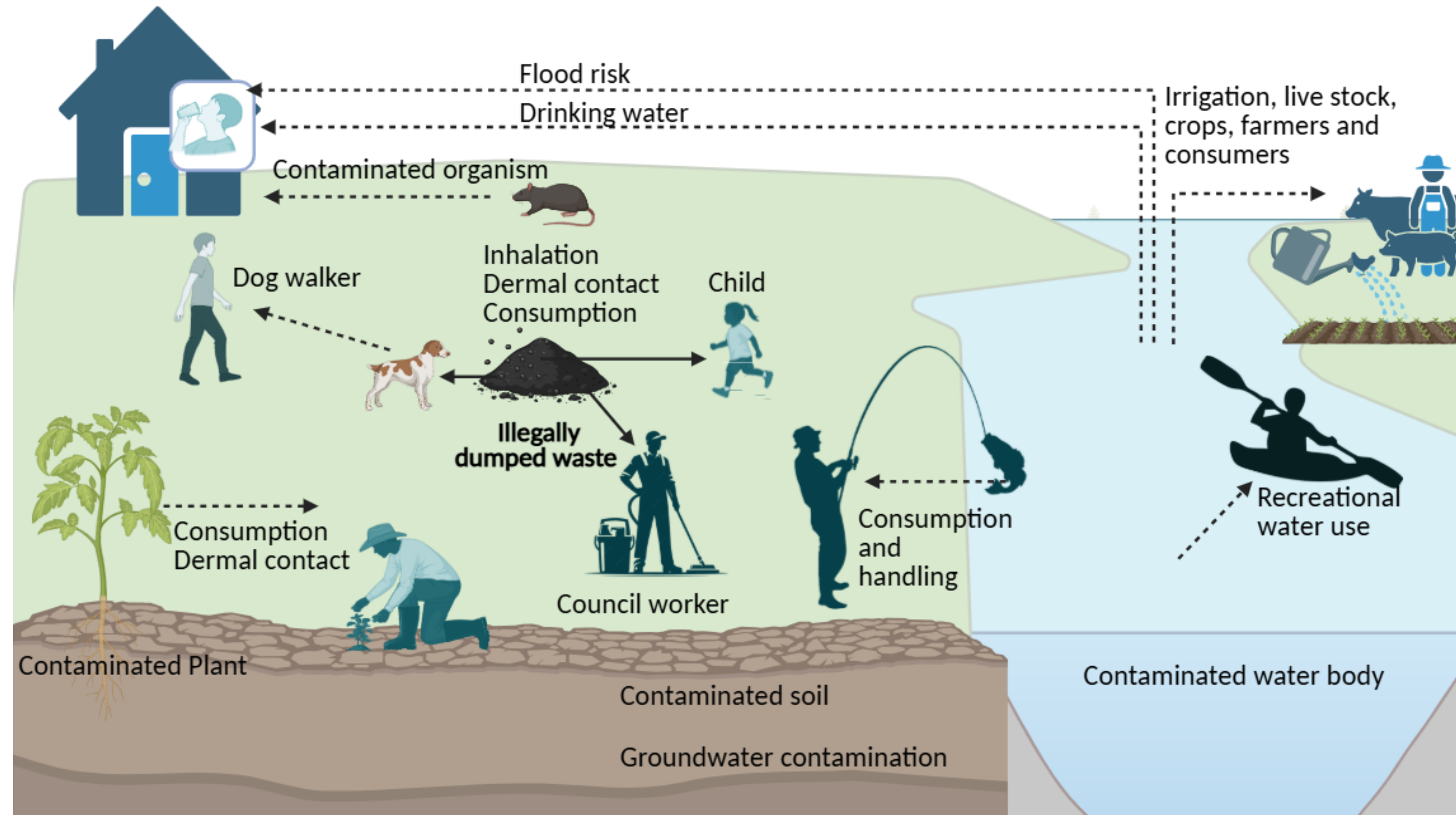
Mechanisms of Plant Uptake of Contaminants



Potential Animal Exposure to Illegal Dumping and Associated Contaminants



Potential Human Exposure to Illegal Dumping and Associated Contaminants



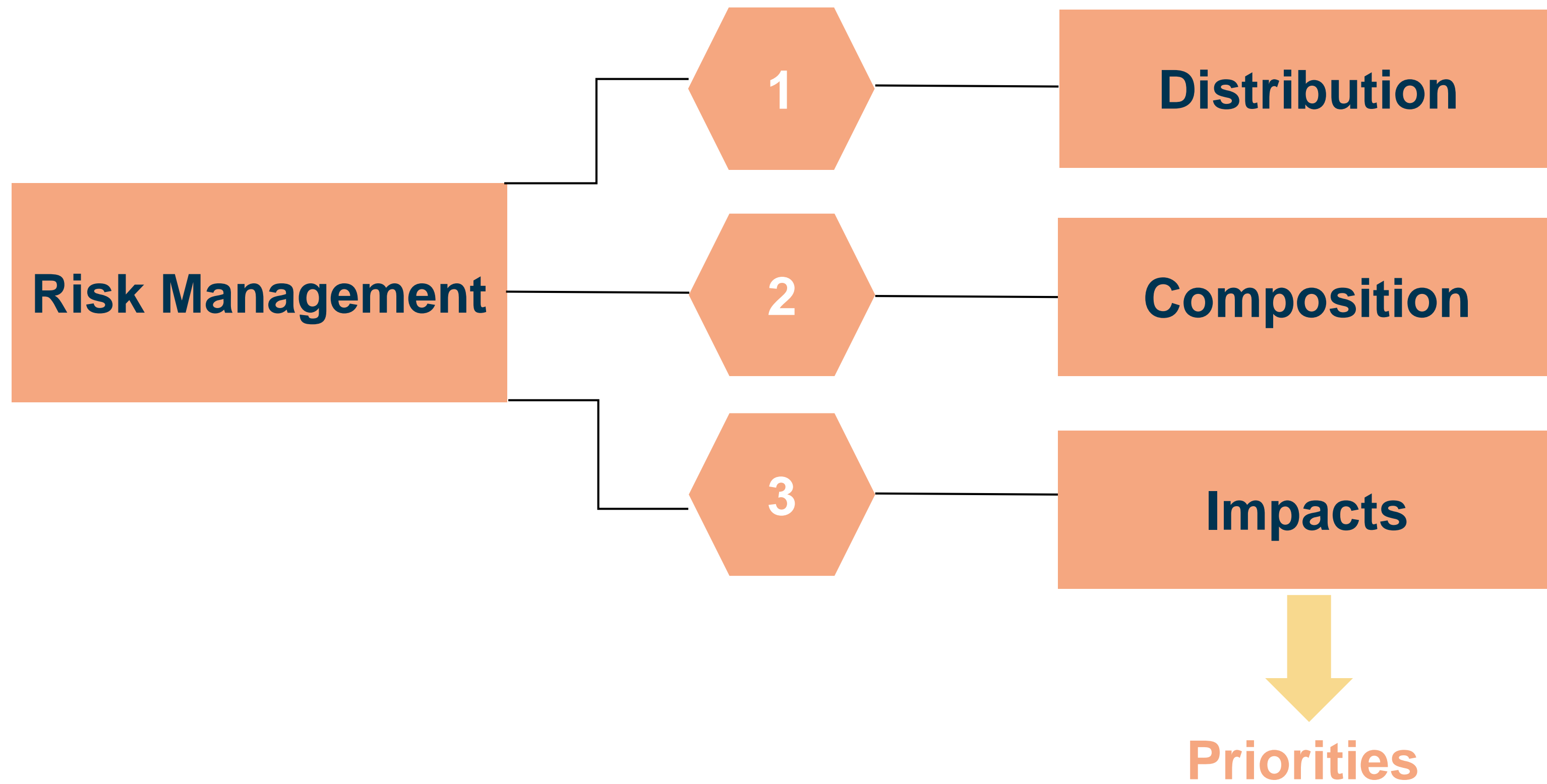
Receptors



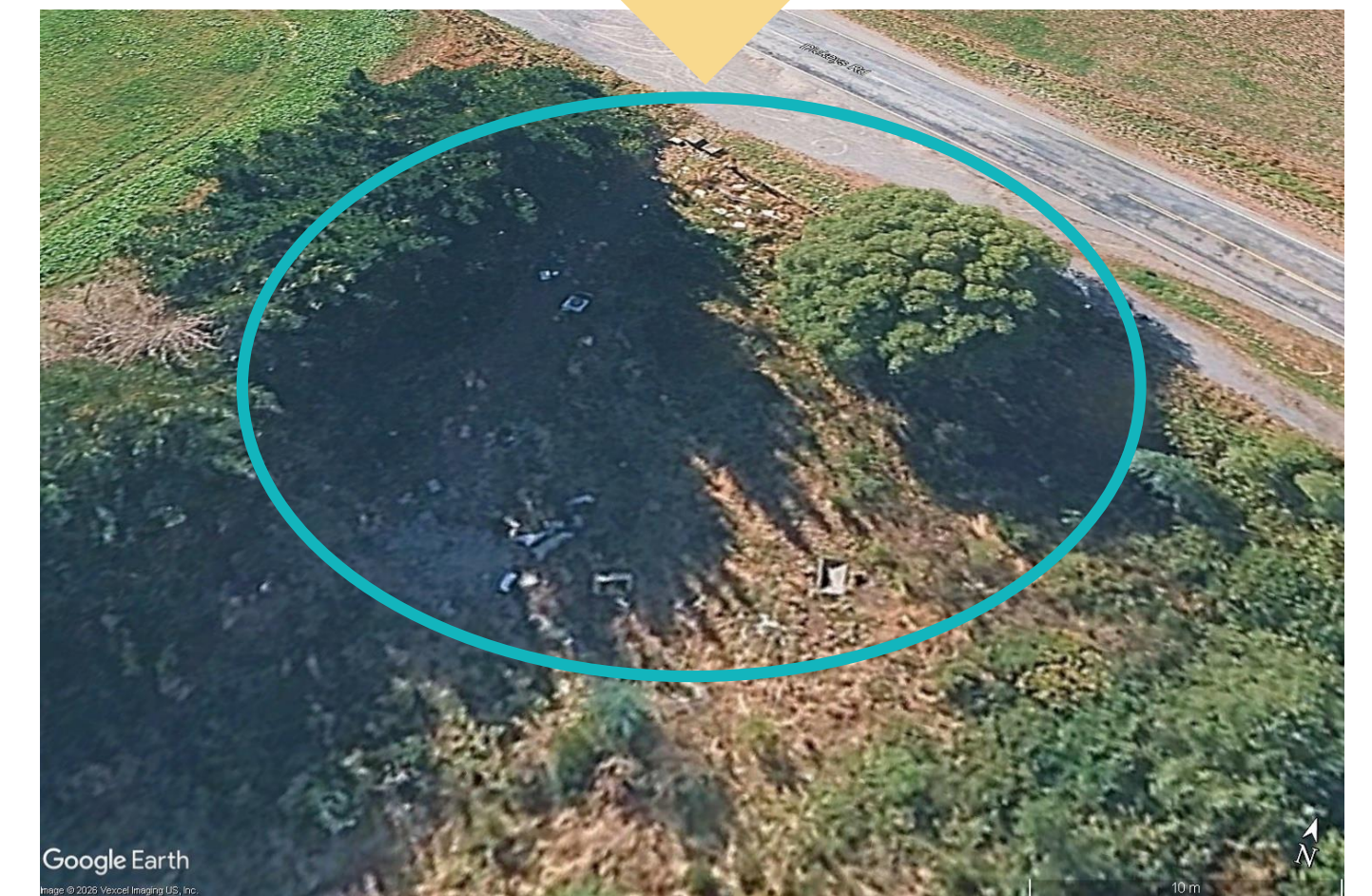
High Risk Receptors



Conclusion



Increase capacity and optimization



Questions?



Grateful Acknowledgements

- The University of Canterbury
- Coauthor – Natalia Watts
- Supervisor – Brett Robinson
 - WasteMINZ
 - ALGA

