

Te Mana o te Wai, Te Mana o te Tangata

Industrial Waters Conference 2023

Vaughan Payne, Chief Executive, Water Services Entity B

**Our backgrounds
shape our world
view and
behaviours**

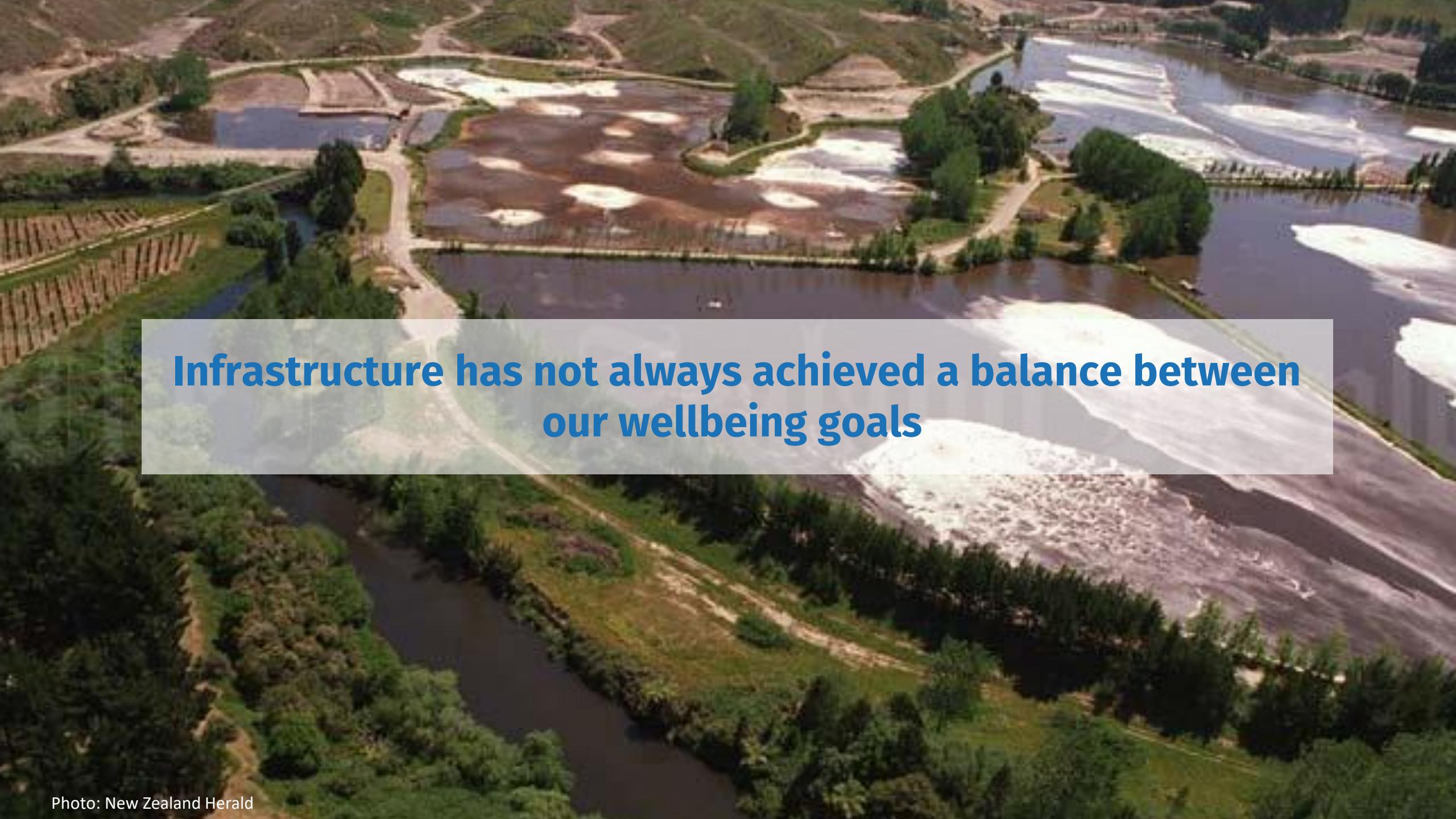


Photo: Brian Young

The purpose of infrastructure is to support our total wellbeing: environmental, cultural, social and economic



Image: Ōpōtiki wharf

An aerial photograph of a river system. On the left, a large industrial facility with numerous rectangular waste ponds in shades of brown and grey is visible. A concrete wall runs along the riverbank. The river itself is wide and dark. In the background, a large dam is visible, with a long, low wall and a rocky embankment. The surrounding land is a mix of green vegetation and brown, possibly agricultural or industrial, areas.

**Infrastructure has not always achieved a balance between
our wellbeing goals**



Photo: Tarawera River, 1980s, Vaughan Payne

Ultimately, addressing complexity is a social issue requiring leadership

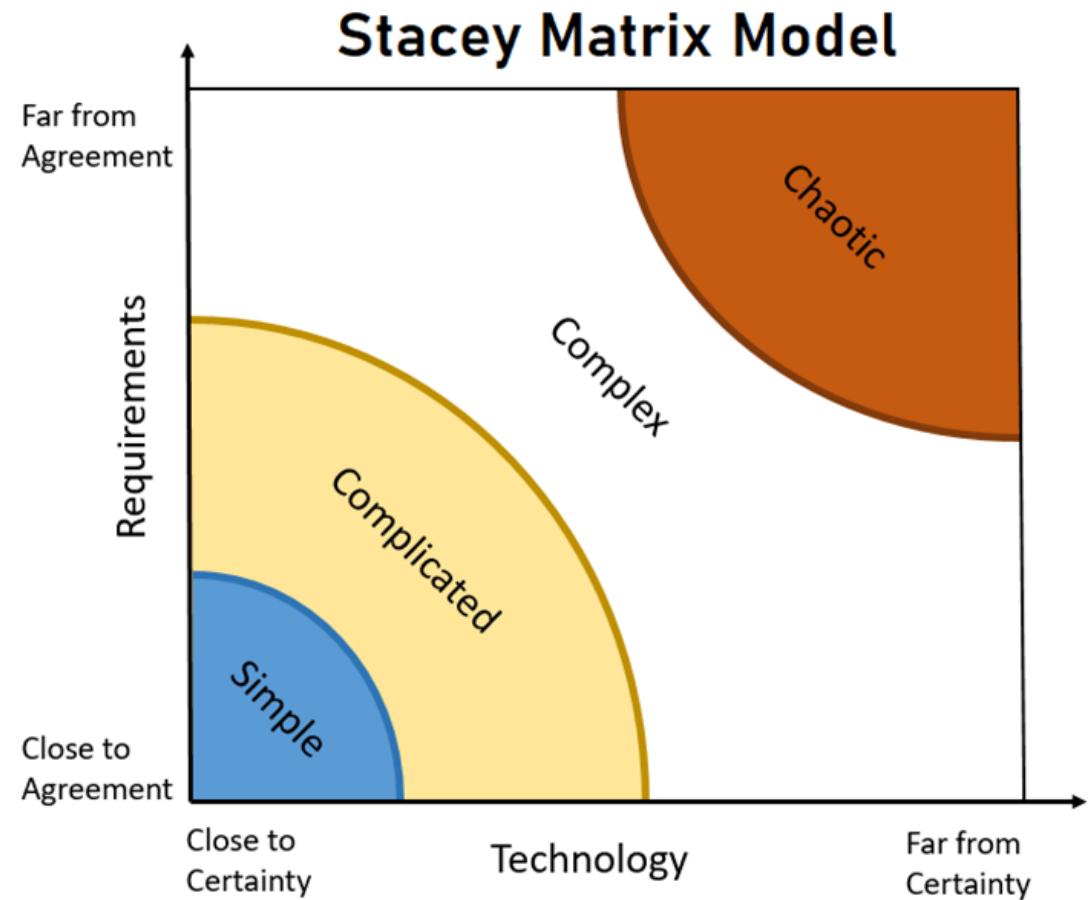


Image: The Scientific World



EXAMPLE: OPOTIKI

Context

- Rich history - Māori and Pākehā
- Serious Treaty breaches
- Town subject to flooding
- Extensive coastline and productive CMA
- Long-standing social-economic challenges
- Major aquaculture developments off-shore (existing and future)

Proposal: Improve river/harbour entrance (building training walls) in a highly sensitive coastal environment



Photo: Resolve Group



Photo: Ōpōtiki District Council



To achieve the necessary balance between our wellbeing goals, we need to be inclusive



EXAMPLE: WAIKATO RIVER

Context

- A tīpuna - an ancestor
- Supports nationally significant sectors
- Provides drinking water to nearly half of NZ's population
- Declining water quality caused by:
 1. Landuse (diffuse)
 2. Natural
 3. Point source
- A Treaty settlement requiring:
 1. Effect to Te Ture Whaimana
 2. Co-governance decision making

Proposal: policy/regulatory changes to improve water quality



Photo: Waikato Regional Council

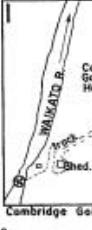
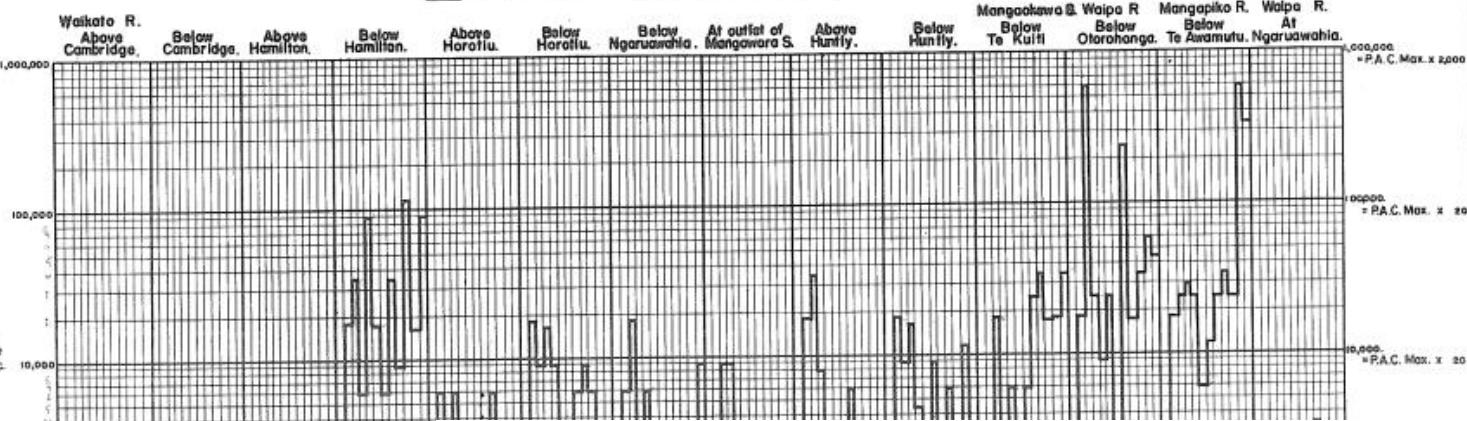
**Leadership is
about creating
the right
environment to
enable others to
grow and be
their best**



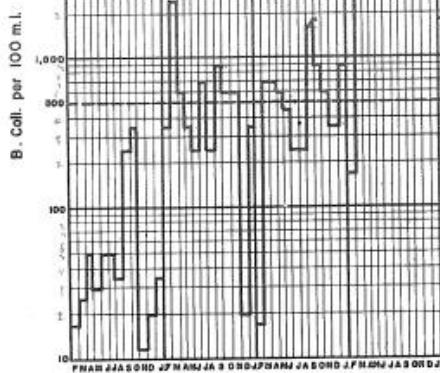
Photos: Vaughan Payne



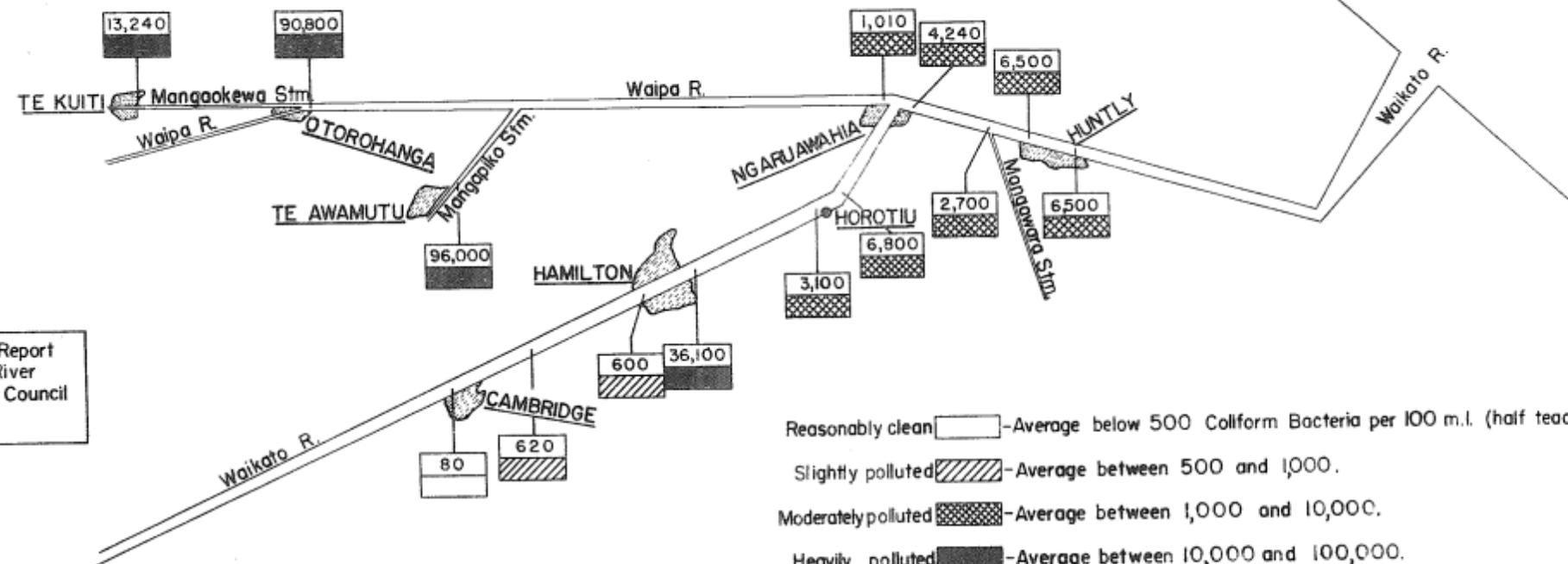
NOTE: Samples were taken each month from Feb '55 to Jan '56.



NOTE: Vertical Scale is Logarithmic.



"Report
River
y Council



Reasonably clean - Average below 500 Coliform Bacteria per 100 ml. (half teacup).

Slightly polluted - Average between 500 and 1,000.

Moderately polluted - Average between 1,000 and 10,000.

Heavily polluted - Average between 10,000 and 100,000.

Waikato River 1955

Waikato R @ Mercer, median faecal coliforms, 1970-2021

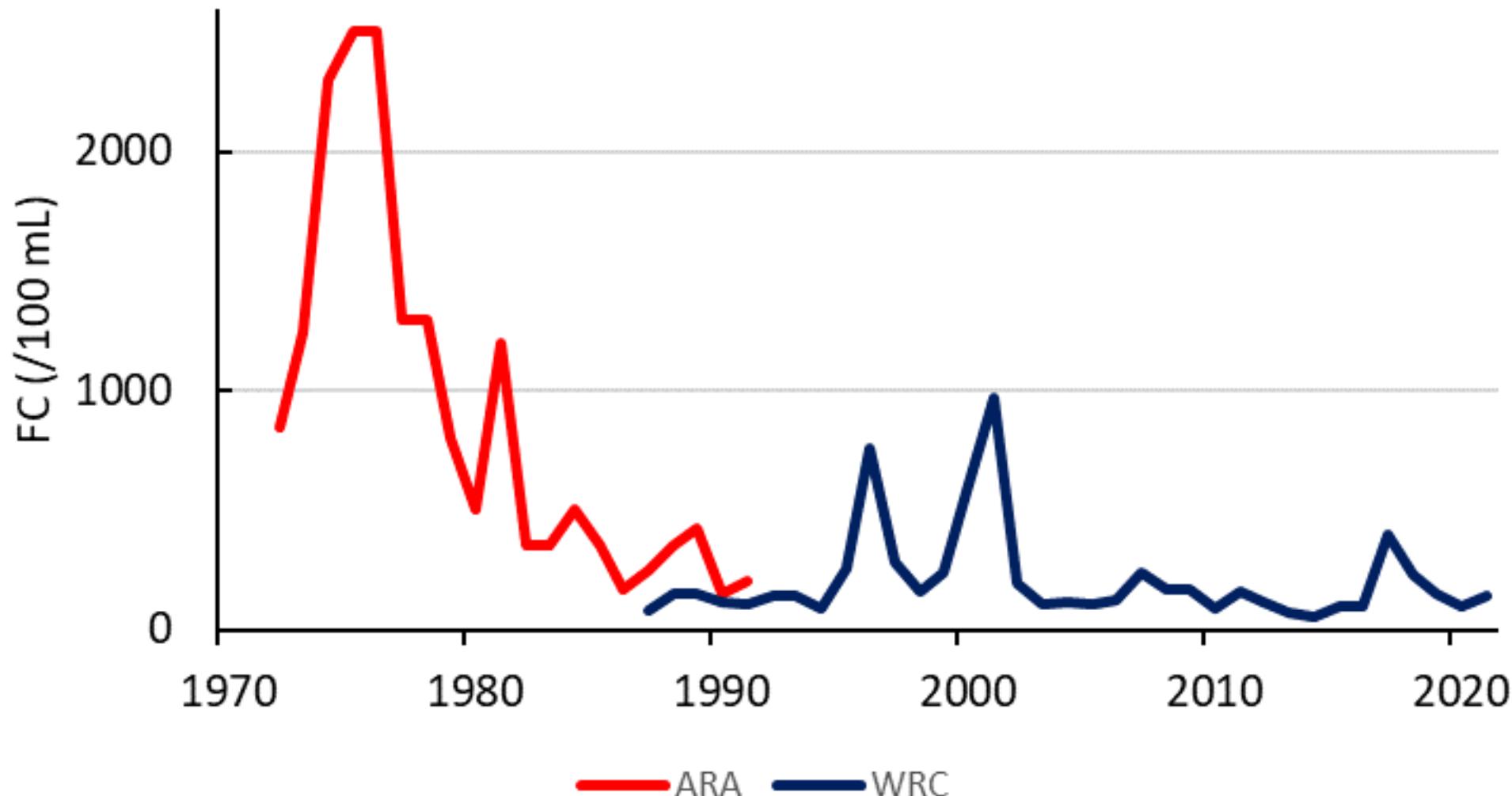




Photo: Jay Farnworth

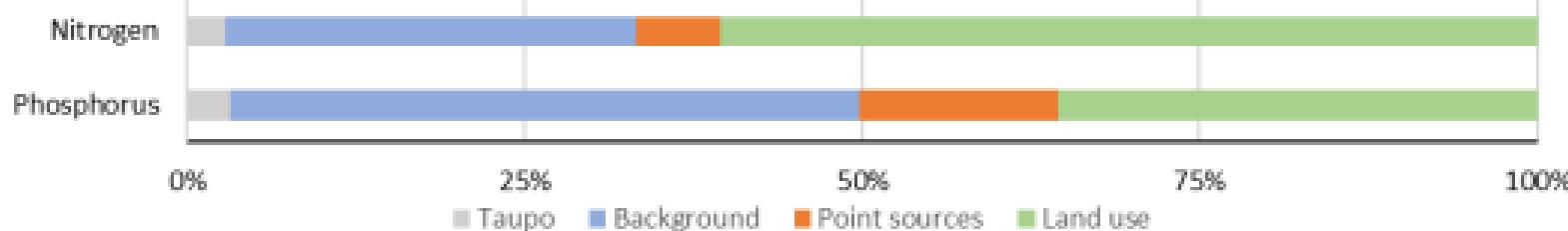


Photo: Greenhill Park, Hamilton

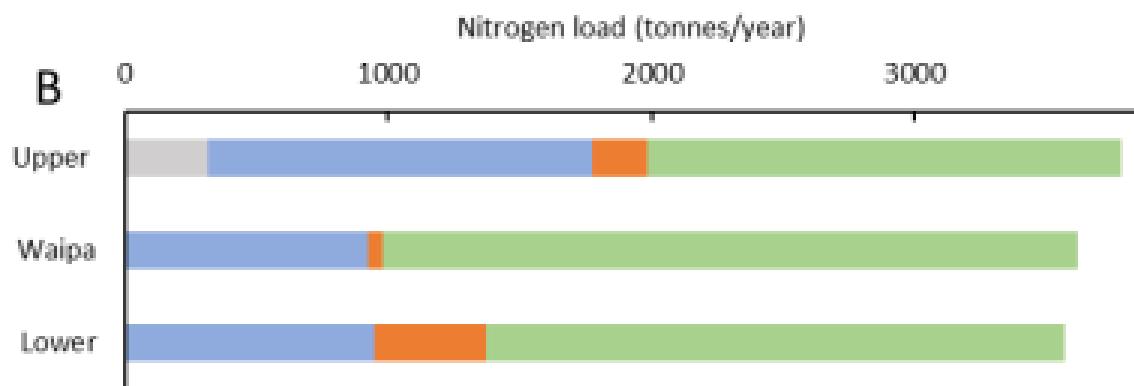
Thank you for your leadership

Waikato River 2011-2020

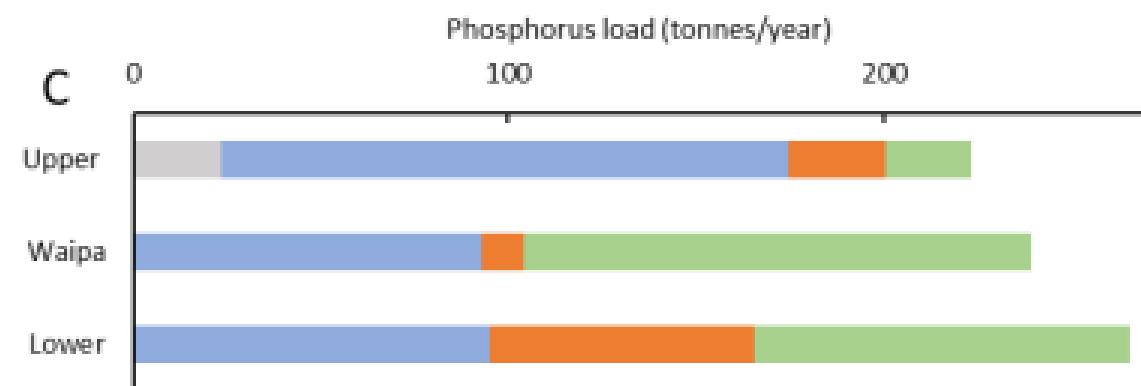
A



B

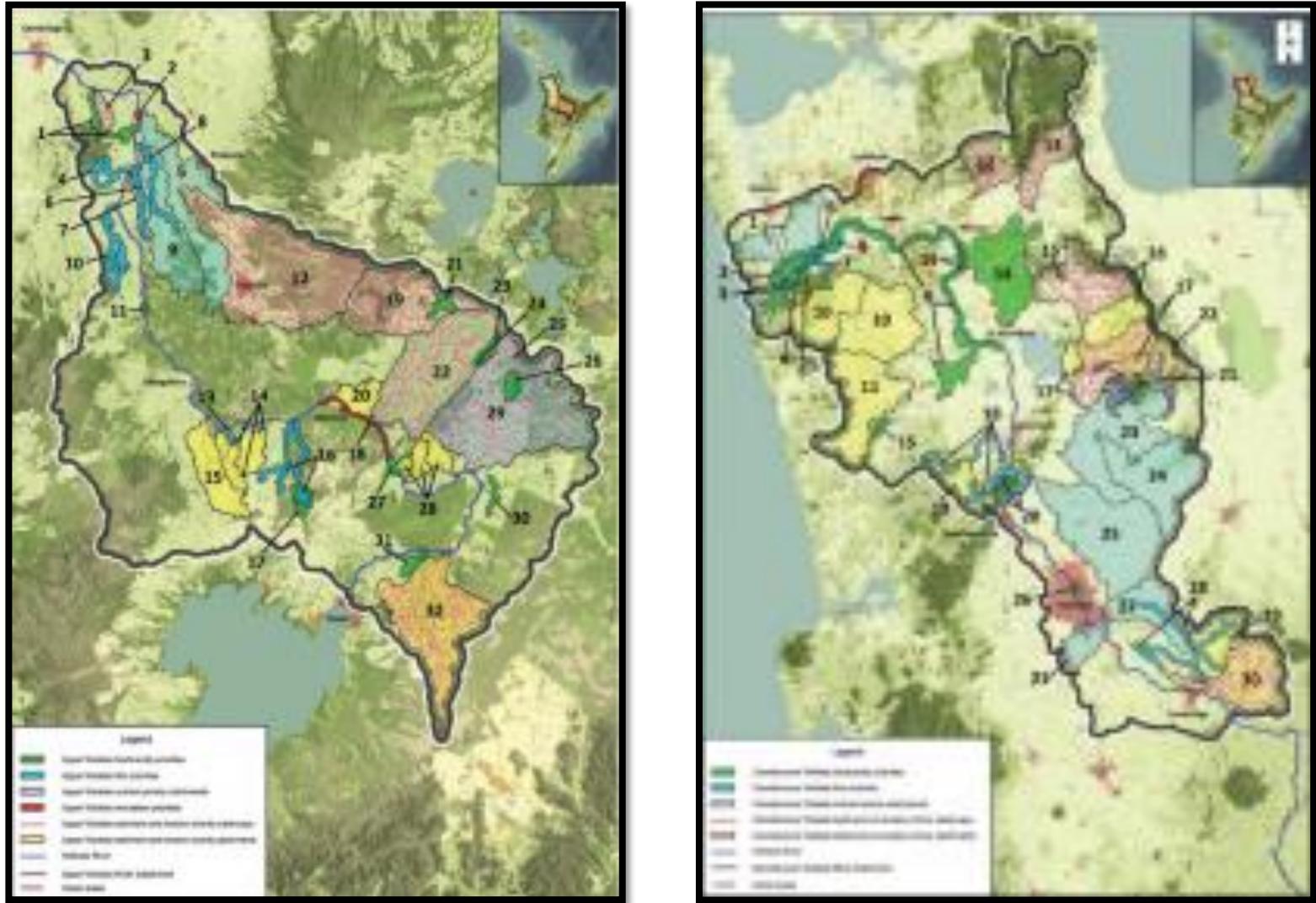


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Ref: Sources of nitrogen and phosphorus in two major catchments in the Waikato region,
2011-20 | Waikato Regional Council TR 2022/05 Author: B Vant

**We need a
conversation
about how to
get the best
return on
investment**



Images: Waikato and Waipā Rivers Restoration Strategy



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Pātai? | Questions?