North-West Wildlink: Landscape scale restoration

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NORTH-WEST WILDLINK

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NORTH-WEST
WILDLINK
Connecting nature
across Auckland

North West Wildlink

A landscape scale project to help native wildlife to travel and breed safely between the conservation hotspots of the Hauraki Gulf Islands and the Waitakere Ranges

NWW goals:

1) Increase ecological health and connectivity of native habitat throughout the area

2) Increased meaningful participation in environmental care

3) Increase collaboration and communication between agencies, groups and individuals and increase their capacity

https://www.northwestwildlink.org.nz/

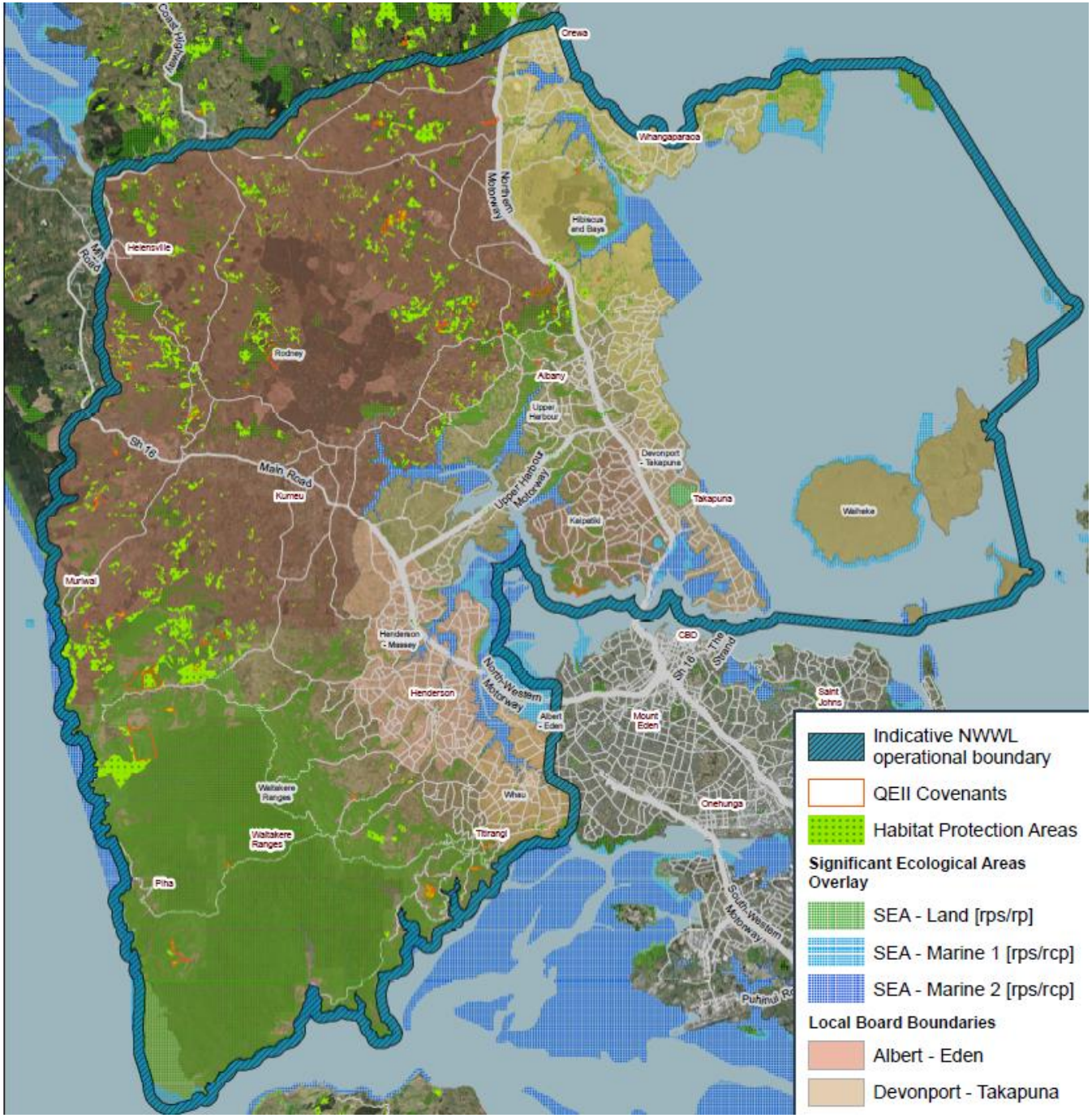
Control pest plants and animals

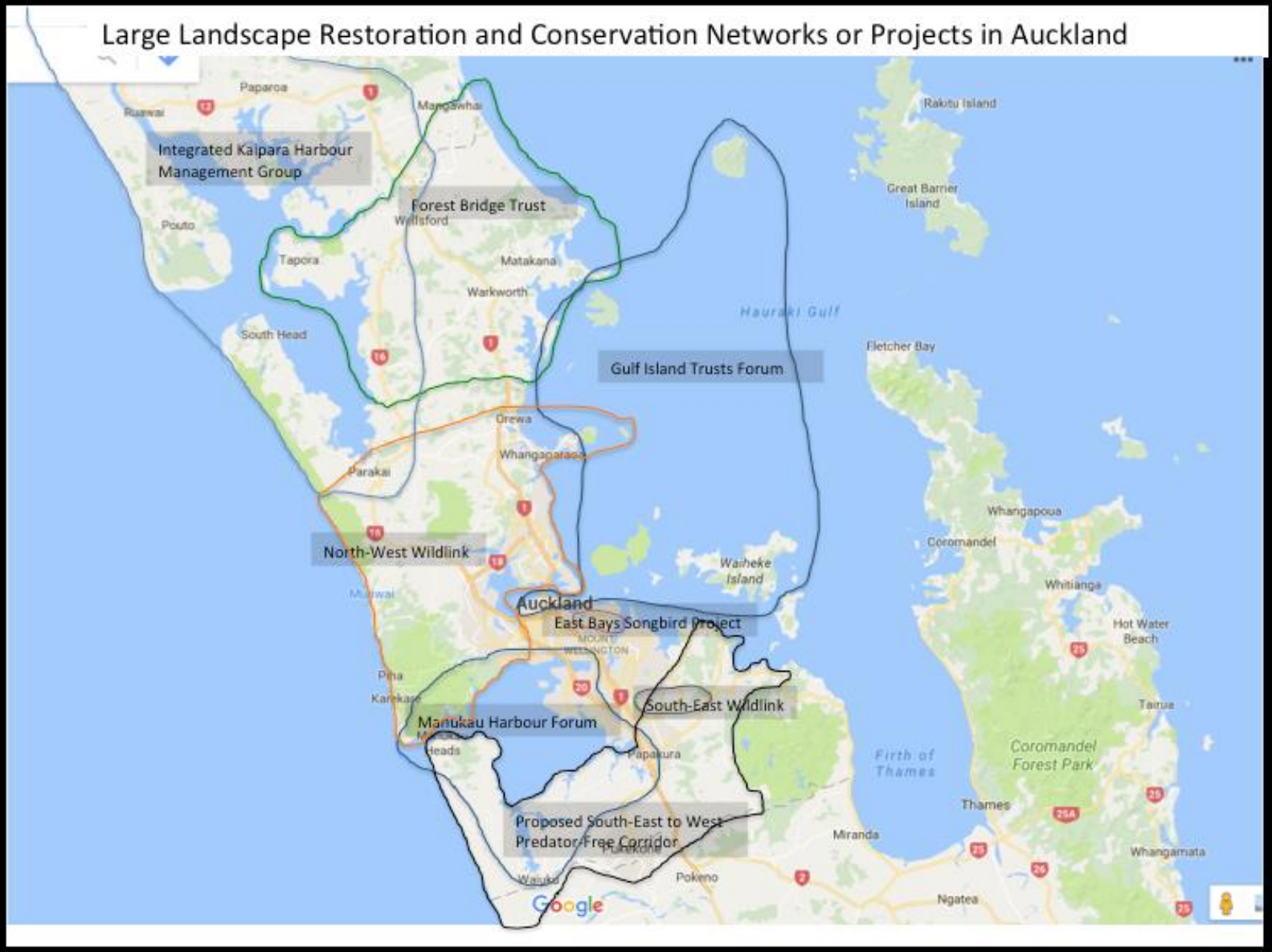
Plant natives for wildlife

Collaborate with neighbours and groups

Pest Free

Mostly Pest Free


Orewa
Whangaparaoa
Hibiscus and Bays
Northern Motorway
Helensville
Rodney
Albany
Upper Harbour
Devonport - Takapuna
Takapuna
Waiheke
Kaipatiki
Upper Harbour Motorway
Main Road
Kumeu
Muriwai
Henderson - Massey
Henderson
North-Western Motorway
Albert - Eden
CBD
The Strand
Saint Johns
Mount Eden
Onehunga
Waitakere Ranges
Whau
Titirangi
Piha
South-Western Motorway
Indicative NWWL operational boundary
QEII Covenants
Habitat Protection Areas
Significant Ecological Areas Overlay
SEA - Land [rps/rp]
SEA - Marine 1 [rps/rcp]
SEA - Marine 2 [rps/rcp]
Local Board Boundaries
Albert - Eden
Devonport - Takapuna


Large Landscape Restoration and Conservation Networks or Projects in Auckland
Integrated Kaipara Harbour Management Group
Forest Bridge Trust
Gulf Island Trusts Forum
North-West Wildlink
Auckland
East Bays Songbird Project
South-East Wildlink
Manukau Harbour Forum
Proposed South-East to West Predator-Free Corridor
Paparoa
Mangawhai
Rakitu Island
Great Barrier Island
Pouto
Wellsford
Tapora
Matakana
Warkworth
South Head
Hauraki Gulf
Fletcher Bay
Orewa
Whangaparaoa
Parakai
Whangapoua
Coromandel
Waiheke Island
Whitianga
Hot Water Beach
Piha
Tairua
Heads
Papakura
Firth of Thames
Coromandel Forest Park
Thames
Miranda
Whangamata
Pokeno
Ngatea
Google

Why create a Wildlink?

We can:

- combine resources & funding
- apply lessons learnt across the NWW & to other Wildlinks in the future
- maximising data-gathering to optimise decision-making
- connect & inspire more people: you're not alone!

Connect Nature AND People

Park visitors: 10 yr Trend Auckland Regional Parks

More likely =

- **NZ European**
- **>$50K income**
- **female**

Less likely =

- **Pacific & Asian**

- Closer to home?
- Experience nature everyday?

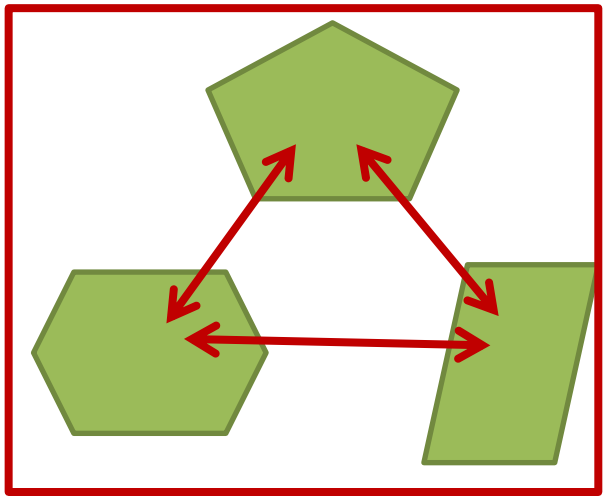
Source: Auckland Council

Why connect nature across Auckland?

- Wildlife can (& need to) move across boundaries
- Ecosystems function across a large scale

Connectivity

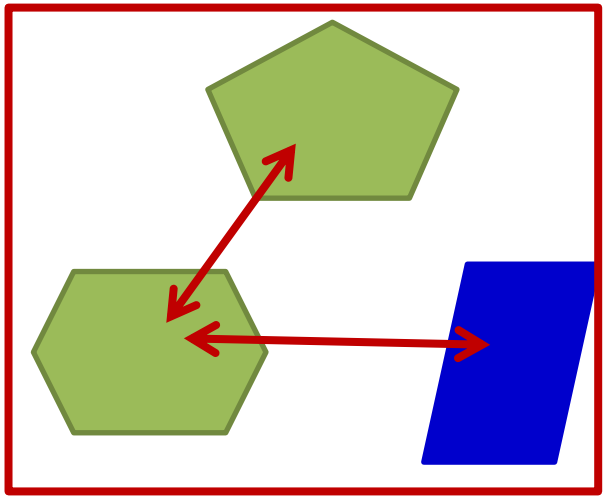
"The degree to which the landscape facilitates or impedes movement among resource patches"



- Fragments don't exist in isolation

  Movement of:

  species, processes, nutrients…



- Many species use resources from different parts of a landscape

Why connectivity at landscape scale?

Ecological reasons:

- Prevent local extinction
- Carrying capacity (K) = effectively make reserves 'bigger'
- Dispersal/migration
- Different food resources
- Linking ecological processes

(gene flow, pollination, seed dispersal)

Robins on Tiritiri Matangi Is.
K = 65 = harvest for network

Armstrong et al (2002)

Connectivity: seed dispersal

Fragments:

- **Size and shape**
- **Connectivity**
- **Degree of isolation**
- **Predator control**

Carolina Lara: PhD student

Connectivity: seed dispersal

Totara

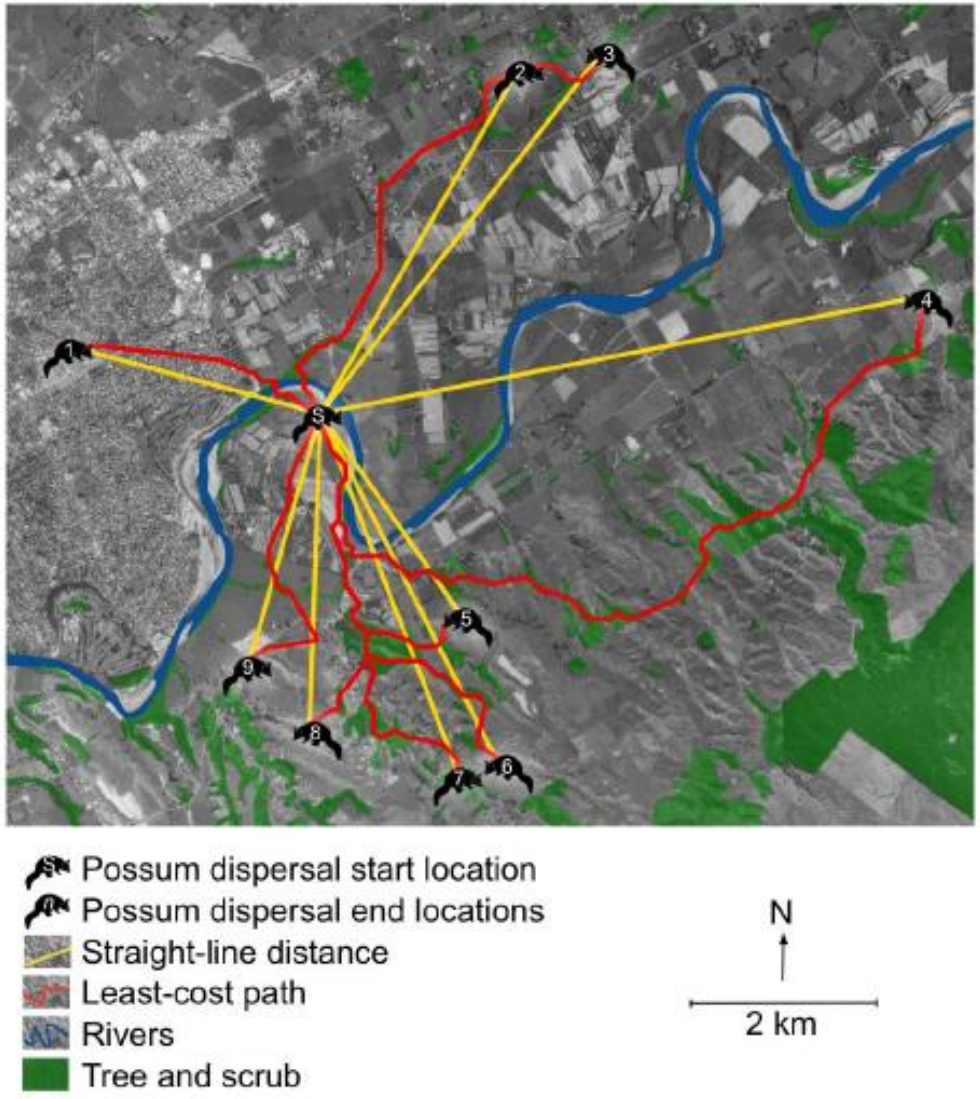
Perverse outcomes: pest spread?

Corinne's Reserve

John's Reserve

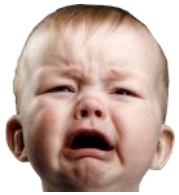
Know the landscape around your project!
What's coming your way? (surveillance)

Perverse outcomes: pest spread?



Etherington et al. (2014)

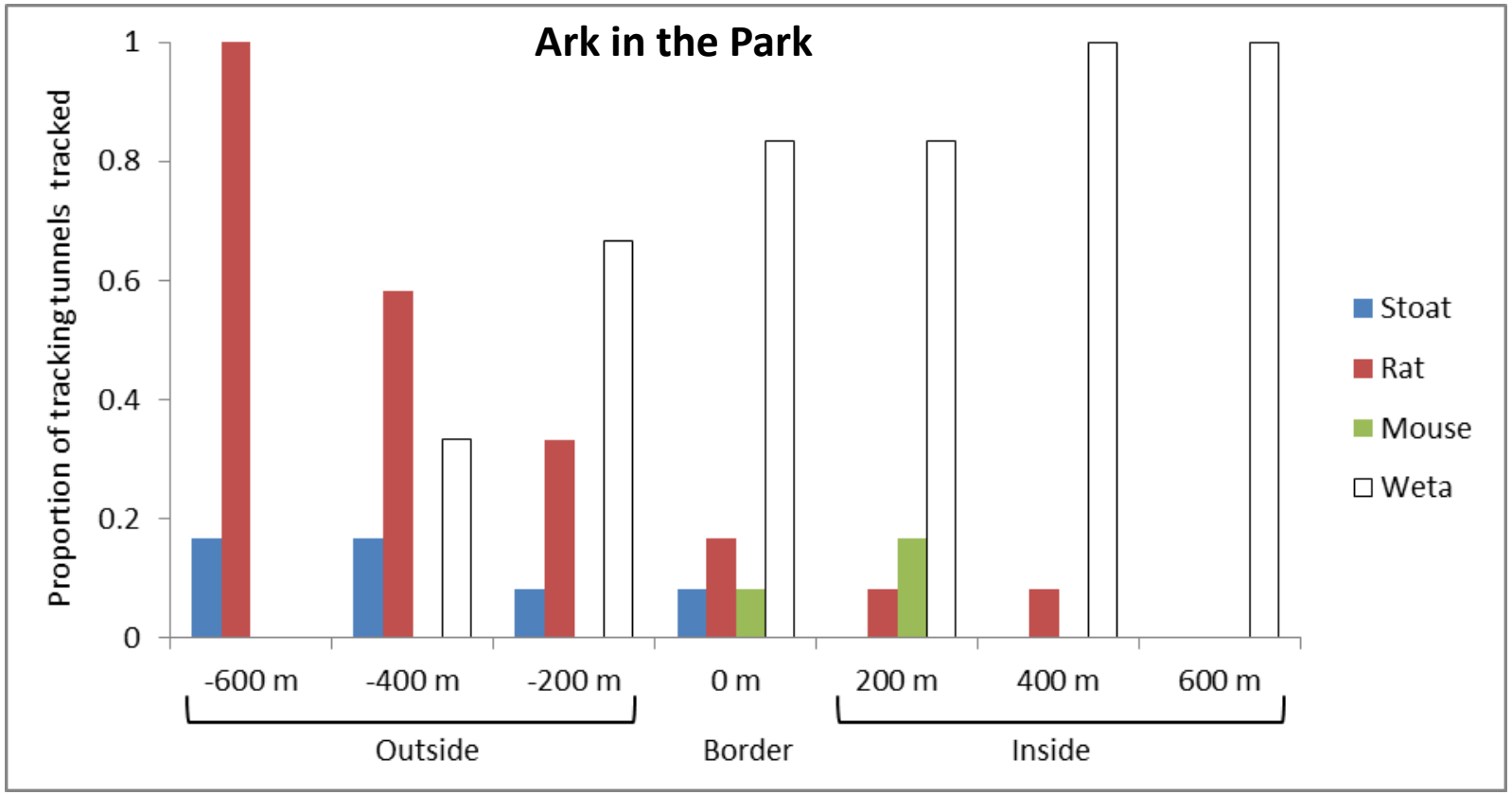
Yes – mammalian pests will use corridors!



<u>Manage pests at a landscape level:</u>

understand pest movement & the spatial effectiveness of pest control

Spatial effectiveness of pest control



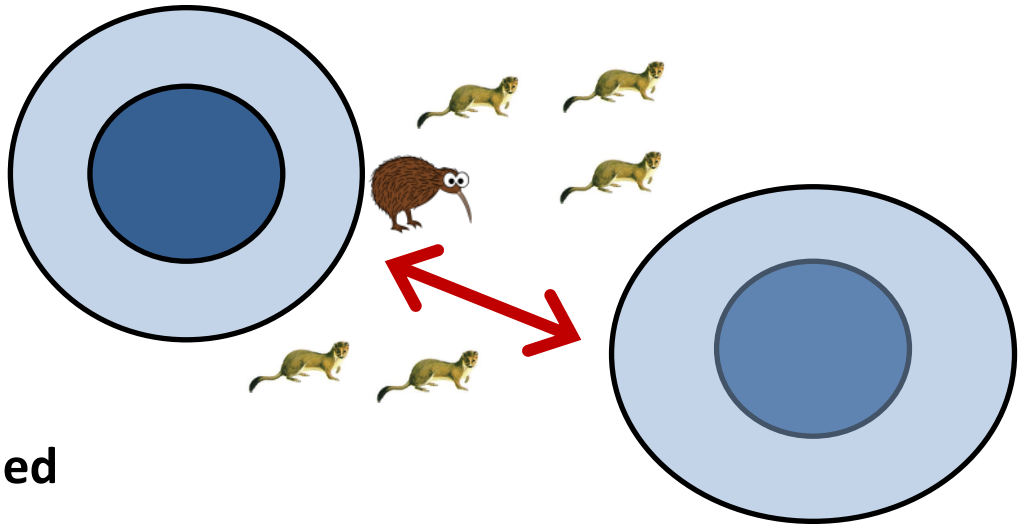
Core vs spillover

Eru Nathan: MSc 2013

Spatial effectiveness of pest control

Knowledge of spill-over effects can be used to promote connectivity & dispersal

- Linking pest management ‘islands’



Pest control applied

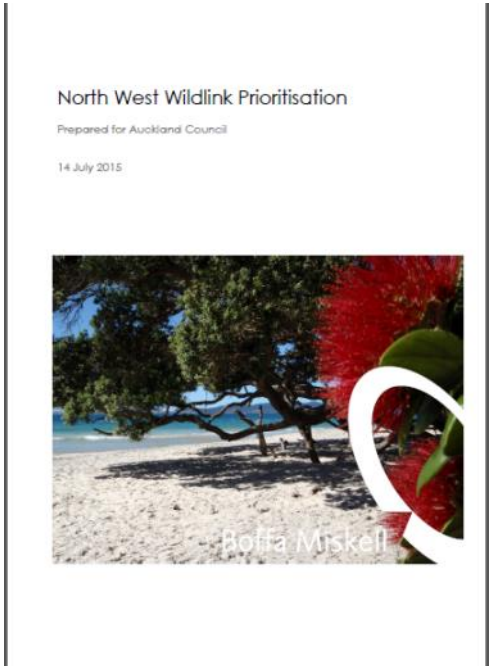
Effective pest control area (spillover)

How do we get connectivity?

- Protect important biodiversity hotspots ('Wildlink Wonders')
- Protect connecting features ('linkages') already present (eg. riparian zones, shelter belts)
- Create: Fill-in gaps in links or restore missing connections
- Create: Enhance existing habitat (resources + few pests)

What are ‘Wildlink Wonders’?

Boffa Miskell Limited 2016.
NORTH WEST WILDLINK: Prioritisation Report.
Report prepared by Boffa Miskell Limited for Auckland Council



Wildlink Wonders

'Wildlink Wonder'

- Defined areas of habitat (i.e. a forest remnant) that have demonstrably significant ecological values. These areas have been recommended as priorities for conservation management.

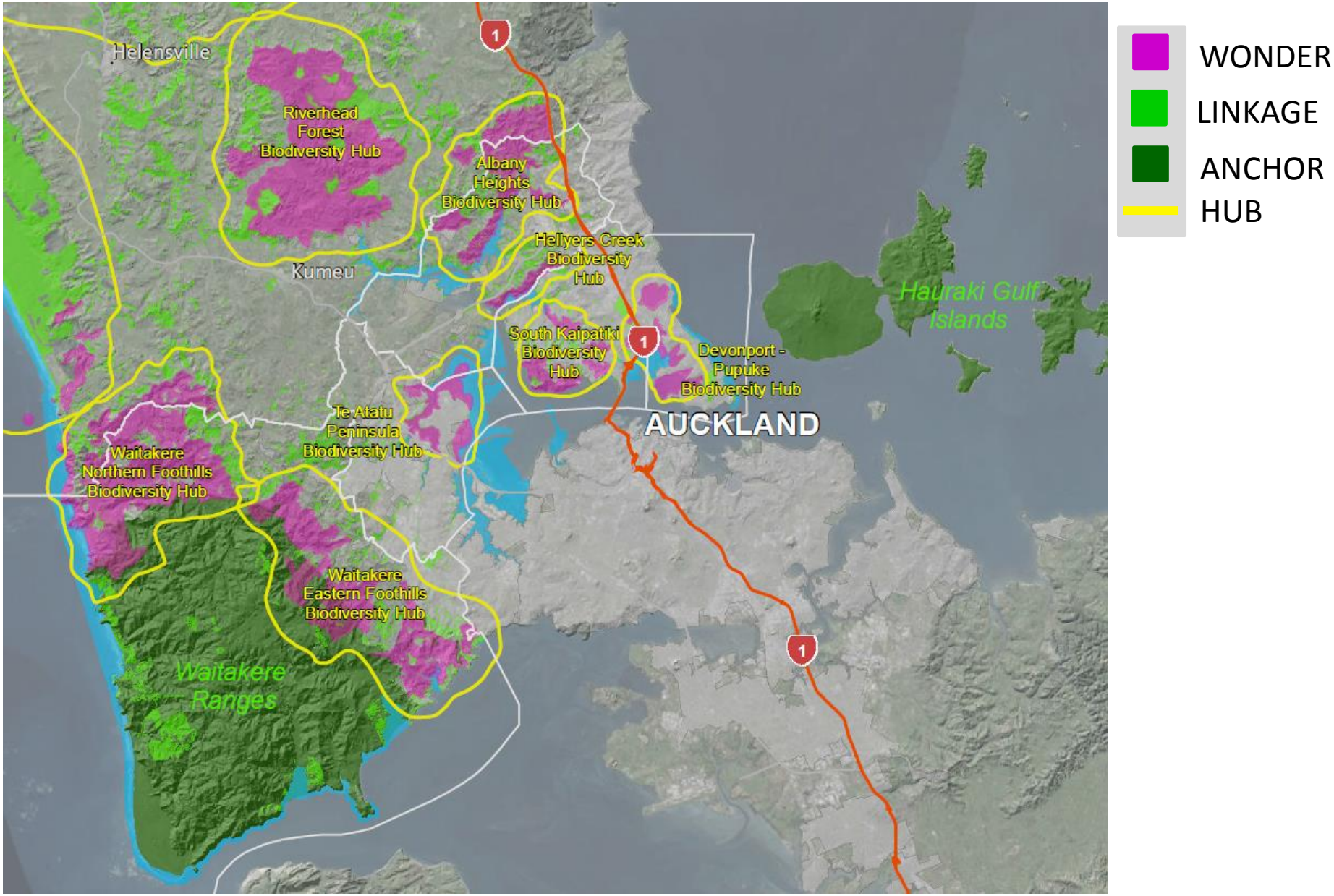
'Biodiversity hub'

- For the purposes of this document, a biodiversity hub has been defined as a one or more 'Wildlink Wonders' and linkages surrounded by a network of lower-quality habitat.

'Linkage'

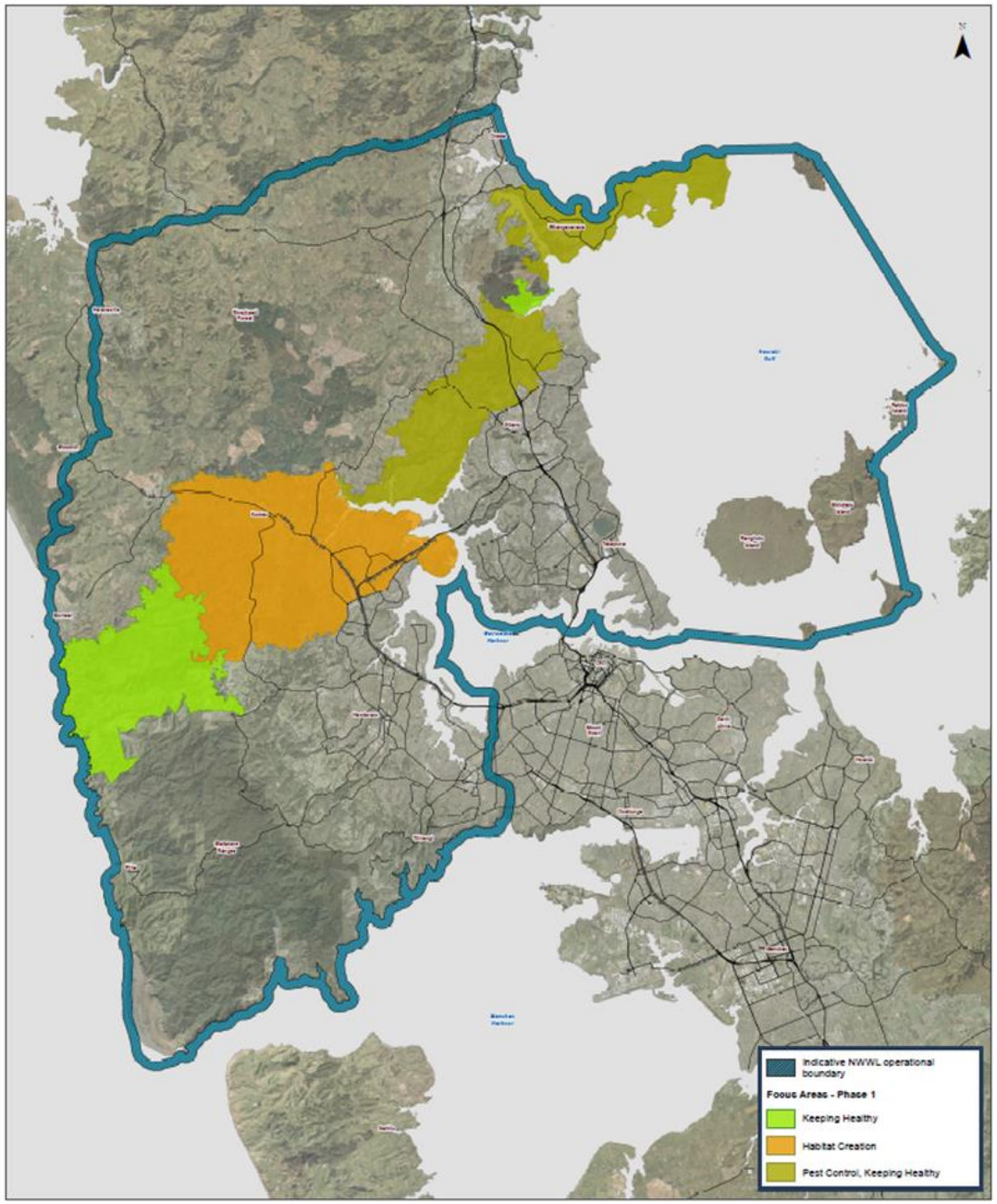
- Defined habitat corridors or steppingstones that connect Wildlink Wonders both within, and between biodiversity hubs. Vegetated stream corridors are one example.

Boffa Miskell Limited 2016. NORTH WEST WILDLINK: Prioritisation Report. Report prepared by Boffa Miskell Limited for Auckland Council



Boffa Miskell Limited 2016. NORTH WEST WILDLINK: Prioritisation Report. Report prepared by Boffa Miskell Limited for Auckland Council

Priority Areas



How does NWW work?

Partnership Group

Department of Conservation
Te Papa Atawhai

Gecko

Auckland Council
Te Kaunihera o Tāmaki Makaurau

Community Waitakere

Kaipatiki Environment Centre Project

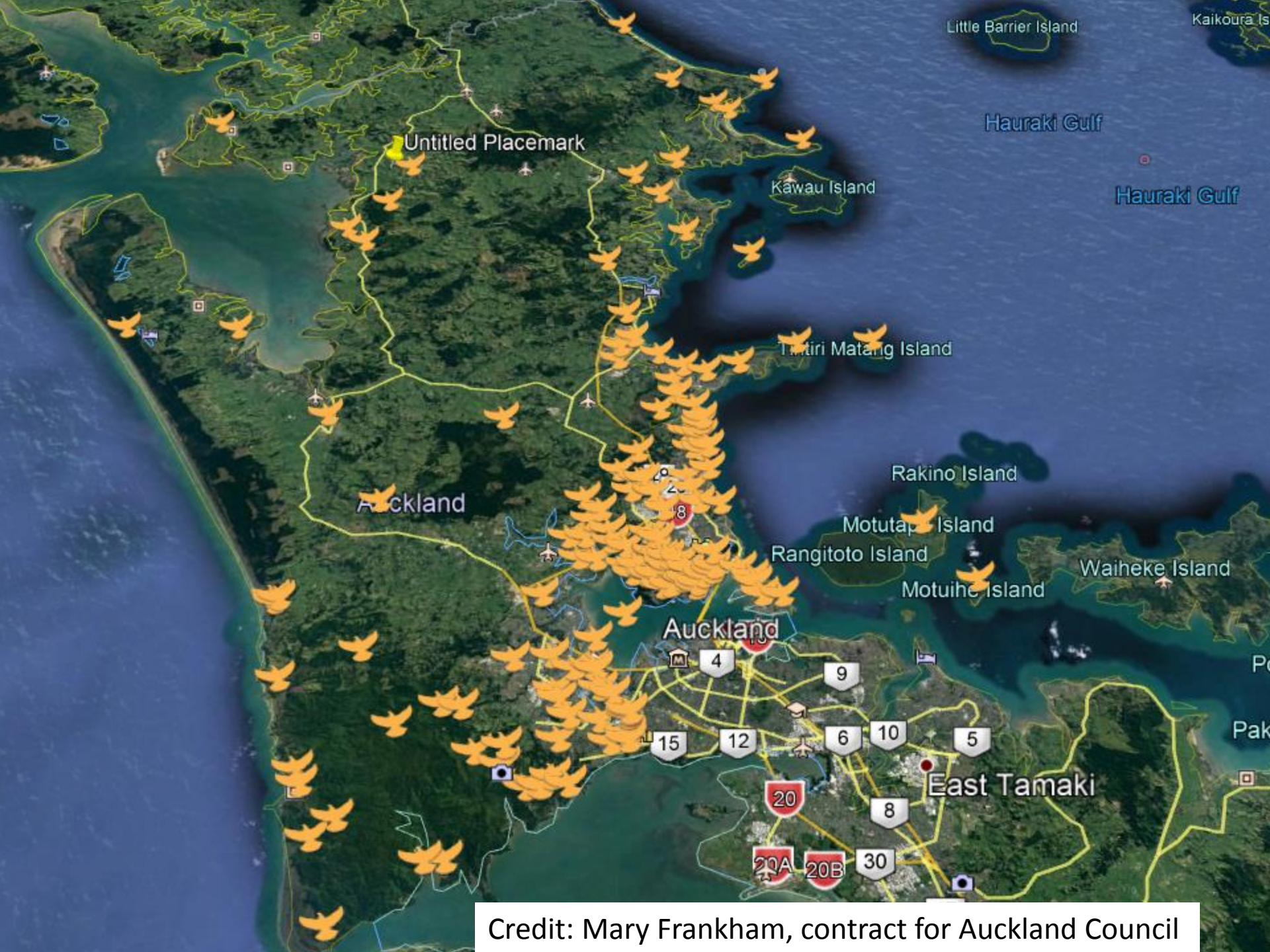
EcoMatters

Forest & Bird
GIVING NATURE A VOICE

QEII National Trust
Open Space New Zealand
Ngā Kairauhī Papa

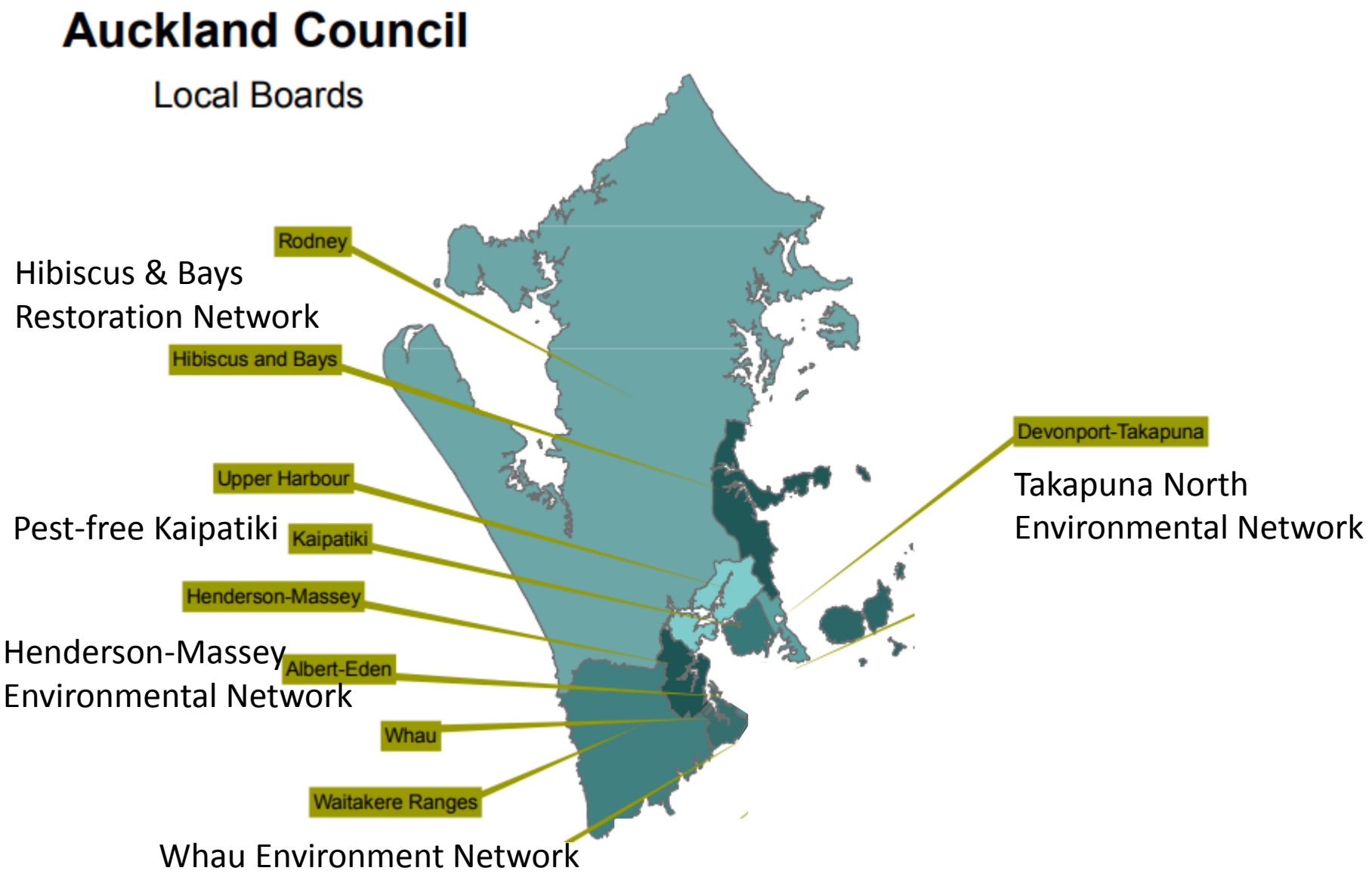
THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

Margaret Stanley: Technical advisor



Credit: Mary Frankham, contract for Auckland Council

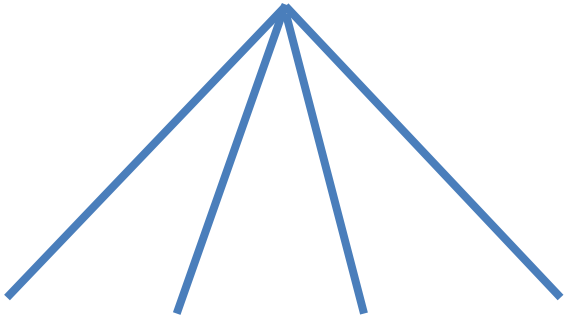
Hubs: Restoration Networks



Examples of restoration networks only

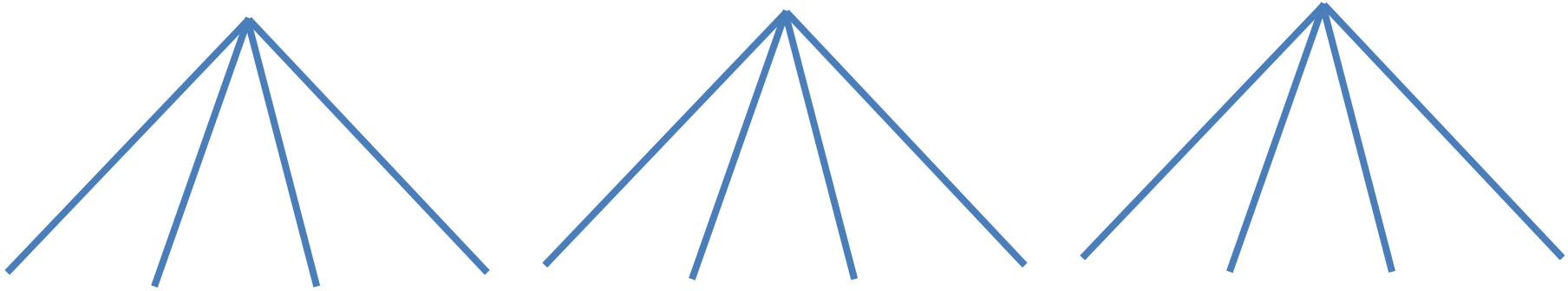
Partnership Group

Forums 3/yr



Regular/monthly meetings

Restoration Networks



Community groups

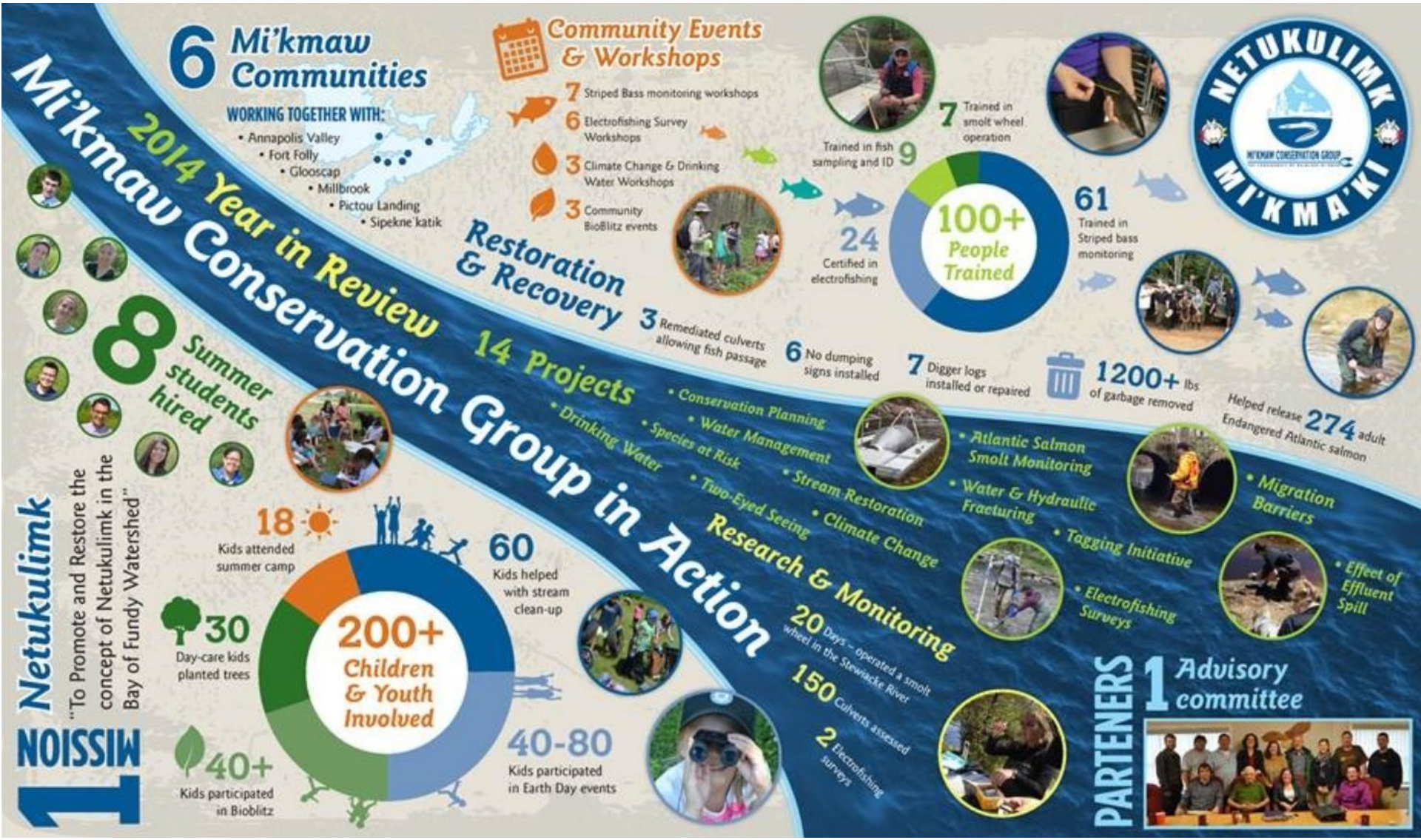
Know we are part of broader network BUT

participation at local, meaningful scale

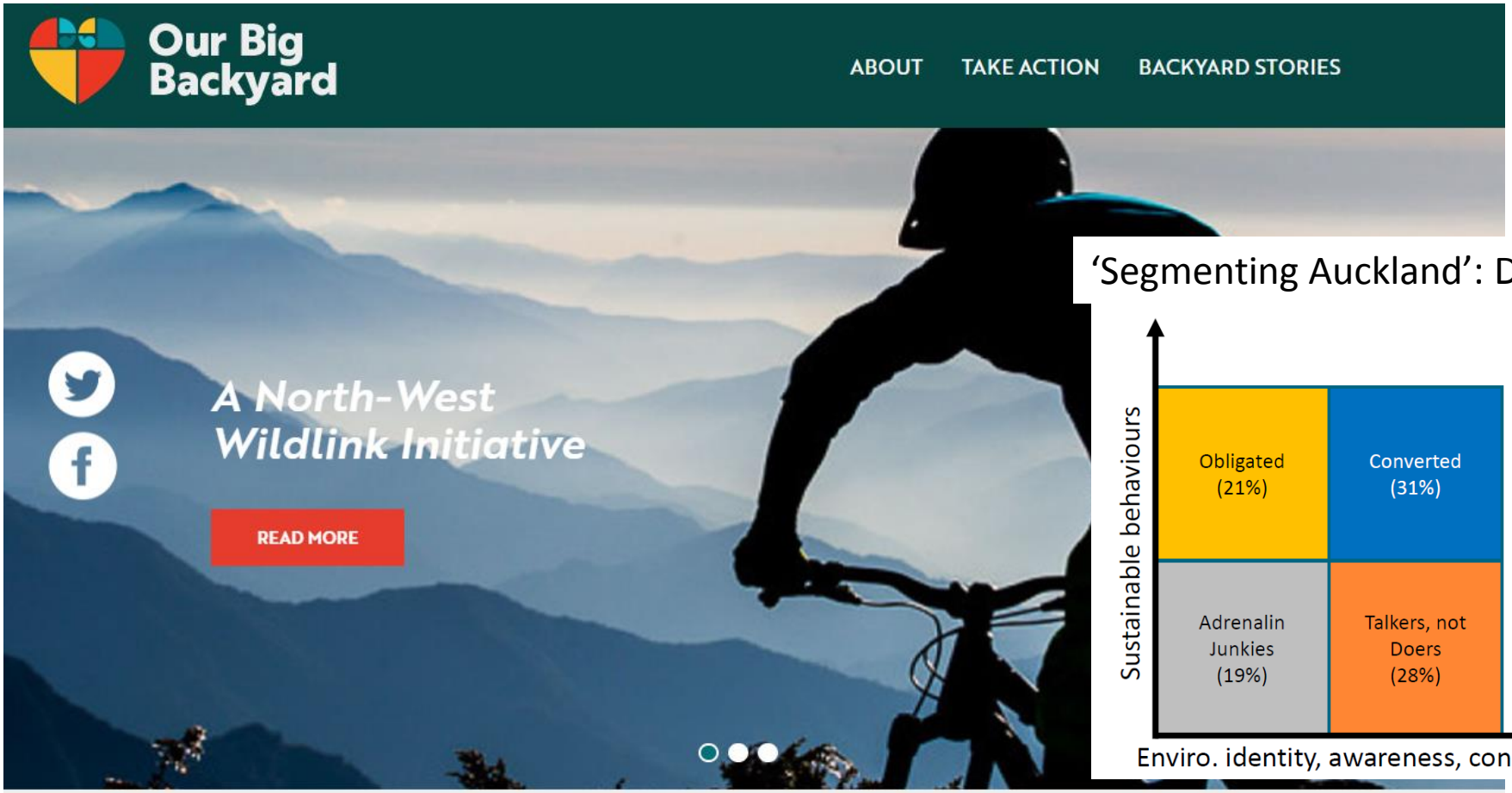
NWW Challenges

- “But we’ve always done it this way”
- Co-design but ALSO council buy-in
- Funding – for full-time facilitator!
- Multiple programmes (Pest free Akl; Predator Free NZ…)
- Engagement with mana whenua
- Buy-in from other ethnicities, ‘non-greenies’
- Demonstrating outcomes – NWW-wide monitoring plan

Social & ecological outcomes measured?



Beyond the ‘converted greenies’

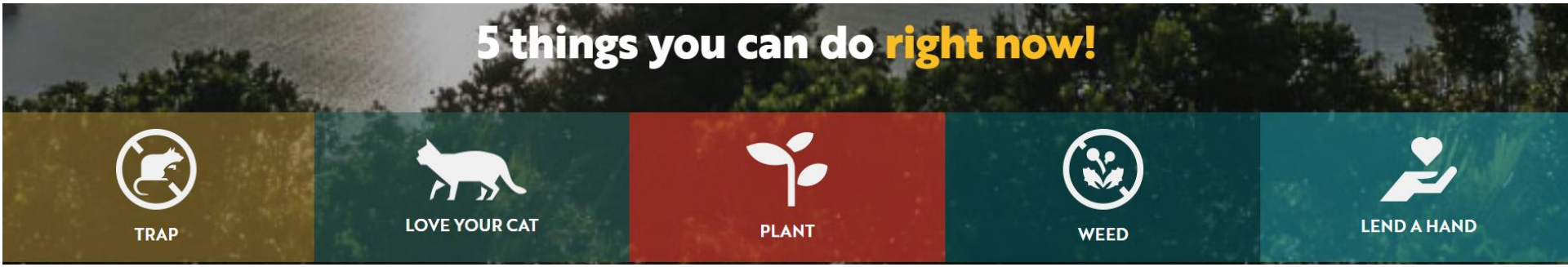


‘Segmenting Auckland’: DOC

Clear actions

ACTIONS:

- Control pest plants and animals
- Plant natives for wildlife
- Collaborate with neighbours and groups



NWW outcomes

- Monitoring programme being developed
- Strategic landscape scale vegetation planning
- Restoration planning templates
- Community nursery network (hygiene protocols!)
- Support policy improvements (tree protection)
- Training support via networks
- Trial tools (e.g. volunteering opportunities project)
- Information sharing & understanding partner strengths