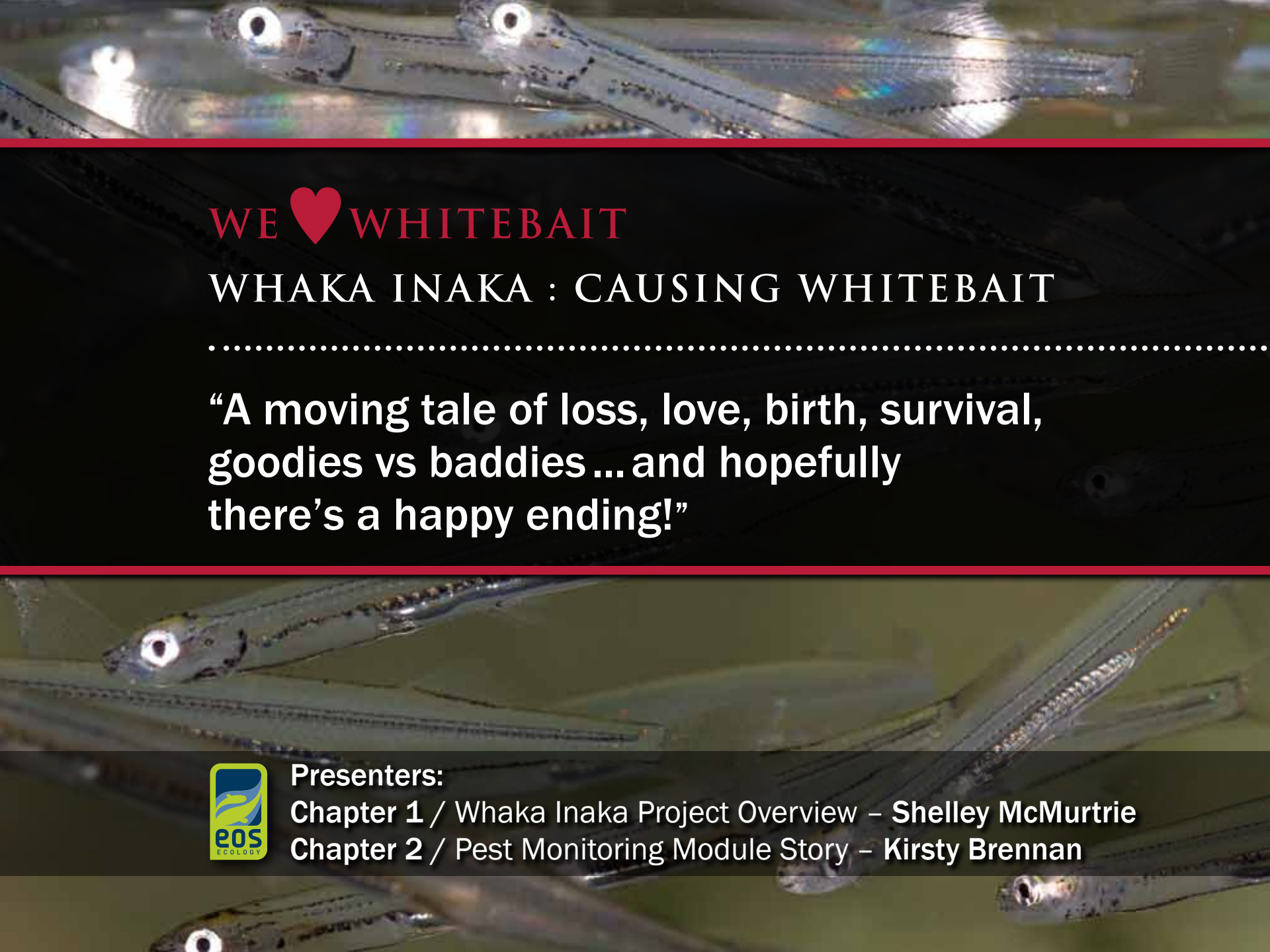
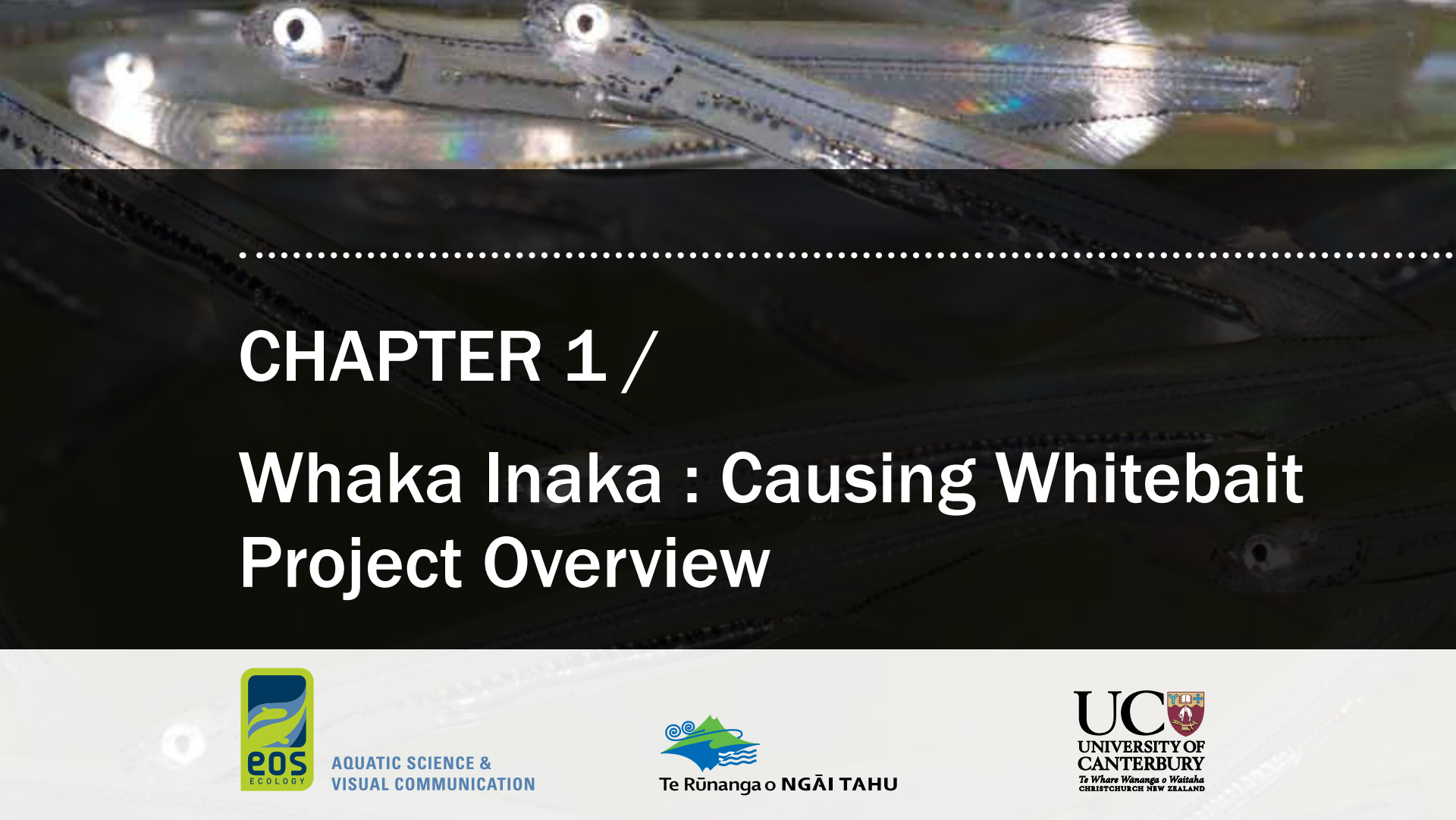


WE ♥ WHITEBAIT

WHAKA INAKA : CAUSING WHITEBAIT

“A moving tale of loss, love, birth, survival, goodies vs baddies … and hopefully there’s a happy ending!”

Presenters:
Chapter 1 / Whaka Inaka Project Overview – **Shelley McMurtrie**
Chapter 2 / Pest Monitoring Module Story – **Kirsty Brennan**



CHAPTER 1 /

Whaka Inaka : Causing Whitebait Project Overview

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“Once upon a time…”

- Historically Christchurch major source of juvenile inaka within Pegasus Bay – great spawning habitat
- But legacy in decline for some time…the fairytale is over
- Lower reaches of rivers deteriorating & poorly managed

…then there was an earthquake or two…

Impact on human environment

general building destruction

RESPONSE PRIORITY

High

Low

cracks in road by river

EOS Ecology office

bridge on river

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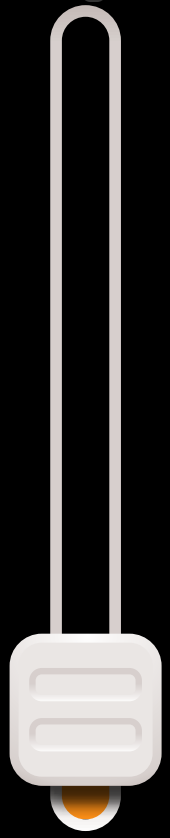
Impact on inaka environment

Avon River, 22 February 2011

effects of sediment

RESPONSE PRIORITY

High



Low

vegetation changes & maintenance

change in saltwater wedge

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Our response plan

- Gather group of passionate experts
- Develop plan & resources to improve habitat to enhance spawning outcomes
- Secure funding & in-kind support
- Engage community & media
- Monitor sites to find where they're spawing = focused restoration

Project team

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Project Lead

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Project solution

STRAW BALES = the perfect temporary spawning habitat

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Project sites determined

Lake Kate Sheppard
(Mahinga Kai Exemplar)

New Brighton Beach

Ōtākaro/Avon River

Hagley Park

Christchurch CBD

Ihutai/ Avon-Heathcote Estuary

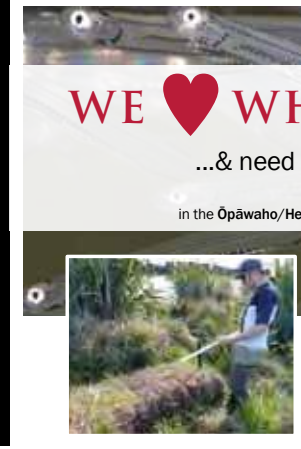
Southshore Spit

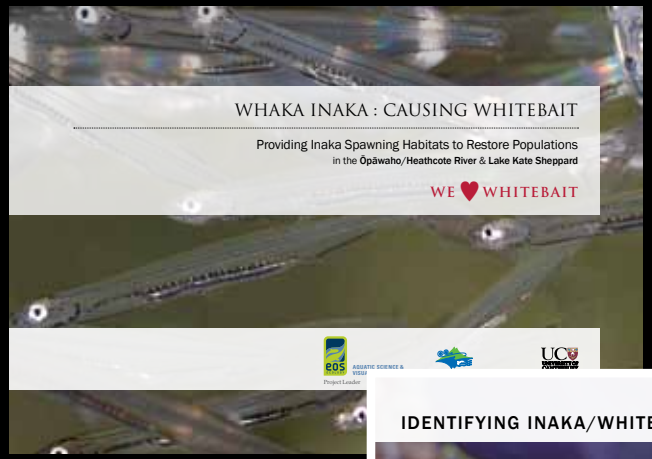
Ōpāwaho/Heathcote River

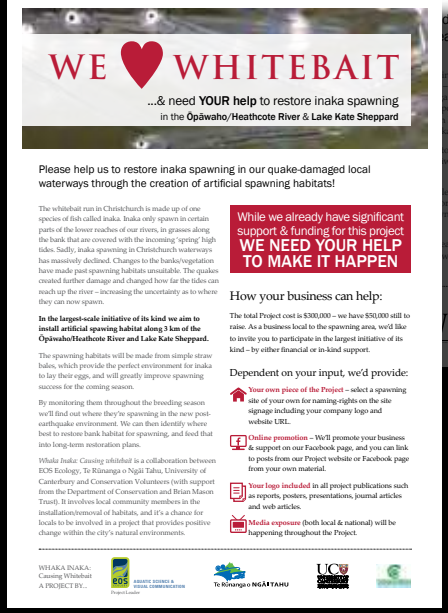
Steamwharf Stream

Total of 34 sites

Project resources developed







Secure funding & in-kind support

» A big thanks to all these guys...

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K4 CULTURAL LANDSCAPE CONSULTANTS LTD

Te Rūnanga o NGĀI TAHU

Department of Conservation
Te Papa Atawhai
COMMUNITY FUND

GELITA
Improving Quality of Life

BRIAN MASON
SCIENTIFIC & TECHNICAL TRUST

ravensdown

Avon-Heathcote Estuary Ihutai Trust

CASSELS & SONS

W
Wickliffe New Zealand Limited

Rātā Foundation

whitebait Connection
Xstream about freshwater life

CALTEX
DYERS ROAD

Kathmandu

Hirepool

MITRE 10

city care

Engaging the community

Bales installation day – 204 bales installed – thanks to all the volunteers who helped make it possible

Engaging media channels

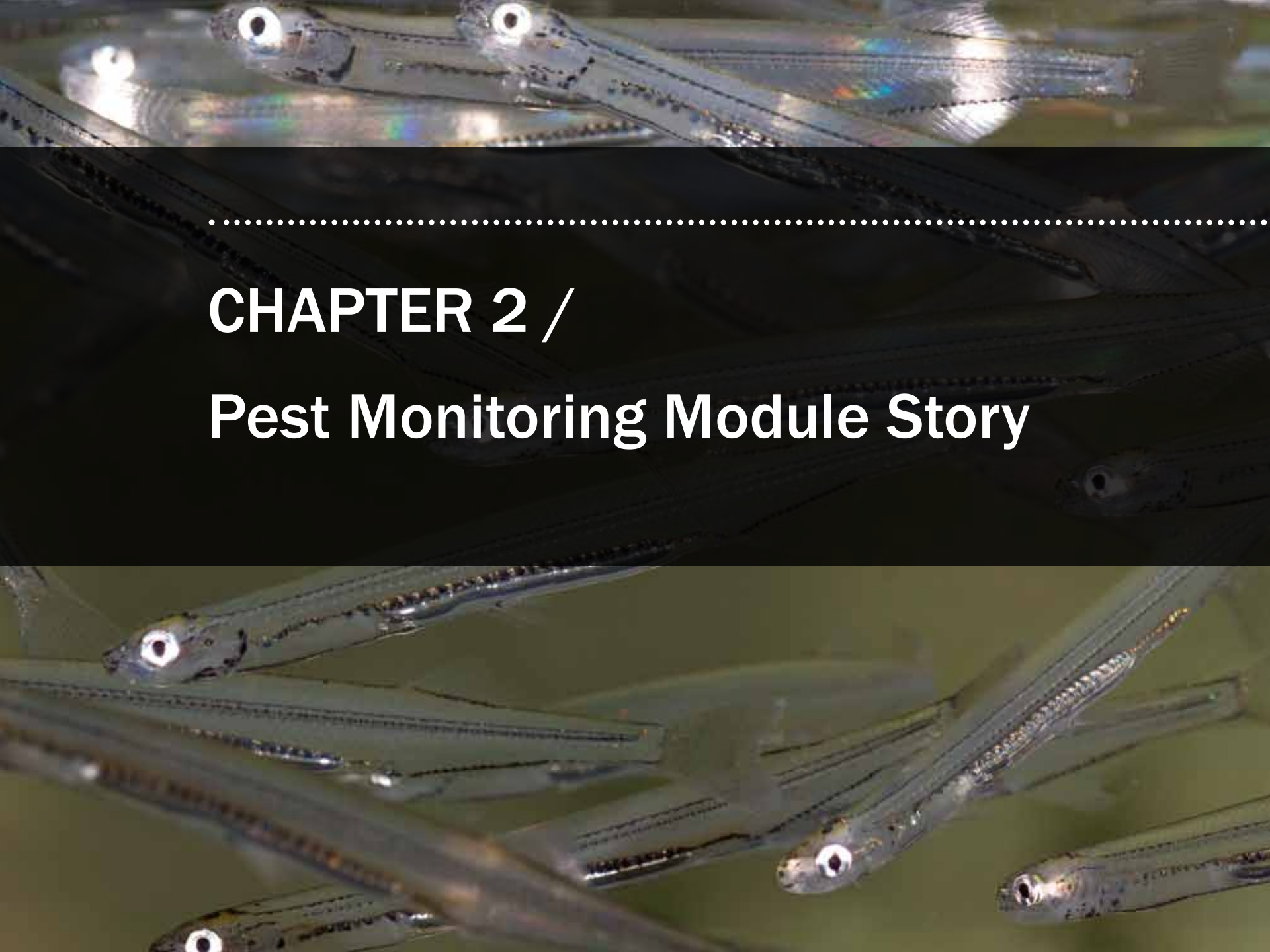
Monitor sites for eggs

Community volunteers & students have helped us with 3 rounds of egg monitoring done to date

Monitor sites for eggs

This is what success looks like!

Future outcomes



CHAPTER 2 /
Pest Monitoring Module Story

Pest Monitoring Module plan

The “goodies vs baddies” part...

- Whaka Inaka team needed help checking bales & signs as funds limited
- Not much known about pests around river

...local schools to the rescue!

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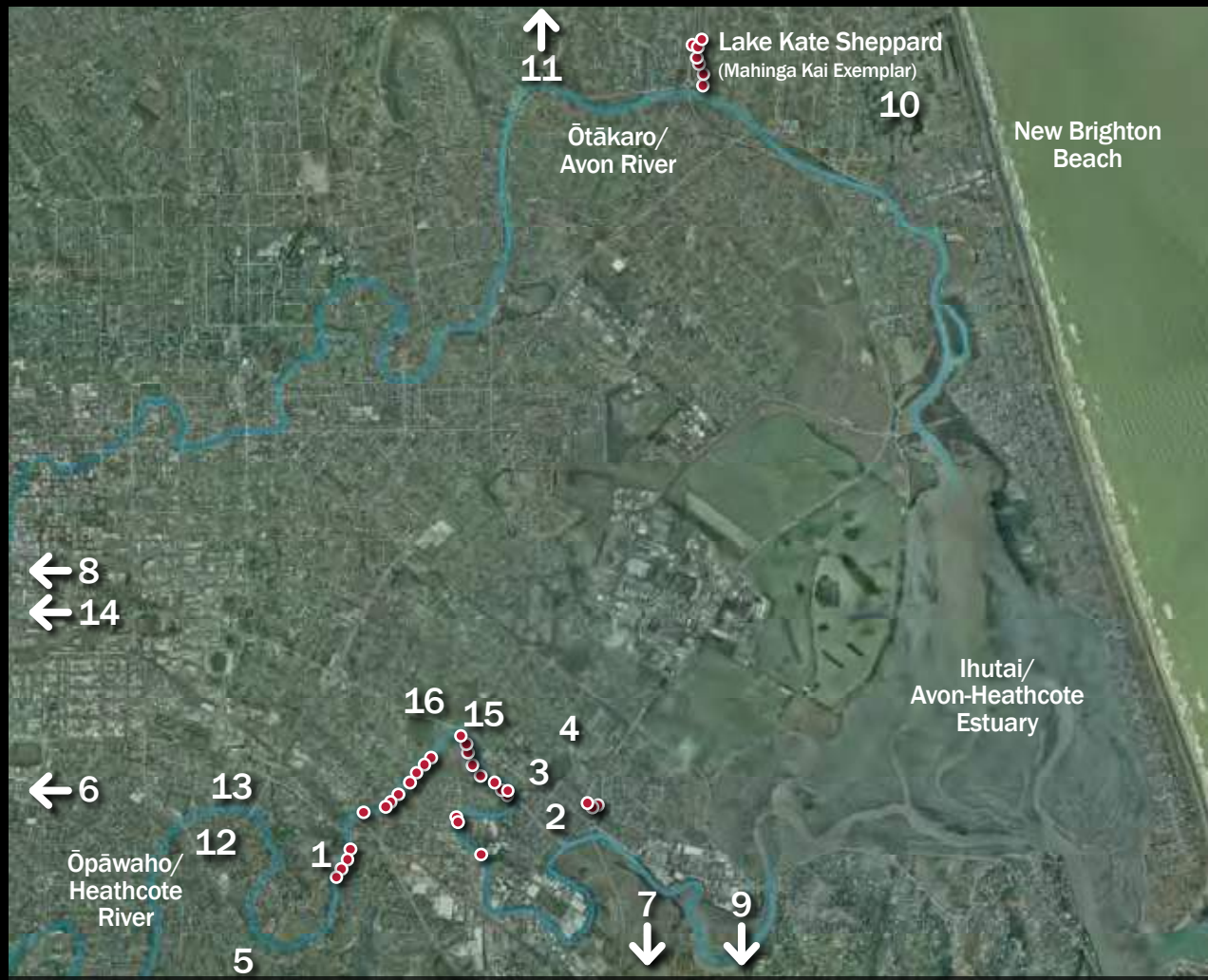
16 schools participating

1 Opawa School
2 Bamford School
3 St Annes School
4 Tamariki School
5 St Martins School
6 Te Kura Kaupapa Maori O Te Whānau Tahi
7 Lyttelton Primary School
8 Ao Tawhiti Unlimited Discovery
9 Heathcote Valley Primary School
10 Rāwhiti School
11 Waitākiri Primary School
12 Hillview Christian School
13 Seven Oaks School
14 Te Pā o Rākaihautū
15 Kindercare Learning Centre
16 Te Waka Unua School



Schools monitor for 15 weeks on rotation to suit individual requirements

What schools do

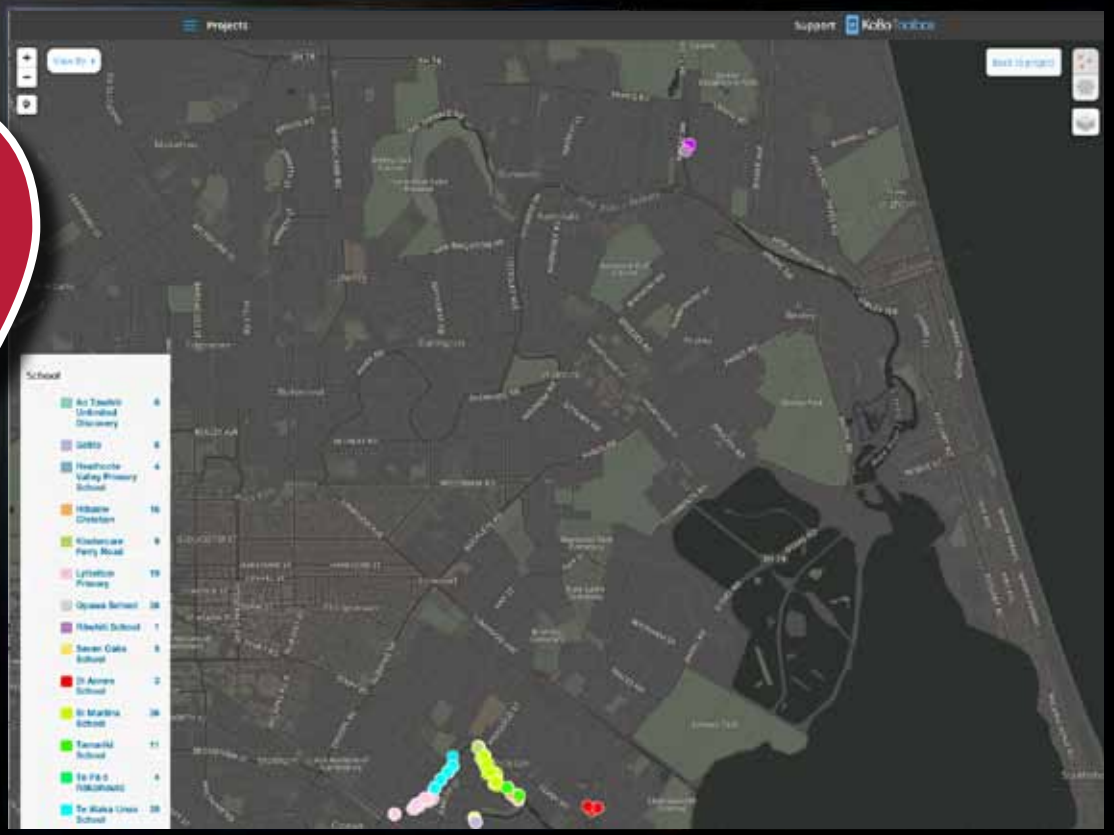
» Pest detector cards installed at Whaka Inaka bale sites

What schools do...

- Check if pests active
- Try & identify pest (rat, hedgehog, mouse, possum?)
- Check if dog poo around
- Check bales/signs OK
- Record all this data
- Replace detector card with fresh one

Resources developed/supplied

Database & geospatial form for digital logging of data



Resources developed/supplied

Group teacher training

Online training video

Onsite teacher training

Online & printed support material

Benefits for schools/students

Best benefits...

Outputs from schools/students

Classroom present-ations

Online videos & photo diary entries

Online blogs

Drawings

Outcomes from module

- Engaged & aware students
- Strong connection between scientists & schools/students
- Provide Councils data to help influence conservation & management strategies related to:
  - dog poo & *E. Coli* levels in waterways
  - riverside pest control

Future opportunities

Schools involved in monitoring inaka eggs

Schools learning about river & can showcase findings at public event

World Fish Migration Day activities

Funds applied for to establish 'Environment Investigators'

Continue work with schools to expand learning about their river

Pest Module says thanks to...

» Rāta Foundation for funding

» Mountains to Sea Conservation Trust

» Iain Gover (Te Rūnanga o Ngāi Tahu) for database & geospatial form development