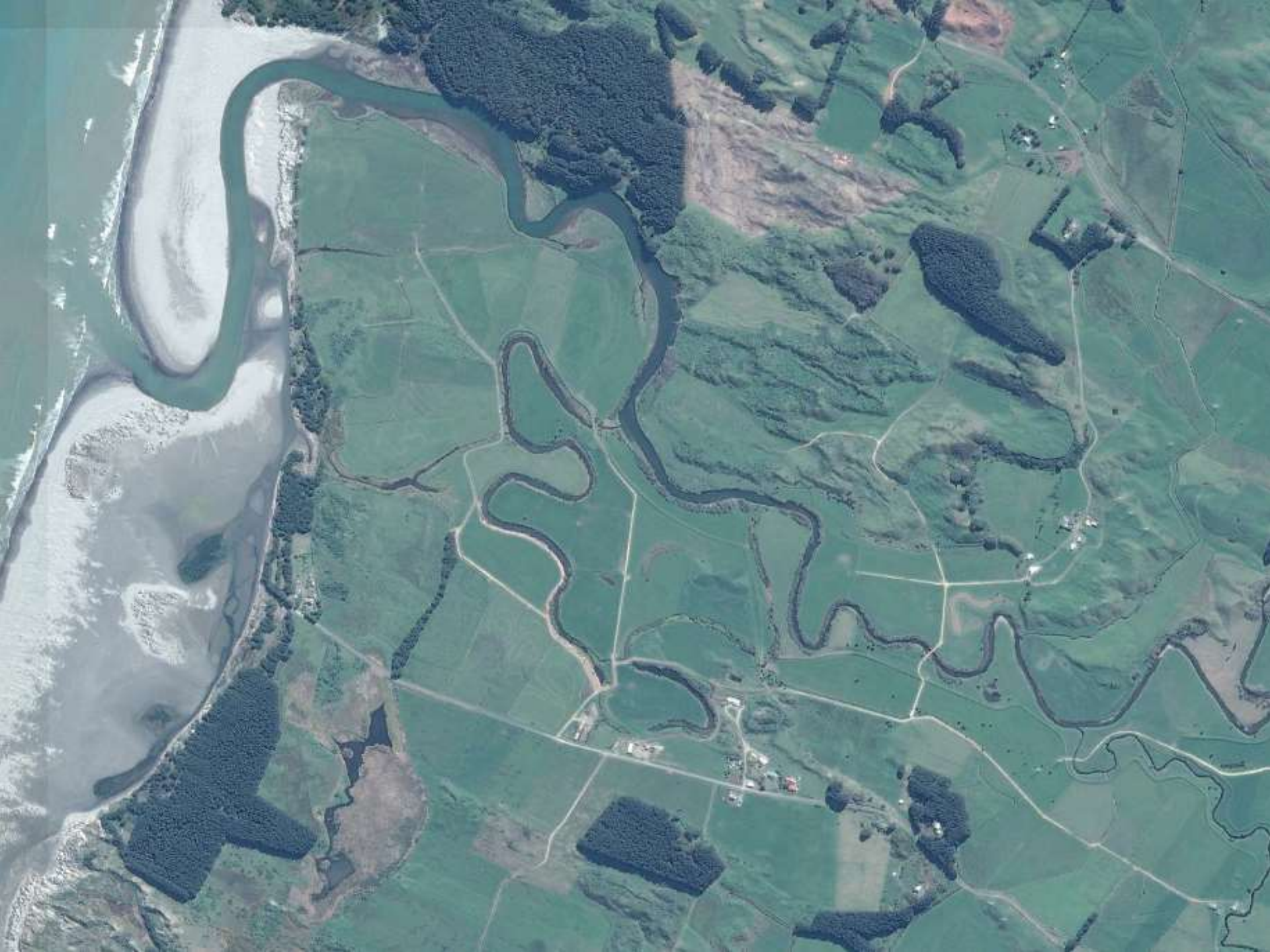


Ōhau kia mau! Hold fast to the Ōhau River



The Ōhau River Loop

- Our restoration story -



Kati Doehring | Huhana Smith

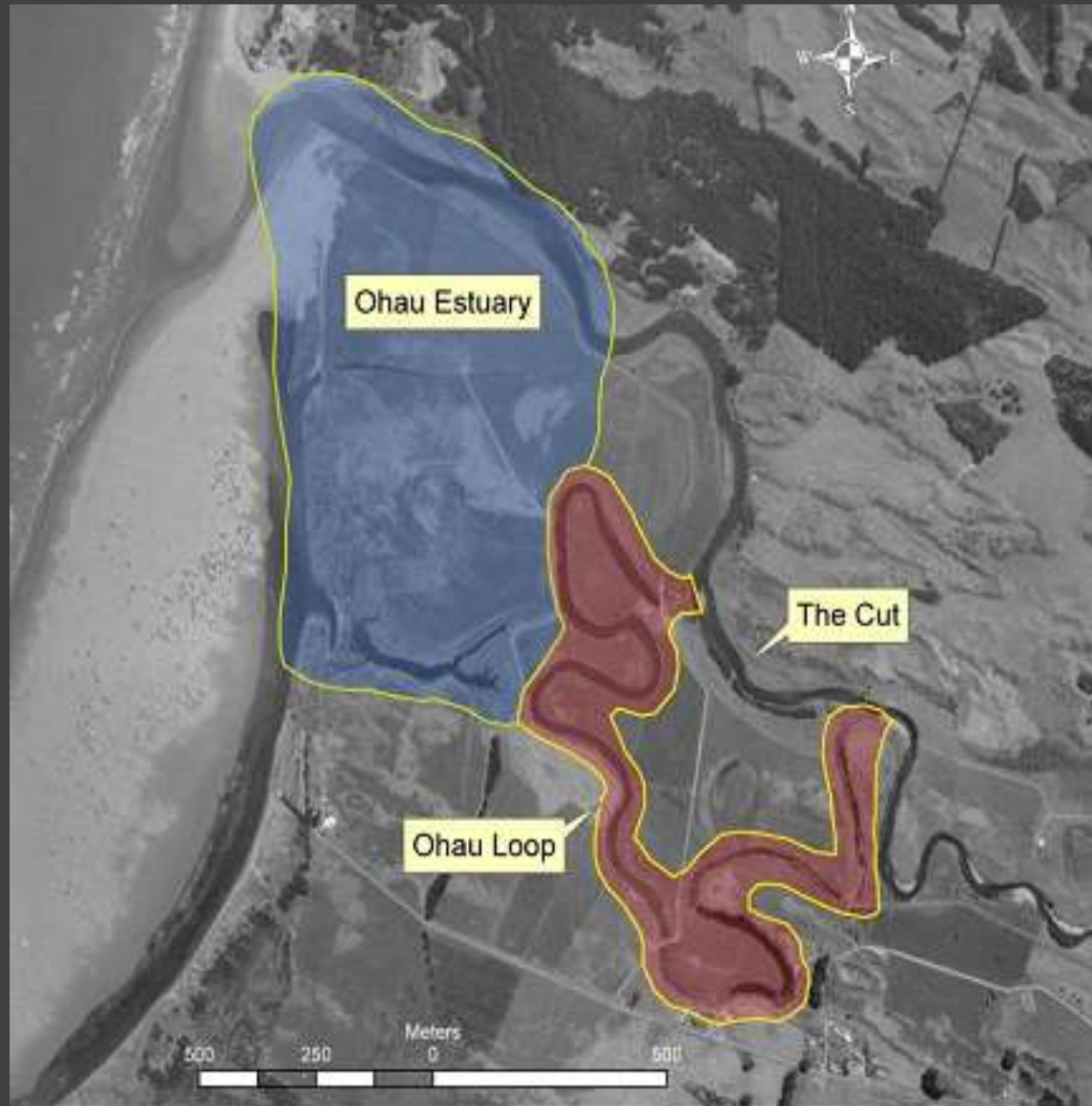
Ōhau River meander, c 1946.

Sourec: Aerodrome
Services Public Works
Department, National
Publicity Studio, Prime
Minister's Department,
1946, National Archives,
Wellington. AAQT 6404
WA2175



| The Ōhau River 'Loop'

1972 flood
protection
works to cut 3.5
km off the
'Loop'



| Current issues with the Loop

Hydrology

Water Quality

Loss of *mahinga kai* and taonga species for shareholders of Tahamata, Iwi and hapū

Exotic fish species

Limited fish passage

Habitat Quality

Sediment accumulation



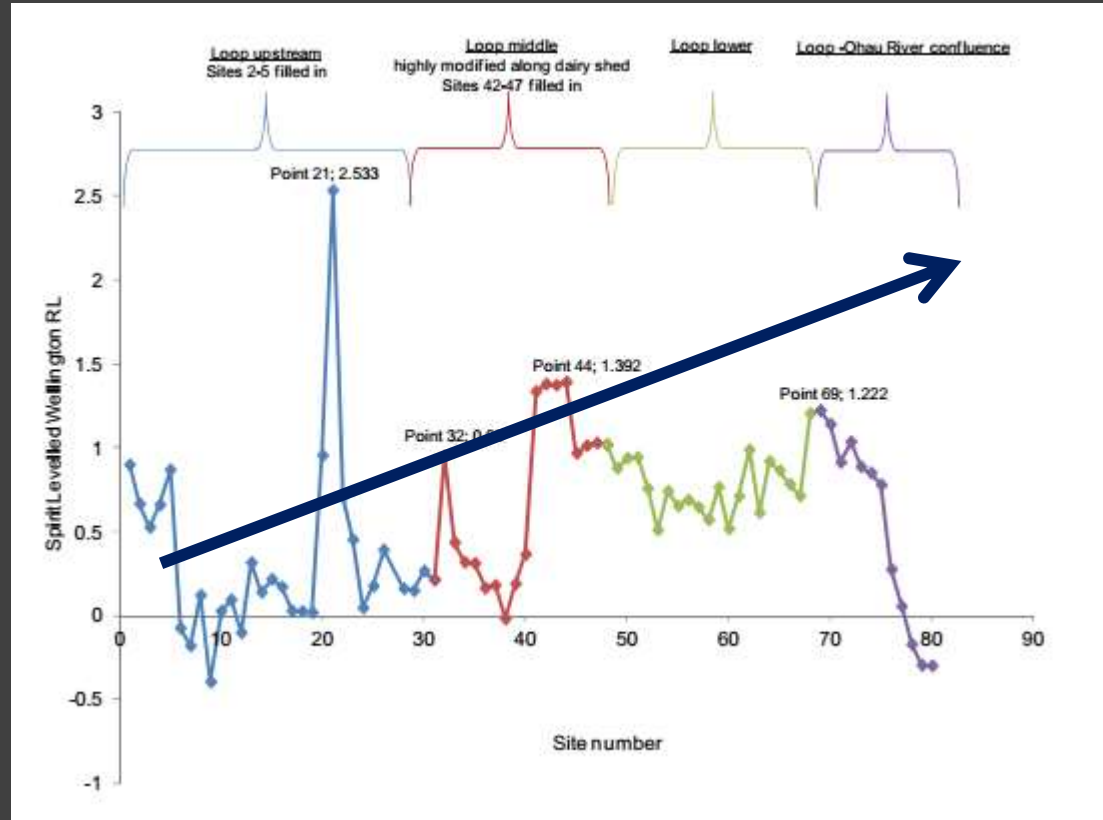
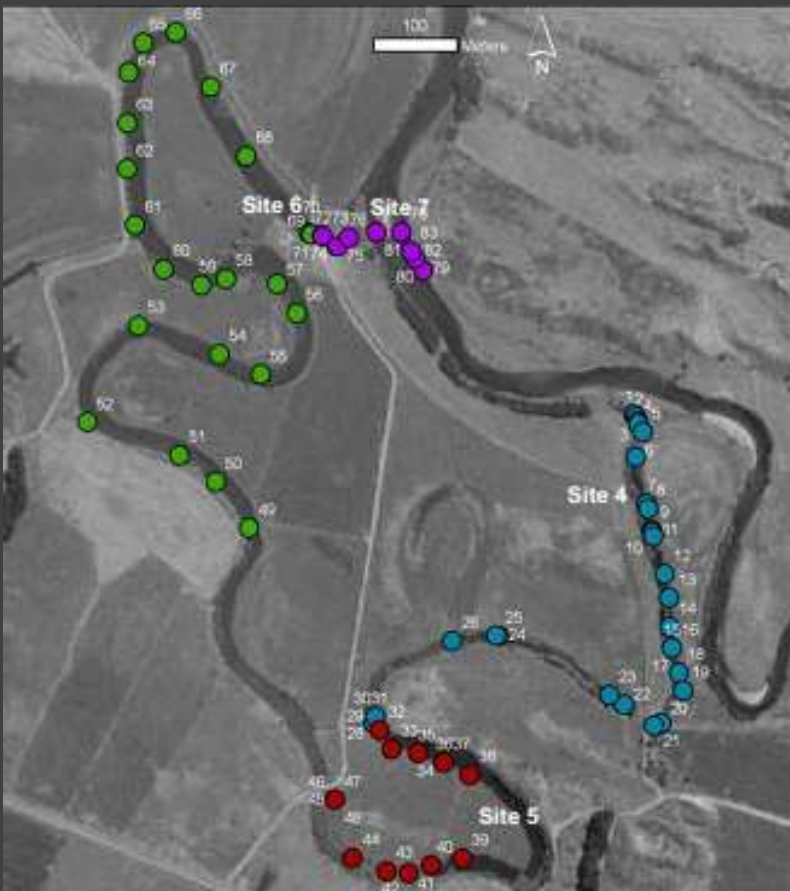
| Sediment depth

Ca. 104,000 m³ of fine
sediment
50m cube...

High in *E. coli* bacteria
stored in the sediment



| Bed gradient



“Does this mean fish have to swim upstream to get downstream??”

| Surface water flow



Images taken in 2012

| Water quality

- Low dissolved oxygen levels
- High nutrients (nitrogen & phosphorus)
- High faecal coliform (*E. coli*) concentrations



23 February 2011

| Fish species

4 fish species in Loop
9 in Ōhau River



wdfw.wa.gov



| Impaired fish passage



| “We need to fix our taonga”

Tahamata Incorporation set up a 5 year strategic plan:

- Sustainable farming practices
- Fenced off all waterways and drains
- Support of Te Hākari Dune wetland
- Ōhau River ‘Loop’ restoration and Kuku Ōhau Estuary frontage projects
- Collaborated with regional and national entities in environmental research
- Maintained the environmental compliance standards of regional authorities
- Annually revised and fine-tuned the nutrient and effluent management plans
- Managed fertilizer application per industry’s code of conduct.



| Not just words... but action!

What has been done?	When?	Who?
Cow effluent discharge stopped	Early 1990s	Tahamata Inc.
Ōhau 'Loop' report	1996 - 1997	Tahamata Inc.
Riparian planting and enhancement	2006 ongoing	Tahamata Inc., iwi, hapu, Corrections, Horowhenua DC
Assessment of freshwater environment	2011-2013	Tahamata Inc., Cawthron Institute, Horizons RC
Installation of fish friendly floodgate	2013	Tahamata Inc., Horizons RC
Assessment of inanga spawning habitat and installation of artificial habitat	2014-2015	Tahamata Inc., Cawthron Institute, Horizons RC

We need you for new funding for a far larger project to dredge Ōhau 'Loop' and remove accumulated sediments

| Science and iwi work together

A bit of this...



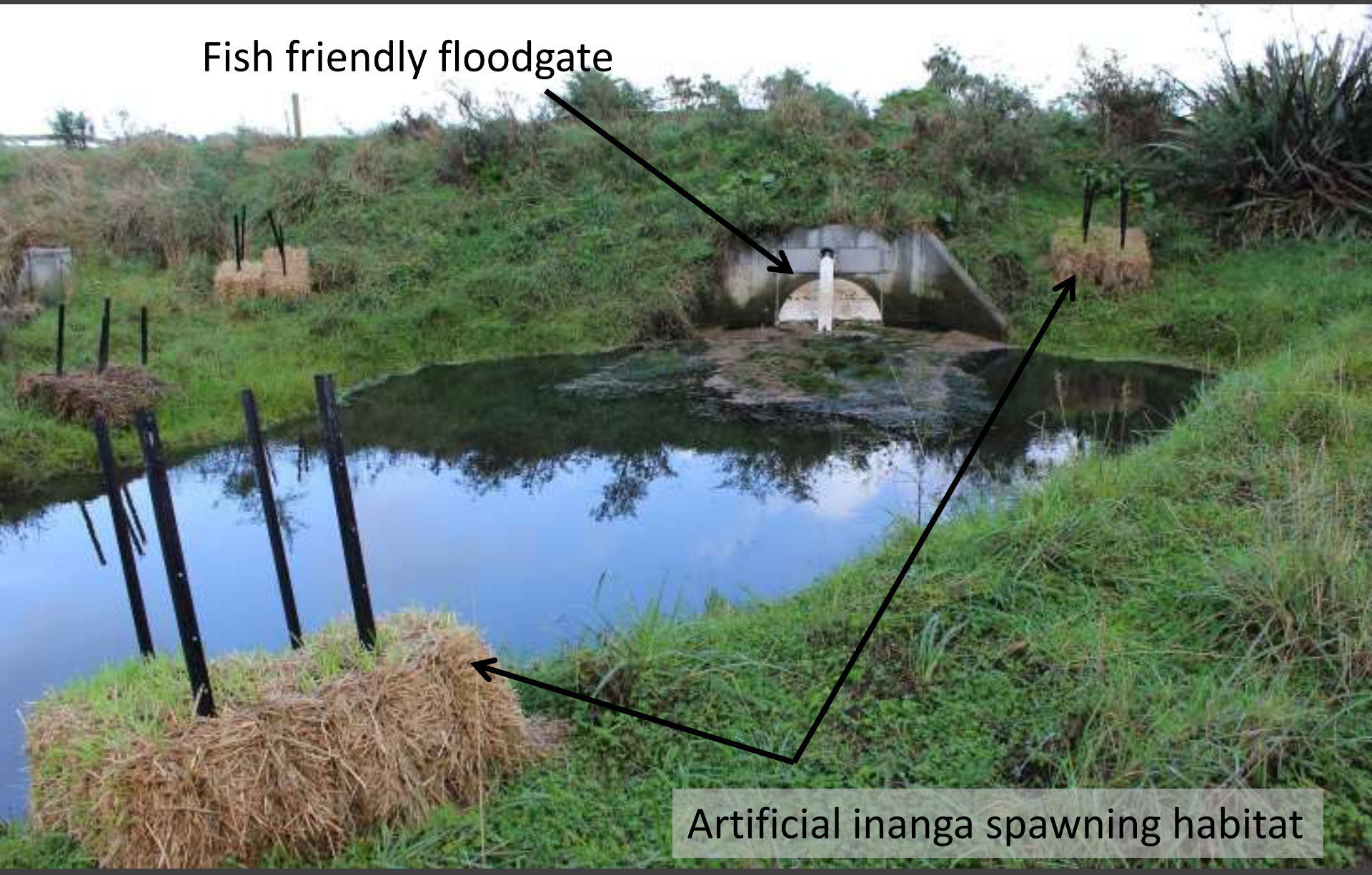
A bit of that...



And more of this...



And some of that...



Fish friendly floodgate

Artificial inanga spawning habitat

| Lessons learnt

Toughen up!

- Not all restoration is readily adopted by nature
- Good things take time and are hard work!



| Take home message

1 | Collaboration between iwi and scientists a success

2 | Great restoration progress

3 | Not quite there, yet...

4 | Tahamata wants healthy streams and *mahinga kai* → working with them we are helping to return our Ōhau to a healthier state

| Thank you!

