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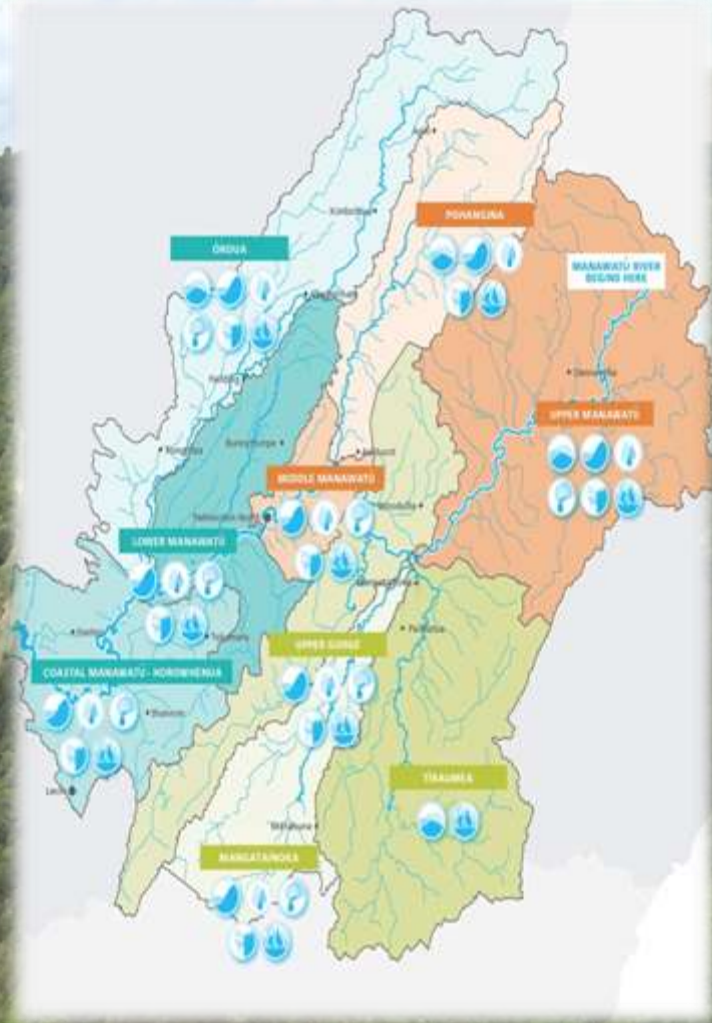
ANDREW . STEWART



# Cleaning up the Manawatū River: A collaborative approach



Richard Thompson  
Independent Chairman  
Manawatū River Leaders' Forum



# Manawatu River tops dirty table

River the most polluted by far of 300 tested in the Western world

THE Manawatu River is the most polluted river of 300 tested in the Western world, according to new research.

The Manawatu tops a new pollution measurement of 300 rivers and streams across North America, Europe, Australia and New Zealand, research by the Cawthron Institute has found.

The waterway is fouled with treated sewage, industrial waste and farm runoff.

Under a system measuring oxygen changes in water, the Manawatu has by far the world's highest reading – almost twice as much as the next worst.

It measured 107 on the scale. Anything over eight is considered an indication of poor ecosystem health. The next most polluted river, sampled downstream from a sewage outfall near Berlin,

measured 59. Roger Young, a freshwater ecologist with the institute, was amazed by the readings from water

samples taken at Hopetlands, near Woodville. "To see a count c was just ridiculous," he said.

Tests at Palmerston North dot as high but still indicate ecosystem health.

The Manawatu was affected by farm nutrient leaching and town sewage, Dr Young said.

"Agricultural use is a major nitrogen runoff, mainly from shallow and wide moving river, which is sunlight that encourages growth.

Massey University's Mike Joy said the river was "a bad but even I was aware that the river was a nutrient-rich and river modification."

Environment Minister Smith said it was

# Our river of shame

## Manawatu 'among worst in the West'

Jon Morgan and Kelly Burns

THE Manawatu River is one of the most polluted in the Western world, according to new research.

The Manawatu tops a new pollution measurement of 300 rivers and streams across North America, Europe, Australia and New Zealand, research by the Cawthron Institute has found.

town sewage, Dr Young said. "Agricultural use is most of it; nitrogen runoff, mainly."

Other factors were the shallowness and width of the slow-moving river, which exposed it to sunlight that encouraged algae growth.

Massey University ecologist Mike Joy said the research showed the

effect swimmers' health, and warning signs were erected at some spots.

Horowhenua District Council admitted in September pumping 5.1 million litres of partially treated sewage – including tampons, condoms and toilet paper – into the river over 48 hours in October 2007.

Dr Joy said: "At the high levels

“Perception of river at an all-time low”

# The Facts

Probably NZ's most polluted river:

- Low water clarity
- High nutrient concentrations
- High sediment loading
- High pathogens
- Loss of fish & bird habitat, remaining areas under threat

But depends on where and what flow.....

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**THE MANAWATU RIVER FLOWS THROUGH ALL OF US. IT SHAPES OUR REGION AND REFLECTS OUR PEOPLE. IT IS PRECIOUS BECAUSE IT IS OURS. NOW IS THE TIME TO STAND UP AND TAKE OWNERSHIP. WE NEED TO IMPROVE AND PROTECT THE MAURI (LIFEFORCE) AND ECOLOGICAL HEALTH OF THE MANAWATU RIVER CATCHMENT FOR GENERATIONS TO COME.**

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Kei te ora te wai, kei te ora te  
whenua, kei te ora te tangata



# The Accord

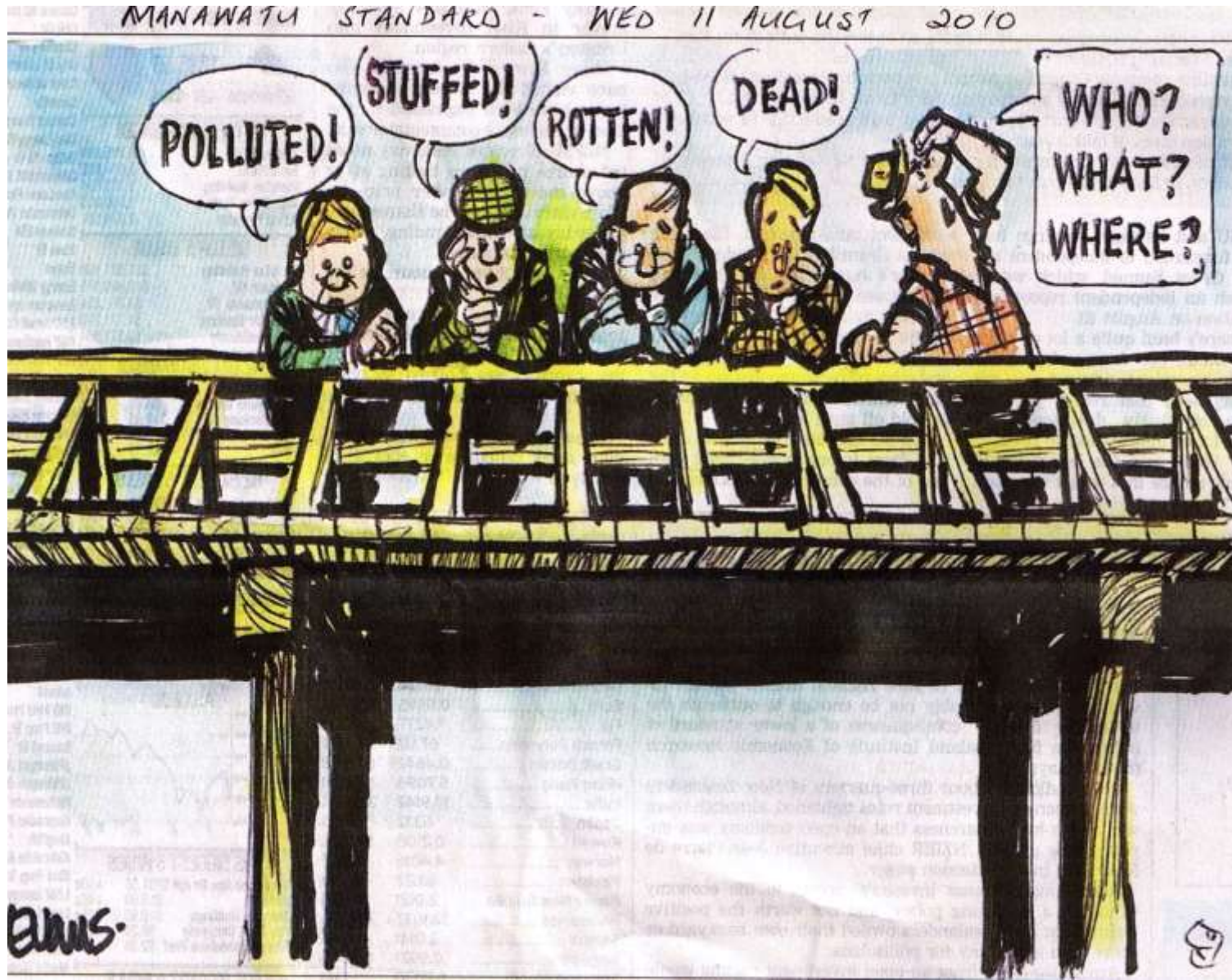
- 32 signatories
  - Iwi
  - Environment
  - Production/industry
  - City and district councils
  - Horizons Regional Council
  - .....but not farming



## But not farmers....

*“However, we acknowledge that the community has concerns and has identified that the river is in a poor state. It has been described as dirty, lacking life and culturally compromised.”*

# But not farmers....



# The Accord

Contains a focus, vision, goals and commitments

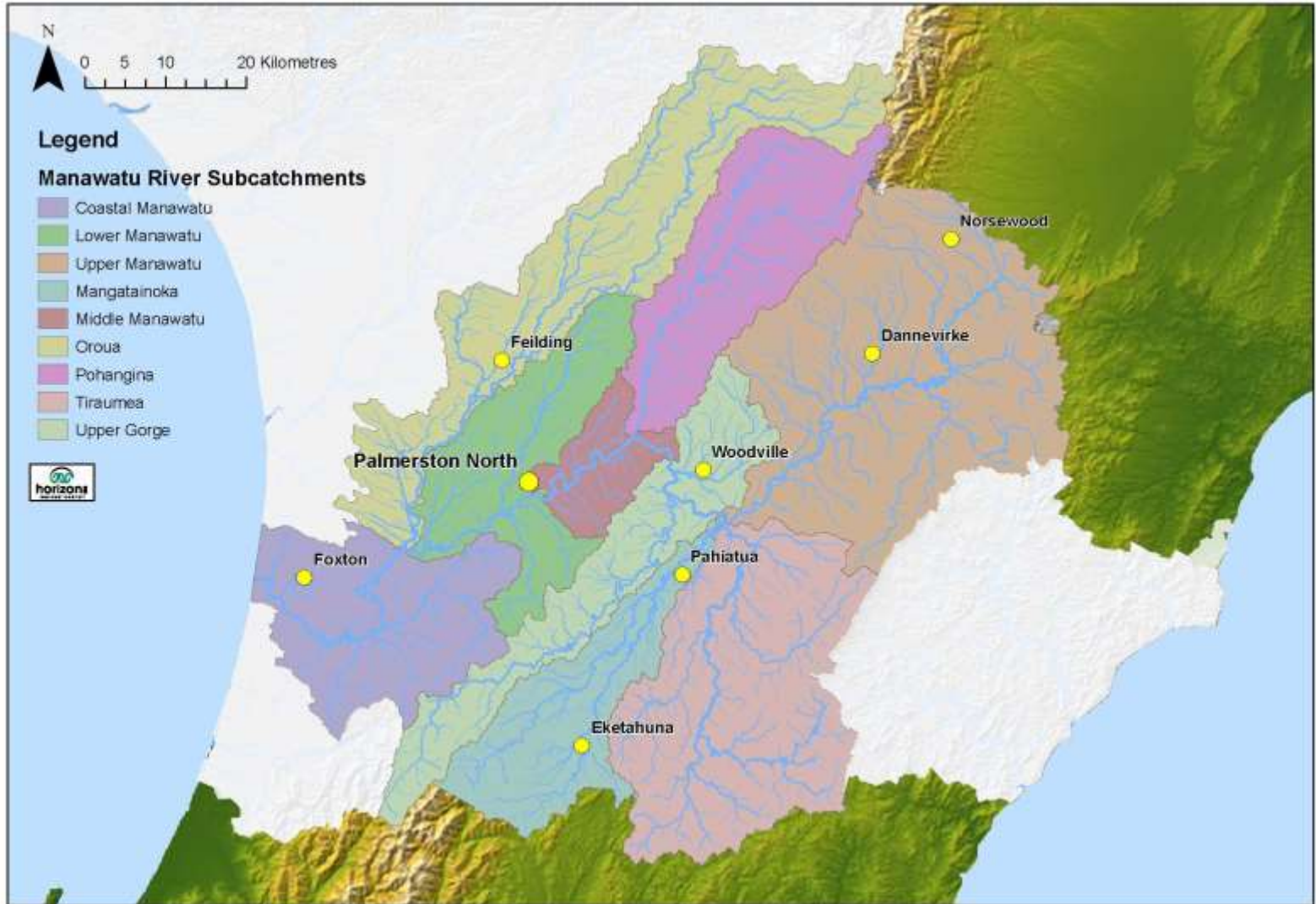
Commitment 1:

*“Establish a collaboratively owned and implemented Action Plan by March 2011...”*

# Action planning

- Workshops of leaders (or delegates)
- Caucusing of sector sub-groups
- Independent and authoritative science
- Simplified the issues
- Developed common understandings

# Action planning



# Action Planning hiccups

- Involvement of Federated Farmers (in or out)
- Being part of a longer term research project
- Iwi issues (treaty claims and mana whenua)
- Peripheral issues e.g. trout predation of native fish
- Some frustration and attrition


But

- Lots of goodwill and trust was built
- Strong desire to reach agreement, hence the plan is a compromise

# Understanding the Mauri of the river

## The River as a 'provider' and life form in itself

As we allow the river's mauri to flourish, the river's ability to provide will increase.



Cultural and spiritual health and wellbeing of the river and its communities

Rongoā Māori traditional healing plants and resources in and by the river. Introduced food species in the river

Drinking water for people and stock

Swimming/other recreation/tourism

Food outside the river, agriculture

Flood protection

Gravel/sand extraction

Electricity generation

As the river's mauri shrinks, its ability to provide will shrink too.

# Action Plan

- “*The Challenge*”
- Key actions – prioritised and agreed by all
- Sub-catchment descriptions agreed by all
- Tasks: Put forward by individual (or groups of) organisations. All tasks accepted. 14 pages of tasks:

## NON-POINT SOURCE RUN-OFF CONTINUED

TASKS	WHO
Provide funding assistance/incentives to dairy farmers to exclude stock from waterways	Horizons Regional Council
Promote the need to meet Dairying and Clean Stream Accord targets <sup>9</sup> and monitor the extent of progress towards them	Fonterra (with assistance in promotion from Federated Farmers)
Aim to reduce nutrient losses to streams and ground water to acceptable levels	Landowners and land users
Collect the existing nutrient management data from all farms in the Manawatū catchment (approx 600 farms) to develop a clear picture of where nutrient loss and nutrient use efficiency sits currently within the entire catchment. This will be achieved through using existing data from FMRA <sup>15</sup> , using modelled data, or obtaining the information directly from the farmers. Commencing August 2011	Fonterra and Dairy NZ





## REDUCE SEDIMENT RUN-OFF FROM EROSION PRONE FARMLAND, THE RURAL ROAD NETWORK, AND AREAS OF MAJOR EARTHWORKS THROUGH:

- ♦ continuation of Horizons Regional Council's Sustainable Land Use Initiative
- ♦ adoption of road maintenance and earthworks best practice management practices
- ♦ meeting resource consent conditions, compliance monitoring and enforcement
- ♦ adoption of best practice management for earthworks



Central Government,  
Horizons Regional  
Council, Farmers



## REDUCE THE NUTRIENT AND PATHOGENS FROM POINT SOURCE DISCHARGES THROUGH:

- ♦ resolving outstanding resource consent applications
- ♦ ensuring discharges meet regional water quality standards
- ♦ meeting resource consent conditions, compliance monitoring and enforcement
- ♦ requiring resource consents for stormwater discharges

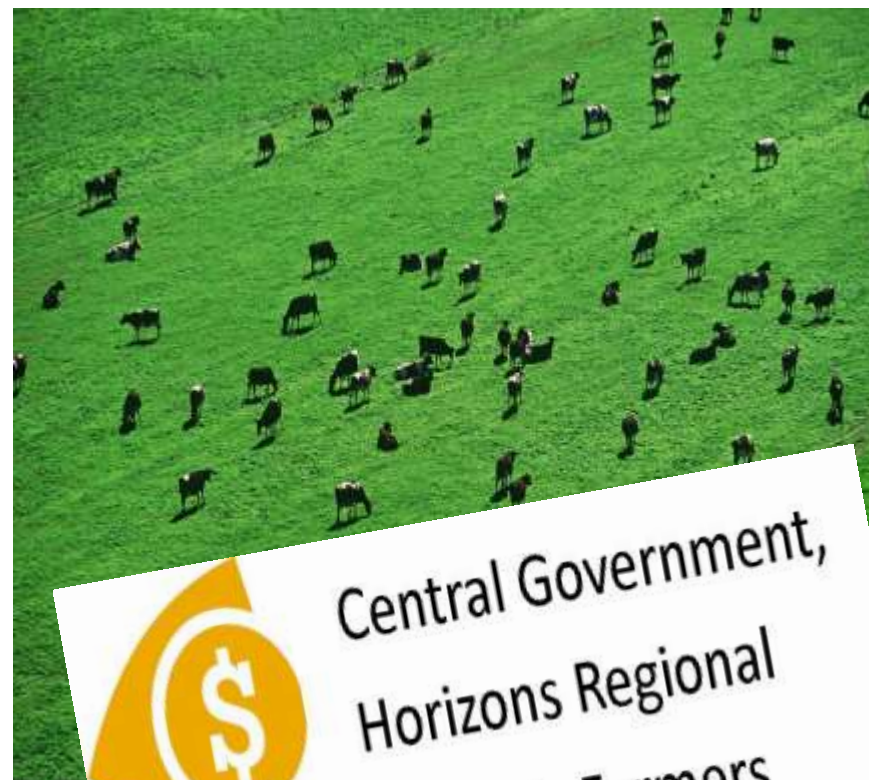


Councils, Central  
Government, Industry




## REDUCE THE RUN-OFF OF SEDIMENT, NUTRIENTS AND PATHOGENS FROM INTENSIVE LAND-USE SUCH AS DAIRYING AND CROPPING THROUGH:

- ♦ meeting resource consent conditions, compliance monitoring and enforcement
- ♦ achieving the Dairying and Clean Stream Accord targets
- ♦ adoption of Nutrient Management Plans and promotion of nutrient use efficiency



Central Government,  
Horizons Regional  
Council, Farmers



## PREVENT OVER-USE OF WATER BY:

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- ♦ ensuring consented takes meet regional standards
- ♦ meeting resource consent conditions, compliance monitoring and enforcement
- ♦ ensuring metering of all major water takes

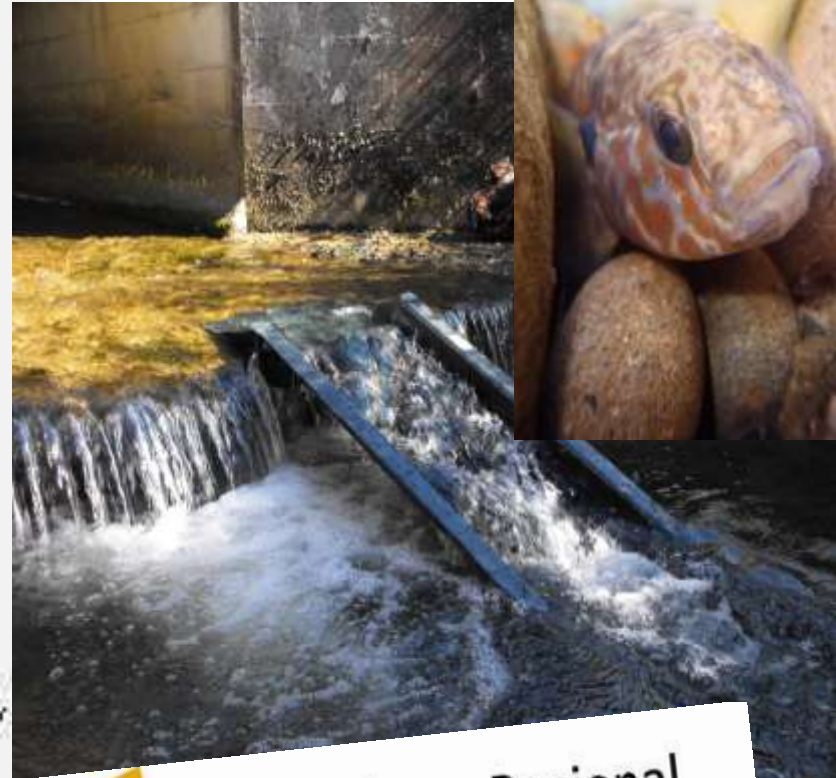


Horizons Regional  
Council, DairyNZ,  
Councils, Maori



## PROTECT AREAS OF HABITAT FOR NATIVE FISH, BIRDS AND TROUT BY:

- ♦ fencing and planting streams and bush/wetland areas, and pest control
- ♦ removing fish barriers
- ♦ meeting resource consent conditions, compliance monitoring and enforcement



Horizons Regional Council, Community Groups, Central Government, Maori



# OURS.

## THE MANAWATU RIVER LEADERS' ACCORD

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**OUR GOAL**

Through a vision by Manawatu Area of Raukawa (MARA) and the Manawatu District Council, we will create the world's most successful Manawatu water catchment through the creation of a partnership.

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Whitby signed 4 August 2019

Kai te ora te wai, kai te ora te iwhiri, kai te ora te tangata.  
If the water is healthy, the land and the people are nourished.

# Funding success

## FRESH START FOR FRESHWATER CLEAN-UP FUND

Granted \$5.2m (over two years), for:

- Municipal wastewater discharges (Dannevirke, Pahiatua, Woodville, Kimbolton, Feilding, Shannon)
- Cattle exclusion from waterways
- Native fish habitat protection
- Nutrient management farm plans (“Best Practice”)
- Community involvement

Matches community finding of approx \$25m

# Progress Report

Lots of achievements:

- Community projects
- Cattle exclusion from waterways (208km)
- Native fish habitat protection
- 83 dairyfarm plans, 41 farms mapped (SLUI)
- Major wastewater improvement work
- 12 fish passage improvements
- 66,000 riparian plants





# Progress Report - Science

Will take time to tell for sure. Some progress showing. Water quality targets not met but:

- Apparent improvements in nitrogen, phosphorus and bacteria
- Periphyton getting worse
- Dissolved oxygen, clarity, temperature, cyanobacteria - too soon to tell

# Where next?

- Resolution of iwi dissatisfaction
- Revise Action Plan and commit
- Apply for further funding
- And just carry on.....



# Collaboration

## *“COLLABORATION*

*The Leaders’ Forum’s commitment to collaboratively find solutions for the Manawatu catchment is like a journey of discovery, at times a rocky road. All parties are committed to collaborate and gain a better understanding of how to integrate and balance cultural, social, environmental and economic values.”*

# Insights

- Time-consuming
- Can be resource intensive
- Hard to keep leaders engaged (and delegates may not have authority)
- Needs careful and independent facilitation
- Helps to have a “sponsor”
- External political scene may impinge

But...

# Insights

Yes! It is definitely worth doing:

- Improves relationships
- Clarifies facts
- Focuses attention
- Builds common goals
- Initiates collaborative action

***E kore a Parawhenua e haere ki te kore a Rakahore***

*Water wouldn't move if it wasn't for rock*

*Partnership in ventures is essential for success*



healthy,  
people

are nourished

Kei to ora te wai,  
kei te ora te whenua,  
kei te ora te tangata.