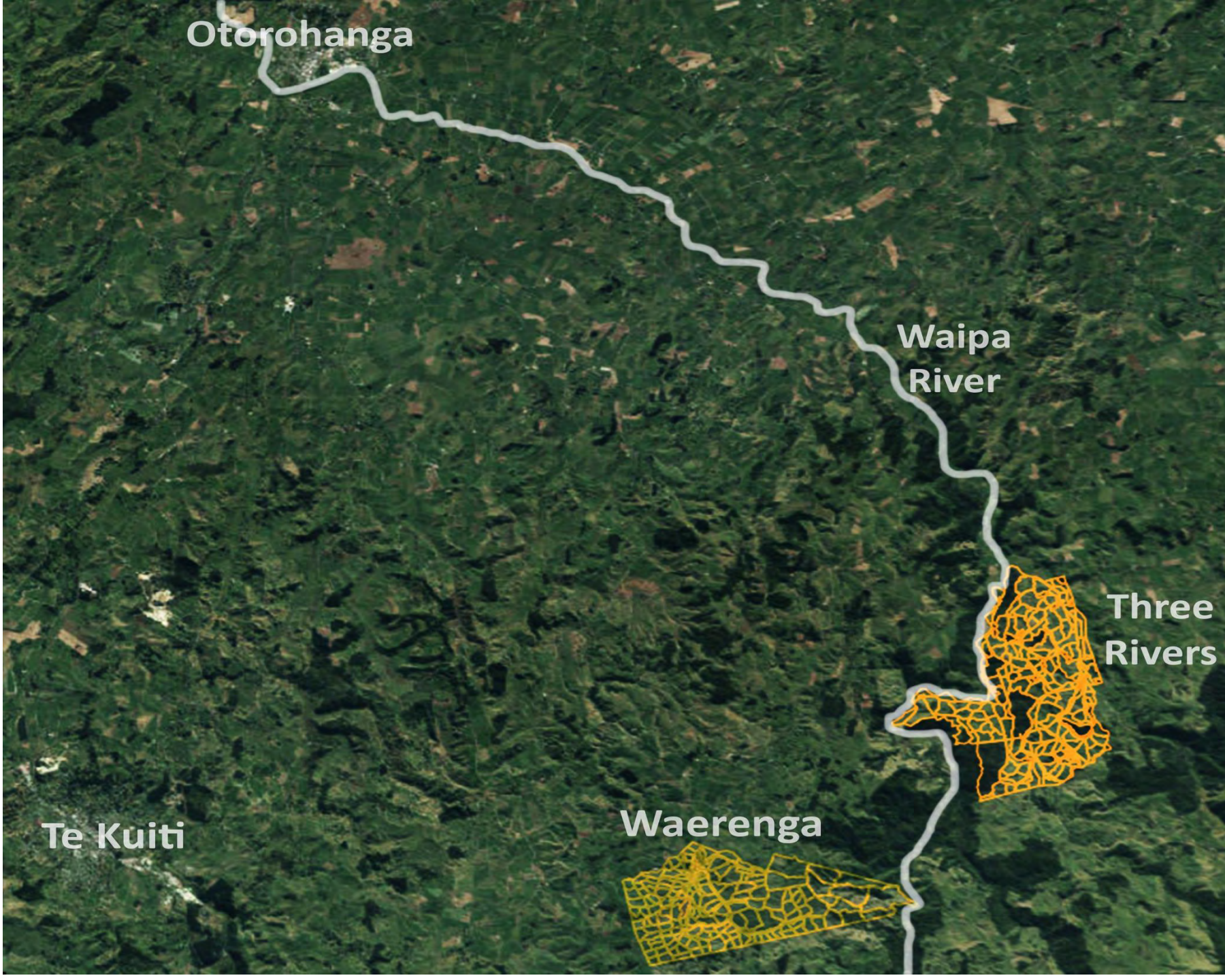
Our Turangiwaewae.

6 maybe 7 generations of NZ farmers.


Otorohanga
Waipa
River
Three
Rivers
Waerenga
Te Kuiti

What we Do.
What we farm.

- 1750ha, 1524 eff. Mid winter stocking numbers.
- 3600 Deer .1300 Cattle.
- 60ha pines, (40ha off farm) . 6000 Sheep
- . We Employ 5 full time staff. . Grow 80ha of maize.
- Many other jobs through contractors, further processing…15
- Our books show our costs excl interest @ $1.1M. Multiplier effect *4
- We conserve/protect 200ha native forest

Vision.

- “ Our vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn are all responsible for restoring and protecting the health and well being of the Waikato river and all it embraces, for generations to come”

NRP.

- We farmed in the Taupo catchment from 2008-2012, and farmed with a NDA (Nitrate discharge allowance).
- Our wider family bought 6 farms in the area, leased short term 3 others.
- NDAs (NRP by another name) set the value of the land, NDA had a value of Approx $400kg. Grand parenting determined a farms NDA.
- For example 300ha ex ballot farms. NDA 16kg/ha $6400ha $1.92m versus NDA 32kg/ha $3.84m. This happened!!
- The above farms had similar infrastructure, size, and natural capital!
- The farming methods or the ability of some to understand WRC policy during the grand parenting period created a situation where the polluters were rewarded.
- Land should be valued on its natural capital, not an owners ability to pollute.
- There are many current examples in the Waikato of neighbor's where NRP will create anomalies which will mean issues with banking and finance, etc.
- More importantly NRP create issues for future generations, i.e restricting land use because of previous poor policy not natural land use capability.

Stock exclusion

Extensive network of surface water. Waerenga falling in to 3 sub-catchments.
Waerenga length of main streams not including little tributaries 9.6km need to fence both sides and not easy fencing. $500,000. We can do it but need more time.
Resources are now an issue, skilled labor and material, demand from horticulture.
Risk based.
Have done FEP's understand risk areas and mitigating.
Sediment Ponds, Reticulated water, fencing, grazing management.
We need more stream monitoring to Identify point source and find practical solutions.
Sub catchment groups are best placed to do that.

Stock exclusion. Large capital cost, will need more time to fence for Deer.

Races, culverts, fenced off QE11.

Fencing off steep side-lings prone to erosion for more managed grazing.
We spend in excess of $140k pa on each farm on RM fencing, reticulated water.
To reach level of stock exclusion as per proposed PC1 will challenge resources.
To get fencing contractors is a challenge, materials the horticultural industry are meaning posts etc are increasing in value.

Maintenance will be an issue

Maintenance and Weeds.

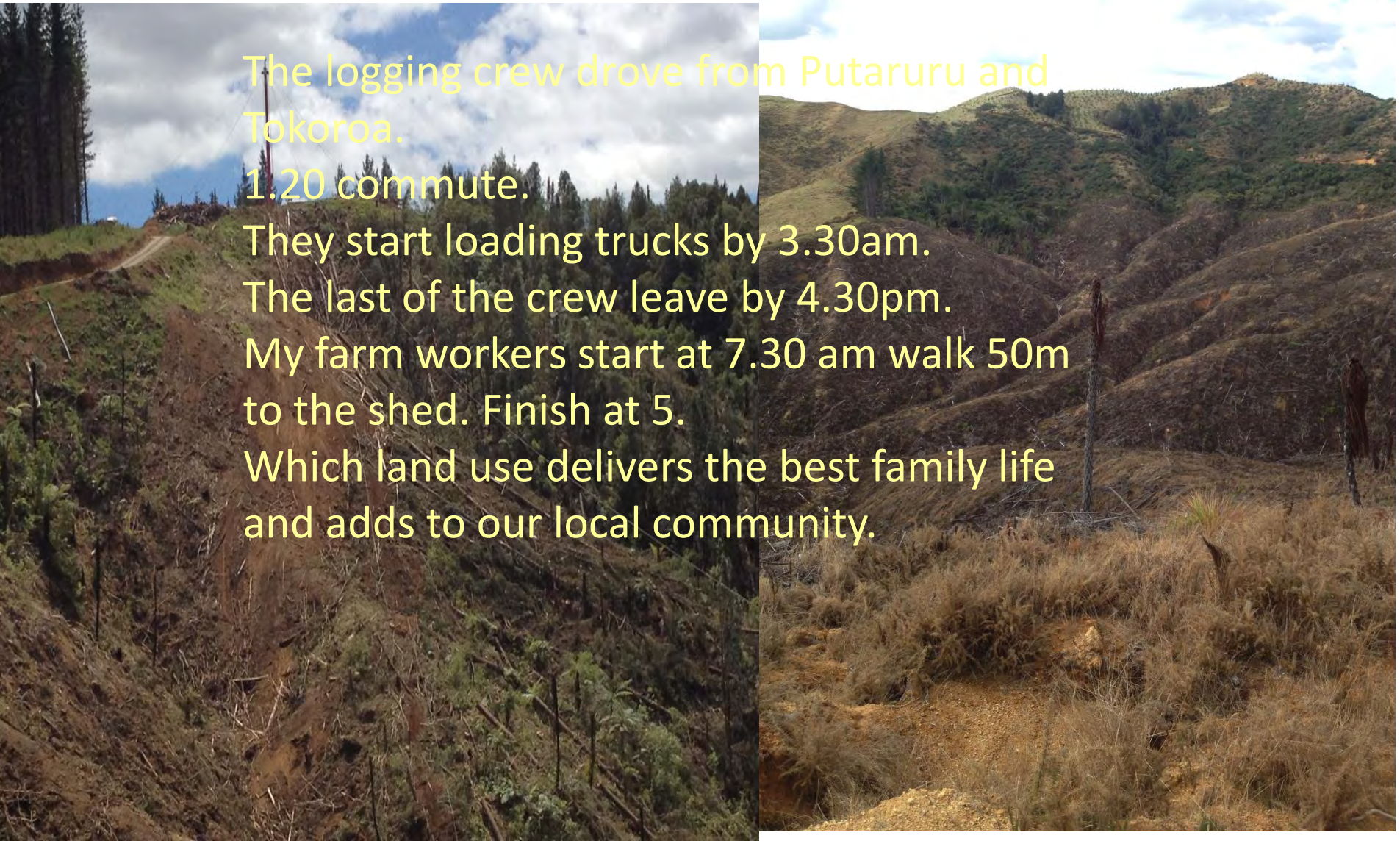
Upper Waipa planting and fencing 18years old.

Weed control in fenced waterways will mean a week on each farm doing another job we previously did not have.

Steeper extensive areas.
Do we plant? Economies of scale, balance of stock.
Trees cost until harvest. Carbon supply and demand

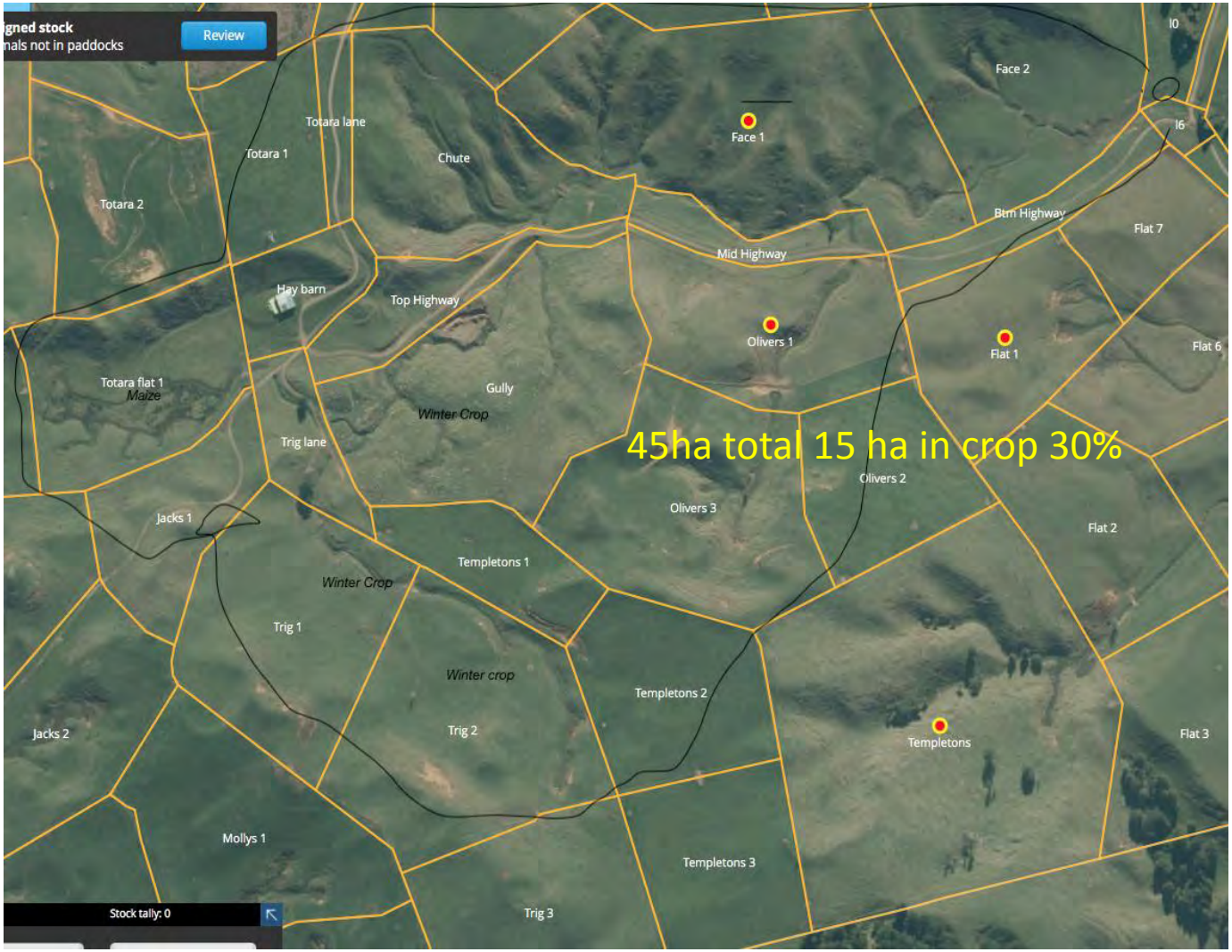
This is the stream at the bottom of the previous slide.
With correct stocking, reticulated water is this over 25 years worse than the following for 5years during harvest and reestablishment.

Forestry. Every 25-28 years has harvest environmental issues.
This is a forest I was involved with, the 5 year period from harvest to establishment is hard on the environment.

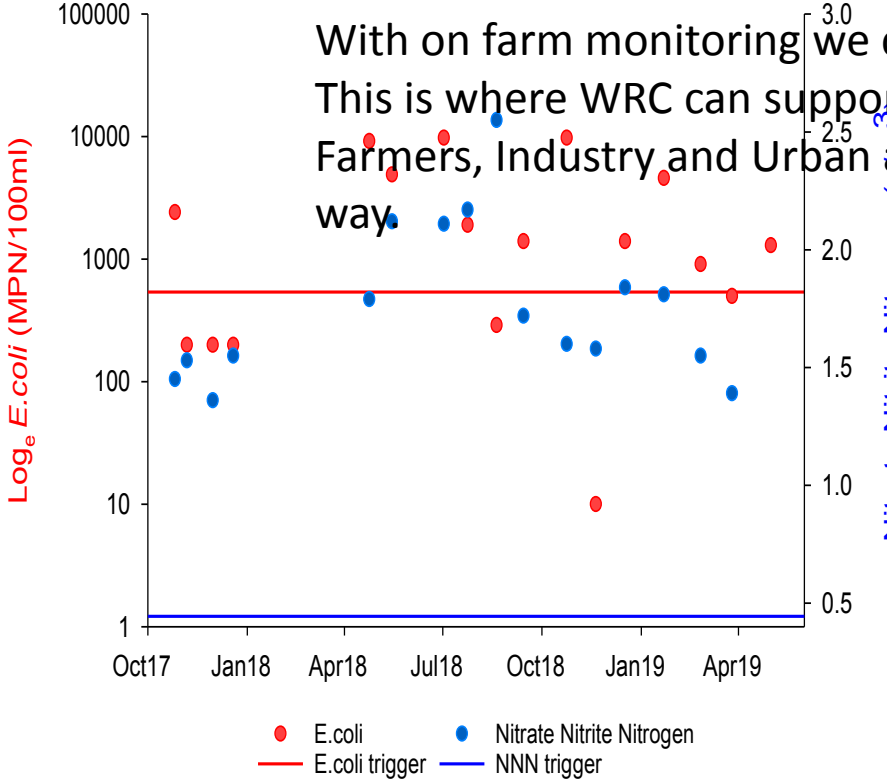


The logging crew drove from Putaruru and Tokoroa.
1.20 commute.
They start loading trucks by 3.30am.
The last of the crew leave by 4.30pm.
My farm workers start at 7.30 am walk 50m to the shed. Finish at 5.
Which land use delivers the best family life and adds to our local community.

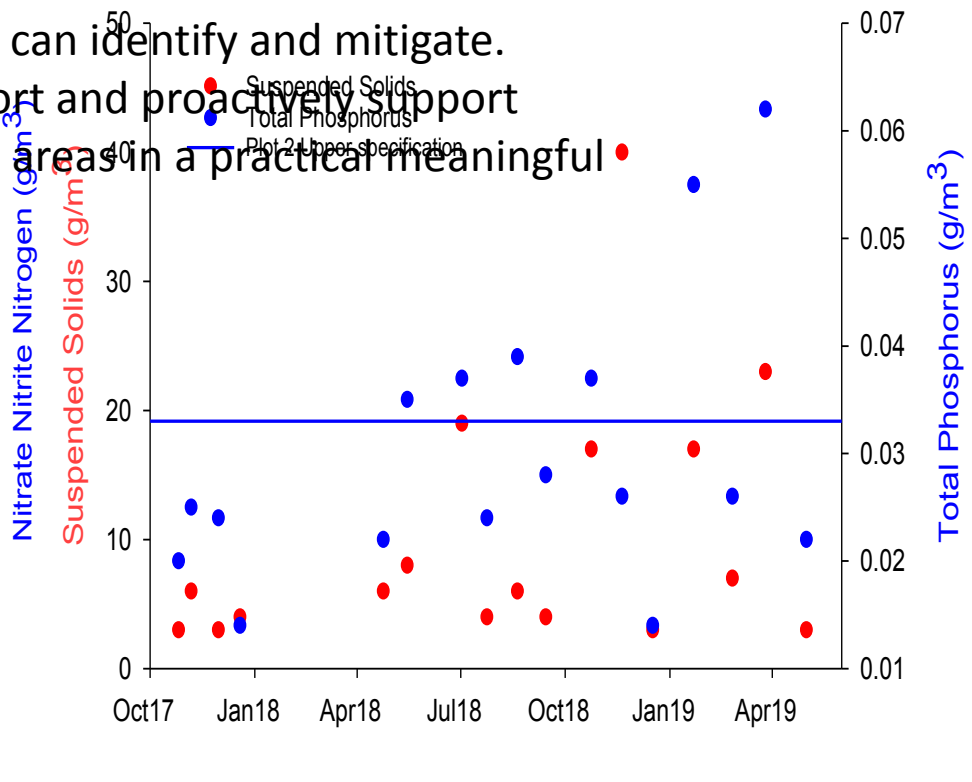
Water testing catchment.



Concentration of *E.coli* and Nitrate Nitrite Nitrogen over 18 months



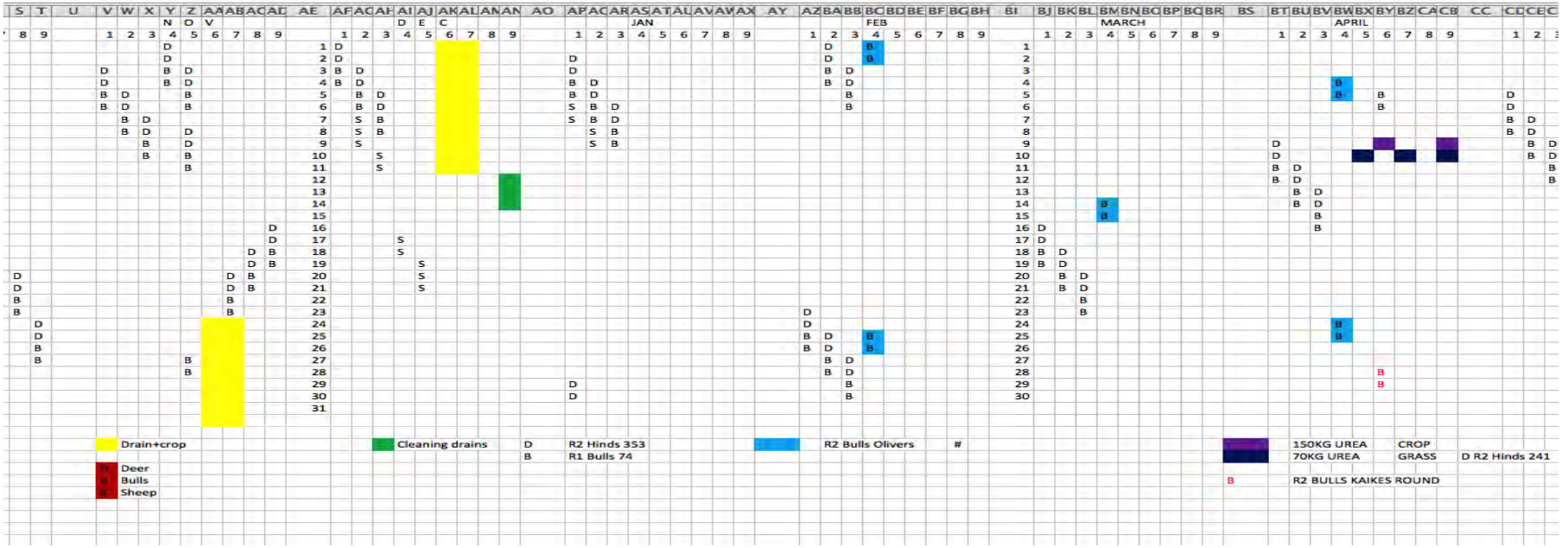
Concentrations of Suspended Solids and Total Phosphorus over 18 months



With on farm monitoring we can identify and mitigate. This is where WRC can support and proactively support Farmers, Industry and Urban areas in a practical meaningful way.

We are recording cropping, stocking and grazing of paddocks and we can see what effect it is having on the stream water quality. This is obviously a very intensely farmed area and would expect dilution with rest of farm. Next year, there will be no winter crop and planned fencing for stock exclusion in this small catchment. Most importantly we know how we can mitigate.

Paddock records.



Present river monitoring as referenced in WRC Tech report 2018/30

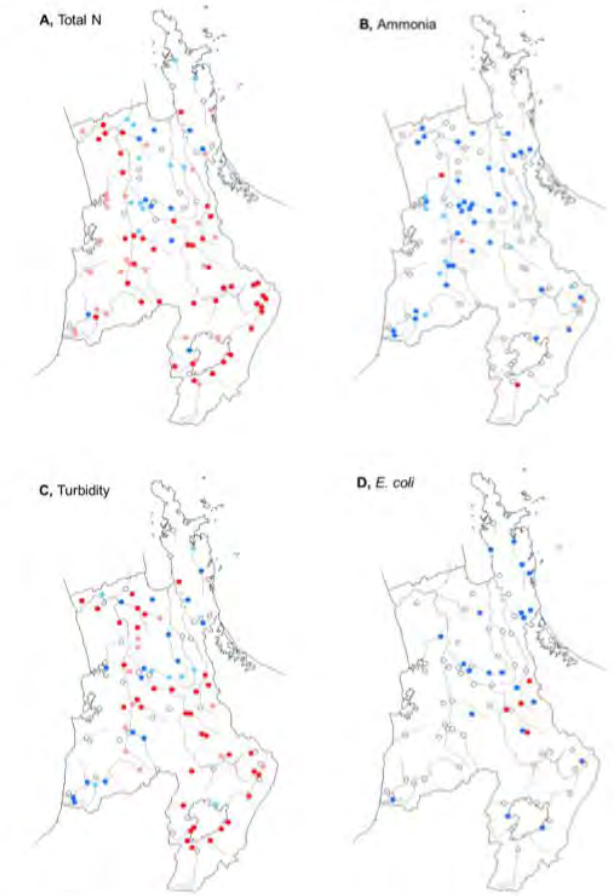
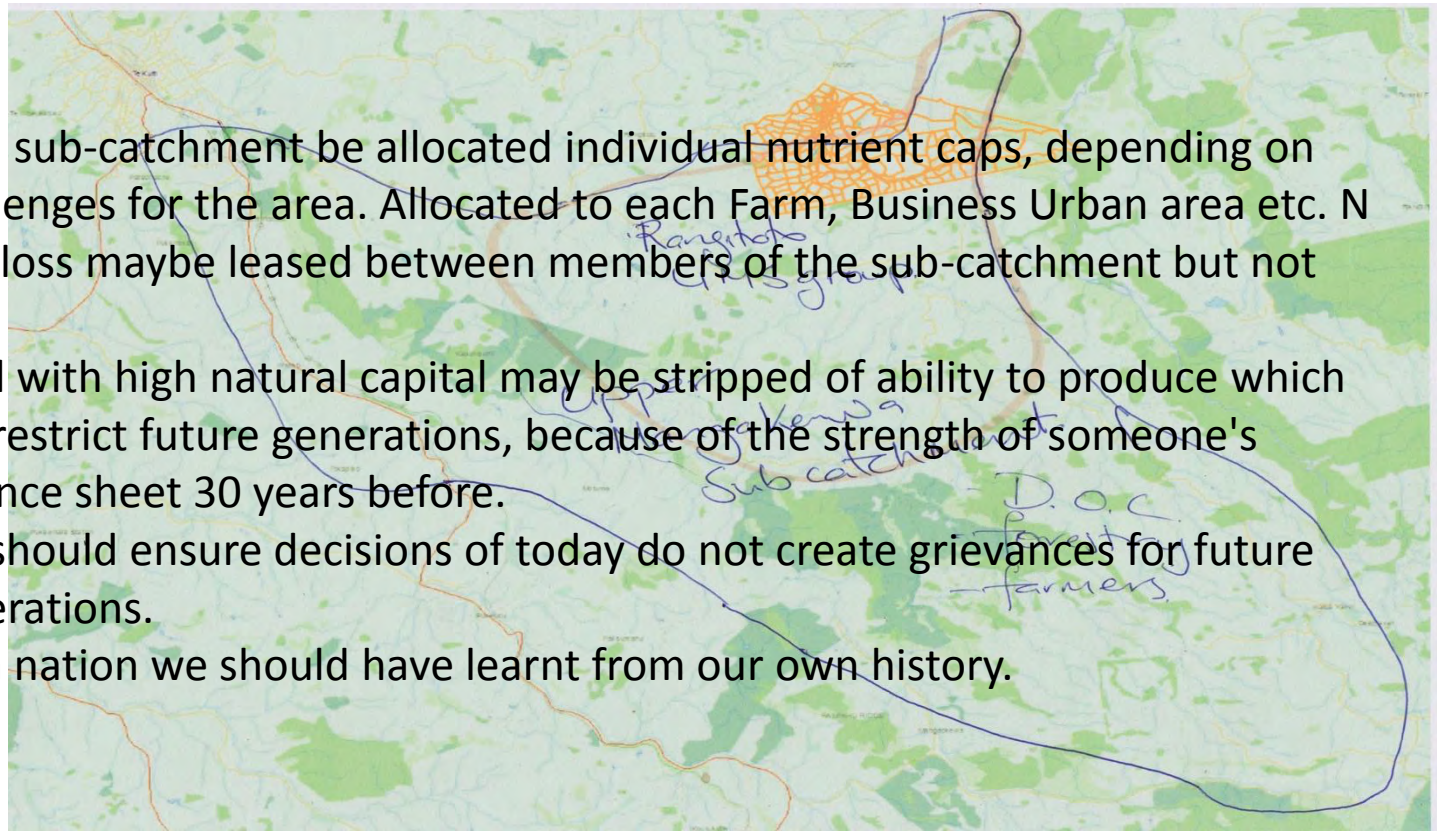


Figure 4: Nature of trends for selected water quality variables at regional river sites during 1993–2017. The symbols distinguish between records where slope probabilities were not very likely (open circles), and those showing one of the following very likely trends: important improvement (dark blue), slight improvement (pale blue); slight deterioration (pink) and important deterioration (red). **A**, total nitrogen; **B**, ammonia; **C**, turbidity; and **D**, *E. coli*; See Figure 1 and Table 5 for details.

Sub Catchments practical sense.

A Sub catchment group for the Upper Mangakewa might look like this. The orange area a sub area of which is responsible for the tributaries' in that area.



Each sub-catchment be allocated individual nutrient caps, depending on challenges for the area. Allocated to each Farm, Business Urban area etc. N or P loss maybe leased between members of the sub-catchment but not sold

Land with high natural capital may be stripped of ability to produce which will restrict future generations, because of the strength of someone's balance sheet 30 years before.

We should ensure decisions of today do not create grievances for future generations.

As a nation we should have learnt from our own history.

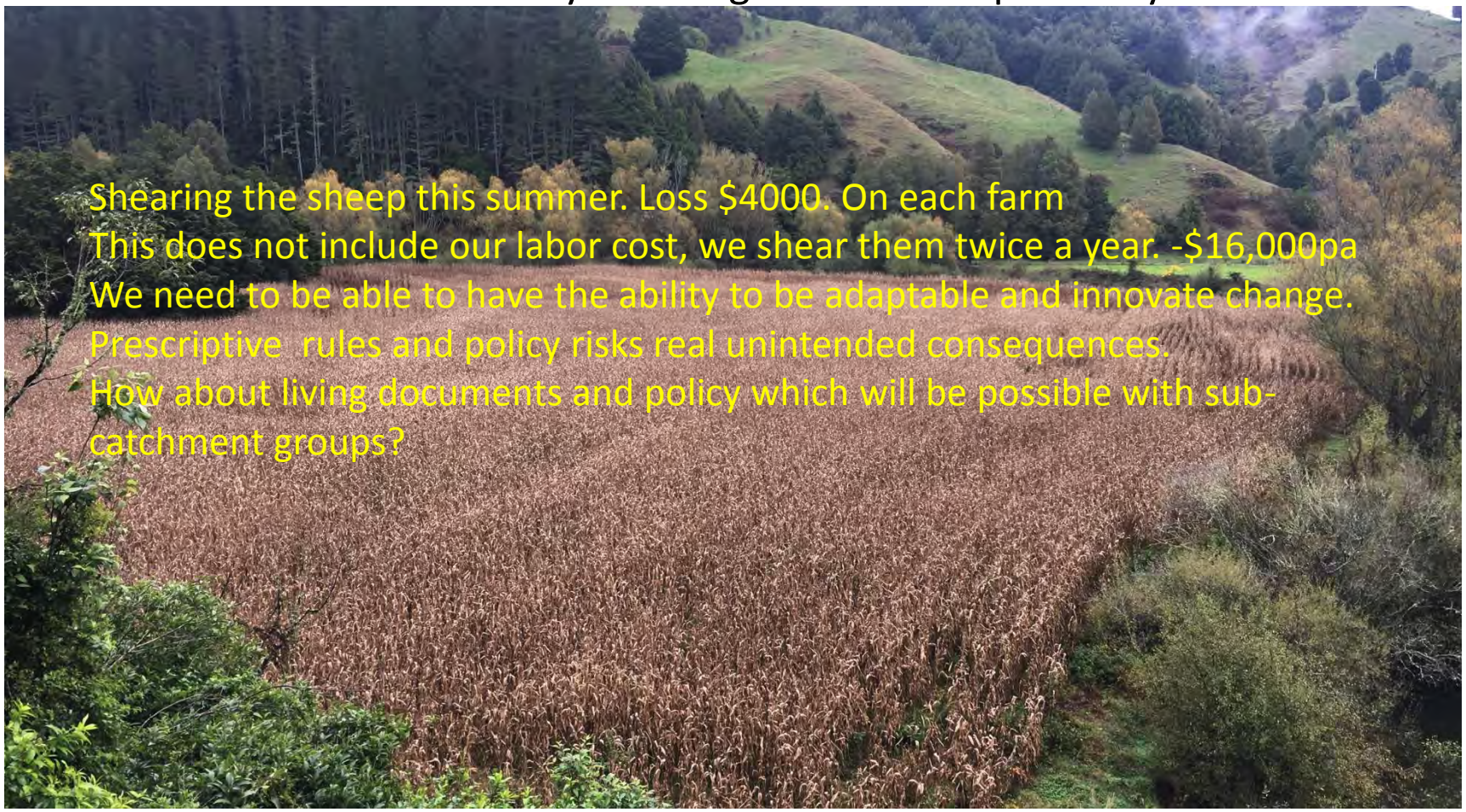
Sediment catchment ponds in high risk winter crops

Land use change.

This maybe growing Hemp next year.

Wool was the main source of income on this land, then bull beef heifers now Maize.

We loose money shearing course wool presently.



Compliance.

- Plan change 1 in its present form will mean a lot of time and money to satisfy compliance, this will lead to a “do the bare minimum culture”.
- Compliance will take money and time away from action to, time and resource with advisors, legal and accountancy requirements. A Canterbury farmer told me he spent $30K last year to satisfy Ecan compliance not including personal time.
- Compliance creates a negative attitude.
- We need to have Waikato environmental legislation which is not more onerous that other Regional councils as this will mean the Waikato Regions businesses, farmers and therefore workers and families will be economically disadvantaged.
- If our cost of production in the Waikato is higher due to compliance than other Regions in NZ this cost structure will directly effect our communities.

One size fits all policy

not practical for an industry and community which is very diverse.

We Have.

- Different soil types.
- Different topography.
- Different rain fall.
- Different farming systems and policies.
- Urban.
- Industry.
- Different personal circumstance, ownership, equity, scale etc.

- But we can work together in our communities with our diversity to achieve great outcomes.

Sub-Catchment Groups will achieve your Vision.

Communities where we all work together without favour.

Members of the community work with farmers so we understand each others issues developing practical farm, urban and industrial solutions.

Farmers work with farmers.

The Deer Industry has shown this works with the exemplar Advance Party discussion groups.