

I don't have a degree or Diploma, but I have over 50 years' experience growing up in Southland being involved in the surrounding areas of Western Southland should amount to something. I have taken a great and personal interest over these years esp. The Aparima River and estuary, Waimatuku and estuary, Otautau, Pourakino, Orauea, Waiau, their tributaries and Fiordland.

I don't own a farm, or have any monetary interest in any farm or farmlet.

I hunt, fish, kayak, flounder, whitebait and swim in all rivers and estuaries mentioned, but mainly in the Aparima River. I take an active role in protecting the environment and waterways.

I have over 26 years' experience in farming practices which includes advising paddock selection for summer and winter crops, including fodder beet, cereal, regrassing programs, selecting the right cultivars for the right paddocks.

Worldwide

On Mr De Wolde dairy farms and run offs, we have done the following improvements over the last 2 years:

Have changed grass cultivars to include both tetraploid and diploid grass species. (Currently most pasture is tetraploid or older species of grass). Diploid is denser and robust, able to handle larger animals, and not so prone to pugging, helps soil health and less nutrient losses. Tetraploid has a more open sward, doesn't "handle" the wet as well, easily overgrazed therefore can open up to bare ground and then subject to leaching through the bare soil.

Have increased clover @6% per hectare, Clover produces nitrogen. Less needs to be applied.

Have added plantain to some areas, there has been a lot of research into plantain (Ecotain) to reduce N loss. In short, Plantain is high in water and makes animals urinate more, 'passed through' nutrients are diluted remarkably. With the potential to reduce N leaching from the urine patch by up to 89%. (Lincoln and Massey universities and Plant & Food Research).

I understand Plantain is currently not included in Overseer.

These improved pastures will help in less leaching will more than offset the small increase in cow numbers and the addition of the conversion of the 178ha sheep blocks.

Winter cropping using fodder beet damages soil, high number of animals on limited space.

High concentrations of dung and urine = high N and p losses.

Grew @63 hectares of fodder beet 2018 for 2019 winter. This crop was just under 37 ton DM per hectare. 63 hectares of growing grass will have a lot less loss than 63 ha of fodder beet and now bare ground until regressed.

In a grass only based system, and regrassing by direct drill, with no tillage, safeguards the soil, soil erosion is minimised, soil compaction and nutrient and sediment loss is minimised, soil disturbance is reduced. Grass has less inputs than fodder beet means better for environment.

Waterways.

The Aparima holds a special place for me and my family. Caught my first fish at age 4 in the Aparima. I have hunted, fished, kayaked, and swam in this river since I was 4 years old and still do now 55 years later.

I have seen this river at its best and its worse.

In the sixties and seventies we would go fishing, in the course of 2-3 hours would catch the limit of 10 trout each.

Come the eighties the river degraded to the extent that if you were lucky enough to catch a trout it wouldn't be healthy.

Early nineties same as the eighties.

Late nineties to present day the river starting changing back. There is less slime and a greater number of fish and other wildlife and healthy too.

Why?

In the seventies farmers started to apply as much fertiliser as they wanted. Took @5-6 years to get into waterways, All classes of animals had access to all the rivers and streams for water. In addition the Orauea had excess water from the coal mines.

In early nineties dairy farmers started converting farms, fencing off waterways and suppling drinking water via troughs. This is why there is an improvement. The monitoring site for water quality is at Thornbury. There are still farmers allowing sheep access to the Thornbury River for drinking water.

The other rivers, Waimatuku, There's more fish in this river above the Isla bank Road Bridge. The data "has been gathered" at the bridge, on the Lorneville-Riverton highway. There's a lot of farms including sheep, between this site and the Drummond "Bog".

The Orauea is improving. This river actually looks worse above Orawia Township.

The Waiau, Didymo is the limiting factor and the lesser flow of this once mighty river.

With all rivers and streams, throughout the area I cover, sheep and in some areas, beef cattle, are still using them as their sole drinking water and camp beside them, hence with a fresh or flood their "effluent goes in the water.

I sometimes see people taking samples of rivers and streams and the results when published. They don't seem to take into account the flow of the river whether high, normal, low or extremely low and water temperature. All this will affect the results. The figures that are tabled regarding amount of E.coli, N and P in waterways may be an average but trout, eels, and other wildlife and invertebrates in the rivers and streams tell me they have improved.

It's a shame ES records only go back to 1990.

Conclusion

Woldwide.

With the improvements stated above, any impact on the environment including waterways, any person or others property, will decrease.

Aparima, Waimatuku, Orauea, Waiau

As stated above my view is these waters have improved over the last 15 odd years because of the change from sheep, beef or deer to dairy. This application will further enhance this.

This application will not impact on this and I know, if the sheep and beef farms that are left have the same enforcements applied, the waters will keep improving.

Lindsay Youngman

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