Healthy Rivers Plan Change 1

A good system should be fair, flexible and financially viable. What is proposed fails on all 3 counts.

Let's start with fairness. Adjoining my farm is a farm that is now running heifer grazers but was previously in dairy. If this proposal comes into effect, the nitrogen leaching number for that land will mean it can never be sold to an adjoining farm to be dairy farmed on, reducing its land value from \$50,000 per hectare to about \$35,000 per hectare. On that 40 hectare farm this represents about a \$600,000 loss of value.

Adjoining my farm on another side there is a block of land of excellent contour that has run sheep and some dairy grazing. Because of this it would have a very low nitrogen reference point, therefore it could never go into dairy. The unfairness of the proposed scheme has shaved millions of dollars of value off this 300 hectare property.

There are many such scenarios throughout our catchment.

Even someone like myself who has already reduced nitrogen usage by 75% is disadvantaged under the proposed scheme. The scheme rewards the biggest polluters.

Flexibility. My son's farm adjoins mine. Last settlement period from Open Country Dairy he was paid out \$5.80/kg MS. That just happens to be the point where that farm would be just as economic as a support block to my farm. My point is that in times of financial difficulties things have to be able to change quickly to survive. Because New Zealand farming is unsubsidised, our industry has changed rapidly to remain economic. My family has been dairy farming since the 1800's. My great grandparents supplied town milk to Auckland. All the cows were milked by hand. It has always been obvious in my family that one generation has not been able to keep farming the same way the previous generation did. Changing to survive in farming has been a must. My son Andrew is looking at the feasibility of converting his dairy farm to an indoor milking goat operation.

Financial. \$11,000 per farm per year. This is what the scheme will cost to run based on Dairy NZ's initial prediction of it needing 300 people to collect the information auditing etc divided by the 2800 farms in our catchment. The average farmer in NZ makes \$60,000 per year net profit. The cost of the proposed scheme is 20% of the average farmer's net income. That is only the cost of the scheme. After that there is the cost of using less nitrogen or paying penalties, riparian planting, retirement of land and better effluent systems. Most dairy farmers are struggling to find the money to upgrade their effluent systems now without this cost.

The proposed scheme itself does not change nitrogen leaching. A lot of farmers in our catchment use no nitrogen. Their leaching will be unchanged. Both National and Labour governments are looking at a direct tax on nitrogen fertilizer. This is likely to happen whether we implement the proposed scheme or not. Our Regional Council and our government need to be working together. An average dairy farm of 120 hectares using the industry standard of 200kg N per hectare and paying a tax of \$500 per tonne equals \$12000 per year. About the same cost as the proposed system. A direct tax on nitrogen fertilizer would be a simple and direct way to address the problem. Less nitrogen fertilizers used will mean less milk in the world. Less milk produced will mean we will be paid more for it. Less nitrogen used will mean cleaner waterways. If this tax money was then used for creating and planting stock exclusion zones or even lent to farmers to upgrade effluent systems if they could prove to be under financial stress, then I could see the \$12000 per year improving our waterways.

With a Nitrogen Tax of \$500/tonne of N

Response of 10 to 1 when N is lacking in the soil

1kg Urea spread \$1 = 10kg grass growth at 30c kg Dm= \$3

1kg Urea spread \$1 + \$1 tax=\$2 cost to get \$3 grass growth

But then when nitogen is not lacking in the soil and you only get 5 to 1 response, the urea plus tax equals \$2/kg of urea, and would only grow you \$1.50 worth of grass.

It would be fair to assume that nitrogen would only be applied when nitrogen is truly lacking, and you would be able to get an economic benefit. I can see a tax of \$500/tonne of N halving the amount of urea used.

So to summarise, the average 120 hectare farm, using 200 of N per year (the industry standard), would use 24 tonnes of N and pay \$12,000 in tax. If that farmer now found it to be unprofitable, and halved his nitrogen usage, we would have a major win for the environment.

\$11,000 is the direct cost of the proposed system we are debating today.

Farmers using no nitrogen would have no additional costs to their farming system.

Getting back to the cost of the councils proposed system. If The proposed system is to go ahead it can be automated to need almost no people thanks to computers. There would be an upfront cost of building the system. Again, the Regional Council would have to work with the Government to make it mandatory that all inputs and outputs from our farms were entered directly from the suppliers into a Government database. That is what the diagram is showing. The system would update daily.

If all the information was coming directly from the companies involved then there would be no need to audit the information in the system. It would be very easy for the Regional Council to set a nitrogen leaching threshold. Once a farm had hit that threshold the fertilizer company could no longer sell them more nitrogen. There would be no need for penalties. It is too late once the nitrogen is on the ground. Penalties do not help the environment.

With a good computer system that updates daily, the system would become a tool to manage nitrogen usage throughout the season. Once this system is running, every farm would have a rolling average nitrogen reference point. It eliminates the need for every farm to go back in time to create one. After this computer system is running, it is a simple matter of rolling the highest polluters back to the annual threshold set by Regional Council to achieve our stated objectives of the plan.

Thank you for time

Cheers

David Lord

Notes **Notes** Other Virtual Farms The proposed system just does all the manual data entry automatically. This in turn lets it run in real time at minimal cost. The virtual farm would also hold information like waterways With this running in real time, it stops the nitrogen fertilizers fenced, riparian planting, inspection history being applied—eliminating the need for penalties. It also becomes a very useful management tool. After the system has NAIT been running for 12 months, everybody will have a nitrogen Feed / Crops reference point. Although it wont be grand parented because Livestock by the following year the council sets an N threshold that stops the purchase of N past a farms catchment limit. **Outputs** Inputs **Fertilizer Companies Dairy Company Stock Feed Suppliers NAIT** Virtual Farm One Off Misc Purchases **Meat Processors** Government Owned Dataable to be entered manually base **Rolling Average NPK Real Time Reporting** Access **NPK Leaching** Ability to manage **Auditors** Overseer/Similar system permissions Customers Alerts when nearing upper **Local & National Government** nutrient limits for particular catchment Red Flagging to Fertilizer suppliers