Submission on ‘Action for healthy waterways – A discussion document on national direction for our essential freshwater’

Federated Farmers Taranaki

21 October 2019
To: Ministry for the Environment

Submission on: Action for healthy waterways – A discussion document on national direction for our essential freshwater

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Submission by: Federated Farmers Taranaki

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SUMMARY

➢ We thank the Ministry for the Environment (‘MfE’) for the opportunity to comment on the discussion document.

➢ Farming in Taranaki is integral to the social and economic fabric of the region, with the primary sector the biggest contributor to economic growth in the period 2008-2018. There is nationally and internationally significant food processing infrastructure here, including one of the largest dairy processing plants in the southern hemisphere. Food production and processing employed 9,444 local people last year, not counting those in supporting services.

➢ The dairy industry in Taranaki differs from that in some other regions, with more (and smaller) family farms, while numbers of dairy cattle have not intensified greatly, remaining stable for the last twenty years.

➢ The Essential Freshwater proposals will deliver sub-optimal and perverse outcomes, if implemented without provision for regional flexibility and local tailored approaches. There should be allowance for regional variation of climate, soils and management approach.

➢ The proposed 5m average setback on low-slope waterways over 1m should be removed. The requirement to pull out existing riparian fences (even with lead-in times) will divert resources away from what should be the priority – unfenced waterways.

➢ The Taranaki Riparian Programme is long-established, internationally recognised and has been correlated with improved freshwater outcomes. Key to its success has been the ability to tailor it to local circumstances. We submit that rolling out Taranaki’s successful model nationwide would produce superior environmental outcomes for significantly less cost to the community than the current proposals.

➢ We submit that better cost-benefit analysis is required to for example assess the costs involved with increased monitoring to Councils and communities, including likely rates rises.

➢ Monitoring requirements seem beyond that which would be required to make scientifically defensible conclusions of the state and trend of freshwater. We submit that monitoring requirements be scaled back, particularly in light of the affordability and capability issues for rural Councils.

➢ We submit that the Waingongoro River should be removed from ‘schedule 1’, given that it has good to excellent health and key environmental indicators are stable or improving.

➢ We submit that Overseer should not be mandated for use in Taranaki until proven to work effectively under local conditions.

➢ Slope calculations should be based on something other than land title. In an ideal world, farmers would be able to draw their own boundaries to calculate slope for the purposes of things like riparian planting, taking into account paddock shape and contour.

➢ We submit that sediment bottom lines be revisited, including with a robust cost-benefit analysis of the measures proposed in areas like the eastern Taranaki hill country. Existing programmes such as those in place in Taranaki hill country should be recognised as an appropriate way to manage sediment.

➢ We submit that provisions around drainage be revisited to ensure that farmers retain the ability to maintain drainage / put in new drainage to protect existing pasture, as a permitted
activity. The 100m setback of drainage from wetlands is excessive in our landscape; this is another example of the need for regional flexibility.

➢ We urge a complete rethink of the Essential Freshwater package, with better engagement of regional perspectives and an approach that looks to build on what already works. We would be happy to assist the Ministry with this if there is the opportunity in future.
INTRODUCTION

We thank the Ministry for the Environment (‘MfE’) for the opportunity to comment on the discussion document ‘Action for healthy waterways – A discussion document on national direction for our essential freshwater’ and related documents.

As you may be aware, Federated Farmers consists of 22 autonomous provinces, supported by a national body – Federated Farmers of New Zealand. This is the submission of Taranaki Federated Farmers, the provincial body representing local farmers. We are relying on Federated Farmers’ national submission to represent our views on most points; this submission outlines some of Taranaki’s unique regional characteristics and how they relate to the Essential Freshwater package. The submission should be seen as complimentary to the national submission.

After the announcement of the Essential Freshwater package, there was demand for local community meetings and Federated Farmers Taranaki facilitated or took part in eight meetings around the region. The following represents the main themes of these meetings. It is important that this submission be seen as the collective voice of the 550+ people who attended these meetings. These were primarily farmers, but included those from the wider sector, such as rural professionals and those who work in service industries.

Local context

Food production is embedded in Taranaki’s social and economic fabric. It is an industry with deep roots here.

The regional economy is dominated by two main industries; energy and the primary sector. The primary sector was the biggest contributor to economic growth in the region in the period 2008-2018\(^1\) while agriculture and fisheries employs 16% of the region’s labour force\(^2\). Food production (which includes farming through to the processing and manufacturing of food products) contributed over $1.2 billion to the Taranaki regional economy in 2018 and accounted for 8.2% of national food production\(^3\). The industry supported 9,444 jobs in Taranaki last year (total population of the region 109,000), of which the production and processing of dairy products ranked first, followed by sheep and beef farming and processing\(^4\). Agriculture and its associated processing industries contribute almost 20% to regional GDP\(^5\), and are (along with the energy sector) responsible for making Taranaki one of the strongest regional economies in the country (notwithstanding that there are areas of deprivation, particularly in our small rural towns\(^6\)).

Food production plays such a big part in the region because of our soils, climate and long history of food processing.

Geographically, the region is dominated by Mount Taranaki and its surrounding ring plain. Mt Taranaki sticks out into the Tasman Sea and catches the prevailing westerly weather patterns. As a

\(^1\) Taranaki Region at a Glance. Venture Taranaki (2018).
\(^3\) Taranaki Trends. Venture Taranaki (2019).
result, many of the rivers and streams in this area radiate out from the mountain and are fast-flowing. There are over 300 rivers and streams flowing from Mount Taranaki.\(^7\)

The ring plain and coastal terraces are some of the best agricultural land in New Zealand, with rich volcanic soils and reliable rainfall producing great grass and making the district ideal for pastoral farming. Dairy farming is the main land use with 1,620 farms\(^8\), producing 12% of New Zealand’s total dairy solids\(^9\).

Dairy farming began with small dairy co-ops across Taranaki in the nineteenth century. Nationally and internationally significant dairy processing infrastructure has developed in rural South Taranaki, including a cheese factory in the small town of Eltham (population just over 2,000) and the Whareroa milk processing plant just south of Hawera (population 12,000). Local businessman Chew Chong exported New Zealand’s first butter from Eltham in 1884 and built the first dairy factory in 1887. The Fonterra cheese factory recently celebrated a centenary on its Eltham site and with 140 staff is a key employer in the town. Whareroa is one of the largest dairy processing plants in the southern hemisphere; in peak periods about 14 million litres of milk are processed daily and it employs over 1000 people, not counting those in supporting service businesses.

The eastern hill country is primarily sedimentary ‘papa’ country, with extensive pastoral farms and forestry. There are around 840 sheep-beef farms in Taranaki; these are mostly in the hill country but there are also a number of ‘finishing’ properties on the lowlands, where traditionally livestock is bought down from the hills and fattened. There are approximately 103,500 beef cattle and about 434,400 sheep in Taranaki\(^10\). There is significant meat processing infrastructure in Taranaki, including in Waitara (near New Plymouth), Eltham, Hawera and the South Taranaki settlement of Waitotara.

These plants are major employers and their importance to the local economy, particularly in areas of socio-economic deprivation like Waitara, Waitotora and Eltham,\(^11\) needs no explanation. The farming / food production sector as a whole supports a variety of service industries which contribute to the vibrancy and viability of the towns around Mt Taranaki.

Perhaps because of its long history and the fact that there are more smaller family farms in Taranaki\(^12\), the dairy industry has remained relatively stable over recent decades. As a result, there are some important differences between here and the rest of New Zealand. The dairy industry has not experienced the intensification seen in some other regions.

Total number of milking dairy cattle in 1998/1999 was 481,034 (nearly 15% of the nation’s milking herd) and by 2013/2014 it was still only 493,361 (10% of the national herd). Likewise, stocking rates hardly changed, from an average of 2.8 cows per hectare in 1998/1999 to 2.85 cows per hectare in

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Since 2013/2014, the combination of two seasons of low milk price followed by difficult climatic conditions in Taranaki has seen cow numbers reduce to below 1998/1999 levels at 477,311 in 2017/2018. Since 2017/2018, Livestock Improvement Corporation ( LIC ) 2019 annual results show a significant upswing in herd testing and nominated breeding programmes, suggesting farmers are putting a greater emphasis on cow quality rather than quantity. We believe data will subsequently show a continuing decline in dairy cattle numbers and submit therefore that stocking rates are essentially unchanged in over twenty years.

**SPECIFIC FEEDBACK**

Stock exclusion regulations

Twenty-five years ago, the Regional Council set up a riparian programme in partnership with Taranaki farmers. The Council will no doubt outline this programme in detail in their submission, but it is worth summarising this programme here:

- 99.5% of Taranaki’s farmers on the ring plain have a riparian planting plan for their properties.
- There are 2500 individual riparian plans in place across the region.
- 14,500 km of stream bank have been fenced. The programme includes fencing smaller waterways and drains.
- 84% of plan holders have completed their fencing programmes and 69% have also planted up their riparian margins so far.

It is important to note that this programme is voluntary, yet the uptake is extremely high due to the time and resources put into engagement by the Regional Council, and the sense of ownership and pride that landowners feel about the riparian programme. These plans are designed to be completed in stages as resources and time permit; it is one of the programme’s strengths that it can be slotted into the farm management system and empowers the farmer to do what they can, when they can. Another critical strength is that the programme is tailored for the individual farm, with land management officers walking over the farm and discussing the process with the farmer.

Much of the feedback at local meetings was concerned that the national approach proposed did not take into account local initiatives and would in fact undercut what has been achieved here. There were unfavourable comparisons made between a blanket requirement for a 5m average ( unplanted ) setback from low slope waterways over 1m versus Taranaki’s riparian programme, which does not mandate a setback, has proven environmental outcomes and an altogether different approach.

The riparian programme has been correlated with improving stream health, and farmers are strongly of the view that this model of a variable but planted riparian strip, done as time and resources permit, has delivered superior environmental benefits to the proposed provisions, and with less cost and disruption. A 5m margin will only take land out of production for little if any further environmental gains. There are so many rivers and streams running from the mountain that ( particularly at higher altitudes on the Mountain ) the setbacks would take a significant proportion of the land.

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some properties. For one catchment alone, the Waingongoro, we calculated that a 5m setback would take 445ha of mostly dairy land out of production; the average Taranaki dairy farm size is 105ha\textsuperscript{16}, so this equates to removing 4.2 farms from the catchment (out of 162 total). Some of this land is already in riparian strips, so not all of this land would be new land taken out of production; however, it is worth noting that at around $41,000/ha, the value of this land is over $18m for this catchment alone\textsuperscript{17}.

There are also concerns over weed control in the 5m unplanted sections; Taranaki farmers are experienced with maintaining existing riparian strips and leaving 5m of rank grass on either side of waterways is to them a weed corridor waiting to happen and a significant cost to prevent (weed control costs vary depending on topography but average at $22,000/ha for three years). Farmers who have proactively fenced and planted their waterways feel that their efforts have been ignored by the proposals. They are also of the view that pulling down existing fences (regardless of lead in times) is a waste of time and money. They would much rather see that effort directed towards streams that are as yet unfenced or planting of already fenced riparian strips, as part of their ongoing commitment to Taranaki’s riparian programme.

We estimated the amount of fencing (just for the 5m setbacks, not for smaller streams and drains) in a single catchment, the Waingongoro. From our GIS information, there are 442.4km of streams that would meet these criteria in this catchment (the catchment area is 21,909ha). Much of these are already fenced and it has proved problematic to find a figure for the proportion of fences that would be over the 5m mark; the existing fencing takes into account contour, wasteland and existing vegetation and is therefore in places much wider than 5m, but at the same time much fencing is less than 5m from the waterway. We were able to survey some Taranaki farmers at length; they indicated that more than three quarters had fenced with average setbacks of less than 5m, but the sample size (27) is too small to be definitive and includes those from outside the Waingongoro catchment. For the sake of simplicity and because of time constraints, we have therefore assumed that all existing fencing would fail the 5m test, which will potentially overestimate the costs. However, there will be places such as dry stock farms where a more expensive option than the minimal 2-wire electric cattle fence will be needed. We also employed an estimate of cost used nationally ($4.89/m for a minimal electric 2-wire cattle fence\textsuperscript{18}) that we know is an underestimate; local contractors tell us that it should be $5-6/m.

Using this calculation and noting that a survey of all farmers in the catchment would be needed to firm up this figure, our best estimate is that fencing both sides of the identified waterways in this catchment would cost over $4.3m.


\textsuperscript{17} Median dairy land value in Taranaki over the three months to August 2019 is $40,922/ha. Data sourced from Real Estate Institute of New Zealand.

As most farmers in this catchment have already fenced their waterways, the cost of removing the existing fence is also a factor to consider. Removing fences is a troublesome and time-consuming job that few farmers enjoy; it involves digging out fence posts, pulling out staples, winding up wire,
sorting and storing what can be reused\textsuperscript{19} and disposing of the rest. How long it takes to remove a fence depends on contour (easier if flat), shape of fence (easier if straight), equipment available (e.g. have you a tractor-mounted post rammer), number of people available to help and how many hours are available between other farm tasks. We estimate it would take two people around two days to pull down and replace a 2-300m stretch of fencing, assuming that contour and shape were not too bad. Local fencing contractors quote costs of $1.50-2/m to remove existing 2-wire electric fences. In the Waingongoro, we estimate 98\% of the affected rivers and streams are already fenced; if we take the lower cost estimate of $1.50/m, this would increase fencing costs to comply with a 5m setback by another $1.3m.

If these figures are multiplied across all low-slope catchments in the district, the amount spent on fencing to the proposed 5m setback will inevitably be tens of millions of dollars. Our community would much rather invest this money in existing riparian work programmes with a greater return on investment, and to do this in stages as the flexible riparian programme permits. Adherence to a mandated setback distance (unplanted) does not allow sufficient flexibility or recognise the value of sometimes narrower, but well-planted riparian strips as a buffer for runoff, stabiliser of stream banks and provider of shade. To take out already completed fencing will only demoralise people, while diverting funds from the riparian programme and undermining its future environmental benefits.

\textbf{Recommendation -}

- The Essential Freshwater proposals will deliver sub-optimal and perverse outcomes, if implemented without provision for regional flexibility and local tailored approaches. There should be allowance for regional variation of climate, soils and management approach.
- The proposed 5m average setback on low-slope waterways over 1m should be removed. The requirement to pull out existing riparian fences (even with lead-in times) will divert resources away from what should be the priority – unfenced waterways.
- The Taranaki Riparian Programme is long-established, award-winning, internationally recognised and has been correlated with improved freshwater outcomes. Key to its success has been the ability to tailor it to local circumstances. We submit that rolling out Taranaki’s successful model nationwide would produce superior environmental outcomes for significantly less cost to the community than the current proposals.

\textbf{Rates}

A major concern of rural Taranaki communities is the effect of the Essential Freshwater proposals on their future rates. In particular, the increased requirement for monitoring by Councils, which we believe (along with costs for other parts of the Essential Freshwater package) is likely to require double-digit rates increases.

As an example, there are roughly 3000 wetlands in Taranaki according to the Regional Council. The proposed National Policy Statement, Section 3.5(9), says Regional Councils must monitor natural wetlands for (at a minimum) extent, vegetation, hydrology and nutrients (in water, soil or both). This obligation alone in Taranaki would require significant investment in terms of time and resources, especially as ecologists and water scientists would be needed to do the mandated assessments and

\footnote{Most farmers do not reuse fencing materials in the construction of a new fence, as this would compromise the lifespan of the new fence, but some recycled materials can be used to repair existing fences.}
things like sampling of nutrients require a site visit. Many of Taranaki’s wetlands are in hill country where access is difficult, further increasing the effort and cost associated with monitoring.

How much monitoring is actually required to make scientifically defensible assessments of condition at a regional or catchment level? It would simply be a waste of resources to attempt to monitor everything everywhere, when a representative sample based on accepted scientific practice could do the job.

It is worrying that there seems to be little if any quantification of the costs to Councils and communities of proposed increased monitoring / compliance costs (or assessment of capability issues) within the consultation documents. When Councils prepare Annual and Long-Term Plans, they cost out proposed changes and are explicit about future changes to rating required to pay for them. We would like to see the same level of rigour applied by central Government to these proposed national policy changes.

Farmers are questioning how these new requirements for monitoring will be paid for, particularly when the rates burden falls on sparsely populated rural areas. Rates already represent one of the largest input costs for farming businesses. This could raise affordability issues in rural communities, exacerbate inequalities and compromise the environmental outcomes sought.

Recommendation -

➢ We submit that better cost-benefit analysis is required to for example assess the costs involved with increased monitoring to Councils and communities, including likely rates rises.
➢ Monitoring requirements seem beyond that which would be required to make scientifically defensible conclusions of the state and trend of freshwater. We submit that monitoring requirements be scaled back, particularly in light of the affordability and capability issues for rural Councils.

The Waingongoro River

The Waingongoro catchment is one of those identified as a ‘schedule 1’ river in the proposed policy package and therefore one of those 13 catchments flagged for more rapid management changes than the rest of the country. Key concerns expressed by the local community include confusion as to why this river was chosen when its environmental indicators are good overall, and concern over the repercussions for the social and economic health of the district of proposed policy.

The following is a brief summary from the latest regional state of the environment report, as relates to the Waingongoro.20 the Waingongoro scores well for a range of environmental parameters, with all or the majority of results meeting regional council guidelines, including for nitrogen. The river has good to excellent health as measured by periphyton, macroinvertebrates, and chlorophyll-a. MCI scores are showing significant improving trends. Concentrations of DIN at mid and lower catchment sites show no statistically significant trend. Concentrations of DRP show a long-term increasing trend at mid catchment and a long-term reducing trend at the lower catchment site. (Over a shorter, more recent period, there is no obvious trend in either nutrient in the river).

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In the past, there was discharge of wastewater into the river from Eltham township, but this was diverted to a treatment plant in 2010, with resulting improvements in water quality in the lower reaches of the catchment\textsuperscript{21}. There remain some consented industrial discharges of storm water and effluent into the Waingongoro at Eltham.

Most of the significant improving trends in Taranaki’s water quality over a nearly twenty-year period have been associated with the lower Waingongoro\textsuperscript{22}.

In other words, monitoring results suggest that despite nitrogen being elevated, other indicators for stream health are good. There is little or no correlation between nutrient concentrations and in-stream macroinvertebrate health in Taranaki. Part of the reason may be that Taranaki’s rivers are swift flowing and it is only a matter of hours before water moves from the top of the catchment to the sea. As regards phosphorous, Taranaki’s volcanic soils are naturally high.

A visual introduction to this river is available on the Land Air Water Aotearoa (LAWA) website at https://youtu.be/gitHxoTZqHw - the video was made when the river was named LAWA’s river of the month.

Given that the Waingongoro differs little in terms of environmental indicators from other South Taranaki rivers and that its water quality is generally healthy – in fact improving – it is unclear as to why this river should be on ‘schedule 1’.

We outline some of the potential local costs and benefits of the proposed policy on the Waingongoro catchment below.

We note that there are three possible options proposed for dealing with ‘schedule 1’ catchments - a cap on nitrogen, national fertiliser cap and farm plan-based reductions. There is little detail provided on the last two options, but some drafted policy wording provided for the first, so we assume that option 1 (nitrogen cap) is Government’s most developed / preferred option and have concentrated on this in our feedback.

With little or no cost-benefit analysis provided in the consultation documents in support of these options, we are relying on previous studies by the Regional Council and feedback from our farmers to make assessments of the likely impact of the policy changes in our district.

We used Agribase and GIS software to estimate that there are some 477 properties in the Waingongoro catchment. This is more than the number of individual farms, as farms often include more than one land parcel; Taranaki Regional Council estimates there are 162 farmers in this catchment. Agribase and GIS analysis suggests that most of the catchment (74.3%) is dairy farmland, with another 5.4% dry stock properties, 4% are classed as ‘other’ (which includes lifestyle properties) and there are very few (0.1%) arable farms.

In 2015, the Taranaki Regional Council commissioned studies\textsuperscript{23}, which give an indication of the cost-benefits of meeting the proposed nitrogen cap. They found that if the ‘worst’ 30% of farms reduced N loss down to the 70th percentile of farm N loss rates for the catchment, a 10% reduction in DIN

\textsuperscript{22} Taranaki as One: Taranaki Tāngata Tū Tahi, State of the Environment Report. Taranaki Regional Council (2015).
within the catchment would be achieved. The estimated average cost per farm was $53,000 annually.

This figure underestimates the costs of reducing nitrogen as proposed, because the gain in water quality DIN of 10% reduction is not enough to meet the proposed national nutrient limits. Taranaki as a whole has a current total load of nitrogen 41% in excess of that which would achieve the existing NPSFM bottom lines, with a rolling average N loss over the last four years of 53 kg/ha/yr. A reduction in the order of 60-80% in high N catchments like the Waingongoro is likely to be necessary to meet proposed limits, meaning loss limits of below 30 kg N/ha/year as modelled by Overseer. The discussion document itself (p.88) indicates that over 80% reductions in nitrogen yield will be required in some catchments.

A study modelling the effects of a 30 kg N/ha/yr loss limit across Taranaki found:

- A relatively large number (40%) of farms would be unable to achieve a 30kgN/ha/year limit. Even for those farms able to meet a 30kgN/ha/year cap, costs may be substantial and benefits negligible.
- Total cost to Taranaki dairy farmers was estimated at more than $52m/yr, mainly through increased operating costs. Averaged across Taranaki’s dairy farms, each farm would lose over $30,000 per year, but some would be much more heavily impacted than others. The consequences of such a limit would be farmers forced off their land and loss of land productivity.
- A nutrient limit on land use would be inequitable, carry high implementation and high compliance costs, and be unable to achieve the desired outcomes on a sub-regional or regional basis, because of variation in soil characteristics, topography, hydrology, and weather patterns, from farm to farm. Many of the factors driving a relatively high rate of nutrient loss are outside farmers’ control (e.g. rainfall). They concluded that in Taranaki, a N cap would incur significant cost and pain on the industry for potentially little gain in water quality.

We believe the Waingongoro is a good case study of what is likely to happen in Taranaki (and particularly South Taranaki) if the policy package rolls out as proposed. The river is similar to others in the South Taranaki region and with generally good in-stream health. The modelling suggests that for minimal additional environmental benefit above that of the existing riparian planting programme, the economic and social cost to the region would be extremely high, not just in terms of direct costs on-farm (including lowered land values), but in flow-on effects to the wider community.

Recommendation -

➢ We submit that the Waingongoro River should be removed from ‘schedule 1’, given that it has good to excellent health and key environmental indicators are stable or improving.

Overseer & farm plans

Federated Farmers’ national submission will cover general points around the use of Overseer and farm plans as proposed. We will confine ourselves to explanation of the rainfall patterns in Taranaki and their effect on Overseer.

We respect that Overseer is an excellent tool when used as it was designed to be used; as a management support tool that can model and compare different scenarios on-farm it has few equals. However, we are deeply concerned by the fact that in Taranaki, the higher the rainfall the greater the difficulty people will have in using Overseer to estimate N losses and showing that they have met any cap.

The climate ranges from sea level coastal terraces with sandy soils and 1200mm average rainfall to 400 metres above sea level with ash loam soils and rainfall up to 4 metres per annum\textsuperscript{26}. In the rain shadow of Mt Taranaki, rainfall can even be in excess of this.

Leaving aside the matter of whether Overseer is suitable in general for its use as proposed, Overseer is currently unable to provide reliable numbers at rainfall levels that would be experienced in the higher altitude / rain shadow areas of Taranaki. We understand that investment is proposed to improve Overseer, but to suggest that farmers should farm to and change their management on the basis of what we know will be inaccurate Overseer calculations is unacceptable. Investment and testing should precede any proposed roll out of Overseer as a mandatory component of farm management, not be playing catch up while farmers bear the consequences in the meantime.

**Recommendation** -

➢ We submit that Overseer should not be mandated for use in Taranaki until proven to work effectively under local conditions.

**Slope calculations**

We have had questions from farmers around slope calculations and methodology. This includes what is a land parcel for the purposes of calculating slope averages? As we understand it, land parcels are legal title or rating units. Their boundaries are often based on arbitrary historical factors, not a reflection of the landscape. We understand that getting the level of granularity right is complex and that using legal land parcels may be part of the solution, but having a map of slope that makes sense on the ground is important.

Unfortunately, a lot of farms here also have flat terraces dropping suddenly into steep-sided gullies; lumping them together to calculate slope flies in the face of normal farm management and risks sub-optimum or flat-out strange results.

**Recommendation** -

➢ Slope calculations should be based on something other than land title. In an ideal world, farmers would be able to draw their own boundaries to calculate slope for the purposes of things like riparian planting, taking into account paddock shape and contour.

**Eastern hill country & sediment**

In the eastern Taranaki hill country, we are concerned that proposed bottom lines for sediment are unachievable and if enforced (particularly in combination with proposed N targets) would result in pastoral farming becoming unviable; the Regional Council has estimated that hill country rivers and streams are up to three times the proposed bottom line for sediment. We believe that existing programmes in place to mitigate against erosion in Taranaki’s hill country will produce a more sustainable and cost-effective solution than what is proposed.

This eastern hill country (and indeed Mt Taranaki\(^\text{27}\)) is naturally highly erodible. Many eastern rivers are soft-bottomed and flooding is common after rainfall events. This has been recognised for many years. Farmers and the Regional Council have a long-standing collaborative programme working to maintain soil through careful management. This includes measures such as planting of poplar poles on unstable slopes, targeted afforestation and retirement of steeper land. As a result, more than two-thirds of farmland is under sustainable land management, with around 450 management plans tailored to individual farms. These will produce enduring, long-term gains, particularly as trees grow over time. It is important to remember that erosion will also continue to be a natural part of this landscape; even bush-covered land slips in high rainfall events in the eastern hills.

➢ We submit that sediment bottom lines be revisited, including with a robust cost-benefit analysis of the measures proposed in areas like the eastern Taranaki hill country. We submit that existing programmes such as those in place in Taranaki hill country be recognised as an appropriate way to manage sediment.

**Drainage**

The proposed provisions have given rise to considerable concern among farmers in central Taranaki around drainage.

Much of central Taranaki was wetland at one time in the past, with the majority located east of Eltham, in Maata, Ngaere and Rawhitiroa. These are now highly productive farmland. Generations of farmers have built up experience of managing the deep peat soils. A balance is required to maintain the water table – too much drainage can cause subsidence, while too little drainage results in a deterioration of pasture into a muddy mess.

Good farm management in these areas requires that existing drains be maintained. New drains must also be made if/when water moves in the landscape. Water is not static; as an example, a seepage can move with time across a paddock, sometimes quite quickly and without obvious reason. Drainage will then need to be moved or added to address it.

The proposed buffer distance of 100m between wetlands and drains is likely to cause particular problems in these areas. A blanket figure set nationally will also not take into account such things as whether drainage is taking place across a slope or over a rise from a wetland. The Taranaki Regional Fresh Water Plan currently has controls on taking of water within 25m of surface water bodies\(^\text{28}\), which is a more appropriate measure for this landscape.

Proposed restrictions in the placement of new drains or ‘novaflo’ (flexible plastic drainage pipe) would interrupt a core farm practice and cause much of central Taranaki farmland to slowly become muddy, unproductive and an issue for animal health. Local farmers estimate that they would lose their farms in this way inside perhaps ten years.

We suspect that this was not the intention of the proposed provisions, which we assume were more about the prevention of drainage of natural wetlands, rather than preventing pasture maintenance. But the provisions as written are by no means clear and the 100m setback of drainage from

\(^{27}\) Severe natural erosion of the Stony (Hangatahua) river’s headwaters in Egmont National Park is an example. This river became New Zealand’s first protected river of significance, when in 1985 it was the first New Zealand river to be granted a Local Water Conservation Notice. Natural erosion regularly (and temporarily) devastates the river’s fish life.

\(^{28}\) Rule 48. Taranaki Regional Fresh Water Plan.
wetlands is excessive in our landscape. We urge the importance of consulting with farmers and land managers in these types of areas (and we suspect the issue extends to other regions with peat soils e.g. Waikato) to ensure that farmers retain the ability to maintain their land appropriately.

**Recommendation –**
We submit that provisions around drainage be revisited to ensure that farmers retain the ability to maintain drainage / put in new drainage to protect existing pasture, as a permitted activity. The 100m setback of drainage from wetlands is excessive in our landscape; this is another example of the need for regional flexibility.

CONCLUSION

Taranaki farmers are committed to good environmental management and are prepared to put in the hard yards to achieve good outcomes. The success of initiatives like ‘Wild for Taranaki’ (in the biodiversity area) and the Riparian Programme are proof if proof were needed. But we are struggling with the Essential Freshwater package. Despite what may have been the intention, it is a top-down, blunt instrument which has no flexibility to allow for regional differences and approaches. As written, it will cause significant harm and disruption to an established industry and the local communities that depend on it. And for little if any environmental gains beyond what we were already on our way to achieving.

Arguably, Taranaki could be the region most unfairly affected by the Essential Freshwater package. We have examples of good environmental management to build on, state of the environment reports that record improving water trends, and we are blessed with a unique topography / climate that helps mitigate against some of the water quality issues found elsewhere. Our dairy industry is also unusual, in that it has not been subject to significant intensification in recent decades. The fact that we have smaller family farms than typical (with associated reduced access to capital and older infrastructure\(^{29}\)) also makes us less resilient in the face of what would be the most disruptive policy change that this region has seen for a generation. We appreciate that lead-in times have been provided for some measures, but given that some 40% of farming businesses\(^{30}\) look like being unable to comply with just one of the new targets (never mind the cumulative effect of them all), for us it would simply be a slow death instead of a rapid one.

We urge a complete rethink of the package, with better engagement of regional perspectives and an approach that looks to build on what already works. We would be happy to assist the Ministry with this, if there is the opportunity in future.

ABOUT FEDERATED FARMERS

We are a not-for-profit primary sector policy and advocacy organisation that represents the majority of farming businesses in New Zealand. Federated Farmers has a long and proud history of representing the interests of New Zealand’s farmers. The Federation aims to add value to its members’ farming businesses.

Our key strategic outcomes include the need for New Zealand to provide an economic and social environment within which:

- Our members may operate their business in a fair and flexible commercial environment;
- Our members’ families and their staff have access to services essential to the needs of the rural community; and

• Our members adopt responsible management and environmental practices.