

## Schedule

<b>Introduction.....</b>	<b>Pam Wilkins</b>	<b>Page 2</b>
<b>Family Farming Background.....</b>	<b>Pam Wilkins</b>	<b>Page 3</b>
<b>Disclaimer.....</b>	<b>Ray Wilkins</b>	<b>Page 4 - 5</b>
<b>Empathy for all parties.....</b>	<b>Ray Wilkins</b>	<b>Page 6 - 7</b>
<b>Context of Current Farming Environment.....</b>	<b>Ray Wilkins</b>	<b>Page 8 - 10</b>
<b>Environment Southland and Community Relationship.....</b>	<b>Sean Wilkins</b>	<b>Page 11-14</b>
<b>Physiographic Zones.....</b>	<b>Sean Wilkins</b>	<b>Page 15-16</b>
<b>Catchment Groups .....</b>	<b>Michael Wilkins</b>	<b>Page 17-20</b>
<b>Rules.....</b>	<b>Brendan Wilkins</b>	<b>Page 21-26</b>
<b>22 New or expanding dairy farms</b>		
- 23 Intensive winter grazing		
- 25 Cultivation		
- 70 Stock exclusion		
<b>Dairy Farms.....</b>	<b>William Bole</b>	
<b>Administrative Contractor.....</b>	<b>Sue Miller</b>	
<b>Lessor.....</b>	<b>Lindsay Wright</b>	
<b>Summary.....</b>	<b>Sean Wilkins</b>	<b>Page 27-28</b>
<b>Nitrates Presentation.....</b>	<b>Dr Mike Sklash</b>	

## Introduction

Good afternoon. Our submission will involve several people from different aspects of our business as per the schedule provided. My name is Pam Wilkins and we would like to start by stating that on a national and global scale what a great province we live in – environmentally, economically and socially. We have a great asset here but most of all it was founded by, and is still made up of some of this country's most enterprising and capable people. The issue of water quality is real, but on a national and global scale in perspective is NOT catastrophic. We have an opportunity to address this matter in a manner which is sensitive to all moving parts and all parties. Let's not over react and limit our options, we need a plan to be practical and we need the OPPORTUNITY to get it right.

I'd like to quote the Prime Minister's Chief Scientific Advisor who states in his New Zealand fresh waters values, state, trends and human impacts report in April 2017.

Firstly, regarding science.... *"its role is to provide the evidence-base to inform policy and actions and to suggest the options and opportunities that exist."*

And again, regarding solutions he says... *"There is no universal set of solutions – in many cases the solutions will need to be catchment-specific, and some, because of the nature of the catchment, may take decades to have maximal effect."*

## **Family Farming Background**

Our ancestors on both sides of the family, settled in Otago and Southland in the 1840's as farmers and as goldminers in the 1860's. Our family has been farming in the Old Maitaura Zone ever since for five generations, now approaching the sixth. Through good times and tough times along with many other farming families in Southland. Four of these six generations are in the room today. I'd like to introduce my father Fred Cooper, born on a farm north of Gore, on land on the banks of the Maitaura River in 1922, as was his great grandson Jack Wilkins born in 2010 at Waipounamu. One thing that has allowed this generational model to work has been a functioning democratic model that many of our parents, grandparents, aunts and uncles made sacrifice to defend during the World Wars. These democratic ideals are threatened by this plan.

It is not our intention to change this generational farming model. We are here to play the long game, and that means sustainability and accountability to our children, neighbours, communities and public. Just as our words are tape recorded here today, to be analysed and scrutinised, so are our farming actions and planning policy by future generations. We need to do the right thing by them, as the current caretakers of the land it is our obligation to improve the legacy and not erode it. As a province, we need to work towards this objective and not undermine it with restrictive regulation, resulting in perverse outcomes.

## **Disclaimer**

This hearing setting of public speaking on political matters is not a farmer's natural habitat. The last place we want to be is standing on a podium. In the past, we have relied on industry bodies to handle these matters, but the response this plan has evoked and the public mutiny is testament to the belief and passion the community has to achieve the right outcome, and suggests the plan needs realignment.

We have all learnt a lot through this process, one thing being in life and science alike, we know more tomorrow than we do today. In the case of our now one-year old submission, there are details we would adjust. The same could be said if we were to write it in another year. However, many of our underlying principles remain the same.

When our families began farming cattle here 150 years there was no awareness of nitrate leaching, it was not understood nor spoken of. Similar to when we carried out exploration drilling in Wendonside 15 years ago, the "Garvie aquifer" was not named. The point being, as the wheel turns our understanding develops and our social conscience evolves. We need to realise that time is our friend. Let's not put unrealistic restrictions and timeframes on our policy. This will only create pressure

forcing assumptions to be made not allowing path for due diligence, resulting in poor outcomes such as this plan in its current state.

Any plan needs to be malleable with provision to change. Provision to change with our understanding of all our environmental, farming, economic, political and social interactions, with the ability to embrace new strategy.

This will allow us time to improve models and extension of good management practice. This will allow time to find the sweet spot of protecting water quality interests while allowing agricultural progression. Execution of this has been well demonstrated in further developed societies worldwide.

## **Empathy for all Parties**

Water quality is an issue to be addressed but we feel it needs some context around it, and sadly it has become a political football, largely overstated in public opinion. There have always been stagnant ponds on river beds, Herefords have crossed rivers in this country for 150 years...only now in this globalisation era of camera phones and social media that those who don't venture into these altitudes have seen it. How can we expect these people to have perspective if these issues are only selectively seen on a laptop. Media is a useful tool, but only can outcomes be credible when interpreted in a local context, with good understanding of all landscapes and contributing factors.

It is disappointing to see brash statements made discriminating rural or urban sectors, polarising dairy farmers and cropping farmers. We feel these statements are premature and destructive, as our understanding of the relationship between farming and water quality is relatively primitive on a farming scale. It should not be about us blaming one land use versus the other. Science will reveal solutions to these problems.

We must be aware of defamation when bluntly categorising and widely discriminating certain practises as the long-term brand damage, capital erosion, public reputation damage can be significant.... As the saying goes “a lie will make its way halfway around the world before the truth will have its pants on” ....

This could be quite applicable in regard to some of the ‘strongly discouraged’ farm practice in this plan in the Wendonside area. A WELL MANAGED dairy farm in Wendonside could prove to be a much more environmentally viable unit than most other places in New Zealand, quite opposite of Environment Southlands current risk assessment. What we are asking for today is the opportunity to prove this. To prematurely and unjustifiable miss-shape opinions of a particular land use in a particular area is inappropriate.

## **Context of Current Farming Environment**

Farming for us, and many others is a generational game of survival, often cash-flowing just enough to live another day. It has never been part of our business model to realise or exploit capital values of land. We are dedicated to making a living off the land in a sustainable way, but feel our options are being unnecessarily restrained by unfairly restricting land use and eroding capital value.

Environment Southland need to be aware of how close to the wind we are sailing.

Regulation has targeted “Old Mataura” .....

Regulation has targeted dairy farming....

After two years of relatively historical low produce prices, some farmers may have only 30% equity... a 10-25% erosion of capital because of this plan could bury a business' viability.

DO NOT UNDERESTIMATE THE MENTAL TOLL OF THIS PLAN ON FARMERS AND THEIR FAMILIES.

Like the share crash, deregulation and high interest rates of the late 1980's...those of us who farmed through this will remember it was not a pleasant experience..., the



Water and Land Plan is at risk of having a similar effect. It is not the sentiments of the plan but the reckless application and execution.

In a farming context, we have only recently become aware of the relationship between farming and water quality. In the meantime, generations of hard work, infrastructure, resource, employment and training have been implemented toward farming objectives. To have this threatened by compromised land use options and capital erosion is unfair.

Considering the awareness of water quality risks, we are the first to put our hands up and contribute to solving any issues. We are concerned this plan shows a lack of recognition of the contribution of Southland's agricultural interests to the province and the work and investment already undertaken to mitigate any adverse risks to the environment associated with land use in the agricultural industry.

It was not long-ago Southlands towns were in a sorry state in the 1980's and 1990's. On the back of farming prosperity since, many fortunes have turned, subsidiary businesses have flourished, countless jobs have been created, service and trades people, contractors, professionals alike have been able to name their price as demand for services has outstripped supply. Receipts from farm working

expenditure and reinvestment has filtered through local communities repeatedly through the province. Farmers are to Southland what a tight five is to a rugby team. If they do not win the ball, the team won't score tries. We feel those developing this plan have been distracted by regulatory overkill and taken their eye off the ball. This has resulted in a disconnection with reality, and a lack of understanding of Southlands economic and social dynamics.

## **Environment Southland Relationship with Community**

We support the ideal of protecting water quality and see merit in many objectives of the plan, however, we feel that the sweet spot has been missed and application has been poor. We feel that many of the discussions, meetings, documents and hassle over the last two years could have been avoided if the plan was pitched appropriately to begin with. It has been of huge economic and time strain, much of which could have been avoided if the initial signals were read. There was community engagement in 2015, however, we feel our sentiments were ignored and there was zero adjustment in relation to our input. Many of the suggestions made by the community back then are merely being repeated time and again now in reference to the arbitrary flat rate of 20 hectares or 50 hectares intensive winter grazing area or the cultivation on hill country rule. This leaves us concerned these meetings, discussions and prior submissions in late 2015 were merely a “Kangaroo Court”, jumping through hoops, box ticking exercise just so “the farmers had a say”. We hope the same does not apply to this hearing process.

We are concerned at a lack of cost benefit analysis of the plan in reference to the Section 32 Report. The implications of this is a headlining issue, especially in reference to dairy farming and intensive winter grazing on Old Maitara and stock exclusion and cultivation on hill country. The level of cost benefit analysis falls well short of the Resource Management Act’s requirement to “use a level of detail that

corresponds with the scale and significance of the effects of the plan”. This review should be able to identify the costs to the community and quantify the supposed improvements in water quality as a result of the plan... Only then we can identify “is the juice worth the squeeze?”.

There is little about this plan that indicates to us that it will meet water quality objectives in Wendonside. On the other hand, we have paid a premium price for land in “Old Mataura”, comparative to prices paid in some other Physiographic Zones (PZs), yet now our land use options are restricted below what can be done in those other PZs. We request that any gross profit reduction or capital erosion because of this plan should be compensated for until its proven this plan meets water quality objectives.

We are concerned at the lack of standardised water quality testing in Wendonside of both groundwater and surface water, which is why WE have engaged Dr Sklash for advice and the Wendonside catchment group is engaging a sampling programme on their own accord. For example, we have not seen any water quality data for the Mataura River all the way from Parawa to near Mandeville, totally bypassing the Wendonside area...

Wendonside which is approximately 8700 hectares only has 3 State of the Environment bores. As John Smith mentioned on his 1200 hectares up until last year he had had zero samples taken. The same could be said for us until we purchased the

Wendonside School property recently with a SOE bore on it. We have heard Alistair Manns anecdote on the Wendonside School well in regard to the adjacent dairy consent, with Environment South instructing all the effluent to be concentrated on a small area potentially compromising this well. When WE were notified this well was reading high nitrates, we inspected the well head to find it was below ground level inviting any run off contamination. In recent years the nitrate concentration of this well has subsided... It could be due to the change in effluent practise... It could be due to the correction of the well head... Or a combination of many factors. Point being that engaging a broader more standardised sampling regime will enlighten us on reality, helping us identify any critical contributing factors and to address them.

We were concerned that the time between the release of the plan and deadline of submissions was merely a few months to digest, investigate and submit on an entire plan change. This may be suitable for a few rule changes but not an entire plan. These were ambush tactics, meaning there was no way we could critically analyse detail appropriately, and we were bound to miss crucial points through lack of time.

We were concerned to observe that immediately after the plan release there was panicked water testing by Environment Southland samplers in Wendonside. This would have been more appropriate before the plan release. As mentioned, rushing through rules and regulations will result in erroneous decision making. Rules from

this plan need to be integrated over a sensible timeframe to allow the relationship between good management practise and water quality to unfold.

Lastly, we are concerned with the statements such as page 249 of the Section 42A report, section 7.450. We feel we are victims of some “window shopping” of evidence. This section states that the Old Mataura has a median nitrate reading of 10mg/L. When speaking in a Wendonside context especially we feel this is premature, Dr Sklash will highlight some areas of concern on the representation of the data.

## **Physiographic Zones**

We request PZs be left beyond the plan. We acknowledge the merit of them as a guideline on what to expect of the landscape in a general sense. But the attempt to apply them in a planning context in this instance has proven problematic. We are not sure why ES felt the need for Southland to revolutionise a farming/water quality model, when we are 30 years behind more developed societies around the world in recognising this issue. Can we not just adopt the best ideas from America and Europe and adapt them in a local context....? In these societies it is worth noting that improved environmental outcomes are supported by government and consumers, not just farmers. Recognition that sustainable food production is a community wide issue, not just a farmer problem.

If this request of removing PZs from the plan is not met, we request a compromise that the restrictions of intensive winter grazing and new dairy farms in “Old Mataura” can be reduced in alignment with Oxidising, Riverine and Central Plains PZs. We need the opportunity to demonstrate that we CAN implement management strategies that CAN mitigate adverse effects, justifying further investment into these initiatives. For us on Old Mataura the current plan does not allow this opportunity and does not incentivise progressive solutions or embracing technology.

Up until now we have not been given a sound explanation on how Wendonside groundwater has a greater risk to WIDER society as far as nitrate concentrations go, when compared with Oxidising, Riverine or Central Plains. Our understanding of the relationship between Wendonside aquifers and our major surface water bodies, the Mataura and Waikaia rivers has proven to be limited.

The only justification we can see is that the Old Mataura or in particular the Wendonside zone are less densely populated, so it is Environment Southlands interpretation they will upset less people by regulating that area more strictly than higher populated ones.

The prospect that Environment Southland are proposing to DICTATE land uses instead of promoting more appropriate ways to manage, is non-democratic and a communist approach. This is especially unfair when we in the Old Mataura zone are competing in the same market against other PZs, and on a national scale when we in Southland are competing in the same market against those in the Otago region who are operating under a totally different effects based model. ES appears to have taken the regulatory path with excessive administrative and policing demands.

Alternatively, the Otago Regional Council have a... *"if it's not broken, don't fix it"* approach... and to only apply restrictions where necessary. To us this is more appropriate, opposed to a poorly received broad-brush approach.



## **Catchment Groups**

We believe that catchment groups are a more progressive, solution based approach that will go further towards community engagement... crucial in protecting water quality interest, in unison with agricultural progression. Rather than implementing a heavy bureaucratic process, which is going to be a nightmare to manage. We do not see what is going to be achieved through a default setting of resource consent for more and more activities. We suggest a more constructive approach using catchment groups to educate and extend expertise to the regions, to coproduce knowledge in a local context, embracing local experience. We believe communities will be more responsive to this approach, demonstrating *“how something should be done”*, promoting good management practises... and then, perhaps using the consenting model as a safety-net to capture non-compliers.

When managed at a catchment group level we can be responsive to the issues, the community have their hands on the levers and can implement change in a more timely fashion... Trying to manage communities or people remotely, with complicated and bureaucratic measures is not constructive... The longer the reach, the weaker the grip.

We feel the need to stop muddling with symptoms and start fixing causes. If the patient is bleeding out on the operating table, we don't call the nurse for more sponges, we find the bleed and stick our thumb in the artery.

IF water quality is in fact compromised... Planting a riparian zone with the local primary school is just a warm fuzzy distraction that might sell a few papers and is dealing with a SYMPTOM of run-off. Let's first focus on how the run-off got there in the first place. Is this a suitable land use...? Is the subsoil drainage system working...? Have good management practices been applied...?

Over the last 30 years we have seen new entrants into our district execute land use change with council consent to a land use which locals knew at the time was not suitable. Example: A stock reticulation system implemented, interfering with generations of tile and mole drains.... destroyed within a matter of weeks. These people have since sold and "capital gained" the property, left the province, and the council has since restricted that land use in this area, punishing and leaving the generational locals to pay for and clean up the mess. A catchment group model would not let this happen.

Let's see more emphasis on solutions such as suitability of land use, winter feed pads capturing nutrients, variable rate fertiliser and irrigation, GPS technology - controlled trafficking, zero tillage cropping, catch crops, carbon emission reduction techniques, crop calculators ... The list of technology and opportunity is endless.

All these tools we adopt on our farm, and all in aid of applying inputs in the right amount... In the right place... And at the right time... Minimising waste and any possible adverse effects on the environment. Every kilogram of grain, seed, meat, milk, wool and velvet is weighed off and every kilogram of fertiliser, every litre of water or fuel is weighed in, with a disciplined approach to keeping the system lean, otherwise we will NOT survive.

We are part way through executing a model on our farm where we can capture all effluent from the dairy shed, winter pad, calf shed and underpass which can be stored for many months until the growing season begins. We can apply these recycled nutrients as fertiliser via pivot irrigation in a precise manner, not only to the milking platform but also a mixed cropping support block. Using elaborate soil monitoring technology, we can apply these nutrients when ground conditions are favourable and avoid leakage beyond the root zone. This will reduce the need for the application of manufactured fertilisers and allow for a complete nutrient cycle. The Proposed Water and Land Plan will restrict our ability to execute this.

Simultaneously to emphasising good management practices we will be developing a more saleable farming model, selling the sustainable production and traceability to the consumer, allowing us to verify... “This is what we produced... This is how we produced it... And this is where we produced it”, all the while adding value to our produce, giving the ability to demand premium prices which will be filtered through our communities.

## **Rules**

I am reading on behalf of my older brother Brendan who cannot be here today due to snow in the lambing paddock.

Rule 22 e) New or Expanding Dairy Farms in Old Mataura.

As previously mentioned we believe the expressions “strongly discouraged” and “non-complying” are too harsh and should be reduced in line with those on Oxidising, Riverine and Central Plains PZs as discretionary activities in accordance with good management practices developed by catchment groups. To remove this land use as an option for farmers in the “Old Mataura” opposed to other parts of Southland, regardless of how well managed is unfair, and for reasons previously explained, undermines generations of work and democratic values.

### **Rule 23 – Intensive Winter Grazing**

Rather than the existing rule, we request that the restrictions in Old Matura be made the same as Oxidising, Riverine and Central Plains PZ. Not necessarily one rule is appropriate to apply across all systems in this instance. For a conventional flat to rolling property we would suggest approximately 30% of the landholding / entity to be more appropriate. In a hill country scenario, this may not be suitable, as with lower yield potential we may not be able to sustain all our stock on a given area... It may be more suitable to base it on an area per stock unit model.

The existing rule limiting to 20 hectares or 50 hectares / landholding promotes perverse outcomes... For example, it may force a farmer to grow as much yield as possible on as little land as possible and import feed resulting in high nutrient loading on just 20 hectares. Compare that to growing 60 hectares of less intensive crop, reducing the need to import supplementary feed, reducing the nutrient loading.

We are aware of the nitrate threat of intensive winter grazing on PZs with less ability to contain nitrate, but there are also risks of doing it on other PZs. A cow wintered in Wendonside on firmer ground, milder climates with less rain, will require less feed than a cow in sloppy mud, cooler and wetter climates. Feed utilisation is better, less energy required to keep warm, less energy expended traipsing through mud to access clean water, minerals and supplements, resulting in less risk of going lame and

preserving better environment for animal welfare. We support rule 23, c (i) the three year grandparenting rule in regards to intensive winter grazing.

All this considered, a cow in Wendonside will require approximately 20-25% less feed to be satisfied – that is 20-25% less nutrients and effluent the province as a whole has to deal with. Not to mention sediment and phosphate run-off and animal welfare hurdles experienced when grazed in some other PZs.

One good management practice with intensive winter grazing could be a winter feed pad, capturing nutrients to be applied in the growing season... Yet the Water and Land Plan restricts one winter feed pad per landholding regardless of how well managed it is, this appears restrictive.

The issue of setbacks for crops from waterways is a classic case for a catchment group on where each example should be taken on its merits. In Old Matura where it is stated the risk is deep drainage to aquifers, having a 3 metre setback on flat ground where there is no overland flow, is excessive and unnecessary. The 3 metres will be a nursery for weeds, creating more work and need for mechanical and chemical control further compromising water quality. FAR scientific studies have revealed there is no advantage in excess of 600 mm setback in this scenario.

## **Rule 25 – Cultivation and Rule 70 – Stock Exclusion**

Like the intensive winter grazing setback rules, the cultivation rules and stock exclusion need to be customised to meet the needs of each unique scenario. It is not a one size fits all situation. The catchment group model with local context is more appropriate, similar to how we have heard positive feedback in this forum for 'Land Use Sustainability Officers', taking each situation on its merits rather than one crude rule.

Regarding cultivation of slopes more than 20 degrees, to restrict to cultivating 1 in 5 years is not practical. This will mean that after a 5-year rotation, we will be back at the start of the farm. Our current system is 1-3 years in crop followed by pasture. From a cropping perspective, we will run into disease issues. This will place excessive cost on a hill country model as the initial pass is the most expensive, breaking down turf, etc. This will force more hill country stock to be wintered elsewhere FURTHER intensifying flat land.

We agree that all intensively farmed cattle and deer should be excluded from waterways on flat ground. We agree that alpine areas should not be mechanically cultivated, however that spraying and over-sowing should be allowed. There needs to be discretion applied in the middle ground on these large areas of hill country in



Southland. This discretion should be applied in co-operation between catchment groups, Environment Southland Officers and farmers to find suitable compromises.

Where appropriate, farmers will be forthcoming to restrict cultivation or exclude stock, just as the dairy industry is practicing on flat ground. In a hill country context, there will be times where this practise is appropriate and times when this practise is not. A more practical solution maybe a sediment trap at the outlet of the property which has ongoing monitoring and maintenance conducted by catchment groups.

To fence off all waterways below 16 degrees slope is not practical, slopes vary within paddocks, the cost of doing this, for our business alone, will cost close to \$2 million, not including the requirement to install stock-water reticulation and then maintain the regeneration of noxious weeds as a result of stock exclusion. We would like to re-enforce the message from other submitters that this rule alone would spell the end to deer and cattle in the New Zealand high country as we could not sustain that cost, putting the industry into billions of dollars of debt.

We support the idea that sheep should not be excluded from waterways, we are regularly complimented by fishermen on how much more pleasant it is for them to fish from banks on a sheep farm rather than wade through gorse and thistles on a dairy farm where stock are not allowed to graze. Sheep do not voluntarily enter water but do a good job of maintaining river margins, hence we support this rule.

To restrict cultivation to a certain slope or frequency is not the solution, like stock exclusion on hill country, it is about *how we do it* on a case by case basis which is more constructive.

In regard to the intensive winter grazing, hill country stock exclusion and hill country cultivation.... And all farming decisions we execute with great sensitivity to the surrounding landscape and contributing factors, for example: Is this paddock prone to overland flow... What is the soil type...? What is the paddock history or weed burden... What stock class will be grazing it... What will the stocking rate be... What is the shelter or aspect and will it expose the stock to prevailing weather... All these subtleties and nuances ingrained in generations of experience creates farmers intuition. The intuition required to understand a dynamic farming system that a bureaucratic plan cannot be expected to capture... Highlighting the need for close quarter, localized, case by case management.

## Poetic Summary

The 'Old Mataura' farming tree has taken 150 years of careful nurturing to grow... Birds nest in it, creatures shelter under it, children learn to climb, the fruit and nuts provide for the community, onlookers admire it...

We could... preserve the fruit, rake the leaves for compost, prune dead branches for firewood.

However, the current approach appears to be, trim the tops, root rake the base and gather up as much self-seeding as possible.

Eventually the trees will die of accelerated ageing, infection and lack of succession.

The community will starve as their stomachs have evolved to digest the fruit and nuts and cannot eat the regenerating Cocksfoot and Californian thistles, thus leaving a favourable seed bed for the 'Shanghai Creeping Ivy'.

This fable manifests a 130-year-old philosophy – and I quote:

“A democracy can only exist until voters discover they can vote themselves largess from public treasury, resulting that a democracy always collapses over loose fiscal policy, which is always followed by dictatorship.” – *Alexander Tyler 1887.*

There is some middle ground in this water and land plan that we need to sink our teeth into...

Let's not have our heads in the sand, profess that the Earth is flat and water quality is not an issue...

Let's not sensationalise the matter, panic and throw out the baby with the bath water... Let's deal with the scientific facts.

Let's farmers, catchment groups and policy planners alike work together to give the province the opportunity it deserves to apply practical solutions in a local context, conducive to protecting water quality interest and agricultural progression alike.