Proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments.

Submission form on publicly notified – Proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments.

SubForm	*PC12016*	**COVER SHEET**	
FOR OFFICE USE ONLY			
		Submission Number	
Entered		Initials	
File Ref		Sheet 1 of	

FORM 5 Clause 6 of First Schedule, Resource Management Act 1991

SUBMISSIONS CAN BE	
Emailed to	healthyrivers@waikatoregion.govt.nz ***Please Note:*** *Submissions received my email must contain full contact details. We also request you send us a signed original by post or courier.*
We need to receive your submission by 5pm, 8 March 2017.	

YOUR NAME AND CONTACT DETAILS		
Full names:	Stephen Borland, Chair, NZ Deer Farmers' Association – Waikato Branch	Leith Chick, Chair, NZ Deer Farmers' Association – Waipa Branch
Full address:	138 Waimanu Road, RD 1, Pukeatua 3880	455 Wairehi Road, RD 7, Te Awamutu 3877
Email:	southerndeer@xtra.co.nz	c/o campbell.clarke@xtra.co.nz
Phone:	07 871 0117	07 872 5551

ADDRESS FOR SERVICE OF SUBMITTER		
Full name: Lindsay Fung		
Address for service of person making submission: PO Box 10702, Wellington 6143		
Email: lindsay.fung@deernz.org	Phone 04 471 6115	Fax

TRADE COMPETITION AND ADVERSE EFFECTS *(select appropriate)*
☐ ~~I could~~ / ☒ I could not gain an advantage in trade competition through this submission.
☐ ~~I am~~ / ☐ ~~am not directly affected by an effect of the subject matter of the submission that:~~ ~~(a) adversely effects the environment, and~~ ~~(b) does not relate to the trade competition or the effects of trade competition.~~ ~~Delete entire paragraph if you could not gain an advantage in trade competition through this submission.~~

PLEASE INDICATE BY TICKING THE RELEVANT BOX WHETHER YOU WISH TO BE HEARD IN SUPPORT OF YOUR SUBMISSION
☒ I wish to speak at the hearing in support of my submissions.
☐ ~~I do not wish to speak at the hearing in support of my submissions.~~

JOINT SUBMISSIONS
☒ If others make a similar submission, please tick this box if you will consider presenting a joint case with them at the hearing.

IF YOU HAVE USED EXTRA SHEETS FOR THIS SUBMISSION PLEASE ATTACH THEM TO THIS FORM AND INDICATE BELOW	
☒ Yes, I have attached extra sheets.	☐ ~~No, I have not attached extra sheets.~~

SIGNATURE OF SUBMITTER *(or person authorised to sign on behalf of submitter)* *A signature is not required if you make your submission by electronic means.*	
Signature	Date: 8 March 2017
Personal information is used for the administration of the submission process and will be made public. All information collected will be held by Waikato Regional Council, with submitters having the right to access and correct personal information.	

PLEASE CHECK that you have provided all of the information requested and if you are having trouble filling out this form, phone Waikato Regional Council on 0800 800 401 for help.

Contents

Introduction

The Waikato and Waipa Branches of the New Zealand Deer Farmers' Association welcome the opportunity to provide a submission on the proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments (PC1).

The New Zealand Deer Farmers' Association (NZDFA) is a voluntary subscription funded incorporated society representing the regional and national interests of approximately 1400 financial members and an estimated 70 % of farmed deer. NZDFA expresses a political and functional view on behalf of all deer farmers and for industry good. It is governed by a national Executive Committee and has a strong regionally based branch network of 20 autonomous groups that also combine for a national perspective in an industry good role.

The Waikato (NZDFA-Waikato) and Waipa (NZDFA-Waipa) Branches of the NZDFA represent the national and regional interests of over 140 deer farmers in the Waikato region (although most of these are not in the Waikato or Waipa catchments). NZDFA-Waikato and NZDFA-Waipa have a long association with the Waikato Regional Council (WRC) in addressing environmental and land care challenges and implementing solutions in this sensitive environment. By way of example there have been many deer industry national environmental award winners from the region and the branches were instrumental in the development of the industry's 2004 and 2012 Landcare Manuals which contained four Waikato case study farms out of the 12.

The Significance of Waikato to the New Zealand Deer Industry

While deer farming is a small and young primary industry in New Zealand (established in 1970), the New Zealand industry is the world's largest exporter of venison and deer velvet antler and has the most sophisticated deer farming industry. The industry's resource is predominantly based in the South Island (over two thirds of the national herd), but the Waikato region has the fourth largest herd size in the country (8 % of the national herd) after Canterbury, Southland and Otago. In recent years, the deer industry has reduced in size (herd size and number of farmers) as dairying as a key land use has expanded and there

has been an associated move out of flat, gentle land into hill and high country. Waikato represents the largest North Island proportion of the national herd.

As at the end of 30 June 2015 the industry generated an estimated $255 million in (national) export revenue (free on board). Deer antler velvet has a small but valuable share of the export revenue (weighted average returns to deer farmers was $105 per kg of velvet over the last five seasons) and the Waikato is an important production region for velvet. In addition roughly 30 % of unprocessed velvet export is coordinated and distributed through one company based in the Waikato (and which also further processes and exports about 5% of the processed velvet production). Specialised venison processing operations are located in the Bay of Plenty and Manawatu.

While farming different species in the same area at the same time is more complex and challenging, due to different seasonal feed requirements, deer farming can complement sheep and beef cattle farming activities. As a result most deer farmers (estimated at 70 % nationally) also farm other livestock species.

The Deer Industry in Waikato

Deer farming systems are pastorally based on the annual production of venison, velvet and deer co-products; as such they share many similarities with sheep and beef systems and can be focused on breeding or finishing, and located in fertile plains or hill country areas.

Waikato deer farmers are mostly well aware of environmental risks from deer farming in the region and the industry has undertaken activities that help raise awareness and provide options for mitigating these risks. Recent activities pertinent to Waikato include:

- The establishment of the first industry focus farms in 2006 (Sustainable Farming Fund Project 05/103 "Focus on Deer") looking at water quality management. Monitoring showed how water quality could be improved through the use of *targeted* fencing of waterways, wetlands and stock management. Key messages and principles were developed from this project.
- The focus farm project was then extended and included Te Awamutu Station in Waipa. WRC land management officers were intimately involved in this project and their experience was invaluable.
- As mentioned above, Waikato/Waipa farmers actively contributed to the development of The New Zealand Deer Farmers' Landcare Manual in 2004 and the update in 2012. Waikato/Waipa farmers also took lead roles in the preceding deer industry Deer QA On-Farm Standards developed in 2003 (which contained minimum environmental standards); this industry quality assurance scheme has since been superseded by separate processing company quality assurance programmes.
- The industry was involved in the creation of the pan-agriculture industry "Industry-agreed Good Management Practices relating to water quality" published in April 2015.
- Waikato farmers were recently involved in a Sustainable Farming Fund Project 13/053 "Adoption of Deer Industry Environmental Best Practice" (which finished in 2016) and are included in a series of videos on managing environmental impacts from farmed deer (link – see series 3). The project (link) was led by Landcare Trust

which has worked with the deer industry across the country to run workshops and develop resources for deer farmers in this project and other regionally focused projects.

- The industry works in closely with Beef + Lamb New Zealand (B+LNZ) on environmental policy and extension activities and endorses the use of the B+LNZ Land and Environment Planning (LEP) toolkit.

A 2009 survey of our high country deer farmers (Peoples and Asher, 2012) as well as a recent Landcare Research survey of rural decision makers (Brown, 2015) indicate a high level of awareness of environmental issues, management and expectation amongst deer farmers.

The deer farming families in the region tend to be early pioneers in deer farming and/or multi-generational drystock farming families. Many deer farms in Waikato are in intergenerational family ownership, as a result our farmers take particular pride in farm stewardship and have pro-actively sought to understand the issues and respond with good practices and extensive communication efforts to raise awareness and encourage innovative solutions.

The industry therefore welcomes any opportunity to work in collaboration with the council and other community stakeholders on activities and initiatives to reduce deer farming's environmental footprint while maintaining a profitable and viable farming business.

References:

Brown P. 2015. Survey of Rural Decision Makers. Landcare Research NZ Ltd. Available: www.landcareresearch.co.nz/srdm2015.

Peoples, S.; Asher, G. 2012. High-country deer farming in New Zealand: Challenges of farming deer in extensive environments. In *Cervetec 2012: Proceedings of a Deer Course for Veterinarians, Deer Branch of the NZVA* No. 29, 87-91.

The New Zealand Deer Farmers' Association. 2004. The New Zealand Deer Farmers' Landcare Manual. Sustainable Farming Fund project 00/187.

The New Zealand Deer Farmers' Association. 2012. The New Zealand Deer Farmers' Landcare Manual. Sustainable Farming Fund project L11/137.

General Comments on PC1

Alignment with other primary industry groups

NZDFA-Waikato and NZDFA-Waipa note that deer farming covers a wide range of farm systems, commonly with other livestock (principally sheep and/or beef cattle) and use of arable cropping. Specialised components such as animal management of other livestock species or crop production will be covered by those organisations with relevant expertise.

NZDFA-Waikato and NZDFA-Waipa are closely aligned with B+LNZ and Farmers For Positive Change (F4PC). As such NZDFA-Waikato and NZDFA-Waipa fully support submissions from these organisations. In particular the request from B+LNZ for PC1 to be withdrawn is endorsed as the Section 32 Evaluation (s32) Report does not provide a satisfactory evaluation of social and economic impacts in, especially with regard to the withdrawn north eastern area from of PC1. In addition PC1 does not give effect to the National Policy Statement for Freshwater Management.

This submission consequently focusses on aspects of PC1 that impact specifically on deer farming, or have the potential to disproportionately disadvantage deer farming.

Alignment of Vision and Strategy with catchment community abilities

The Vision and Strategy states that the Waikato and Waipa Rivers are degraded and require, amongst other things, restoration and protection. At a broad level there is considerable merit in this intention and there would be few community members who would not support this, or the recognition that restoration and protection will be an ongoing intergenerational process (of 80 years).

NZDFA-Waikato and NZDFA-Waipa do however question the aspirational vision that the Waikato River is safe for people to swim in and take food from over *its entire length*. Setting such a target without regard to if this is realistically achievable under natural conditions seems to place unachievable expectations on landowners and the wider catchment community.

The main focus of PC1 appears to be on rural land use. While urban water quality management is acknowledged as being covered under existing policy as stated by the s32 report, it is unclear as to how effective this is and to what extent the requirements of the urban and rural communities are proportionate and realistic. Greater clarity of this will be helpful in building a positive relationship between all catchment communities and sharing of responsibilities to improve water quality.

NZDFA-Waikato and NZDFA-Waipa in conjunction with Deer Industry New Zealand (DINZ) would welcome an ongoing partnership with Waikato Regional Council to utilise industry information such as "*The New Zealand Deer Farmers' Landcare Manual 2012*", key environmental management practices identified in the Deer Industry Focus Farms Sustainable Farming Fund project and more recent environmental stewardship projects, and industry expertise in order to more clearly identify and encourage adoption of appropriate good management practices for deer farming in the region.

Is there a better way?

Sub-catchment community level collaborative approach

NZDFA-Waikato and NZDFA-Waipa strongly support an approach proposed by F4PC which on face value has some strong alignment with WRC's draft Implementation Plan.

F4PC propose that the rules for stock exclusion and limiting a farm's nitrogen loss rate to an historical reference point are replaced by a sub-catchment, community level, collaborative approach. This approach may be able to more effectively identify sub-catchment water quality issues that are more directly relevant to that community and land owners. This would allow, for example, sub-catchment groups in the Waipa catchment to focus on sediment and phosphorus without being constrained by inflexible nitrogen limits that might reduce the farm's ability to generate sufficient revenue to fund installing and maintaining sediment traps, constructing wetlands and targeted fencing.

Key strengths of this approach include:

- Water quality monitoring that is relevant to the sub-catchment and therefore the sub-

catchment community (understanding the issues).

- Completion of Farm Environment Plans (FEPs) that place the farm-scale risk management assessment in the context of the sub-catchment issues, rather than reliance on catchment-wide rules that may not provide cost-effective improvements to sub-catchment water quality.
- Community collaboration that creates shared expectations and responsibilities (no 'haves' and 'have nots') including the possibility for community activities that go beyond the farm boundary.

This approach and that proposed in the WRC draft Implementation Plan (see below) will however be compromised if land owners feel restrained by arbitrary nitrogen limits and impractical stock exclusion requirements.

Draft Implementation Plan for the Proposed Waikato Regional Plan Change 1

This draft Implementation Plan has only recently been available for public viewing and will require more time to refine and receive constructive input from land owners, industry-good bodies and other stakeholders.

NZDFA-Waikato and NZDFA-Waipa reserves support for the draft Implementation Plan as there are issues with PC1 that undermine the effectiveness of the draft Implementation Plan. Concerns noted so far with the draft Implementation Plan include:

- The limited expertise available within drystock advisory services for completing FEPs and nutrient reporting (using OVERSEER®) and the absence of a Certified Industry Scheme that covers the drystock sector. This will create areas of possible non-compliance and require low impact land owners go through an uncertain and poorly resourced process
- An unspecified audit frequency of FEP compliance in relation to estimated environmental risk and impact. Frequent auditing of low input, low impact farms would be a poor use of time and resources for all parties.
- Reliance on collaborative partnerships with industry-good organisations. The deer industry through NZDFA and DINZ fully support current environment initiatives from B+LNZ as well as ongoing dialogue with WRC through the Drystock Liaison Group. The industry reiterates its wish to have an ongoing partnership with WRC to utilise industry information and expertise. However it is also recognised that collaborative partnerships rely on good faith and respect while PC1 creates more obstacles for achieving this.

Impact of deer farming on the Waikato and Waipa catchments

Deer farming has historically been estimated to comprise about 3% of the pastoral sector nationwide, although this is likely to be lower in more recent years due to land use change. It is unknown how much deer farming would be in the Waikato and Waipa catchments but it is unlikely to be more than the national estimate (given that the majority of the national herd is in the South Island).

As PC1 is currently written, the combination of excessive stock exclusion requirements, an inflexible cap on nitrogen loss pegged to arbitrary historical dates and the inability to intensify land use from current land use (irrespective of the natural capital of the land) serves to act

as a strong deterrent to deer farming.

Deer farmers in the two catchments are concerned that should deer farmers exit these catchments due to high costs of compliance, the change in the contaminant loading impact on water quality would be negligible. Although a minor land use, loss of deer farming would reduce regional revenue and diversity of land use. Based on current product prices there may be few, if any, alternative land uses that would provide better returns on hill country.

Deer farming, as modelled in OVERSEER® in other parts of the country, is expected to have slightly higher nitrogen and phosphorus losses than sheep and beef farms on the same topography.

Currently a B+LNZ study is compiling nutrient budgets and Farm Environment Plans for sheep, beef and deer farms in the catchments and will provide some indications of nitrogen and phosphorus losses to water. However a farm in the Waikato catchment with relatively high stocking rates of deer (13.4 stock units per hectare) undertook a nutrient budget in 2016 and had loss rates to water of 13 kg N/ha/year and 0.2 kg P/ha/year.

As noted above, four Waikato deer farms have featured in the two editions of the New Zealand Deer Farmers' Landcare Manual. Three of these continue to farm deer (although the farmers of one farm are now deer farming in a different catchment) and are described in this submission to highlight the environmental values and ethos within the Waikato deer farming community:

Te Awamutu Station (now Wellington Farms Ltd, priority 2 catchment)

- Majority of the property is deer fenced (*ca.* $390,000 to date); self-feeding silage stacks with sediment pond; fence line siting to avoid fence line erosion from stock pacing.
- Ongoing riparian fencing and planting (6 ha at 2012, *ca.* $70,000 for planting only), shelter belts and native bush retirement.
- Water quality monitoring undertaken to identify areas for mitigation (e.g. wintering of hinds).
- 2012: Premier Winner - The Elworthy Environmental Award and Excellence in Riparian Management Award (The New Zealand Deer Industry Biennial Environmental Awards); Beef + Lamb New Zealand Livestock Farm Award and Massey University Discovery Award (Balance Farm Environment Awards).
- 2004: Duncan and Co. Environment Award (The New Zealand Deer Industry Biennial Environmental Awards)
- 2003: Merit award (Farm Environment Award Trust).
- The owners estimate they will need to spend in excess of $1,600,000 for compliance with PC1. The bulk of the costs are tied up in hill country fencing and water reticulation.

Waerenga Farm & Three Rivers Farm (note: the farmers were used as a case study in the 2012 Landcare Manual on a different farm in Lake Taupo catchment. They no longer farm there but continue to farm in the Waipa catchment)

- Retired 200 ha of native bush; land use capability is a priority consideration as is

investment in infrastructure (reticulated water systems, access races and fencing land into different land classes).

- Completed LEP levels 1 and 2 which have highlighted winter cropping and grazing management as a focus to improve water quality leaving the farm.
- 2014: Inaugural winners of the Silver Fern Farms Plate to Pasture Awards, which recognise and champion good land management, innovation, best practice, animal care, vision and understanding of what consumers want.

Raroa Red Deer Stud

- Major issues identified are erosion on steep faces and some races and fence lines channelling soil loss during heavy rainfall; stock classes matched with soil types and specific areas to control erosion.
- 40 ha retired and planted in trees; gully retirement, native restoration and six sediment ponds created resulting in annual improvement of water quality: Most of the water runs through sediment ponds or riparian planting.
- Riparian plantings undertaken 1988 – 2002, the entire farm perimeter is planted.
- Winner of the 2002 Balance Supreme Award in Farm Environment. Winner of the 2006 Fish and Game Award for Riparian Management in the Deer Farmers' Environment Awards.

Clark deer farm (Reporoa) – no longer deer farming

- Used a "Sustainable Development and Management Plan" in 2004 – the same principle as the B+LNZ LEP toolkit (identifies issues and prioritises actions, based on Land Use Capability units).
- Use of trees in plantations, riparian zones and wide space-plantings to reduce soil erosion and draw deer away from at risk areas (link); five detention dams constructed.
- Inaugural winners of the Deer Farmers' Environment Award in 2001 - Sir Peter and Fiona Lady Elworthy Environmental Award.

Specific Comments on the proposed Waikato Regional Plan Change 1

Stock Exclusion:

The specific provisions of proposed Plan Change 1 that this submission relates to are:

- **Policy 2 – Tailored approach to reducing diffuse discharges from farming activities, part e** (Requiring stock exclusion to be completed within 3 years following the dates by which a Farm Environment Plan must be provided to the Council, or in any case no later than 1 July 2026) – *page 30*
- **Rule 3.11.5.1 - Permitted Activity Rule – Small and Low Intensity farming activities, condition 2** (Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C) – *page 39*
- **Rule 3.11.5.2 - Permitted Activity Rule – Other farming activities, condition 2** (Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C and Conditions 3(e) and 4(e) of this Rule) – *page 40*
- **Rule 3.11.5.3 - Permitted Activity Rule – Farming activities with a Farm Environment Plan under a Certified Industry Scheme, condition 3** (Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C) – *page 41*
- **Rule 3.11.5.4 - Controlled Activity Rule – Farming activities with a Farm Environment Plan not under a Certified Industry Scheme, condition 5d** (Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C) – *page 42*
- **Schedule C - Stock exclusion** – *page 50*
- **Schedule 1 - Requirements for Farm Environment Plans, condition A.2.(a)(i)** (the provision of fencing and livestock crossing structures to achieve compliance with Schedule C; and) – *page 51*

NZDFA-Waikato and NZDFA-Waipa oppose the above provisions as they relate to exclusion of farmed deer from water bodies.

NZDFA-Waikato and NZDFA-Waipa support the principle of stock exclusion from water bodies but considers that the above rules and the requirements stated in Schedule C do not give due regard to either the practicality or the effectiveness (in terms of managing environmental impacts) of excluding farmed deer from water bodies in hilly terrain.

Excluding deer from water bodies is likely to be achievable on flat land where access is good and there is the ability to put in place reticulated drinking water supplies. Deer farming on predominantly flat land will most likely be intensively stocked which both increases the risk of environmental damage, as well as justifying the high cost of deer fencing compared with fencing for other farmed livestock.

Exclusion of deer from water bodies on more hilly country becomes increasingly problematical as the number of waterways increases, variable topography increases fencing costs or makes it impractical to fence in some areas and lower stocking densities reduce

available income. These rules and Schedule C do not currently reflect the reality of farming in non-flat environments with often multiple livestock species. Slopes up to 15 degrees will occur over a variety of landscapes and farming systems – not just intensively farmed livestock. Slopes above 15 degrees and up to 25 degrees will be even less likely to be intensively (deer) farmed.

The Section 32 Evaluation (s32) Report (pages 151-152 and 159-160) outline how the proposed approach to stock exclusion was determined but does not provide any meaningful analysis on effectiveness, practicality (*i.e.* can stock exclusion be achieved in all farming situations), or affordability. There is some reference to community consultation and discussion with Waikato Regional Council "implementation staff" but a cursory look at the community consultation report does not show any meaningful consultation with deer farmers. It is therefore unclear, but doubtful that an appropriate understanding of deer farming in the Waikato, or the cost of deer fencing was gained prior to the formulation of these provisions.

NZDFA-Waikato and NZDFA-Waipa note that Waikato Federated Farmers Farm Environment Plan Project (Journeaux, 2016) included one deer farm with fencing costs of $20 per metre on flat land. While fencing costs may vary depending on access to materials, this cost would be greater for more hilly terrain. Beef+Lamb New Zealand is undertaking a similar project over January – March 2017 and results and costings for some additional deer farms are expected to be available for evidence at the Hearings for PC1

Other examples of rather generic and qualitative assessment in the s32 report include:

- *"The provision for land over 25 degrees to have alternative measures to stock exclusion was based on the judgement that it is probable these areas will be lightly stocked, with a lesser effect on waterways, and riparian setbacks are likely to be less effective on steep land"* (page 159-160).

  NZDFA-Waikato and NZDFA-Waipa would contend that this same statement could equally apply to land below 25 degrees and suggest that the Land and Water Forum's fourth report to the government (November 2015) and the subsequent Ministry for the Environment consultation documents "Next steps for fresh water" (2016) and "Clean water" (2017) provide a better distinction between exclusion requirements for livestock intensity, land slope and achievable timeframes. A summary of these requirements is as follows:

  > Flat land, 0-3°: Dairy by 1 July 2017, beef cattle & deer by 1 July 2025
  >
  > Rolling/downlands, 4-15°: Dairy by 1 July 2017, beef cattle & deer by 1 July 2030
  >
  > Hill country, >16°: Dairy by 1 July 2017, beef cattle & deer only where break feeding by 1 July 2022
  >
  > Where a landowner is unable to meet these requirements they may apply to the relevant regional council to develop a 'Stock Exclusion Plan' that sets out alternative mitigations.

- *"The principle applied here is to use the best knowledge available to identify mitigation practices that can be described clearly in a rule that will assist in achieving a reduction of contaminants entering the water…*

  Therefore there should be a clear cause-and-effect relationship between the activity occurring and adverse effects on water quality, across a range of conditions… When

stock have unrestricted access to the beds and banks of rivers, streams and lakes, adverse effects on water quality are highly likely. The magnitude of these adverse effects varies depending upon a number of biophysical and management factors such as soil type, rainfall, slope, type and numbers of stock and length of time they are confined to an area" (page 159).

This analysis appears flawed with the last two sentences being contradictory: if unrestricted access is "highly likely" to have adverse effects on water quality, the biophysical and management factors would not have impacts on the magnitude of the effects. Practical experience and common sense suggests that it is exactly the biophysical and management factors that determine adverse effects and NZDFA-Waikato and NZDFA-Waipa contend that "*type and numbers of stock and length of time they are confined to an area*" are the most significant factors in determining the magnitude of adverse effects. Therefore blanket, catchment-wide rules on stock exclusion completely ignore the more logical and targeted risk assessment approach that is the strength of a Farm Environment Plan.

It is unclear from the s32 report or other supporting documents what evidence there is to justify a higher slope threshold and shorter timeframe for stock exclusion than those being proposed as national regulations.

NZDFA- Waikato and NZDFA-Waipa consider that ability to exclude deer from waterways and affordability need to be considered at the farm-scale and are *best assessed and implemented through a Farm Environment Plan*. This is consistent with the intent of Schedule 1 (page 51) but the reference to (conditions in) Schedule C and the time frames in the above rules effectively ignore a risk assessment approach.

NZDFA-Waikato and NZDFA-Waipa consider that deer crossing waterways, when being moved between paddocks or to the deer shed, are unlikely to have significant adverse effects due to:

- The short duration that a mob of deer will take to cross the waterbody and
- The infrequent occurrence of stock crossing.

The current rules and Schedule C penalise farmers moving stock around the farm where an intermittent crossing of a waterway may be required. This is particularly of concern for hill and high country farms.

In 2006, on a Southland deer industry focus farm, a mob of 400 deer crossing the Waimea Stream (when being moved from one paddock to another) was timed at taking three minutes to cross (Johnson, 2006). During that time and for four minutes after crossing, water quality guidelines (Australian and New Zealand Guidelines for Fresh and Marine Water Quality – October 2000) for *Escherichia coli* and Dissolved Reactive Phosphorus were exceeded, but over the course of a day these increases were negligible. Suspended sediment and ammonium-nitrogen measurements did not exceed the guidelines. Deer were clearly not excluded from the waterway but had *minimal and transient* environmental impact on water quality.

Deer farming does not rely on frequent (daily) stock movements along dedicated routes. Stock movement tends to be actively managed for the purposes of feeding (movement

between paddocks) or annual or infrequent movements to the deer shed (e.g. for velvetting, Tb testing if required, pregnancy scanning, sorting stock for slaughter). In these cases deer move quickly through waterways (typically at set crossing points). This low impact practice is also likely to be the case for beef cattle.

The definition of "water bodies" as provided in Schedule C is broad and has the potential to cover a large proportion of pastoral hill country that is lightly stocked. Stock exclusion (plus any required setback area) could effectively result in complete retirement of otherwise productive pasture. Where this occurs on land that is not intensively farmed it is unproven if this would have an appreciable and cost-effective impact on improving downstream water quality, particularly if alternative mitigation options (on non-flat, or greater than 4°, land) could be employed in lieu of complete stock exclusion (such as choice of livestock classes and management around water bodies, constructed wetlands and sediment traps and targeting of critical source areas).

NZDFA-Waikato and NZDFA-Waipa consider that defining a paddock's slope is pragmatically a subjective assessment due to variable topography. Therefore the slope threshold (e.g. 15°) for excluding stock from water bodies is best assessed and justified through a Farm Environment Plan. This is acknowledged in the s32 report on page 152:

"However, the slope of land surrounding streams in rolling hill country may be difficult to assess, and a slope threshold could result in a situation where a fence was required for only part of a stream's length. Slope thresholds have therefore been included in Schedule 1 that guides Farm Environment Plans, rather than in the rule itself."

However these thresholds still remain definitive rather than being explicitly identified as guidelines or "pointers" for assessing risk along with other risk factors such as soil type, stock intensity, animal behaviour and feed management with respect to environmental impacts on water bodies.

References:

Johnson, M (ed). 2006. Water quality studies – Southland Focus Farm. In *Focus on deer: An update from the Otago and Southland focus farms. Sustainable Farming Fund newsletter, Issue 5.*

Journeaux, P. 2016. Report to Waikato Federated Farmers, Farm Environment Plan Project.

NZDFA-Waikato and NZDAF-Waipa seek the following decision by Council:

☐ Accept the above provision

☐ Accept the above provision with amendments as outlined below

☐ Decline the above provision

☒ If not declined, then amend the above provision as outlined below

Amend as follows:

- **Policy 2 – Tailored approach to reducing diffuse discharges from farming activities, part e** (Requiring stock exclusion to be completed ~~within 3 years following the dates by which~~ according to a schedule of work as identified in a Farm Environment Plan which must be provided to the Council~~, or in any case~~ no later than 1 July 2026)
- **Rule 3.11.5.1 - Permitted Activity Rule – Small and Low Intensity farming activities, condition 2** (Cattle, horses, deer and pigs are excluded from water bodies ~~in~~

~~conformance with Schedule C~~ according to a schedule of work as identified in a Farm Environment Plan; and)

- **Rule 3.11.5.2 - Permitted Activity Rule – Other farming activities, condition 2** (Cattle, horses, deer and pigs are excluded from water bodies ~~in conformance with Schedule C and Conditions 3(e) and 4(e) of this Rule C~~ according to a schedule of work as identified in a Farm Environment Plan; and)
- **Rule 3.11.5.3 - Permitted Activity Rule – Farming activities with a Farm Environment Plan under a Certified Industry Scheme, condition 3** (Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C) – *page 41*
- **Rule 3.11.5.4 - Controlled Activity Rule – Farming activities with a Farm Environment Plan not under a Certified Industry Scheme, condition 5d** (Cattle, horses, deer and pigs are excluded from water bodies in ~~conformance with Schedule C~~ according to a schedule of work as identified in a Farm Environment Plan)

Schedule C - Stock exclusion – *delete entire Schedule C*

Schedule 1 - Requirements for Farm Environment Plans, condition A.2.(a)(i) (the provision of fencing and livestock crossing structures ~~to achieve compliance with Schedule C~~; and)

In addition Schedule 1 should be re-worded to allow slope thresholds to be practically assessed on-farm as guidelines with some margin for error of interpretation to account for within paddock slope variation.

Nitrogen Reference Point/Grandparenting:

The specific provisions of proposed Plan Change 1 that this submission relates to are:

- **Rule 3.11.5.2 - Permitted Activity Rule – Other farming activities, condition 4b** (The diffuse discharge of nitrogen from the property or enterprise does not exceed either i. the Nitrogen Reference Point; or ii. 15kg nitrogen/hectare/year; whichever is the lesser, over the whole property or enterprise when assessed in accordance with Schedule B) – *page 40*
- **Rule 3.11.5.4 - Controlled Activity Rule – Farming activities with a Farm Environment Plan not under a Certified Industry Scheme, Matters of Control ii., iii. and iv.** – *page 43*

NZDFA-Waikato and NZDFA-Waipa oppose the above provisions.

NZDFA-Waikato and NZDFA-Waipa oppose the use of determining a property's nitrogen reference point (historical nitrogen loss rate) that then functions as that property's "right to pollute". While it is accepted that this approach has been chosen to "hold the line" and allow time for future plan changes to move to a more equitable "natural capital" approach that links the rate of nitrogen loss to land characteristics, it does little to seek reduction in nitrogen loss rates or contribute to PC1's Objective 3 (short-term improvement in water quality).

In addition, not only does this approach not result in any improvement in water quality it

effectively restrains farms that are low nitrogen input and low nitrogen output production systems, thereby compromising their ability to earn revenue that could be used to undertake activities that contribute to reducing other contaminants such as sediment, phosphorus and faecal bacteria that might be more appropriate for these farming systems.

Holding farms to an arbitrary nitrogen reference point is clearly an ill-informed and poorly thought through decision that has very little understanding of the variability of drystock farm systems.

Deer farming as noted previously occurs on a wide range of topographies, soil types, and climate patterns and in conjunction with a range of land uses (farming deer alongside sheep, beef, cropping, arable, woodlots and retirement areas). This variation allows deer farms (and drystock farms in general) to spread risks from market changes and climatic variability (such as droughts or floods). As a result, nitrogen loss rates will vary to reflect this dynamic nature, although the magnitude of this variability is likely to be modest reflecting the low nitrogen inputs for many drystock farms. An inflexible nitrogen reference point therefore can severely limit a farm's ability to respond to these challenges.

More perversely the use of the nitrogen reference point effectively rewards existing high polluters and penalises low polluters (irrespective of the intent to limit the top 25th percentile of polluters). Neighbouring farms with different enterprises but same soils and climate will have different nitrogen reference points which will provide a comparative advantage to the farm with the higher nitrogen reference points: The land owner will be able to sell the land at premium, will also have more flexibility to change livestock classes and land use to respond to market prices, and may also be able to better access financing to undertake farm developments.

Conversely land owners with low nitrogen reference points may find that raising capital to fund farm improvements may be more difficult and that land value may be reduced. A perverse outcome of land under low nitrogen emitting land uses being bought and retired to offset and allow the continued use of high nitrogen emitting land use is quite possible.

NZDFA-Waikato and NZDFA-Waipa refers back to the exemplar farms described earlier in this submission. Three of these farms are still operating and although the nitrogen reference points have yet to be determined it would appear that the low impact land use and environmental improvements (voluntarily) undertaken on these farms over many years or decades will not be recognised under PC1, or may result in being liabilities for the land owners. Essentially these farms would have been better off to have not undertaken any environmental improvements and farmed as intensively as possible.

NZDFA-Waikato and NZDFA-Waipa considers that a more rational and equitable approach to managing nitrogen loss rates from land is one proposed by B+LNZ and is consistent with the medium-term intent "*that any future allocation of discharges should be based on the principle of land suitability as a starting point*" (s32 report, page 171).

B+LNZ proposes that nitrogen discharge rates are pegged to Land Use Capability (LUC) classes. As there is already a requirement to undertake a Farm Environment Plan which could incorporate farm-scale identification of LUC classes, overall nitrogen discharge rates can be readily calculated. B+LNZ provides example rates in its submission on Policy 1 (manage diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens).

NZDFA-Waikato and NZDAF-Waipa seek the following decision by Council:

☐ Accept the above provision

☐ Accept the above provision with amendments as outlined below

☐ Decline the above provision

☒ If not declined, then amend the above provision as outlined below

Amend rule 3.11.5.2:

As per B+LNZ submission, amend rule 3.11.5.2 to give effect to amended objectives and policies including Policy 1 and Policy 4, and enable activities with lower contaminant discharges including nutrient discharges to continue or to be established.

Amend Rule 3.11.5-4 as per B+LNZ submission:

In particular delete reference to the 75th percentile; amend so that all land leaching above the sustainable level should be required to reduce discharges overtime at a rate commensurate with their contribution to total load and taking into account economic considerations; incorporate reference to the sustainable nitrogen leaching number by LUC class.

Restricting Land Use Change:

The specific provisions of proposed Plan Change 1 that this submission relates to are:

- **Policy 6: Restricting land use change** – *page 30*
- **Rule 3.11.5.7 - Non-Complying Activity Rule – Land Use Change** – *page 45*

NZDFA-Waikato and NZDFA-Waipa oppose the above provisions

While the intent for the policy and rule is similar to the nitrogen cap (reference point) to hold the line in terms of current levels of contaminant loss from land uses, fundamentally this approach allows existing land uses to continue to operate regardless of the natural capacity of the land to 'buffer' the impacts of contaminants getting in to water bodies, nor the ability for land users to mitigate risks of intensification of land use (e.g. conversion of woody vegetation to farming, but with the establishment of sediment dams and wetlands).

Within hill country farms it is quite conceivable that the use of a FEP would identify areas that could be more intensively farmed and areas that might need to be retired or managed differently (e.g. not putting heavy stock classes on to certain soil types or topography).

Deer farming, typically as part of a mixed livestock operation, relies on varying the proportions of different livestock species on farm to respond to changes in markets (price signals), climate (e.g. drought) or opportunities (e.g. dairy grazing, arable cropping). Land use within a farm may therefore be dynamic – with variability in contaminant loss rates that are characteristic of mixed livestock farms.

It would be more desirable to enable land use change to occur provided this is in line with land use suitability and/or commensurate mitigation measures or practices *and* within a wider consideration of the sub-catchment water quality targets.

Under the more targeted sub-catchment approach (as suggested by F4PC) with the use of a FEP as a prerequisite, land use change could be possible while also managing environmental risks associated with specific land use or management practices (and relevant for the sub-catchment). In particular the ability to identify areas on farm that may allow increased revenue which could then be used to undertake priority mitigation activities (e.g. stock exclusion).

NZDFA-Waikato and NZDFA-Waipa also considers that the approach for policy 6 and rule 3.11.5.7 work against the intent *"that any future allocation of discharges should be based on the principle of land suitability as a starting point"* (s32 report, page 171).

One further consideration that requires more explanation is the treatment of the consent following the end of the stated time period in rule 3.11.5.7: *"changes in the use of land from that which was occurring at 22 October 2016 … is a non-complying activity (requiring resource consent) until 1 July 2026."*

Presumably the status of the land use is reviewed in the subsequent plan change but regardless, the 10 year (or less) consent term does not provide land owners with any certainty to invest in any required infrastructure or mitigation measures. A time period that is consistent with the amount of investment required would be helpful –25 year time frames offer more certainty for investment similar to those for urban or industrial consents.

NZDFA-Waikato and NZDAF-Waipa seek the following decision by Council:

☐ Accept the above provision

☐ Accept the above provision with amendments as outlined below

☐ Decline the above provision

☒ If not declined, then amend the above provision as outlined below

Amend Policy 6 as per B+LNZ submission:

- Enable land use activities including changes in land use where increases in contaminant discharges still enable sub catchment outcomes for water quality to be met.
- Enable changes in land use which occur within the sustainable level for a sub-catchment.
- Take into account the degree to which land use is optimised in relation to the natural capital of soils and sub-catchment water quality 80 year attributes targets.
- Provide for increases in nitrogen discharge where land use change will result in overall improvement in sustainable management and a decrease in soil loss, P loss, management of microbial pathogens, and enhancement of biodiversity.

Amend Rule 3.11.5.7 to reflect:

- That the rule does not apply to land use change where it does not exceed the sustainable nitrogen discharge level for the sub-catchment or where the discharge is within the land's natural capability.
- The consenting period is extended to 25 years from the date the consent is granted.