



Sustainable Land Management And Climate Change Feedback Form

TELL US WHAT YOU THINK

To make a submission on the Sustainable Land Management and Climate Change Consultation please use this form or the form in the discussion document: *Sustainable Land Management and Climate Change: Options for a Plan of Action*.

Please post your submission to:

Sustainable Land Management and Climate Change Consultation
Ministry of Agriculture and Forestry
PO Box 2526
Wellington

or email it to:

climatechange@maf.govt.nz

Please note that the closing date for submissions is: **30 March 2007**.

Alternatively, you can record your answers online at: www.maf.govt.nz/climatechange

Please note: Officials will prepare a public summary of submissions received on this discussion paper. The public summary will not attribute comments to individual submitters. However, your submission will be subject to the Official Information Act 1982 and may need to be publicly released. If you object to the release of any material provided in your submission, please specify the material that you consider should be withheld, and the grounds for withholding. Please note that even if you do identify specific material that you consider should be withheld, we cannot guarantee that we will withhold this material. All requests under the Official Information Act need to be assessed in terms of the Act and while we will take into account your views, we are not bound by them.

Who are you?

The following information will help us analyse your feedback for report back to the Government and the general public.

Are you responding as:

- an individual
 a group or organisation

If your submission is from a group or organisation, please indicate how many people your submission represents:

Please indicate your sector/interest/type of organisation:

- Agriculture: Description/type:
 Forestry: Description/type:
 Maori: Description/type:
 Government: Description/type: Auckland local government
 Other: Description/type:

Contacts for further information

As part of ongoing engagement and consultation on climate change, we may seek more comment about the design or implementation of some of the policy options outlined in this document. If you are willing for us to ask you for more information about your submission or your views on implementing options, please supply your contact details below.

Yes, I am happy to be contacted to provide more views and information

Name: Jo Mackay for Peter Winder, Chief Executive Auckland Regional Council
Company/organisation (if relevant): This is a joint submission from the councils of the Auckland region, namely: Rodney District Council, North Shore City Council, Waitakere City Council, Auckland City Council, Manukau City Council, Papakura District Council, Franklin District Council and the Auckland Regional Council.
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Questions

Goals for a Plan of Action (pages 24-25)

1. Are there any other goals you consider should be included?

We propose two:

"Building resilience to climate change" should be a goal. Building the adaptive capacity for the agriculture and forestry sectors should feature here.

"Land management in New Zealand will be sustainable, in relation to both climate impacts and the range of other environmental impacts, such as water and soil management, biodiversity."

2. Agriculture Goals: On a scale of 1 to 5, where 1 is 'strongly disagree', and five is 'strongly agree', how do you rate your level of support for the proposed goals for agriculture in this section? Please tick one box.

1 2 3 4 5

3. Forestry Goals: On a scale of 1 to 5, where 1 is 'strongly disagree', and five is 'strongly agree', how do you rate your level of support for the proposed goals for forestry outlined in this section? Please tick one box.

1 2 3 4 5

4. If you wish to make any comment on the reasons for your choices, please do so.

We support the draft document's first goal: "that the NZ economy must be internationally competitive". It is important for forestry and agriculture to maintain a high degree of viability within the Auckland region, to assist Auckland councils with our urban containment policy.

There is a strong trend in the Auckland region (particularly in Rodney District and Franklin District) for rural land to convert to lifestyle blocks. We believe there is likely to be adverse climate change effects from this conversion (for example, many lifestyle commuters travel large distances to work daily, and actual land use can be highly variable). Conversion of rural land to residential or lifestyle will be an issue around other major centres also.

While this is a smaller issue than conversion to dairying, we believe that it is of sufficient scale to warrant Government investigation. We request that Government undertake research into the effects of conversion from forestry and agriculture to lifestyle or residential land use (i.e. from lower to higher density land use) on climate change and other environmental and

social impacts. We also request that Government work with local government to consider policy measures appropriate at a national and local level, to mitigate the impacts if they are found to be significant.

Any research central government undertakes relating to climate change impacts from specific land uses will be useful and help to inform local government plan making and we request that this information be made available to local government.

We note that the document seems to concentrate on cost effectiveness as a major driver of climate change action. Policies should primarily aim to achieve a tangible reduction in emissions for the environmental good, and secondly aim to increasing community resilience to the impacts of climate change.

Adaptation (pages 28-30)

5. Do you have any comments on the ideas for adaptation discussed in Pillar 1?

We support the development of an action plan for adaptation to climate change, and wish to be involved in the development of the plan.

More information is needed to plan for adaptation. Some of this information exists, but it is not readily accessible. The existing information needs to be made more readily available to those needing to make decisions, including landowners, councils and others.

The Communities for Climate Protection programme is a useful programme and we support the extension of this programme to include adaptation to climate change.

We support the Government efforts to build community awareness of climate change impacts, and the development of more local/regional level indicators of the sustainability of land use management, so that landowners can know they are doing the right thing. Indicators need to be relevant to people (farmers and forest owners).

We note that there will be considerable costs borne by individuals and communities from climate change impacts. For example, direct costs are borne by people who are flooded out of their homes. There is also an indirect cost to communities (and direct cost to councils) when community infrastructure is washed away. The equity issue of "who pays" needs to be addressed.

Costs of infrastructure planning on local government as a result of responding to Pillar 1 initiatives need to be equitable - i.e the equity issue of "who pays when" needs to be addressed. Certainty and fairness is essential for the forestry sector, for both small and large forest owners - especially in the ownership of costs and benefits.

6. Are there any other actions you consider might be useful in helping the land management sectors adapt to climate change?

Include in the Plan of Action an objective for public agencies who own farms (such as the Department of Conservation, Landcorp and councils) to play a significantly greater role in assisting the transfer of technology and sustainable farming practices to the rural sector via demonstration farms and consistent best practice in land management.

For example, the Auckland Regional Council (ARC) is already taking on this responsibility for improving its own sustainable farm management and offering demonstrations, and is also increasing forest cover each year on its regional parks. The ARC has incorporated climate protection into its newly established farmplan project targeting the general farming sector.

A key government initiative should be the sharing of information about how the New Zealand climate is expected to change, and what impact this will have on different regions and landscapes of New Zealand.

The lack of this information, or affordability of obtaining information, is a primary barrier to territorial authorities taking action on adaptation and in implementing the measures identified in the “Preparing for Climate Change: a Guide for Local Government”. Particularly in rural jurisdictions, capacity and expertise for research and impact investigations could be more affordable through partnerships with central agencies such as NIWA and other research partnerships.

We note the recent Digital Earth international conference held in Auckland in August 2006, which is part of a global initiative to harness the world's data and information resources as tool to support sustainable development and use of natural resources. It aims to provide an integrated model to enable natural and human activity to be monitored, measured and to support forecasting. This type of initiative can assist in adaptation by providing access to detailed information in an open source format. Such information has the potential to support precision agriculture, where cultivation occurs around sensitive areas such as wetlands.

The development of model plan provisions would also assist local authorities.

7. How important is it that the proposed Plan of Action includes an ongoing process to adapt to climate change? Please tick one box (where 1 = not important and 5 = very important).

1 2 3 4 5

8. How strongly do you agree or disagree that the adaptation actions outlined are heading in the right direction? Please tick one box (where 1 = strongly disagree and 5 = strongly agree).

12345

9. If you agree, who do you think should lead the process to adapt to climate change? Please tick one box.

Government

Sectors

Government-sector partnership

10. If you wish to make any comment on the reasons for your choice, please do so.

Re 9. Leading adaptation

A focus on market mechanisms suggests a framework which will be self-perpetuating once established. Therefore sector involvement from outset is necessary but Government agencies need to support this, for example with hazard identification and management, information provision, and alignment of regulatory regimes.

Government agencies and councils need to lead initiatives and need to be able to share and pass them on to relevant sectors of industry with which they have relationships.

Business opportunities (pages 36-37)

11. Are there any other ideas you would like to put forward regarding potential business opportunities?

Rural tourism is an untapped market with important synergies with conventional pastoral farming and significant potential for more sustainable land management. Sustainability benefits could feature more strongly in land management if public recreation in the countryside was enabled by an incentivised and mandated public access initiative around existing centres.

Research carried out in Rodney District points towards a future rural economy that relies on the landscape and rural character qualities that provide lifestyle and recreation benefits rather than one centred around the productivity of the land. Adventure tourism, farm stays, secluded conference venues, walk and cycle touring, remote visitor accommodation, wine trails and a myriad of other activities have huge potential for sustainability improvements over

conventional rural land uses but are threatened by creeping domestication and development of our rural areas.

There is a finite limit to the extent to which rural tourism can replace production orientated farming activities. We suggest a balanced approach, which would use a range of initiatives including promotion and funding of agri-environment schemes in addition to eco-tourism and lifestyle options.

Moving towards (and securing the potential for) this future rural economy could offer significant benefits for climate change. The existing planning system, however, in both its legislation and its interpretation in the Courts is at present inept at protecting natural landscapes and rural character from the cumulative effects of development and the potential of future rural tourism opportunities is being eroded piece by piece by ad hoc unplanned development proposals.

The horticulture sector of New Zealand has much at stake in terms of the "food miles" debate. One way to change the focus of the debate in relation to New Zealand food exports is to provide research sites, sabbatical opportunities and demonstration farms for overseas farmers. This would give heart and increase business confidence in the food production sector.

12. How important do you think it is that the proposed Plan of Action includes actions to capitalise on business opportunities? Please tick one box (where 1 = not important and 5 = very important).

1 2 3 4 5

13. If you think this is important, who do you think should lead the process of identifying and developing new business opportunities? Please tick one box.

Government
 Sectors
 Government-sector partnership

14. Are there any other comments you would like to make on any of the business opportunities outlined in Pillar 3, or any other ideas you want to comment on regarding potential business opportunities?

A market advantage can be created by companies who are proactive in quantifying and reporting their impact on climate change (if it is relatively low!). This kind of reporting should be encouraged to support entry into international markets. A standard framework for reporting would support voluntary reporting.

Working together (pages 38-40)

15. Do you have any comments on the proposals and ideas about the Government, local government and sectors working together on the proposed Plan of Action? Your answer could include any other ideas you might have.

It is necessary to ensure cross sector involvement. As such it may be necessary to actively facilitate the engagement of those who may not otherwise have the capacity to participate in a collaborative manner. This is a particular issue for smaller businesses: many agricultural businesses already usefully undertaking best practice emission management but as smaller businesses they have limited capacity to commit time to such processes. Their input is invaluable and must be facilitated.

We suggest that climate change initiatives be built onto existing initiatives with the rural sector, for example relating to water, flood risk, energy, climate change, waste, biosecurity and biodiversity. The initiatives could all be linked under a sustainable land management framework.

16. How supportive are you of the land management sectors working together with local and central government under the proposed Plan of Action? Please tick one box (where 1 = not supportive and 5 =very supportive).

1 2 3 4 5

Agricultural options (pages 42-56)

17. Are there other options for addressing agricultural greenhouse gas emissions you would like to put forward?

We consider there is a need for agriculture to address its greenhouse gas emissions as part of the sustainability of agriculture in New Zealand. For example, this could include consideration in relation to the suitability of crops and farming practices in different locations; energy use on farms; the waste stream including packaging of farm materials and waste disposal practices; and the reliance of New Zealand agriculture on energy-intensive and fossil fuel based fertilisers. We acknowledge that many of these areas require research, and that any changes may need to be transitioned to minimise adverse economic and social impacts.

Promotion of organic farming systems may provide another option for reducing greenhouse gases:

1. Reduces fossil fuel energy use - uses organic matter and soil biology for crop nutrition, instead of energy-intensive fertilisers.
2. Increases the carbon content of soils - organic farming is based on the use of organic matter. This builds up carbon in the soil.
3. Increases soil methane oxidation rates - by not using artificial fertiliser, organic farming maintains the role of soil micro-organisms in oxidising atmospheric methane.
4. Reduces transport - organic farming is a local production system as most crop nutrition, animal health and pest control is carried out by natural processes in situ on farm. Non organic food, even if sold locally still involves the transport of fertiliser, animal feed, pesticides and veterinary drugs.

Further, the document should include measures specific to the horticultural (including viticultural) sector. In order to encourage sustainable horticultural land use, Government assistance is needed to ensure the development and application of tools for efficient greenhouse gas emissions management, for example an appropriate alternative to "OVERSEER" (a software programme to support nutrient management in the dairy industry).

18. If you had to make one choice out of Options 5, 6, 7 and 8, which would be your first preference? Please tick one box.

- Option 5: Charge on nitrogen fertiliser
- Option 6: Tradeable permit regime
- Option 7: Offset schemes for emissions
- Option 8: RMA standards to control GHG emissions

19. If you had to make one choice out of Options 9 and 10, which would be your first preference? Please tick one.

- Option 9: RMA standards to control new agricultural land uses after deforestation
- Option 10: Charge where deforested land is used for agriculture

20. Please rank the agriculture options presented in terms of your preferences on a scale of 1 to 5. Please tick one box for each option (where 1 = don't support and 5 = strongly support).

Agricultural Option 1: Research (page 44)

- 1 2 3 4 5

Agricultural Option 2: Technology transfer (page 45)

- 1 2 3 4 5

Agricultural Option 3: Voluntary reporting (page 46-47)

1 2 3 4 5

Agricultural Option 4: Incentive for nitrification inhibitors (page 47-48)

1 2 3 4 5

Agricultural Option 5: Charge on nitrogen fertiliser (page 49)

1 2 3 4 5

Agricultural Option 6: Tradeable permit regime for agricultural greenhouse gas emissions (page 50-51)

1 2 3 4 5

Agricultural Option 7: Offset schemes for agricultural emissions (page 51-52)

1 2 3 4 5

Agricultural Option 8: RMA standards to control agricultural greenhouse gas emissions (page 52-53)

1 2 3 4 5

Agricultural Option 9: RMA standards to control new agricultural land uses following deforestation (page 54)

1 2 3 4 5

Agricultural Option 10: Charge where deforested land is used for agriculture (page 55)

1 2 3 4 5

21. Do you have additional comments? You may like to comment on the reasons for your choice of options or on the design detail of how the options might best be implemented.

We echo the Local Government NZ position in relation to the use of the Resource Management Act (RMA) to control greenhouse gas emissions (option 8).

As stated in the discussion document, there are a number of disadvantages and implementation issues to this option, and from a local government perspective, these would be considerable impediments and would be costly to both the council (ratepayer) and to the applicant. The key problems are administrative and relating to measurement of greenhouse gas emissions. A higher level of greenhouse gas measurement accuracy is needed for any policies that rely on proof for enforcement through the courts. We consider that measurement of greenhouse gas impacts of various activities for rural activities is problematic. We would only support such a proposal where clear national guidance for the assessment of greenhouse gases is provided through a statutory instrument, e.g. through a national policy statement or national environmental standard. Climate change is primarily of national and international significance, so local decision-making over projects will require national guidance.

The local government sector would also be concerned at any proposal that would mean the loss of flexibility for local decisions to be taken.

Also, RMA control on new agricultural land uses after deforestation (Option 9) is a very blunt way of addressing emissions reduction and is not supported. It would be applied after the horse has bolted with respect to deforestation.

We note that there may be opportunities for clearer national direction to local authorities under the RMA. For example, a National Policy Statement on flood management could outline figures for expected sea level rise over 50 year and 100 year periods, while leaving the appropriate policy response to these figures up to individual local authorities.

We suggest that the agricultural sector will best be able to work with standards if the standards aim to reinforce best practice and if they fit with farmers' international market requirements. We request that any requirements enable small to medium sized enterprises (SMEs) to operate efficiently and effectively, or otherwise smaller farms will be squeezed out of business. Most Auckland farmers will feel the squeeze soonest from additional requirements because farm sizes are relatively small in the Auckland region, and farm sales will in some cases lead to changes to land use.

We support a price being put onto carbon emissions across all sectors of the New Zealand economy, including the agricultural and forestry sectors. We do not have a position on exactly how that should happen at this time. We also consider there is a role for forestry and other tree planting (e.g. regeneration of native bush) in providing credits as part of a broad emissions trading system.

We request that any regime include incentives as well as penalties for landowners, and that incentives and regulations relating to greenhouse gases be administered nationally, rather than regionally. Councils don't have the capacity to administer the complexity that greenhouse gases would require.

We support a simple mechanism for smaller landholdings. Direct pricing mechanisms such as the nitrogen inhibitor incentive and nitrogen fertiliser charge are examples of a simple scheme that would be workable for smaller farms, whereas a tradeable emissions mechanism may be unworkable for smaller players. However, transition to any incentive/charge regime must be staged so that viable alternative fertilisers are available. We support continued viability of smaller farms as these are important to the Auckland region. Land use regimes need to be flexible to maintain viability.

The capacity of farmers to take advantage of any of the options 1 to 10 will vary depending on the level of support provided, and the technical proficiency, size and nature of the farming operation. Therefore, we suggest that two packages of options be developed for land users. One option could be more appropriate/usable for those operations with limited capacity to undertake assessments of greenhouse gas emissions and the other option could be for those operations which could benefit from engaging in such schemes as trading of credits.

We believe that voluntary reporting in itself is unlikely to be effective in limiting or reducing emissions, though it may have its place in encouraging some landholders to become more aware of their emissions levels. There is no incentive for landowners to voluntarily report their emissions, unless they can use the information in the international marketing of their products. Even voluntary reporting schemes should be initiated within a standard reporting framework developed by Government.

Protecting the country look and feel of the rural areas of the Auckland region is extremely important. The issue of farm viability is critical due to the pressure for rural residential development in the area. Any significant change to the profitability of pastoral farming would have to be done in conjunction with an overhaul of how rates are levied under current legislation or “real” farming (which is still a critical component of the local economy) could begin to disappear from the district entirely.

Funding mechanisms would need to be put in place if enforcement or additional duties arising from these options falls on local government.

Conversion to dairying is not an issue for the Auckland region as we have a reducing number of dairy farms, although with an increasing herd size on the remaining dairy farms. Very little land is actually being converted to dairy. The Auckland region currently has 356 dairy farms with an average herd size of 200, and this number of farms has been shrinking in recent years by 10% per year.

We also note that the Communities for Climate Protection programme is a useful programme and it should also be extended to allow the quantification of farming emissions and the subsequent development of advocacy and voluntary measures by local government to assist in reducing the emissions profile of this sector.

Afforestation options (pages 58-62)

22. Are there other options for encouraging afforestation you would like to put forward?

We propose that Government provide additional direct financial incentives to such a point where the Permanent Forest Sink Initiative (PFSI) is an attractive option for marginal land. This could be phased out as the dollar value of carbon credits increases to such a point where PFSI Afforestation becomes commercially viable without the additional direct financial incentive.

23. Please rank the afforestation options presented in terms of your preferences. Please tick one box for each option (where 1 = don’t support at all and 5 = an option you strongly support).

Afforestation Option 1: Afforestation grants scheme (AGS) (page 58-59)
1 2 3 4 5

Afforestation Option 2: Providing growers of new Kyoto Forests with a choice between an afforestation grant scheme (AGS) or the devolution of forest sink credits and their associated liabilities (page 59-61)

1 2 3 4 5

24. If Afforestation Option 2 were implemented, which mechanism would you choose if you were establishing new forests (please tick one).

- AGS, or
 Devolved credits and associated liabilities, or
 A combination of both (ie. AGS for some areas and devolved credits and liabilities for other areas)

25. Do you have additional comments? You may like to comment on your reasons for choosing the option you did or on the design detail of how the option might best be implemented.

We support the Permanent Forest Sinks Initiative as it provides landowners with opportunities to sequester carbon, while achieving benefits for other functions such as biodiversity, erosion control and improving water quality, thus providing resilience to future impacts of climate change.

Forestry is one of the greatest polluting land uses during the milling phase and for the subsequent five years prior to the forest cover re-establishing. The proposed Afforestation Grants Scheme could be a useful interim mechanism to provide an incentive for landowners to afforest marginal land, prior to a carbon trading mechanism being implemented.

The Afforestation Grants Scheme may enable the retirement of marginal land, which would have co-benefits for improving soil conservation and water quality. In steep marginal areas with high rainfall, such as areas of Rodney District and the Hunua Ranges, incentives for landowners to retire marginal areas are welcomed.

If the Crown retained all sink credits and associated harvesting and deforestation liabilities for Afforestation Grants Scheme forests, this would remove any incentive and ability for the private sector to engage with the international carbon market and would remove the potential for local private sector trading.

There need to be options for landowners that take into account their capacity to respond. As such, rather than choosing between the options, we would prefer both options to be offered to the landowner to make a commitment to one of them.

Although resolving the allocation of emission units will be difficult for Option 2, we consider this is appropriate for addressing the inequality of offering grants for new forestry and only charges for changing the use of existing forestry blocks, and offering direct incentives to the market to encourage afforestation and discourage deforestation .

We note that the targets for renewable energy generation set in the 2001 National Energy Efficiency and Conservation Strategy, were given weighting in a number of Environment Court decisions regarding windfarm proposals. Although the targets weren't mandatory, they set a national benchmark that was given weighting because it was a national policy. We consider that similarly, for the forestry sector, if there were national targets for afforestation or deforestation, they could contribute to maintaining forestation levels.

Deforestation options (pages 63-68)

26. Are there other options for deforestation you would like to put forward?

27. Please rank the deforestation options presented in terms of your preferences. Please tick one box for each option (where 1 = don't support at all and 5 = you strongly support).

Deforestation Option 1: Flat charge on land use change from forestry to another use (page 63-64)

1 2 3 4 5

Deforestation Option 2: Tradeable permit regime (page 67)

1 2 3 4 5

Deforestation Option 3: Centrally determine deforestation levels (national deforestation limit) (page 66-67)

1 2 3 4 5

Deforestation Option 4: RMA controls on deforestation (page 67-68)

1 2 3 4 5

28. If it came to a choice between these options, how would you rank them in order of preference? Please insert the number of your preference in the box below. 1= your most preferred option and 4 = your least preferred.

<input type="checkbox"/>	Deforestation Option 1: Flat charge on land use change from forestry to another use
<input type="checkbox"/>	Deforestation Option 2: Tradeable permit regime
<input type="checkbox"/>	Deforestation Option 3: Centrally determine deforestation levels
<input type="checkbox"/>	Deforestation Option 4: RMA controls on deforestation

29. Do you have additional comments? You may like to comment on your reasons for choosing the option you did or on the design detail of how the option might best be implemented.

Rodney District contains substantial areas of forestry, many of which are economically marginal or unviable. In some of these areas the levels of soil loss which has occurred makes further cropping impractical. Because of its proximity to Auckland, the emphasis of conversion pressure is towards rural lifestyle settlements rather than dairy farming and the policy options do not address this adequately. For example, charging \$13,000 per ha for conversion of an 800 ha forestry block in Weiti to 600 or more house lots 30 minutes drive from the Harbour Bridge would not dent the profitability of such a development significantly. District Plan rules seeking to protect rural character can limit the loss of carbon sink potential by securing retention of a portion of these areas in open space. However, results will vary due to the nature of the resource consents process so shouldn't be relied upon to protect the carbon sink function of the forest. There will be variability between district plans as well.

Much more investigation is required to develop a range of options for controlling deforestation in terms of climate change effects. None of the above options should operate alone because there would be adverse consequences in some areas if this were to occur.

The inequality of offering grants for new forestry and only charges for changing the use of existing forestry blocks should be addressed.

The rural sector needs to be thought of more broadly than just focusing on a monocultural philosophy in primary production that favours large, mechanised farming methods such as conventional agriculture and forestry. This type of production does not provide the most sustainable land management results, including increasing vulnerability to climate change effects.

There are numerous benefits, particularly in small land holdings, from agroforestry, both for climate change mitigation, adaptation and other sustainable land management issues such as water quality and soil biodiversity (Schoenenberger and Ruark 2003, van Noordwijk, Roshetko, Murniati, Angeles, Suyanto, Fay, and Tomich, 2003).

There needs to be some recognition of agroforestry as a methodology for sustainable land management, particularly as this kind of land management regime will not, it appears, be incentivised under any of the initiatives proposed within the proposed mechanisms in spite of its potential to provide economic return, climate change mitigation and resilience to the agricultural and forestry sectors and to local communities.

**Thank you for completing this form. To submit this form electronically, please save it to your computer hard drive and email it as an attachment to climatechange@maf.govt.nz
Alternatively, print out and post your submission by 30 March 2007, to:**

**Sustainable Land Management and Climate Change Consultation
Ministry of Agriculture and Forestry
PO Box 2526
Wellington**

NB: Make sure you save a copy of your submission for your own records.