# Nutrient Management Plan User Guide

## Part A: Property details

This section identifies the property and the people responsible for the nutrient management plan.

- Complete the contact details.
- State the farm areas – total, effective (i.e. in production or fallow in preparation for production; exclude non-effective areas such as lanes, buildings, farm shelter belts) and irrigated (if any).
- State the irrigation type(s).
- Tick all of the enterprise types that apply.
- The template provides a sample statement of purpose. You can add to this if you wish.

## Part B: Plan objectives, land management units and environmental risk

- Code specific objectives are supplied in the template and must be adopted if they apply. If you choose to reject any of these, attach justification (e.g. a farm map showing that there are no areas of significant vegetation or wildlife habitat).
- There is space for additional 'property management objectives'. Write in any extra objectives the owner or manager chooses to set – e.g. objectives about achieving particular nutrient level targets or objectives about farm practices such as soil testing.
- There is space to identify 'land management units' (LMUs) for the farm – i.e. areas of the farm that are under similar management and that will respond to management in similar ways. Consider such things as soil types, slope, management activities (e.g. dryland or irrigated, significantly different crop types, areas receiving dairy effluent) and differences in historical management.
- If all of the farm is managed similarly and responds to that management in similar ways, only one LMU is needed.
- Make a brief note distinguishing each LMU in the table and note the area it covers.
- Mark these on a farm map and attach it to the NMP.
- On a separate piece of paper, make a list of farm nutrient management activities and their possible environmental consequences – e.g. nitrogen fertiliser use might lead to contamination of surface or ground water. For each of these, estimate the likelihood of adverse environmental effects and the consequences of such events. (See Chapter 4, step 3 of the Code for more information about assessing likelihood and consequences.)
- Consider only the inherent risk caused by the activity and do not discount the risks because good management will overcome it. Good management will be highlighted in Part C of the template.
- Note any activities that have medium or higher likelihood of adverse environmental effects and/or medium or higher consequences in the table of environmental risks. Tick the LMUs on which these will occur.
- Add any comments you want to make about the risks identified. For example, you might note industry rules or regional concerns about farm activities.
- Tick the box at the bottom of the page to indicate nutrient management activities that you will address in your planning. Three common activities are already listed – add your own labels for the other boxes if necessary.

**You can add any objectives you like, but be aware that management practices should then reflect these and set out steps to achieve them.**

## Part C: Management guides

- Pages for management planning are provided for nitrogen fertiliser use, phosphate fertiliser use and dairy effluent application. Complete these if they apply for the property.
- Note the types of applicable fertiliser, application rates and locations where they will be spread (LMUs).
- List any specific requirements your industry has about this nutrient use or activity.
- List any specific requirements your Regional Council has about this nutrient use or activity. These will include conditions that must be met for the activity to be a 'permitted activity' or conditions imposed as part of any resource consent held by the farm for this nutrient management activity.
- List the best management practices (BMPs) that the farm will use to reduce environmental risks from this activity.
- There are tables of BMPs in Chapter 5 of the Code. Choose suitable practices from these tables and note them in the NMP.
- It is not necessary to adopt all the possible BMPs for a particular risk or activity but the practices chosen need to be suitable for managing the inherent risks identified for the property.
- For each BMP included, note how the manager will check that these are implemented – e.g. diary entry or noted on a farm map.
- Use the management guide pages as a model for further activities if necessary. In each case, check that the activity itself is reasonably explained (e.g. fertiliser types and application rates, LMUs treated), industry or Regional Council rules are stated and best management practices have been listed.

## Doing self-assessment

- The property manager needs to complete a self-assessment at the end of the season, checking that the management practices did achieve the objectives set at the beginning.
- For each nutrient management activity included in the management guides, check through the industry and Regional Council requirements and tick 'yes' or 'no' to show whether these were met.
- For each management practice listed at the planning stage, tick 'yes' or 'no' to show whether these were actually practiced.
- Now consider the effects of this nutrient management activity overall. Were the Code specific and property objectives achieved? Tick 'yes', 'no' or 'partially' (if only some objectives were met and/or objectives were barely achieved or the manager was not satisfied with performance).
- If you have ticked 'no' or 'partially' then changes in management practice are required. Note the new management practices that will be used, the person responsible for ensuring these are implemented and a deadline for completion or introduction.
- Write in the actual completion date when each new management practice is adopted.
- The person responsible for the NMP (owner or manager) needs to sign off and date the self-assessment.

## Farm map

- Check that there is at least one farm map attached, showing the land management units or other distinctions between management areas.
- Extra farm maps can be added – e.g. to show areas receiving particular fertiliser types, to show riparian strips or protected vegetation that are not treated, etc.

## Nutrient budgets and soil test results

- Check that there is at least one nutrient budget attached for each land management unit, this is particularly relevant where you identified significant environmental risks from nutrient management activities.
- This nutrient budget should use the planned nutrient inputs and the expected production outputs from the area. If several fertiliser options were considered then the nutrient budget should support the final choice.
- Soil test results are important for establishing initial soil nutrient levels for nutrient budgeting.
- Further soil tests are useful checks on trends in soil fertility over time to compare actual changes with those expected and planned.

**The following document is an interactive PDF version of the Nutrient Management Plan Template and User Guide.**

**This document maybe filled out using your computer and printed, or alternatively printed and filled out by hand.**

## Contact details:


**Fert Research (NZFMRA)**

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**F:** 09 415 1359

**E:** info@fertresearch.org.nz
**W:** www.fertresearch.org.nz

PO Box 9577
Newmarket
Auckland

# Nutrient Management Plan

**Prepared by**

**for**

**Date**

*For help completing this section click here*

## Part A: Property details

| | | | |
|---|---|---|---|
| Property name: | | | |
| Owner: | | | |
| Postal address: | | | |
| | | | |
| | | | |
| Phone No. | | Mobile No. | |
| E-mail address: | | | |

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|---|---|---|---|
| Manager: | | | |
| | | | |
| Postal address: | | | |
| | | | |
| | | | |
| Phone No. | | Mobile No. | |
| E-mail address: | | | |

| | | | | |
|---|---|---|---|---|
| Property area (ha): | | | | |
| Effective area (ha): | | | | |
| Area under irrigation (ha): | water | | effluent | |
| Irrigation Type : | water | | effluent | |

Enterprise type: (please click to tick box)

| | | | | |
|---|---|---|---|---|
| Dairy | Dairy grazing | Sheep & Beef | Deer | Cropping |
| ☐ | ☐ | ☐ | ☐ | ☐ |
| Horticulture | Viticulture | Arable | Forestry | Other |
| ☐ | ☐ | ☐ | ☐ | |

Purpose of plan

*For help completing this section click here*

# Part B: Plan objectives, land management units & environmental risk

## Objectives:

Comply with all legal requirements related to nutrient management activities.

Take all practicable steps to maintain or enhance the quality of the property's water resources.

Take all practicable steps to ensure that there is an adequate supply of soil nutrients to meet plant needs.

To take all practicable steps to contain nutrients within the property boundaries.

Take all practicable steps to minimise the risk of nutrient contamination of any areas of significant vegetation and/or wildlife habitat.

Undertake a nutrient budget.

### Property management objectives

| | |
|---|---|
| Production | |
| Financial | |
| Environmental | |
| Personal | |

### Land management units

We have identified the following land management units on this property.
(See map described in Code Appendix 4 and Fact Sheet 1: Land Management Units and Land Capability Mapping)

*Extra information may be recorded on a seperate page and included with this document*

| Unit | Description | Approximate area (ha) |
|---|---|---|
| A | | |
| B | | |
| C | | |
| D | | |

## Environmental risks

We have identified the following environmental risks for these land management units.

*Extra information may be recorded on a seperate page and included with this document*

| | | Inherent risk assessment (see Fig. 3) | | | |
|---|---|---|---|---|---|
| Activity | Potential risk/s* | LMU A | LMU B | LMU C | LMU D |
| | | | | | |
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| * Potential risks | Yes | No |
|---|---|---|
| • Contamination of ground water | | |
| • Contamination of surface water | | |
| • Undesired changes in soil nutrient status | | |
| • Nutrient application to non-target land | | |
| • Accumulation of non-nutrient impurities in the soil profile. | | |
| • Excess stocking rate | | |
| • Pugging and compaction | | |
| • Poor cultivation methods | | |
| • Other | | |

Comments about specific risks identified.

From the table above, we have chosen the following nutrient activities as significant.
These are addressed in management plans.

| N fertiliser use | P fertiliser use | Effluent disposal | Supplement use | Other |
|---|---|---|---|---|
| | | | | |

*For help completing this section click here*

# Part C: Management guides

## Nitrogen fertiliser use

### Fertiliser applications

| Fertiliser type | Rate of application (kg/ha) | LMU where it is applied |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

### Industry and legal requirements

| Specific industry requirements<br>(Contact industry representative for details) | Met requirements<br>Yes | <br>No |
|---|---|---|
| | | |
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| | | |

| Specific Regional Council requirements<br>(Contact local Regional Council for their requirements) | Met requirements<br>Yes | <br>No |
|---|---|---|
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### Management practices

We have identified the following management practices to meet the objectives as set out in Part B of this plan.

| Management practices implemented to achieve our objectives<br>(See Chapter 5 of the Code for examples | Verification method | Checklist<br>Yes | <br>No |
|---|---|---|---|
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## Self assessment for nitrogen fertiliser use

Did the management practices achieve the Code objectives and any farm objectives?

| | | |
|---|---|---|
| Yes | ☐ | Objectives achieved |
| No | ☐ | Fill out table below |
| Partially | ☐ | Fill out table below |

| Changes in management practices required | Person responsible | Timeframe for completion | Completion date |
|---|---|---|---|
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Verification
I verify that the information supplied above is correct.

Property owner / manager

Signature .....

Date .....

## Phosphate fertiliser use

### Fertiliser applications

| Fertiliser type | Rate of application (kg/ha) | LMU where it is applied |
|---|---|---|
| | | |
| | | |
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| | | |

### Industry and legal requirements

| Specific industry requirements<br>(Contact industry representative for details) | Met requirements<br>Yes | <br>No |
|---|---|---|
| | | |
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| Specific Regional Council requirements<br>(Contact local Regional Council for their requirements) | Met requirements<br>Yes | <br>No |
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### Management practices

We have identified the following management practices to meet the objectives as set out in Part B of this plan.

| Management practices implemented to achieve our objectives<br>(See Chapter 5 of the Code for examples | Verification method | Checklist<br>Yes | <br>No |
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## Self assessment for phosphate fertiliser use

Did the management practices achieve the Code objectives and any farm objectives?

| | | |
|---|---|---|
| Yes | ☐ | Objectives achieved |
| No | ☐ | Fill out table below |
| Partially | ☐ | Fill out table below |

| Changes in management practices required | Person responsible | Timeframe for completion | Completion date |
|---|---|---|---|
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Verification
I verify that the information supplied above is correct.

Property owner / manager

Signature .....

Date .....

## Dairy effluent application

Do you apply dairy effluent?

Yes ☐ No ☐ – if yes, fill in the following, if no, go to next section.

### Effluent application

| Rate | LMU (site/location) |
|---|---|
| | |
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### Industry and legal requirements

| Specific industry requirements<br>(Contact industry representative for details) | Met requirements<br>Yes | <br>No |
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| Specific Regional Council requirements<br>(Contact local Regional Council for their requirements) | Met requirements<br>Yes | <br>No |
|---|---|---|
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### Management practices

We have identified the following management practices to meet the objectives as set out in Part B of this nutrient management plan.

| Management practices implemented to achieve our objectives<br>(Contact your local Regional Council for their requirements & refer to the DEC Manual) | Verification method | Checklist<br>Yes | <br>No |
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## Self assessment for dairy effluent irrigation

Did the management practices achieve the Code objectives and any farm objectives?

| | | |
|---|---|---|
| Yes | ☐ | Objectives achieved |
| No | ☐ | Fill out table below |
| Partially | ☐ | Fill out table below |

| Changes in management practices required | Person responsible | Timeframe for completion | Completion date |
|---|---|---|---|
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Verification
I verify that the information supplied above is correct.

Property owner / manager

Signature .....

Date .....

## Potassium fertiliser use

### Fertiliser applications

| Fertiliser type | Rate of application (kg/ha) | LMU where it is applied |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

### Industry and legal requirements

| Specific industry requirements<br>(Contact industry representative for details) | Met requirements<br>Yes | <br>No |
|---|---|---|
| | | |
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| Specific Regional Council requirements<br>(Contact local Regional Council for their requirements) | Met requirements<br>Yes | <br>No |
|---|---|---|
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### Management practices

We have identified the following management practices to meet the objectives as set out in Part B of this plan.

| Management practices implemented to achieve our objectives<br>(See Chapter 5 of the Code for examples | Verification method | Checklist<br>Yes | <br>No |
|---|---|---|---|
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## Self assessment for potassium fertiliser use

Did the management practices achieve the Code objectives and any farm objectives?

| | | |
|---|---|---|
| Yes | ☐ | Objectives achieved |
| No | ☐ | Fill out table below |
| Partially | ☐ | Fill out table below |

| Changes in management practices required | Person responsible | Timeframe for completion | Completion date |
|---|---|---|---|
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Verification
I verify that the information supplied above is correct.

Property owner / manager

Signature .....

Date .....

## Lime use

### Lime applications

| Lime source | Calcium Carbonate content | Rate of application (kg/ha) | LMU where it is applied |
|---|---|---|---|
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### Industry and legal requirements

| Specific industry requirements (Contact industry representative for details) | Met requirements Yes | No |
|---|---|---|
| | | |
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| | | |

| Specific Regional Council requirements (Contact local Regional Council for their requirements) | Met requirements Yes | No |
|---|---|---|
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### Management practices

We have identified the following management practices to meet the objectives as set out in Part B of this plan.

| Management practices implemented to achieve our objectives (See Chapter 5 of the Code for examples | Verification method | Checklist Yes | No |
|---|---|---|---|
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## Self assessment for lime use

Did the management practices achieve the Code objectives and any farm objectives?

| | | |
|---|---|---|
| Yes | ☐ | Objectives achieved |
| No | ☐ | Fill out table below |
| Partially | ☐ | Fill out table below |

| Changes in management practices required | Person responsible | Timeframe for completion | Completion date |
|---|---|---|---|
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Verification
I verify that the information supplied above is correct.

Property owner / manager

Signature .....

Date .....

*For help completing this section click here*

## Farm map

If you are filling this in on your computer, or online slot your farm map in here after printing the completed plan.

If you don't have a farm map discuss this section with your fertiliser advisor or consultant.

A farm map might be an aerial photograph of your land, a topographical farm layout, or another document you have created to show your farm's layout and specific details.

Attach detailed nutrient budgets and soil test results.

Include the most recent nutrient budgets (using the fertiliser applications detailed in the Nutrient Management Plan) and soil tests to support the Nutrient Management Plan. Historic soil test results are also useful to show soil fertility trends over time. Also include effluent area and its location.