Dairy farm effluent self assessment – helping to achieve compliance in Northland

This checklist is supported by the following organisations: DairyNZ, Farmers of New Zealand, Fonterra, Federated Farmers and the Northland Regional Council who are committed to improving water quality in both Northland and New Zealand. Minimising the risk of effluent entering surface or groundwater 365 days a year is a critical step you can take to maintain and improve Northland's precious water resources.

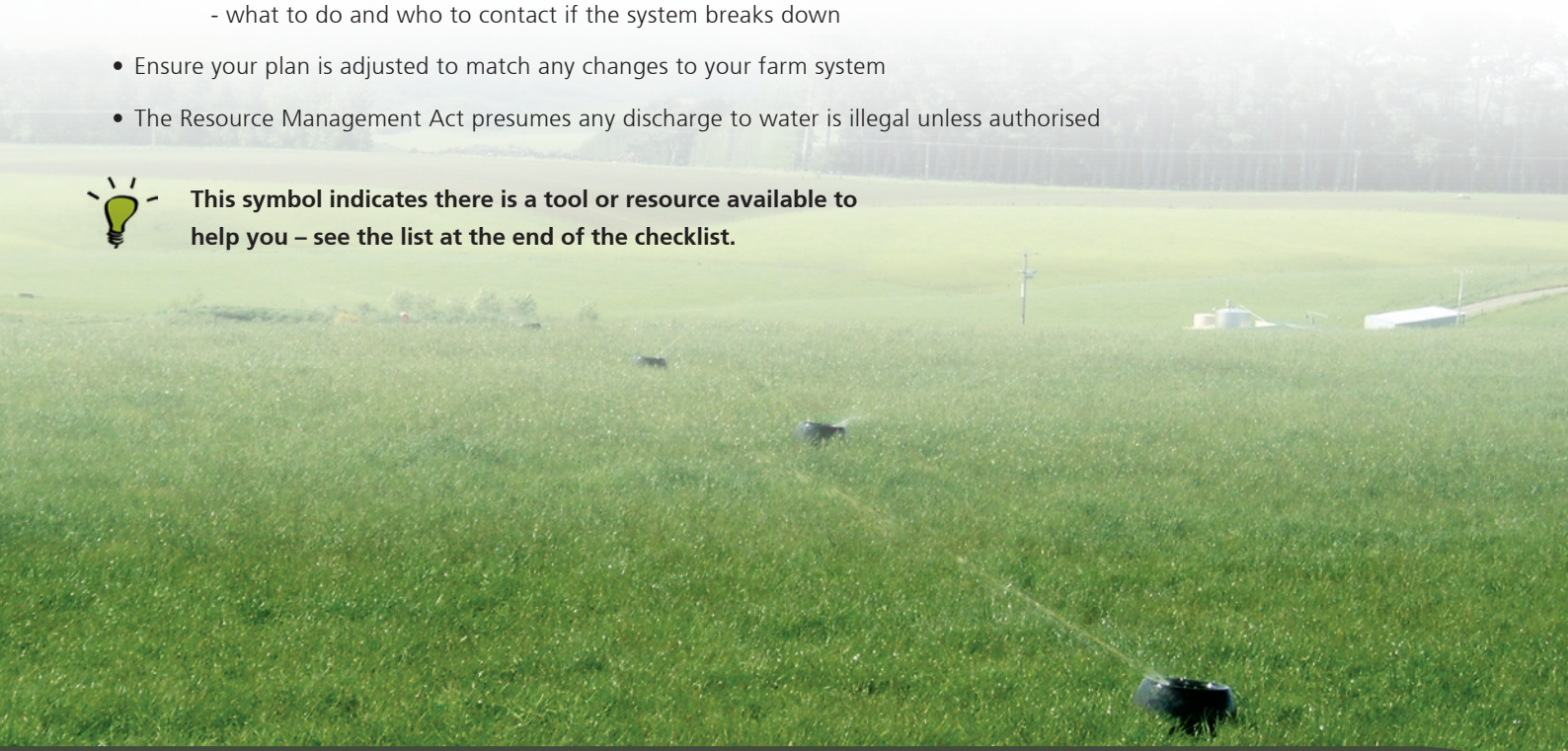
This checklist is a self audit for you and your staff to ensure ongoing compliance of your effluent management system with regional council rules. Some good practice tips are included to help achieve year round compliance.

We strongly urge you to follow up any crosses as soon as possible. If you need assistance, please contact one of the organisations listed at the back of the checklist for help.

NOTE: Please see for Rule 16 & 17 of the Regional Water and Soil Plan for Northland for exact rule wording if required (www.nrc.govt.nz)

- You must ensure that your effluent treatment/disposal system and any discharge from the system comply with regional rules and (where applicable) your resource consent conditions at all times, regardless of the time of year, weather conditions, breakdowns or staffing issues
- Ensure that contingency plans are in place and documented
- Aim for every day good practice rather than just achieving compliance on inspection day
- Fully train your staff on:
  - the rules;
  - the operation and maintenance of your effluent system; and
  - what to do and who to contact if the system breaks down
- Ensure your plan is adjusted to match any changes to your farm system
- The Resource Management Act presumes any discharge to water is illegal unless authorised

This symbol indicates there is a tool or resource available to help you – see the list at the end of the checklist.



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Northland checklist

Effluent discharge – includes solids/sludge/slurries generated from:

- milk room and washdown water
- yards, entry/exit races, concreted races
- sumps, sand traps
- ponds (desludging)
- stand-off areas (includes races if used for holding stock)
- feedpads and wintering barns and calf rearing facilities
- underpasses

	✗	?	✓
Do you understand the regional council rules for effluent management?			
Do you understand the conditions of your resource consent? (If you do not, please contact your regional council for an explanation of your conditions)			
Has your effluent system been upgraded if you have done any of the following: increased the number of cows, added imported feed, stand-off pads, feed pads, underpasses, wintering barns, loafing pads, calf rearing facilities, piggeries etc?			
At the farm dairy			
Stormwater from buildings is diverted away from the effluent system (i.e. guttering leads to drain or holding tank)			
Clean stormwater from the dairy yard is diverted away from the effluent system before the stone trap, but effluent contaminated stormwater is never diverted			
Effluent from all sources is captured within an effluent treatment system			
Sumps and gravel traps are sealed and are designed so that any overflows are directed into the effluent system. *Note: sealing requires construction with non-permeable material*			
Gravel traps and sumps are regularly cleaned out			
Solids removed from feed pads and gravel traps and other areas are stored on a contained, sealed surface which drains back into the effluent system			
Solids/sludges/slurries and stand-off pad bedding material is spread back over land with no runoff to waterways, and meets land application criteria (see Land Application section)			
Stand-off pads are designed so all effluent is contained within a bedding layer, or collected in a sealed effluent system			
There is enough contingency storage to ensure effluent is not irrigated during periods when soil is saturated (or likely to be, due to forecast of heavy rain). *Note: if your ponds are full you have no effective storage contingency*			

	✗	?	✓
Land application			
Pumps, pipelines, hydrants, connections and irrigators are all well maintained and managed			
Effluent applicator has been well maintained, such as tyre pressure, lubrication, nozzle condition, hoses			
There is at least a 20m setback between effluent spray/overland flow and any waterways and any drain containing water			
There is at least a 10m setback between effluent spray/overland flow and any dry drain			
There is at least a 20m setback between effluent spray/overland flow and any neighbouring property			
There is at least a 50m setback between effluent spray/overland flow and any occupied dwelling			
There is no effluent discharge via sub-surface drains			
There is no excessive ponding of effluent after application. *(Note: under council rules 'excessive' means there is no ponding for longer than 3 hours)*			
All necessary actions are taken to minimise overland flow of effluent			
Effluent application is evenly distributed onto the application area			
Management, maintenance, people and contingency			
Everyone in the farming operation understands the importance of effluent management and the consequences of non-compliance			
There is a documented operating procedure for effluent system operators which includes: • areas of the farm to receive effluent • areas of the farm to avoid applying effluent • basic use of the farm effluent irrigation system • a daily/weekly task list to sign off • correct irrigator hose layout • basic maintenance requirements of the effluent system • a contingency plan which includes: key contact names and numbers for when there are system failures, bad weather or issues which may compromise the correct operation of the system			
All people with effluent management responsibilities have been trained in the operating procedure, and training records are kept			
External training courses are utilised to increase understanding of good practice			
There is a documented effluent system maintenance plan in place which is followed			

	✗	?	✓
Pond discharge treatment systems			
Treated discharge does not cause significant colour or clarity change to the receiving water			
Pond is sealed (lined or compacted clay where suitable) to restrict leaching			
No untreated effluent is able to get into waterways or within setback areas			
The first (anaerobic) pond is routinely desludged. *(Note: ask the regional council how often the pond should be cleaned)*			
Embankments are not damaged and do not leak			
There is freeboard in the pond so they don't overflow. *(Note: freeboard is the difference between the water level and the lowest part of the embankment)*			
Pond surface and pipework is clear of weeds and obstructions			
The baffle or tee on discharge pipe from anaerobic pond is keeping solids out of the aerobic pond			
No evidence of effluent short-circuiting the system			
Solids are prevented from entering the aerobic pond			
Ponds are well maintained and fenced off			
Rule 17. Permitted Activity – Key points for making silage, disposal of dead stock and disposal of offal			
There must be no discharge: • within 50m (horizontally) from any surface water or water supply bore • within 50m of any residence • of leachate to water **and** • catchment runoff must be prevented from entering any disposal site • offal pits and dead stock disposal sites must be covered to prevent nuisance odours • the volume of any silage pit is not greater than 1000m^3 **Any activity which does not meet the permitted activity criteria requires application for resource consent.**			

Disclaimer
The information that appears in this checklist is intended to provide the best possible compliance guidelines for dairy farm effluent practices. However, the information is provided as a general guidance only and is not intended as a substitute for specific advice. Practices, systems and advice may vary depending on the circumstances applicable to your situation. The information may also be subject to change at any time without notice. DairyNZ, Farmers of New Zealand, Federated Farmers, Fonterra, Northland Regional Council and Agriculture ITO take no responsibility whatsoever for the currency and/or accuracy of this information, its completeness or fitness for purpose.

You can check out the rules on **www.nrc.govt.nz**, see Rules 16 and 17. If you need assistance with any environment issues on your farm, call one of these organisations for help:

Northland Sustainable Dairying Advisor	Annelisa Hackett - 021 241 6504
Fonterra Sustainable Dairying Team	0800 65 65 68
DairyNZ Sustainability Team	0800 4 DairyNZ (0800 4 324 7969)
Northland Regional Council	0800 002 004
Federated Farmers	0800 Farming (0800 327 6464)
Farmers of New Zealand	09 439 5219
Agriculture ITO	0800 691 111

Tools and resources

Tools and resources available to help with effluent management

The following are a series of practical tools which have been developed by DairyNZ with farmers. They are available to download on the **dairynz.co.nz** website under publications and tools, or order a copy by calling 0800 4 DairyNZ (0800 4 324 7969).

A Guide to Managing Farm Dairy Effluent

A good practice guide for farm decision makers. Topics include design, nutrient value, management, monitoring, measuring and storage

Irrigator Run Sheet

A one page template for recording travelling irrigator runs, includes date, paddock number, run number and sign off area for person responsible for moving irrigator

Tasks for Effluent Management

A small poster planner for ensuring daily and weekly management and maintenance tasks are completed, and signed off by irrigator operators

On-Farm Effluent Checklist

A one page checklist to assess how your effluent practices compare with best practice

Correct Irrigator Setup

A one page photo example of correct hose layout for optimal effluent applicator performance

Compliance Toolkit

An online resource covering all aspects of farm compliance; Employment, Health and Safety, Animal Welfare and Environment (released 2010/11). Download a copy of the Compliance Checklist, or use the consent scoping tool

FarmFacts

A series of info sheets covering effluent management

Effluent Training Schedule

Keep a record of individual staff training history and requirements with this one page effluent training schedule

Minimising Muck, Maximising Money Guide and Case Studies

A guide to design and management of feed pad and stand-off areas

Farm Enviro Walk

A self-assessment for environmental practices. Covers effluent, soil, nutrient, waterways and other hotspots on farm

Effluent to Land – Getting it right

A ten minute DVD outlining 7 key principles of applying effluent to land

Top Tips for Effluent Irrigators

A poster for the dairy, outlining top tips for trouble free effluent irrigators

Effluent Design and Standards Code of Practice

For effluent system designers and installers (due for release in the 2010/2011 season)

Best Management Practices for Maize

Covers using effluent on maize crops

Agriculture ITO Dealing with Dairy Farm Effluent

A one day course suitable for whole farm teams looking at the reasons why, and how to treat dairy effluent on farm. Includes a one-on-one practical assessment on the participant's farm. Agriculture ITO 0800 691 111

Agriculture ITO Effluent Management Planning

A one day course for herd managers, supervisors, sharemilkers etc. Templates and tutor expertise to help create an effluent management plan for your farm. Includes a follow up session to discuss practical implications. Agriculture ITO 0800 691 111

Farmers of New Zealand inc
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NORTHLAND REGIONAL COUNCIL
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