

Dairy Effluent Management

The main aim of an effluent irrigation system is to avoid losing nutrients and bacteria from the soil to groundwater or surface water.

Bay of Plenty Regional Council works with farmers and the dairy industry to develop effluent management systems that achieve the community goals for water quality and help dairy farmers comply with their resource consent conditions.

Which effluent system should I choose?

First you need to consider the soil type and slope of the discharge area. Second, your effluent storage system should be big enough so that irrigation can be paused when the soil is too wet.

Dairy NZ has information on designing systems, managing and operating systems, efficient effluent storage and other useful information available on their [website](#).

Upgrading your effluent storage facilities

An effluent pond that leaks, overflows or is built in the wrong place can affect the environment and the health and safety of people and animals.

For information about industry codes and standards for effluent system design and a list of accredited system designers see [Farm Dairy Effluent System Design Accreditation Programme](#).

Dairy NZ has an Effluent Technical Note for [Pond Leakage Measurement Approaches](#). This gives options for finding and testing pond leakage.

[IPENZ Practise Note 21](#) gives engineering guidance on designing and constructing Farm Dairy Effluent (FDE) Ponds.

Water Use in the Dairy Shed

You can find a worksheet on how to estimate water use in the dairy farm on page 16 of the guide to using the Dairy Effluent Storage Calculator (DESC) found at:

https://www.dairynz.co.nz/media/3223285/Using_the_Dairy_Effluent_Storage_Calculator_DNZ40_114.pdf

Find information about smart water use on farm at: <https://www.dairynz.co.nz/environment/water-use/smart-water-use-on-the-farm/>

Tools

The Dairy Effluent Storage Calculator helps you work out how much effluent storage you need. The calculator and guide to using the calculator is [here](#).

To calculate how much storage you currently have (total volume and working volume) on your dairy farm you can use [this](#) calculator from the Dairy NZ website. When you click the link you will need to then click OPEN. This will open an Excel spreadsheet where you can put in the relevant information.

Good Management and Mitigation Measures

Dairy NZ has a guide to good environmental management on dairy farms. The general guide for all of New Zealand is [here](#). The Bay of Plenty guide is [here](#).

Another good management practice guide is the [Industry-Agreed Good Management Practises](#) relating to water quality. This Good Management Matrix was made for Canterbury, but it works all over New Zealand.

Sustainable Dairying: Water Accord

Dairying, like most intensive land use including urban areas, impacts on water quality and water environments. Intensification of dairy farms and expansion of dairying into new regions makes it more important than ever to manage impacts on water.

The Sustainable Dairying: [Water Accord](#) aims to improve management of risks to waterways from dairying. Keeping our waterways healthy benefits the dairy sector and its reputation as a high quality, sustainable food producer, and all current and future New Zealanders.

The Sustainable Dairying: Water Accord was developed under the oversight of the Dairy Environment Leadership Group (DELG), which includes representatives from farmers, dairy companies, central government, regional councils and the Federation of Māori Authorities.

Training in effluent management

Here are some courses on dairy effluent management:

AgITO - [dairy farm effluent management](#)

Massey University - [dairy effluent system design and management](#)

Advice and Information

The [Land Management](#) Team at the Bay of Plenty Regional Council may be able to help you with funding and advice on riparian management and nutrient management.

Consent Information

Information about Resource Consents can be found [here](#).

For advice on which Regional Natural Resources Plan rule your dairy farming operation falls under, please contact the Consents Team on 0800 884 880.

Maps

Soils information:

<http://boprc.maps.arcgis.com/apps/webappviewer/index.html?id=1df59abe23ea4e99bea02fcbd69af031>

Consents:

<http://gis2.boplass.govt.nz/Html5Viewer/Index.html?configBase=http://gis2.boplass.govt.nz/Geocortex/Essentials/REST/sites/Consents/viewers/Viewer/virtualdirectory/Resources/Config/Default>

Water quality classifications:

<http://gis2.boplass.govt.nz/Html5Viewer/index.html?configBase=http://gis2.boplass.govt.nz/Geocortex/Essentials/REST/sites/WaterQualityBOP/viewers/Viewer/virtualdirectory/Resources/Config/Default>