### FARM Plans

# CERTIFIED FARM ENVIRONMENT PLAN – GUIDANCE



#### Disclaimer

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# ARM Plans

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### Introduction

Greater Wellington (GW) is facing unique challenges with its land use and water quality. Certified Farm Environment Plans (cFEP) are a practical tool for landowners to use to not only implement regulations but obtain improved environmental outcomes for their catchment and our region.

By having a cFEP, a farmer is able to design specific solutions to fit their own circumstances regarding soil, slope, climate and farming system. The process of creating a cFEP involves an individualised risk assessment of each farm followed by the development of an action plan to reduce the risk.

### What are Certified Farm Environment Plans?

Certified Farm Environment Plan (cFEP) is a regionally regulated farm planning process that provides a practical way to identify, manage and reduce the impact of farming and growing activities on freshwater. cFEP's are regulated under the Natural Resources Plan (NRP), with the requirements of a cFEP outlined in Rule 110 Schedule Z – <u>located here.</u>

cFEP's have been developed to align themselves with central Government's Freshwater Farm Plans (FWFP) regulated under the Resource Management Act. FWFPs are currently on pause and under review by the Government. Therefore, this guide is developed with the information best known at the time.

Please go to the GW farm plans webpage to see the full information, FAQ's and catchment boundaries to see if you require a cFEP [GW Farm Plans]

### Who needs a cFEP?

Certified Farm Environment Plans (cFEPs) are being phased in across the region and eventually, all farms in priority catchments will need a cFEP if they meet the following criteria:

- 20 hectares or more in arable or pastoral use
- Five hectares or more in horticultural use
- 20 hectares or more of combined use.

If do not meet the above criteria and do not require a cFEP, ie have 50ha ungrazed bush block out of a 65ha property. Then please contact Greater Wellington at <u>farmplans@gw.govt.nz</u> and we will verify this and remove you from further farm plan communications.

### **Frequently Asked Questions?**

We have a series of Freqently Asked Quastions that others have asked along their journey, these can be found here - <u>Farm Plan - FAQ's</u>. Each farming situation can be differnet and if you have a particular circumstance or question not already addressed please reach out to to us at <u>farmplans@gw.govt.nz</u>.

### Ways to develop a cFEP



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### What is a Certifier?

A certifier is an industry professional approved by Greater Wellington that has the necessary industry experience alongside specialist qualifications to assess your farm plans against the schedule Z requirements, complete the mandatory nutrient risk assessments and develop actions & mitigations specific to your farming system. This guide has the areas a certifier must complete highlighted in red (as seen here).

To ensure initial plans meet the Greater Wellington requirements, there are stages of Certifier accreditation. Please refer to our Certifiers webpage for a detailed explanation of roles and status along with the full list of certifiers and contact information - <u>List of certifiers</u>.

It's important you find a certifier that has good knowledge of your farming type (i.e., dairy or arable cropping) and understands how you want to develop your farm plan. We encourage you to have a clear conversation about the scope of service and costs involved prior to any work being undertaken.



### How to use this guide?

To support you on your farm planning journey, GW have the following tools and resources available on their website that should be used in conjunction with this guide - <u>GW Farm</u><u>Plans</u>.

- cFEP template and guidance document
- Sheep & beef and dairy farm cFEP examples
- Free online mapping tool
- Links to farm planning and industry resources
- A team of environment restoration advisors that are available to support you through this process

These resources can support farmers and growers motivated to write part of their own plan or rural professionals who will complete a cFEP on behalf of a farmer or grower. If needed, support is available from Greater Wellington (GW) advisors.

This guide correlates with the cFEP template and designed for you to regularly refer to the appropriate sections while filling in the template.

To future proof your farm plan and link it to your catchment context, this guide and template goes beyond the minimum requirements under the NRP schedule Z requirements. The sections not required for a cFEP are highlighted with a yellow box (as seen here). We strongly encourage you to include these sections within your farm plan to avoid duplication with possible future regulations and to make your plan more comprehensive.

### Where do I start?

Farm planning requires every risk to be assessed, and mitigations put in place to reduce the impact of these risks. There will be variability between cFEPs as is influenced by the farming system and the biophysical properties of the farm. Flexibility is a necessity as changes to the farming system and risks will influence the mitigations selected. In general, the greater the risk of contaminant loss from a property, the greater the scale of reduction expected in a cFEP through the use of mitigations.



### Step One – Collate your farm information

Start by collecting the relevant farm information to help you complete the different sections required in our template, this includes:

- Fertiliser information
- 🏯 Soil test results
- Stocking rates/numbers
- Section 2 Cropping practice and supplementary feed information
- Irrigation information (rates, timings, area applied)
- 🇯 Farm maps you already have
- Blank farm maps you can make notes or draw on
- Hereica Details of previous environment projects

### Step Two – Create farm maps

Before you start creating maps, we encourage you to explore GWs free online map building tool and watch the instructional video to understand how it functions and how to explore the variety of layers available - <u>Click here to watch video</u>. For written prompts on how to use our mapping tool refer to page 16 of this document.

There are several maps you are required to create for your cFEP. See section 7 below for a full breakdown.

For those of you who prefer to hand write on maps or not tech savvy we have created a map legend document for you to hand draw the required elements on maps. If the legend & maps are legible these maps can be part of your farm plan or provided to a certifier to help reduce time. This legend can be found in the tools and resources section of our farm plans webpage.

If you currently are or have previously worked with your GW Environment Restoration Advisor (ERA), they may be able to provide you with these base maps to draw on or data files such as fence lines which you can upload into a mapping tool. If you don't know who your ERA is, please contact <u>farmplans@gw.govt.nz</u>.

### Step Three – Fill in template

The information detailed in the *Template Section* of this document has been developed for you to use while you fill out a cFEP template. It explains what each section means and what information is required. You can find our templates in the tools and resources section of our farm plans webpage. You can also find examples of cFEPs for both Dairy and Sheep and Beef Farms here.

As no catchment or farm is the same, there is no one size fits all approach to writing your Plan. Writing your plan can be split into three key steps:

Risk identification and assessment: Understanding the catchment context and mapping your farm to allow for identification and assessment of risks.



Risk management: Determine how best to manage those risks. If you are already managing them, then outline this in your Plan to gain recognition for existing work. If the risks are not already being managed, then you need to add these "new actions" to your Action Plan.

Action planning: After determining what actions need to be taken, you will categorise and select timeframes specified for implementation. This process is outlined below:



### Step Four – See a Certifier to complete their relevant sections

Once you have filled in the template to the best of your abilities, it's time to engage a Certifier to complete their relevant section and review your farm plan. The Certifier must complete the following:

- Section 4 Farming activities and Risk Assessments
- Section 5 Action Plan
- Map The location(s) of the actions and practices that will be adopted to ensure the effective management of contaminant loss on the farm. [Schedule Z, section C1. (d)(xi)]
- Review the farm plan to confirm it contains all the requirements of schedule Z.



As part of their review process a certifier may ask you to clarify or provide further information in your farm plan before it is submitted to GW. The relevant sections a Certifier must complete have been highlighted in red throughout this document.

### Step Five – Submit plan to Greater Wellington

Now that your plan has been completed and reviewed by a Certifier the plan must be submitted to Greater Wellington.

The full farm plan can be submitted by yourself or the certifier via email to – <u>farmplans@gw.govt.nz</u>. We recommend you agree with your certifier who will submit the farm plan to make sure it does not get missed.



Source: Te Uru Kahika – A farm operators guide to writing a Freshwater Farm Plan



Source: www.landscapednz.org

### **Template sections**

### **1.0 Farm Overview**

### 1.1 Farm Story\* [Above Sch Z requirement]

The Farm Story includes farm history, goals, system currently implemented and direction the owners or managers want to head. It is a good way to introduce the farm and talk about where you are on the farm planning journey.

### **1.2 Property Details**

- Full name, postal and physical address and contact details (including email addresses and telephone numbers) of the person responsible for farming on the land.
- Legal description of the land being farmed which is the subject of the farm environment plan. This information can be found here <u>LocalMaps</u>.
- The legal description and ownership of each parcel of land if different from the person responsible for farming on the land.
- Any relevant farm identifiers such as dairy supply number, Agribase identification number, and valuation reference.
- Identification of any irrigation scheme from which water is, or will be, taken or any existing water permit authorising water take and use for irrigation. For example, the consent number WAR 123456 and not the bore/ Well number being BP 55/7799.

Map required in this section: Property boundaries of the land being farmed

### 2.0 Catchment Information\* [Above Sch Z requirement]

When developing a certified farm environment plan, catchment context should be considered. This is about understanding the farming or growing operation beyond the farm gate and part of the wider catchment or sub-catchment. Catchment information should give understanding of unique environmental features, current environment health status, cultural values and practices, and important recreational sites in your catchment.

Catchment information provides farm scale context to risk mitigations. Good Management Practices (GMPs) are a great starting point to address on-farm risk; however, their level of effectiveness will depend on the catchment context. Catchment information is also an important tool to help prioritise actions.

To future proof your farm plan the Catchment, Context, Challenges and Values (CCCV) information will be available through the online tool currently under development by Greater Wellington. This will be available via the GW farm plans webpage once completed.

The Greater Wellington Catchment Context, Challenges and Values (CCCV) online tool was used to answer the Catchments sections (Sec 2) seen in both the dairy and sheep and beef example cFEPs. This can be found <u>here</u>



More information is continually being added to this CCCV tool as we continue on this farm planning journey.

### 2.1 & 2.2 Catchment & Sub-catchment

A catchment is an area with a natural boundary (ridges, hills or mountains) where surface water drains to a common channel to form a river or creek. cFEP's have eight priority catchments – Waitawa, Parkvale, Otukura, Mangatārere, Waipoua, Kōpuaranga, Makahakaha and Taueru. These were chosen using the already prioritised catchments listed in Method 10 of the NRP, recommendations within the Ruamahanga Whaitua Implementation Plan and through scientific evidence such as state of the environment reporting.

### 2.3 Challenges

Are the threats and issues facing freshwater and the threats to identified values in your catchment. Areas to include are:

- Contaminants (for example nitrogen, phosphorus, sediment, bacteria)
- Freshwater habitat loss
- Degradation of sites and/ or species of cultural or community significance

What is the priority issue in my cFEP catchment?		
Nitrogen (N	In a farm system, the primary inputs of nitrogen to the soil are effluent from livestock, plant materials (organic matter), and synthetic fertiliser. Any N not taken up by plants can be lost through the soil.	
Phosphorus (P	On a farm, P is typically added through the use of phosphate fertilisers. When soil is lost by runoff (for example after/during rain), it takes the phosphorus with it.	
Bacteria / E.coil	E. coli is used as an indicator of human and/or animal faecal contamination. Bacteria are deposited on the soil surface and are, therefore, transported predominantly by overland flow. However, artificial drainage can also act as transport for sediment/bacteria to surface water bodies.	
Sediment	Sediment can come from soil erosion, human activities such as construction, cultivation, winter grazing and cropping or from the decomposition of plants and animals. The heavier the rainfall the more likely sediment can be transported.	
Periphyton	High levels of nutrients, primarily nitrogen and phosphorus, can cause increased growth (blooms) of plants and/or algae in waterbodies such as periphyton.	

### 2.4 Values

Are the things about your catchment that are important to the community, including:

- Catchment freshwater objectives, priorities, or outcomes identified in policies, regional and / or iwi plans
- Cultural significance and matters of importance to tangata whenua
- Sites and/ or species of cultural or community significance



### Example of how to include catchment context Information in your risk identification process:

The farm has several ephemeral streams and Critical Source Areas that run into the Otaio river during periods of heavy rainfall. This results in direct pathways for contaminants to enter the waterway which could impact the abundance and safety of mahinga kai, alongside the abundance of threatened and at-risk species downstream of the property. Risks that relate specifically to catchment context include:

- Cultivation of ephemeral streams and critical source areas risk of sediment and pathogen runoff impacting the waterway
- Winter grazing of crops risk of sediment and pathogen run-off impacting the waterway
- Winter grazing of crops risk of nitrate-leaching impacting the waterway Including catchment context information when selecting and categorising actions.
  - The following actions are identified in the action selection process and included in the action plan to address the risks identified above:
  - Leave ephemeral streams and critical source areas uncultivated when cropping the river flats and rolling downland
  - Use only minimum tillage techniques when cropping the rolling downland These actions would be categorised as catchment actions in the action plan as they arise from risks related to catchment context.

[Source: Te Uru Kahika – A farm operator's guide to writing a freshwater Farm Plan]

### 2.5 Farm focus

Identify and list key priorities on your farm that will assist in environmental improvements (i.e. riparian planting, waterway fencing, and nitrogen mitigation). This information comes from combining relevant GMP's based on your farming system and the CCCV information specific to your catchment.

#### Question to consider:

**1.** What farming practices do I currently undertake that contribute to reducing the priority catchment issue?

2. What farming practices could I try to contribute to reducing the priority issues?

**Next:** list in order of priority the key practices on your farm that will assist in environmental improvements. (Take into consideration - time, scale, cost, season and current farming operations; break the practice into manageable actions given the scale of your operation).

Where can you find information and practices to help?		
Industry agreed management practices	Farm menus	
that can be undertaken to reduce a	industry-agreed-good-management-practices-relating-water-	
particular priority issue	<u>quality</u>	
Environmental reports and data	Greater Wellington - Environmental data and information	
	Greater Wellington - Live data viewer	
Wairarapa weather data	LAWA wellington-region	

**Map required in this section:** Location of where the farm is within the Catchment and subcatchment (insert into 7.1)

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### 3.0 Land Management Units and Inherent Vulnerabilities

Land Management Units (LMUs) are areas of land that can be farmed or managed in a similar way because of underlying physical similarities. For each land management unit, it is required to complete an assessment of the inherent vulnerabilities. The assessment of land management units when combined with farm management activities will inform the risk assessment process, to determine the risk of contaminants entering freshwater. You need to considereach LMU individually. Look at what makes it different, what are the favourable qualities and what are the unfavourable qualities?

Creating Land Management Units involves:

- 1. Grouping similar land types i.e. river flats, rolling hills, north facing steep topography, effluent areas, non-effluent areas, cropping areas.
- 2. Evaluate their inherent vulnerabilities:
  - Riparian zones
  - Soil type/soil order, dryness, iron or clay pans, stoniness, soil texture, soil depth
  - Natural drainage
  - Changes in geology
  - Erosion existing and at-risk areas
  - Aspect
  - Flooding frequency
  - Elevation
  - Contour and slope
  - Erosion management areas
  - Wetlands
  - Stock risk areas (gorges, tomos)
  - Irrigation (separated by type)
  - Climate

Inherent vulnerabilities are things that occur naturally and/or are difficult to change i.e. waterways, flooding risks, soil types, topography. Irrigation is considered an inherent vulnerability as the infrastructure is difficult to change and generally fixed in the landscape.

The LMU page is designed to provide a clear and concise snapshot of the landforms, farming activities there, risks and priority actions within that particular area of land.

There is space for 5 land management units. You can add or delete pages accordingly.

For hill country farms Land Use Capability (LUC) mapping is a good starting point for when you are looking to define LMU areas. Refer section 'Additional information (C) Land use capability' for a more detailed look at LUC.



Te Uru Kahika - Regional and Unity Councils Aotearoa provide good examples of LMU's specific to pastural, dairy and horticultural land uses in their farm operators guides linked in section '(E) Additional online resource' at the rear of this guide.



Image: LMU map from cFEP Dairy Farm example

### 4.0 Farming activities & Risk Assessment [Required to be completed by a certifier]

### 4.1 Introduction

A risk matrix must be used when assessing the risk of the various elements to freshwater in each LMU. GW provides an example of a risk matrix for you to use. The risk matrix you choose must be provided in this section. Colour coding the table helps quickly identify the higher risk areas that should have associated mitigations described later to manage or reduce this risk rating.

### 4.2 Nutrient management

A certifier is required to complete a risk assessment considering factors set out in Table 1 and nutrient transport risks set out in Table 3 of schedule Z.

The risk assessment must be completed for nitrogen, phosphorous, Sediment & E. Coli. To fully understand the risk and implement the correct mitigations the risk assessment is broken down to each LMU. This is important for farming systems that operate on a large scale, have different blocks of land or have varying systems operating on a small scale.

**Mitigations** - The farm environment plan must provide a description of the good management practices (GMP's) and mitigation measures that are taken or are planned to address the relevant risk factors in Tables 1-3 of schedule Z. The mitigations must:

• minimize nitrogen leaching loss, phosphorus loss, sediment loss and *E.coli* loss from activities on the farm, and

2.2 Nitrogen							
		Risk rating (High, Medium, Low)					
	Risk factors on your farm	Land Management Unit (LMU) or Paddock					
Risk		Whole farm	1: Pivot	2: Sprinklers+ non- effluent	3: Sprinklers+ effluent	4: Effluent	5: Dryland
Nitrogen loss isk Nitrogen potentially entering	Animal loss risks: stock, feed type, grazing practices, off-paddock feeding	Medium	Medium	Medium	Medium	Medium	Medium
vaterways mpacting reshwater health or frinking water quality	Fertiliser loss risks: excessive nutrient levels (beyond plant needs), direct application to waterways	Medium	Medium	Medium	Medium	Medium	Medium
	Effluent loss risks: overland flow, application beyond plant requirements	High	NA	NA	High	High	NA
	Nutrient transport risk: artificial drainage, soils, climate, topography, structural mitigations	Medium	Medium	Medium	Medium	Medium	Medium

• avoid an increased risk of loss of nitrogen, phosphorus, sediment or *E.coli* to water.

**Contaminant management and farm context** – to allow the reader to understand the factors a certifier considered during their decision-making process, it is recommended two or three short sentences are provided under each table. This can educate the reader and answer questions a reader may have whilst looking at the risk assessment table.

# Plan

### 4.3 Critical source areas \* [Above Sch Z requirement]

**CSA's** are overland flow paths, small low-lying parts of farms such as gullies and swales, that can accumulate and move runoff (water and contaminants) to waterways. These areas can transport large amounts of soil, phosphorus and E. coli to waterways. The connection of these areas to water is the important element.

**Point Source Areas** are areas where substantial amounts of contaminants are leached, which have a negative impact on the nearby environment. The key point sources located on farm are unmanaged high concentration stock crossing points, silage pits, rubbish pits, used agrichemical containers, fuel containment, deceased stock, compost and offal pits.

Mapping required: location of any critical source areas, and hotspots for contaminant loss to groundwater or surface water (insert into 7.6)

Further resources: Ministry for the Environment <u>Critical-source-areas-Guidance-for-intensive-winter-grazing.docx</u> Waikato Regional Council <u>What are critical source areas?</u> Dairy NZ <u>Intensive winter grazing rules - DairyNZ | DairyNZ</u> Beef & Lamb NZ <u>Winter grazing | Beef + Lamb New Zealand</u>

### 5. Action plan [Required to be completed by a certifier]

The action plan table provides a 5-year programme of actions, both new or on going, for each activity undertaken on the property to avoid, remedy, or mitigate the risks to freshwater and its eco system. The programme of actions builds on positive works carried out over previous years and sets the base for a longer-term programme of works that will make a positive contribution to improved catchment outcomes.

In selecting actions, it should include the following information:

· Identify the timeframe by which each action must be implemented or achieved over the next 5 years with more urgent actions having closer timeframes.

 $\cdot$  Identify whether each action is an existing action (that is already being carried out on farm), or a new action

 $\cdot$  Describe the specific location or unit/s in which each action is to occur

 $\cdot$  Describe how each action relates to the identified risk that it is intended to avoid, remedy or mitigate (address)

· Identify the category of each action

We recommend you categories each action identified in your action plan using the following framework:

 $\cdot$  *Regulated actions* are actions that address a risk to freshwater and also relate to another relevant regulatory requirement ie stock exclusion.

 $\cdot$  *Catchment actions* are actions that address risks to freshwater and your priority catchment issue.

 $\cdot$  Supplementary actions are actions that address risks to freshwater but exclude catchment and regulated actions.

Your actions should be S.M.A.R.T:

**Specific** – define the action as specifically as possible. Describe exactly what will be done, implemented, and/or achieved.

**Measurable** – ensure you can practically demonstrate (show evidence) that the action has been or is being implemented.

**Attainable** – ensure that the action is achievable for your farm system in the timeframe you have assigned.

**Relevant** – ensure that the action will manage the identified risk. Describe how the action relates to the risk (and farming/growing activity) that it is intended to manage.

**Time-based** – identify a specific and realistic date for implementation or achievement.



Source: Ministry for the Environment - Developing a freshwater farm plan

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Under cFEP requirement there is no auditing process. This allows farmers some flexibility when reviewing their action plan each year, this allows you to accommodate for outside influences such as climate events or economic markets. It is not currently known what audit process will be involved in FWFP's. *(See additional information section below on how to review your cFEP)* 

The table of actions what is considered a 'fair and reasonable' programme of works appropriate to the risks identified. This should take into account the size and scale of your property and associated risk.

Greater Wellington contestable funding programmes are available to assist farmers with managing environmental risks on farm. Actions within the plan can aid in the application for funding. Visit the Greater Wellington Farm Plans webpage for more information or contact your local Environment Restoration Advisor (ERA).

### 6.0 Land Use and Stock Details

This section gives more information on the farm system being run. Delete the tables that do not apply to you (i.e., sheep and beef properties are not required to fill out the dairy section).

### 6.1 Farm System

Provides details of the farm you are operating.

### 6.2 Dairy / Sheep & Beef

The stocking rate required is an indication of the current and/or future stock within your farming system.

### 6.3 Cropping information

Details of feed type, location and current and future use cropping are required to be outlined. The location of the cropping needs to be included in a map, as it helps you visually assess risks to the land ie. proximity to waterways or inherent vulnerabilities of the paddocks selected.

### 6.4 Other farming practices

Provide an opportunity to comment on re-grassing, riparian planting, intensive winter grazing management, regenerative agriculture practices or any practice that is not covered by the other areas.

### 6.5 Farm infrastructure

Can provide a risk to the environment if not considered or mitigated. Descriptions of infrastructure including, irrigation, feed pads and animal housing, stock yards, silage pits, collected animal effluent storage, effluent disposal paddocks, offal pits, farm refuse dumps, burning holes, chemical and fertiliser storage locations should be outlined. This can include their current physical state, maintenance or known risks particular infrastructure poses to freshwater.

### 6.6 Nutrient information

On the details of current and future use of fertiliser is required to be outlined. A table is provided in the template.

### 6.7 Soil testing

Soil testing supports good fertiliser practice and farm decision making by providing clear information on the current nutrient status of your soil, to maximise yields within environmental optimums. Soil test information needs to be included to show the average soil test levels across the LMUs, to manage excess nutrient levels and reduce any risk excess levels may pose to the environment. If historic soil tests have been taken alternatively, please record and reference appropriately. Potentially Available N for crop paddocks is nice to have and can be vital information for crop requirements.

### 6.8 Supplementary feed information

Current and future use of supplementary feed is required to be outlined. This includes feed cut and carried on farm or brought onto farm from an outside source. Consideration of the storage facilities and grazing methods employed for supplementary feed needs to be given, as they are potential hot spots for contamination loss.

### 6.9 Irrigation Management tables

- Include <u>full</u> consent details. If you are unsure where to find this information contact Greater Wellington <u>notifications@gw.govt.nz</u>.
- Irrigation area and application rates.
- Where new irrigation is proposed, the following information must be provided.
  - the location and type of irrigation take and,
  - the location, method and rate of land irrigation and,
  - evidence to demonstrate that irrigation (if any) of the land will attain 80% water use efficiency,
- Our template has a table with all relevant headings or refer to the Dairy Farm cFEP example section 6.9
- For further information on water takes, bores and consents refer to the GW webpage <u>water-takes-and-bores</u>

### 6.10 Effluent Management tables

- Include <u>full</u> consent details including conditions of the consent. If you are unsure where to find this information contact Greater Wellington <u>notifications@gw.govt.nz</u>.
- Our template has a table with all relevant headings to be filled in or refer to the Dairy Farm cFEP example section 6.10



### 7.0 Farm Maps

The maps listed below are all required by schedule Z, some may not apply to the property. If a particular element does not apply to your property, please indicate it on the template table.

The GW farm plan mapping tool has layers which identifies all the regional scale land and soil information required for the maps, i.e., scheduled sites, drains etc. but not farm specific details such as riparian vegetation or stock crossings.

### Map

The property boundaries of the land being farmed

The boundaries of the main land management units or land uses on the land being farmed

The catchment and sub-catchment that the farm is within and a map showing the location of the farm within the sub catchment

Soil types and topography at 1:50,000 scale

The location (and for named waterbodies, the names) of any permanently or intermittently flowing waterbodies on the property including;

- rivers,
- streams,
- drains,
- wetlands,
- lakes, and
- springs, and
- specifically identifying any waterbodies that meet the criteria for stock exclusion in the Regional Plan and/or Resource Management (Stock Exclusion) Regulations 2020

The location of any site or river included in Schedules B, C, F1 and F3 of the Plan that is within, or adjacent to, the property

The location of riparian vegetation and fences (or other stock proof barriers adjacent to water bodies)

The location of any stock crossing points or structures on any water bodies where stock have access

The location of any critical source areas, and hotspots for contaminant loss to groundwater or surface water

The location of any surface and (where known) sub-surface drains

The location(s) of the actions and practices that will be adopted to ensure the effective management of contaminant loss on the farm [Required to be completed by a certifier]

Any other feature or characteristic of the land necessary to assess the risk factors set out in Tables 1 to 3;

- Effluent applications areas including liquids and solids
- Animal types
- Erosion/sediment issues
- Cropping areas



### **Additional information:**

### (A) How & when to review your farm plan

It is important to review and update your farm plan regularly – it should be a living document. Reviews are a 'snapshot' of your operational and environmental issues and should be used to improve implementation. Make sure your goals are still appropriate, tick off actions completed and set new ones for the year ahead.

It is about asking the right questions and working with others to get the answers. This is a good opportunity to involve farm staff to help identify challenges and find new solutions. What, if anything, would you change and why? Write down notes so when you are reassessing your risks and actions, you can adapt and do things differently.

Year:		Reviewed by:		
Identified risk	Location	Planned action / Mitigation	Time frame	
e.g. nitrogen leaching, phosphorus and sediment runoff	eg. Where the risk area is - Map reference	eg. What do you plan to do and by whom?	eg. When will the work be done?	

Below is an example of a template you could use when reviewing your farm plan.

### (B) GW Free online map building tool helpful hints



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### (C) Land Use Capability (LUC) mapping

### What is it:

Land Use Capability (LUC) Classification is a system in use in New Zealand since the 1950s to try and achieve sustainable land development and management on farms. The system classifies all of New Zealand's rural land into one of eight classes, based on its physical characteristics and attributes. Class 1 land is the most versatile and can be used for a wide range of land uses. Class 8 land has a lot of physical limitations, it may be extremely steep, and not generally suitable for arable, pastoral or commercial forestry use.



### How LUC can be used to assist in your farm planning:

Understanding the physical resources of your farm is essential to managing your farm business, LUC mapping helps you understand your land's capability for long term sustainable land use. Grouping the degree of limitation and its dominant features together can helpful when in hill country farms when assessing your farm for Land Management Units (LMU's) refer section 3 above.

### How to find your LUC data:

You can find out if your farm had been LUC mapped by contacting your advisor or on the GW free online map building tool. Once you have located your property, in the legend on the right-hand side under "Land Use Capability" select the GWRC Land Use Capability layer.

### **Potential funding options:**

With the assistance of MPI each year Greater Wellington funds the LUC mapping of rural farm land, please contact your advisor or the farm plan inbox to see if you could be eligible.

### **Resources:**

Region scale LUC Mapping GIS data - <u>NZLRI Land Use Capability 2021 | LRIS Portal</u> 3<sup>rd</sup> Edition Land Use Capability Survey Handbook - <u>LUC handbook 3rd edition</u> Beef & Lamb NZ LUC approach - <u>map-your-land-resources-land-use-capability-approach.pdf</u>

## ARM Plans



Figure: LUC sample from Belmont Regional Park

### (D)Hill Country LMU example

3.1 Land Management Unit: Steep hills



### **Description and management**

A high percentage of this block is in the strongly rolling to steep hill country land classes of 6e and 7e. This erosion can be disruptive to tracks, subdivision and can result in pasture and stock losses. These generally highly productive hills can be supported by spaced poplar and willow planting to provide considerable soil protection. This will include gully planting with willow to minimise gully erosion. While under new ownership, there is evidence of heavy stock classes over winter by the previous ownership with steeper slopes heavily furrowed by stock movement. Erosion control will reduce the sediment entering the nearby waterway.



### Inherent risks

The Back country Hill LMU has a significant number of ephemeral waterways that run during rainfall events. Both land classes are on soft mudstone geology and are prone to slip, gully and earthflow erosion. Inherently low N leaching potential.

### Actions within this LMU

- Space planting willows Tangoio, Moutere in the gullies and Poplar Crowsnest and Veronese on the mid hill slopes.
- Stock selection and class to match the land class.
- Increased grass buffers during period of high rainfall.

\*Refer to action plan of Sheep & Beef cFEP example for possible erosion control actions for hill country class 'e' land\*

### (E) Additional Online Resources

### **Regulation & Policy**

Please refer to <u>Natural Resource Plan</u> (schedule Z) for a full breakdown of C-FEP requirements. For further information on cFEP requirements please visit <u>Greater Wellington</u> <u>Farm Plans</u>.

### **Industry Factsheets & Resources**

Farm operators guide to Farm plan mapping (MfE)	a-farm-operator-s-guide-to-farm-mapping
Pastural land use - Farm operators guide to writing a FWFP	pastoral-land-use-a-farm-operators-guide
Dairy land use – Farm operators guide to writing a FWFP	dairy-land-use-a-farm-operators-guide
Permanent tree & horticultural land use - Farm operators guide to writing a FWFP	permanent-tree-and-vine-crops-land-use-a- farm-operators-guide
Land, Air, Water Aotearoa (LAWA)	Nitrogen fact sheet
Land, Air, Water Aotearoa (LAWA)	Phosphorus fact sheet
Land, Air, Water Aotearoa (LAWA)	River Quality
Land, Air, Water Aotearoa (LAWA)	Sediment
Dairy NZ – Good Management Practices	DairyNZ GMP's
Beef & Lamb – Industry agreed GMP's	beef & lamb GMP's
Practices for dry stock, hill country sheep and beef, for nutrient management and water quality.	beeflambnz.com/drystock-menu-book

### Greater Wellington resources & regulations

Greater Wellington Farm Plan resources	Greater Wellington — Farm Plan resources
Defining a watercourse	<u>GW Watercourse-categorisation-guidance-</u> <u>document</u>
Stock exclusion regulation	GW stock-exclusion-regulations
Water race information	GW water-races
Natural resource Plan (NRP)	Natural resource Plan
GW ArcGIS online data portal	https://data-gwrc.opendata.arcgis.com/

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### **Central Government Regulation**

National Policy Statement for	National Policy Statement for Freshwater
Freshwater Management 2020	Management 2020
National Environmental Standards for	National Environmental Standards for
Freshwater	Freshwater