

20 Steps on Completing a GLAS NMP

1. Log into NMP online <https://nmp.teagasc.ie> using your username and password.
2. For Teagasc users search for the client under “Agency Clients”, “All Plan Types” then using the “Search” function input the herd number. (With Teagasc users all clients are present on the system. All Agencies other than Teagasc must create their own client list, by selecting “Add Client” on the home page, then enter all the client’s details, name, address, herd number etc.)
3. Once found, click on the clients name and on the top right hand corner click on the red button “Create Plan”.
4. Click on the green button to “Create Plan” and follow the next few steps and input the relevant data under client details (Select GLAS plan and “Yes” to Plan Safety Option), optional settings, and units and finally click on the red button, “Create plan”. Red Boxes must have data entered into them. As per screen grab below you must select **Soil sampling**, **Use Maps** and **Winter Housing** as Yes. Make sure to ask the farmer whether he/she imports or exports organic manures.

Option Settings

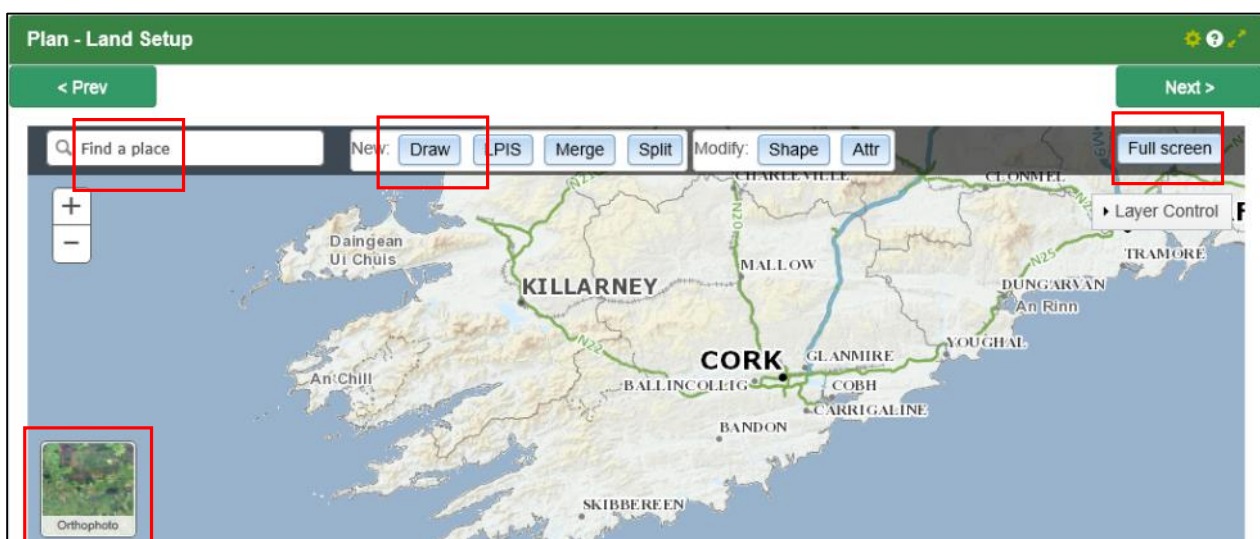
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Enterprise	<input checked="" type="checkbox"/> Beef	<input type="checkbox"/> Pigs/Poultry
	<input type="checkbox"/> Dairy	<input checked="" type="checkbox"/> Sheep
	<input type="checkbox"/> Deer/Goats/Horses	<input checked="" type="checkbox"/> Tillage
	<input type="checkbox"/> Horticulture	
Soil Sampling	Yes <input type="button" value="v"/>	Organic Manures Import
Use Maps	Yes <input type="button" value="v"/>	Organic Manures Export
Crop Yields Adjustment	No <input type="button" value="v"/>	Manure Storage Capacity
Winter Housing	Yes <input type="button" value="v"/>	No <input type="button" value="v"/>

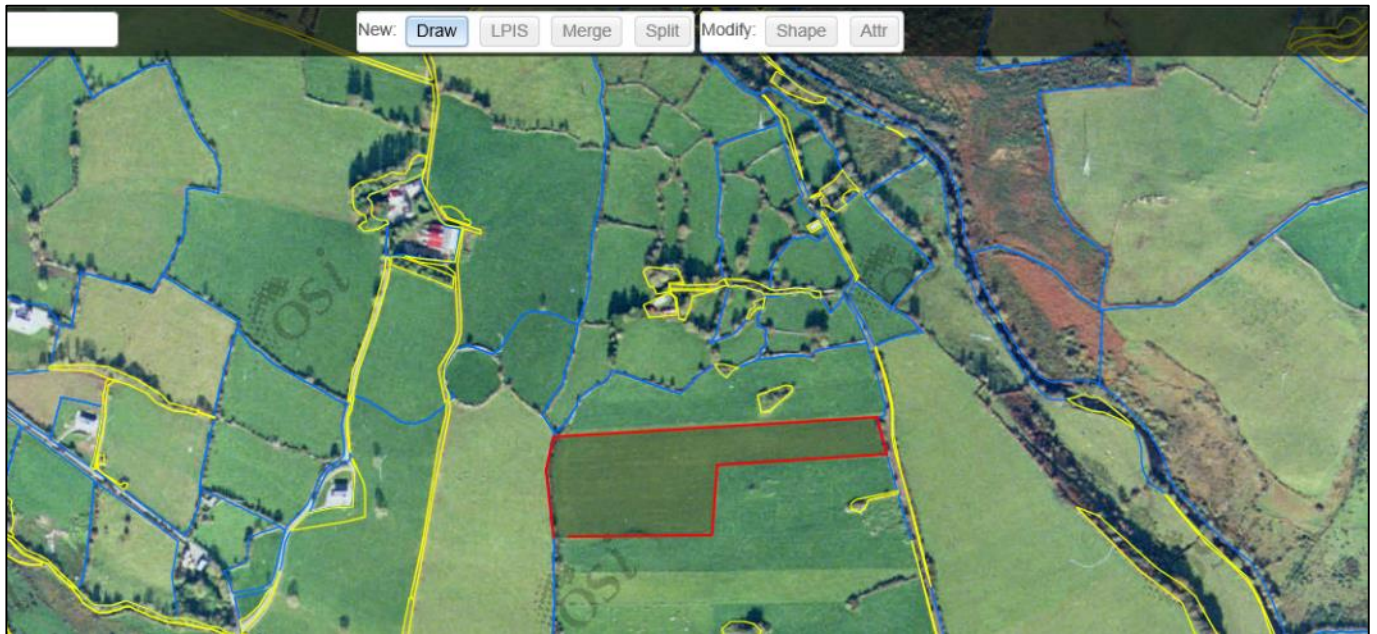
5. This will then bring you to the following screenshot with soil samples and menu on the side.

6. For Teagasc users you can “Import LIMS Samples” by searching under the herd number once selected or “Add soil samples manually”. Ensure to enter all **pH**, **lime requirements**, **P** and **K** values. **All soil sample results entered manually and imported from LIMS must be checked to ensure that the data entered/imported is correct.**

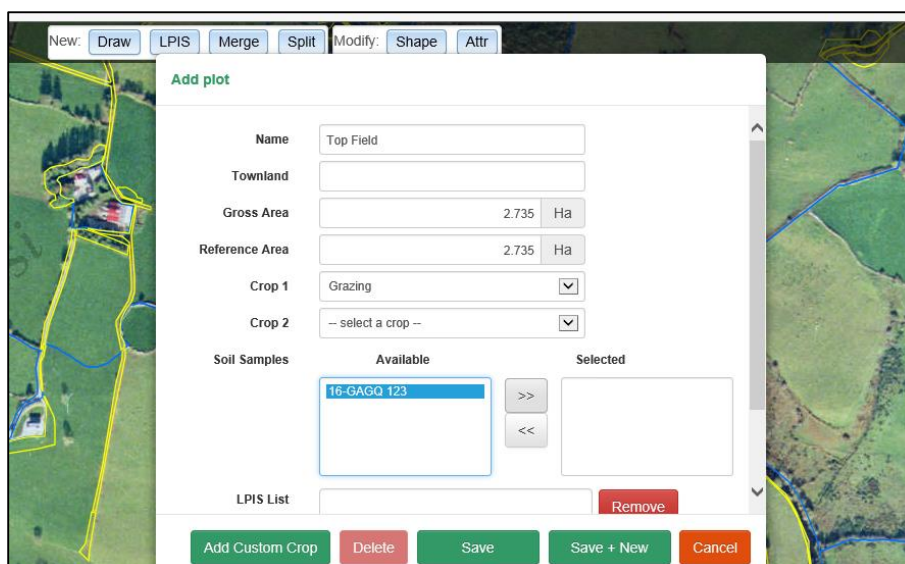
7. Once soil samples are entered the user needs to allocate a plot to the soil sample which is done on the “Land setup” page. Click on “Full screen” to enlarge the map, click on “Ortho-photo” and click the “Draw” button over the map. Locate your plot by entering the townland in the “Find a place” box or zoom in using the roller ball on the mouse. On the map the blue lines are LPIS boundaries and the yellow lines are exclusions.



8. Using the mouse, left click to draw a plot as below and double left click back where you started and this will close the plot boundary. The screen shot shows when drawing what the plot outline will look like.



- It is important to **name the fields** so that they appear on the maps and the reports for the farmer or adviser. Each plot that is drawn is linked to a crop and to a soil sample.
- Select **crop** and if it's a tillage crop the N Index must also be selected (Table 10 page 39 of S.I. No. 31 of 2014).
- Under the soil samples the list of soil samples will appear and click on the appropriate soil sample and using >> this will **allocate this soil sample to the plot**, just draw.
- Tip is to click on "Save + New" and then select "Cancel" to remain on the mapping home screen and then start drawing the next plot. If you click "Save" it will bring you back to the original map and you will have to find the townland and plots again.
- The screen shot below will popup when you double click to close the plot.



9. It is important before the mapping is done that the user has done a rough table containing the following information. This will help speed up this section of mapping and it will prevent having to split or merge plots after mapping.

Plot Name	Crop	Area Ha (roughly)	N Index	Soil sample ID
Top Field	GLAS LIPP	5Ha?	N/A	GAQ 123
Lower Field	GLAS WBC	2Ha?	3 (In silage in 2015)	GAQ 124
Middle Field	Grazing	4.6Ha	N/A	GAQ 125
Tom's	GLAS LIPP	3.6Ha?	N/A	GAQ 125 Same soil sample as they have had the same cropping history
Well Field	Silage 1 Cut	5Ha	N/A	GAQ 126
Barley Field	Spring Barley	6Ha	1 (Continuous Tillage)	GAQ 127

10. Draw all plots as above and assign a crop, N Index and a soil sample.
11. **Livestock – Animal Numbers** add in livestock by clicking on “Add Livestock”, and insert the average numbers of each animal type for the year and average animal numbers over the winter.

Add live stock

Live Stock type: Cattle (0-1 year old) [v]

Average Number of animals over year: 20

Average Number of animals over winter: 20 x

Show monthly average calculator

Buttons: Delete, Save, Save + New, Cancel

12. **Plan – Concentrate Feeds** see screen grab below and select the **Accounting Method** and **Add Feed** and save. Put in **Last Year's total Organic N** and click "Apply". Last year's Total Organic N is the total N produced by grazing livestock including bovines, ovines, equines and any other grazing livestock.

New version Create a copy Send to another agency Send to external entity Map Viewer Reports -

Plan - Concentrate Feeds [Settings] [Print]

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Straight Feed Accounting Method: Book Value [v]

Compound Feed Accounting Method: Default(Skg) [v]

Last years total organic N: 4500 kg [Apply]

Total P Fed to Grazing Livestock: 0 kg

Total P to be discounted: kg

Net P contributing to Available Allowance: kg

Search: []

Name	Quantity (t)	P Content Data Source	P Content	Total P (kg)
No data available in table				
	0.0			

Previous Next

Add Feed

Advisor notes [] Farmer notes []

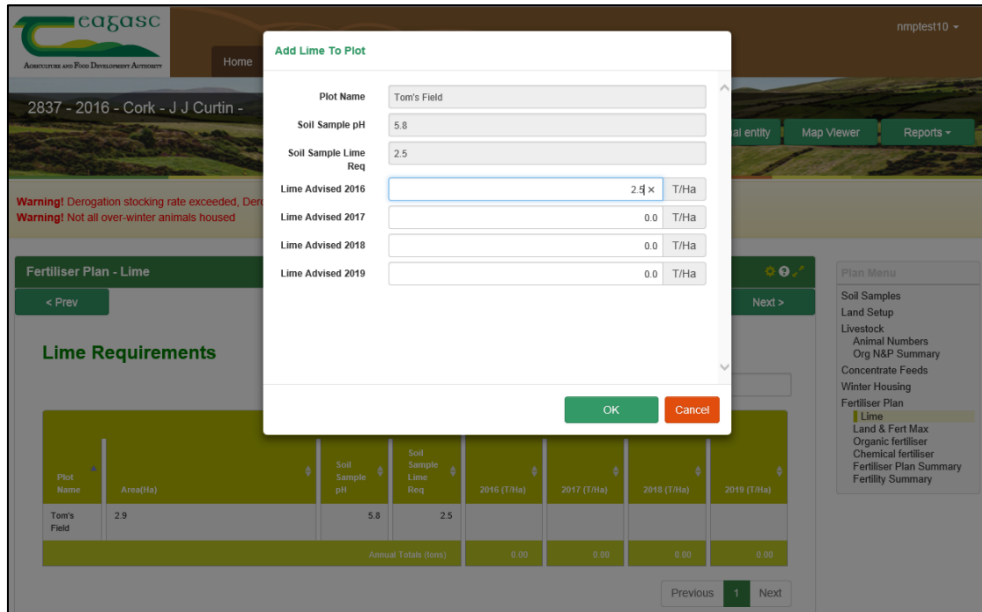
Plan Menu

- Soil Samples
- Land Setup
- Livestock
 - Animal Numbers
 - Organic Fertiliser import
 - Organic fertiliser export
 - Org N&P Summary
- Concentrate Feeds**
- Winter Housing
- Manure Storage
 - Storage Requirements
 - Soiled Water
 - Winter Dairy Herd
 - Soiled Water Locations
 - Collecting Yard
 - Yards to Soiled H2O
 - Dairy Washings
 - Summary
 - Storage
- FYM
 - FYM Production
 - Straw Requirement
 - FYM Storage
 - FYM Storage Balance
- Slurry
 - Slurry Produced
 - Slurry Storage
 - Available
 - Slurry Storage Balance
- Farmyard Map
- Storage Summary
- Fertiliser Plan
 - Cereal crop yields
 - Lime
 - Land & Fert Max
 - Organic fertiliser

13. **Plan - Winter Housing** is associated with the red text **“Warning! Not all over-winter animals housed”**. This means that the animal numbers the user selected in animal numbers over the winter have not been allocated to a straw/FYM or to slurry/slatted sheds. This can be completed by clicking on the animal type in the “Winter Housing” section and by allocating the animals to out-wintering, FYM or Slurry.

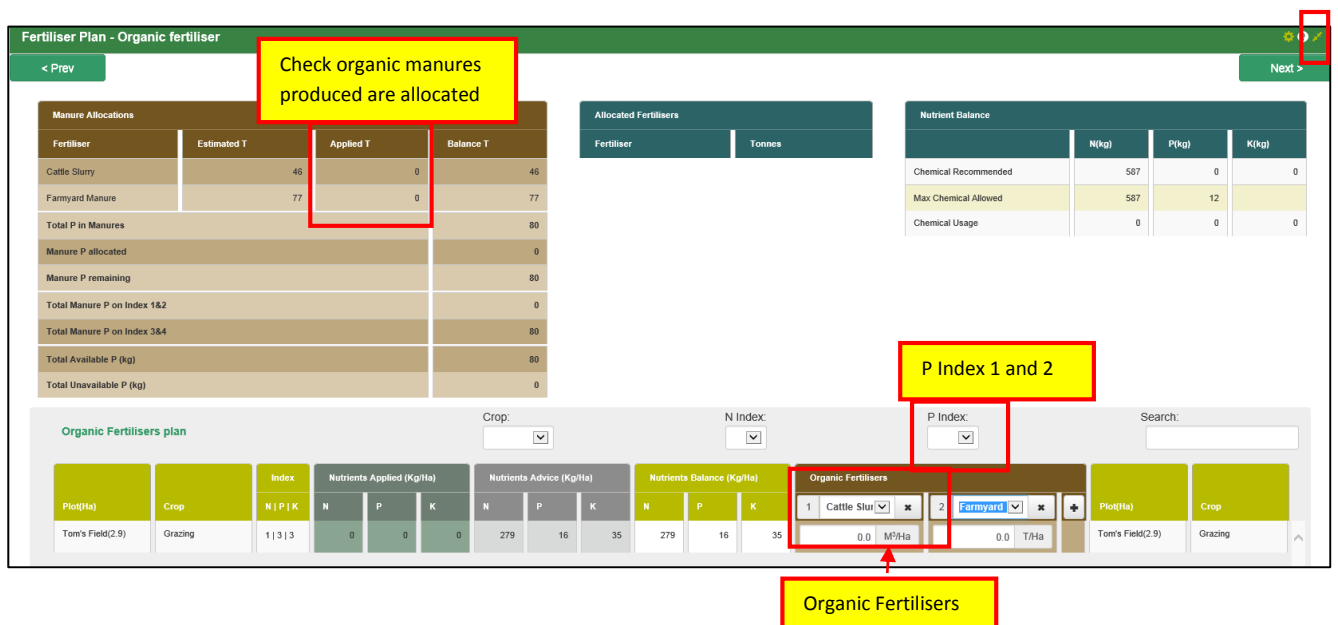
Animal	On FYM	On Slurry	On Straw	On Slatted	On Other	On Total
Cattle (0-6 months old)	20	20	0	0	0	0
Cattle (6-12 months old)	20	20	0	0	0	0
Suckler cow	20	20	0	0	0	0

14. **Fertiliser Plan – Lime**. Split lime application into two separate years and two years apart if the Lime Requirement is >5 t/ha. Select the row involved and the popup screen below will appear.



15. **Fertiliser Plan – Land and Fert Max** is a summary of the plots, crops, soil samples and Available N and P allowances from the Nitrates Directive.

16. **Fertiliser Plan – Organic Fertiliser** use the screen enlargement option to show the screen grab below, click on the “+ under Organic Fertilisers” and select “P Index 1 and 2”.



- If the farmer imports organic manure, make sure to include this in the start of the plan before assigning chemical and organic manure.
- Check that “Estimated Organic Manures” are allocated. It is recommended to apply all estimated organic manures.

- If FYM is produced as well these can be added in the same way.
- Allocate all organic manures to P index 1, 2, 3 and 4 in this order with a guideline maximum of 33m³/ha or 3,000 gallons/acre of slurry; 37m³ or tonnes FYM /ha or 15 m³/Tonnes/acre.
- Advice is to spread up to the maximum amount of organic manures on P Index 1 and 2 lands as best practice.
- The brown section on top left of this page which will show the organic manures created on the holding, the organic manures spread and the Organic P allocated to P Index 1 & 2 and Index 3 & 4 lands.
- GLAS LIPP and THM areas could be P index 1, or care would need to be exercised allocating organic manures to these areas to ensure that species composition is not affected by increasing the P allocation to such lands.
- A suggested order for allocating organic fertiliser could be: Silage fields (2nd cut) (P 1, 2) – Silage fields (1st cut) (P1, 2) – fields for grazing – fields for tillage.
- **Remember to click save on the bottom left of this screen, otherwise all works completed will be lost.**

17. Fertiliser Plan – Chemical Fertiliser use the screen enlargement option.

- Allocated fertiliser will total the different types of fertiliser types in tonnes.
- Nutrient Balance will check the allocated fertiliser against the “Chemical Recommended”, which is the fertiliser, recommended for the stocking rate on the farm, and also check against the “Max Chemical Allowed” as per Nitrates and GLAS.

Fertiliser Plan - Chemical fertiliser

< Prev Add Fertiliser Next >

Manure Allocations			
Fertiliser	Estimated T	Applied T	Balance T
Cattle Slurry	46	46	0
Farmyard Manure	77	76	0
Total P in Manures			88
Manure P allocated			131
Manure P remaining			0
Total Manure P on Index 1&2			0
Total Manure P on Index 3&4			88
Total Available P (kg)			88
Total Unavailable P (kg)			0

Allocated Fertilisers	
Fertiliser	Tonnes
Urea(46%N)	1.27

Nutrient Balance			
	N(kg)	P(kg)	K(kg)
Chemical Recommended	587	0	0
Max Chemical Allowed	587	12	
Chemical Usage	585	0	0

Chemical fertilisers

Nutrients Advice

N Index: [v] P Index: [v] Search: []

Plot(Ha)	Crop	Index N P K	Nutrients Applied (Kg/ha)			Nutrients Advice (Kg/ha)			Nutrients Balance (Kg/ha)			Chemical Fertilisers	Plot(Ha)	Crop
			N	P	K	N	P	K	N	P	K			
Tom's Field(2.9)	Grazing	1 3 3	271	45	231	279	16	35	8	-29	-196	1 Urea(46%N) 440.0 Kg/ha	Tom's Field(2.9)	Grazing

- Add chemical fertilisers to meet the nutrient advice in grey above. The Nutrient Advice is the same as chemical recommended.

- A grassland farm user could start with Urea as the first fertiliser due to relative cheaper cost/Kg of N, and the fact that it works better at lower ground temperatures and can reduce GHG emissions.
- The second fertiliser allocated will deal with P deficits left after the organic manures have been applied.
- The third fertiliser should address the remaining N, P and K deficits.
- The advice would be to recommend fertilisers that are available locally and to keep the fertiliser list to three or four fertilisers for grassland farmers. For tillage farmers with multiple cereal/crop fertilisers this will vary accordingly. Keep figures rounded up or down.
- **Remember to click save on the bottom left of this screen otherwise all works completed will be lost.**

18. The NMP is now complete and the report can now be printed as below.

The screenshot displays the 'Fertiliser Plan - Chemical fertiliser' interface. At the top, there is a navigation bar with buttons for 'New version', 'Create a copy', 'Send to another agency', 'Send to external entity', 'Map Viewer', and 'Reports'. Below the navigation bar, there are three warning messages: 'Warning! Derogation stocking rate exceeded, Derogation rules applied', 'Warning! Not all over-winter animals housed', and 'Warning! Fertilisers allocated exceeds limits'. The main content area is titled 'Fertiliser Plan - Chemical fertiliser' and contains three tables: 'Manure Allocations', 'Allocated Fertilisers', and 'Nutrient Balance'. The 'Manure Allocations' table shows 'Cattle Slurry' with an estimated 46 tonnes, 46 tonnes applied, and a balance of 0. The 'Allocated Fertilisers' table shows 'Urea(46%N)' with 1.27 tonnes allocated. The 'Nutrient Balance' table shows 'Chemical Recommended' with 587 kg of N, 0 kg of P, and 0 kg of K. A 'Plan Menu' is visible on the right side of the screen.

Fertiliser	Estimated T	Applied T	Balance T
Cattle Slurry	46	46	0

Fertiliser	Tonnes
Urea(46%N)	1.27

	N (kg)	P (kg)	K (kg)
Chemical Recommended	587	0	0

19. To print maps click on the green button called "Map Viewer" on top of the screen and the screen shoot below will appear.

- Select layer "Ortho" and "Layer Control".
- "Colour Layers" refers to the layers or outlines that will appear on the map.
- "Labels Layers" refers to the text that will appear on the map.



- To print a map click on “Add Custom Page”, and then click on the map and a black shaded square will appear. Click on the square and the outline will appear with grey corners and then click “Edit”, then you can set the size of the map as required and the scale. Then “Print Selected” and this will be processed and appear underneath as “Result”.



20. Finished – GLAS Report for DAFM to be submitted online and a GLAS set of Maps.

Useful Tips for using NMP Online

- Where possible **use a large screen**, this will make more data available on the screen and ensure less scrolling up, down and across.
- **Using a mouse** makes the use of mapping and other aspects of the system easier.
- If you click the little question mark symbol on the top of every page it will bring up a help text in relation to the page you are on, which will guide you if you are unsure of something.
- If you find that an action you are carrying out is unresponsive this means that the session has timed out, however, you will not have to sign back in just click the **refresh button**.
- Data should be saved every 5 minutes; > 5 minutes data entered will be lost.

Remember to **'SAVE' after entering data into the following pages** otherwise all works completed will be lost:

- **Fertiliser Plan – Organic Fertiliser**
- **Fertiliser Plan – Chemical Fertiliser**
- **Soiled Water – Winter Dairy Herd**
- **Soiled Water – Soiled Water Storage Facilities**

- The overall land area drawn onto the maps must match the BPS overall farm area (tolerance of <0.5 ha is recommended).

- All lands declared on the farmers BPS are included in NMP (this includes rough grazing and commonage areas). Forestry and yards are not included in the farmed area. GLAS Commonage or GLAS rough grazing can be used for non-trafficable/ non-fertilised areas.

- When drawing plots on the mapping system, zoom into the map to avoid overlapping plots.

- If a farmer has GLAS bird cover, 'tillage' needs to be ticked in the Optional Settings and user will need to select a Nitrogen Index as per the table below

Table 10 Determining nitrogen index for tillage crops			
Tillage crops that follow permanent pasture			
Nitrogen Index			
Index 1	Index 2	Index 3	Index 4
The 5th tillage crop following permanent pasture. For subsequent tillage crops use the continuous tillage table.	The 3rd or 4th tillage crop following permanent pasture. If original permanent pasture was cut only, use index 1.	The 1st or 2nd tillage crop following permanent pasture (see also Index 4). If original permanent pasture was cut only, use index 2.	The 1st or 2nd tillage crop following very good permanent pasture which was grazed only.
Continuous tillage: — crops that follow short leys (1-4 years) or tillage crops			
Previous crop			
Index 1	Index 2	Index 3	Index 4
Cereals Maize	Sugar beet Fodder beet Potatoes Mangels Kale Oil seed rape, Peas, Beans		
	Leys (1-4 years) grazed or cut and grazed.		
	Swedes removed	Swedes grazed in situ	
Vegetables receiving less than 200 kg/ha nitrogen	Vegetables receiving more than 200 kg/ha nitrogen		

- Home produced feedstuff, i.e. rolled, crimped cereal, is taken into account in the concentrate feed section
- Housing ewes over the winter is a pro-rata calculations, e.g. 18 week zone and 120 ewes are housed for 6 weeks, you put in 40 ewes as being houses on FYM or slurry.
- When inputting livestock numbers, e.g., lowland ewes and lambs, enter the ewe numbers only and take account of a decrease in ewe numbers for the year due to culled ewes (e.g. a flock of 100 ewes, might consist of 85 ewes and 25 hogget ewes).
- The farmyard map doesn't show up unless the Winter Housing section is ticked.
- On the Organic Fertiliser page the estimated m³/ tonnes is based on the nitrates requirements for storage (Estimated Figure). The Applied Figure is the m³/ tonnes actually applied on farm. Depending on the length of the farmers' housing period, you can apply more or less than the estimated figure, usually it's more than the estimated due to longer winter housing period and the addition of slurry for agitation.

NMP Online Help Desk

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