



NMP Online – User Update 11 – 05/03/2018

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1. Recent DAFM clarification

GLAS Circular 02/2018 on Soil Samples and Nutrient Management Plans (NMPs) in GLAS is available in appendix 1. DAFM have indicated that all soil samples for Tranche 1 and 2 must be received in soil laboratories before the end of 2017 and all soil samples for Tranche 3 must be received in soil laboratories by the 31st March 2018. All Tranche 3 NMP's to be submitted before the 31st March 2018.

The submission of GLAS NMP's is summarised below. As can be seen the total Herd numbers with GLAS NMP's submitted to DAFM is 43,605 but of these only 40,059 individual herd numbers have submitted NMP's. This indicates that some GLAS NMP's have been uploaded twice (perhaps P index 3 was assumed whilst soil samples were being analysed).

NMP Submission Data from DAFM (8AM Daily)				
Date	Total Submitted	Total Herd	Teagasc	Other
03/04/2018	43605	40059	11980	31625

2. P Build-up facility and Soil Organic Matter Testing

DAFM circular Soil Phosphorus Build-Up Programme and Soil Organic Matter Testing in Designated 'Peaty' Areas are highlighted in Appendix 2. DAFM and Teagasc have facilitated 3 training days on this over the past few weeks and the training material from these days are available on the Teagasc web site <https://www.teagasc.ie/crops/soil--soil-fertility/soil-p-build-up-training-material/>

NMP online will produce NMP's with or without P Build-up. The user can select P build-up in Plan settings under Optional settings as per screen grab below. All NMP users must ensure that all lands are soil sampled (even conacre) and that every sample that is being used in the P Build-up plan is 5.0ha's or less. Valid soil samples must be in date.

There are 3 Settings –

- No P build-up for farmers not availing of P Build-up
- Derogation with P Build-up
- Non-Derogation with P Build-up

The application process for P build-up is different for Derogation and Non Derogation Farmers. Selecting the second option above will give you a front page of the derogation plan with the following header. The normal process of submitting a derogation plan will suffice for the application.

Front page heading for Derogation Plan with Build-up

Derogation & P Buildup - Fertiliser Plan 2018	
Name	Example for Training
Address	Cork

Changing plan settings for P Build-up

The screenshot shows the 'Plan Settings' interface with three tabs: 'General Settings', 'Optional Settings', and 'Units'. Under 'Optional Settings', there are several sections:

- Enterprise:** Beef, Dairy, Deer/Goats/Horses, Horticulture (all checked).
- Pigs/Poultry:** Sheep, Tillage (both checked).
- Soil Sampling:** Yes (dropdown).
- Use Maps?:** Yes (dropdown).
- Crop Yields Adjustment:** No (dropdown).
- Winter Housing:** Yes (dropdown).
- Higher P Buildup Conditions:** A dropdown menu is open, showing four options: 'No Derogation with P Buildup', 'No P Buildup', 'Derogation with P Buildup', and 'No Derogation with P Buildup'. The last option is highlighted in blue.
- Organic Manures Import:** Yes (dropdown).
- Organic Manures Export:** No (dropdown).
- Manure Storage Capacity:** Yes (dropdown).

A green 'Close' button is located at the bottom right of the settings window.

To produce a non-derogation with P Build-up report select the derogation report from the list of report types. The report front page header is as shown below. The report has to be submitted to the email address provided by DAFM to derogation standard; with manure storage completed.

Front page heading for Non-Derogation Plan with Build-up

Nutrient Management Plan for P-Buildup	
Name	Example for Training
Address	Cork
County (Zone)	Galway (B)
Herd No.	D1234567

The general provisions for Soil P Build-up is contained in S.I. No. 605 of 2017 (Section 16.5 and Table 13B from SI 605/2017 <http://www.agriculture.gov.ie/ruralenvironment/environmentalobligations/nitrates/>

Table 13B from SI 605/2017 (Soil P Build-up)

Table 13B Annual maximum fertilisation rates of phosphorus on grassland adopting increased P build-up application rates

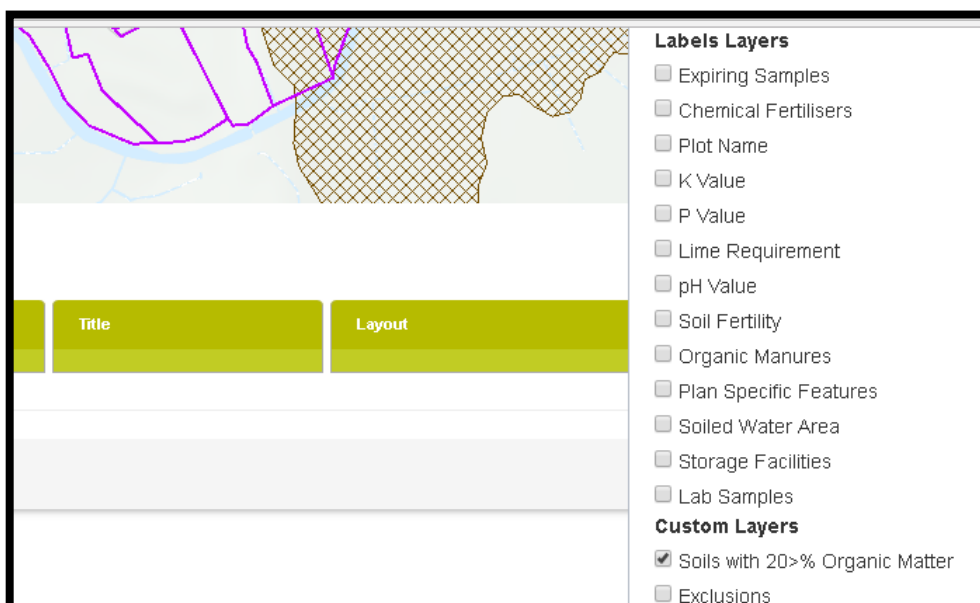
Grassland stocking rate ¹ (kg/ha/year)	Phosphorus Index			
	1	2	3	4
	Available Phosphorus (kg/ha) ^{2,3,6}			
131-170	63	43	13	0
Grassland stocking rate greater than 170 kg/ha/year ^{4,5}				
171-210	66	46	16	0
211-250	69	49	19	0
>250	69	49	19	0

¹Total annual nitrogen (kg) excreted by grazing livestock averaged over the eligible grassland area (grazing and silage area). Stocking rate refers to grassland area only.
²The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.
³Manure produced by grazing livestock on a holding may be applied to Index 4 soils on that holding in a situation where there is a surplus of such manure remaining after the phosphorus fertilisation needs of all crops on soils at phosphorus indices 1, 2 or 3 on the holding have been met by the use only of such manure produced on the holding.
⁴The maximum phosphorus fertilisation of grassland shall not exceed that specified for stocking rates less than or equal to 170 kg/ha/year unless a minimum of 5% of the eligible area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding.
⁵This table does not imply any departure from Article 20(1) which prohibits the application to land on a holding of livestock manure in amounts which exceed 170kg Nitrogen per hectare per year, including that deposited by the animals themselves (or 250kg in the case of a holding to which a derogation has been granted in accordance with the Nitrates Directive).
⁶An additional 15 kg of phosphorus per hectare may be applied on soils at phosphorus indices 1, 2, or 3 for each hectare of pasture establishment undertaken.

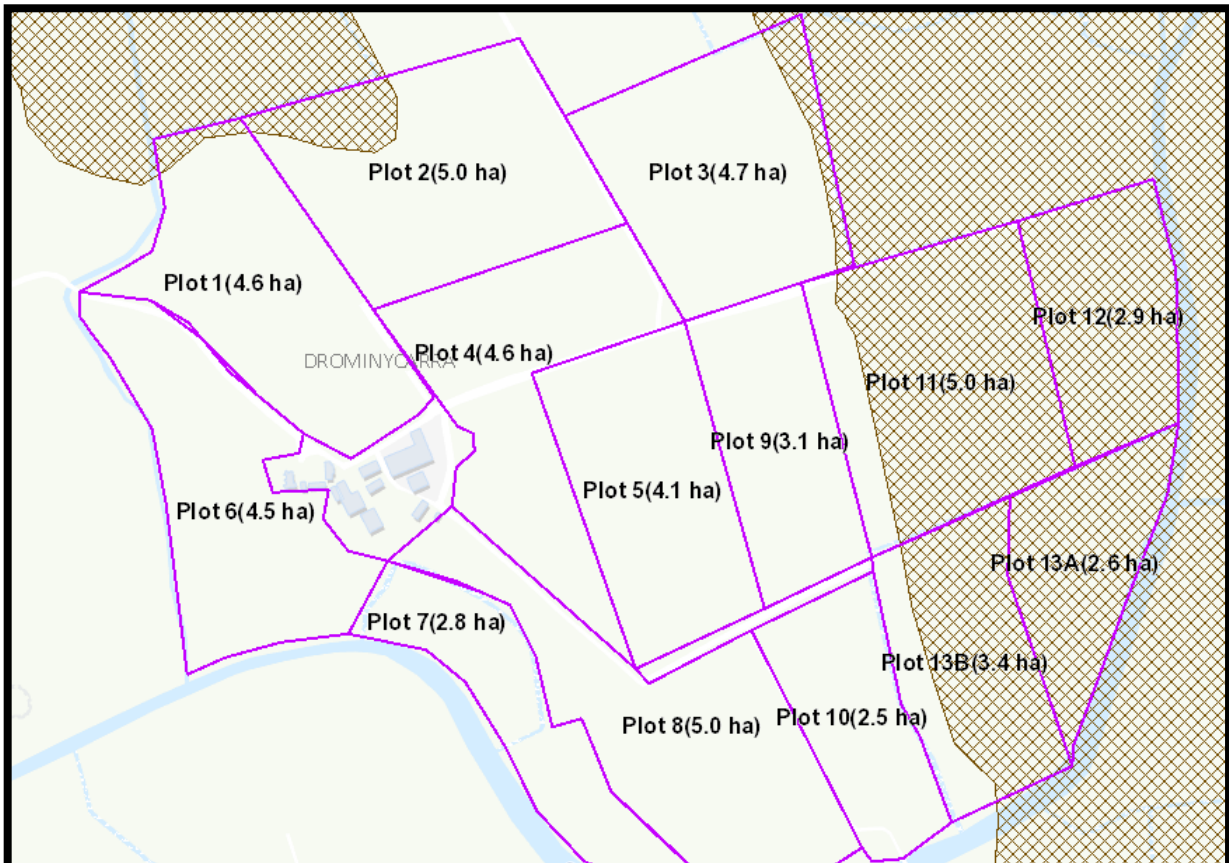
Soil Organic Matter testing applies to all soil samples for all NMP's received in soil laboratories since 01/01/2018. The map showing these areas is available in Appendix 3. NMP online has a layer to show this Soil Organic Map which is available under "Map Viewer".

<http://www.agriculture.gov.ie/ruralenvironment/environmentalobligations/nitrates/>

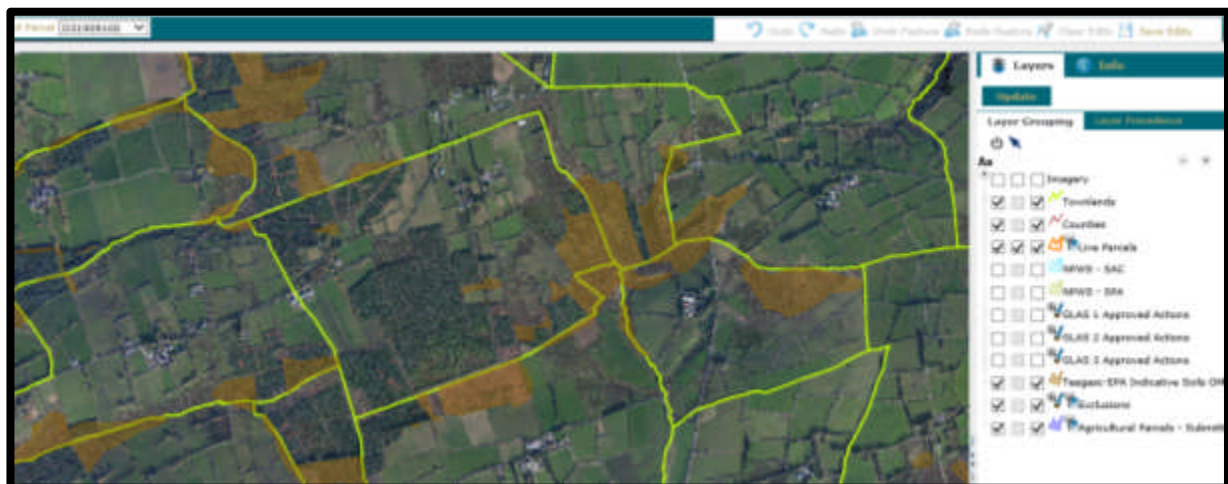
Turning on Soil OM >20% layer in NMP Online



Soil OM >20% layer in NMP Online



The Organic Matter layer is also available on DAFM AgFood site.



Soil Organic matter testing is required:

- Where additional P Build-up is planned for all plots where the adviser does not sign off that the soil is mineral soil below 20% OM
- Where no additional P Build-up is planned for on plots where the maps indicate that there is a (likely) soil OM of greater than 20%.

Where soil organic matter is > 20% this should be entered in the appropriate soil analysis and the NMP Online system will limit the P allocation to Index 3 levels.

P allowances and P recommendations

Where additional P build-up allowances are applied for the programme gives an additional allowance to grassland plots with index 1 and 2 on the farm. However, because of the complexity of the overall P allocation system on the farm the P recommendation on individual plots has not been increased. There are 2 main reasons for this

- In a significant number of farms the current recommended levels cannot be applied because of meal adjustments
- It was felt to be more appropriate to allow the user decide where the additional P would be applied based on the requirements of the farm. This could be based on production requirements in different sections of the farm, knowledge of soil type where build up on certain soil types requires more P than on others etc.

This will lead to an indication of over-allocation (figures appearing in red) relative to the 'Green Book' recommendations which are based on a slower build up process.

3. Livestock numbers and FYM/Slurry produced

Improvements have been required in NMP online to more accurately reflect actual slurry and manure production on the farm and the requirements for storage. This was most evident in relation to farmyard enterprises and sheep. However there were also issues in relation to (a) cattle slurry including the assumption that the amount to be applied was the same as the storage requirement, (b) the pooling together of cattle and other slurry types and (c) the dilution effect of mixing of cattle slurry with soiled water, rainfall in open tanks and seepage. It became apparent that a slightly changed overall approach to handling manures was required to deal with the many issues arising.

To enable accurate and effective planning for both storage requirement and manure application in the program it was necessary to put a greater degree of division between manure storage requirement and manure production/application.

When adding livestock numbers the screen shot below shows that there are 2 additional entries to be made.

- Weeks Storage Required. This indicates the number of weeks storage required for the animal group. If no figure is entered the system assumes the default level for the region.
- Weeks of Manure Production. This can be greater or less than the week's storage required. This allows the actual volume of slurry/FYM to be calculated. If no value is entered the default storage for the region is assumed

Edit live stock

Live Stock type: Dairy cow

Average Number of animals over year: 80

Average Number of animals over winter: 80

Week storage required: 18

Week storage actual: 20

Show monthly average calculator

If no values are entered for a plan; the plan will compute on the basis of the default storage period for both storage requirement and manure production.

Some examples of the potential use of this are given in the table below

Animal Type	Weeks Storage	Weeks Production	Impact
Any Cattle			Where left blank the default weeks storage for the county will be used . If you are satisfied with this no entry is required
Dairy Cows	16	12	Where actual time indoors is less than the required storage – Less manure will be shown for application
Cattle 1-2	16	26	Where stock are housed for a considerably longer period than the required storage
Sheep	6	6	You will now be able to specify a 6 week winter for sheep enterprises
Pig and Poultry	26	52	The system will calculate a storage requirement for 26 weeks but a slurry production for the full year

The changes outlined will reflect in the slurry and FYM volumes produced as shown on the Slurry and FYM production pages and on the Organic Fertiliser page where estimated tonnes of slurry/FYM available for spreading are shown.

FYM Production

In the previous version of NMP Online all manures went into the same category of FYM. In the new version there are a number of additional manure categories. NMP Online will divide the overall FYM figure into the appropriate categories in the Organic Fertiliser Page

The screenshot displays the 'FYM - FYM Production' interface. It includes a table for animal categories, a summary table for FYM metrics, and a detailed table for various animal types. Callouts explain the default values for breeding units and the use of total FYM produced in storage calculations and organic fertiliser allocation.

Animal Categories Table:

Animal	No. on FYM	Straw Usage	Weeks FYM Production	Weeks FYM Storage
Breeding unit (per sow place)	10	H	52	26
Cattle (1-2 year old)	20	M	18	18

Summary Table:

Total FYM Produced (m3)	Total FYM Required (m3)	Seepage Produced (m3)	Total Straw Usage (kg)
109.2	54.6	0.0	2,600.0
110.2	110.2	23.8	7,200.0

FYM Production Table:

Animal	No. on FYM	Straw Usage	Weeks FYM Production	Weeks FYM Storage	Total FYM Produced (m3)	Total FYM Required (m3)	Seepage Produced (m3)	Total Straw Usage (kg)
Breeding unit (per sow place)	10	H	52	26	109.2	54.6	0.0	2,600.0
Cattle (1-2 year old)	20	M	18	18	110.2	110.2	23.8	7,200.0
Cattle 0-1 yr	20	H	18	18	116.6	116.6	0.0	9,360.0
Daily sow	20	H	22	18	308.0	252.0	0.0	24,200.0
Horse (450kg LW)	1	L	18	18	10.6	10.6	0.0	504.0
Horse (540kg LW)	2	M	10	18	29.4	52.9	0.0	1,680.0
Integrated unit (per sow place)	2	H	52	26	49.9	25.0	0.0	1,040.0

Summary Metrics:

- Total Straw Usage: 46,584.0 kg
- Seepage Produced: 23.8 m³
- Total FYM Produced: 733.9 m³
- Total FYM Required: 621.9 m³

Callouts:

- Breeding unit - Defaults to 26 and 52 weeks while cattle defaults to the county storage** (points to the Weeks FYM Storage column for Breeding unit and Cattle).
- Shows Total FYM Produced and separately the storage requirement. For Pig unit this will normally be different while most users may leave the same for cattle enterprises** (points to the Total FYM Produced and Total FYM Required columns in the summary table).
- Total FYM Storage is Used in the Calculation of the adequacy of the storage** (points to the Total FYM Required value in the summary metrics).
- Total FYM Produced is Used in the Organic Fertiliser Page to allocate Manures** (points to the Total FYM Produced value in the summary metrics).

Slurry Production

A similar system is used in relation to slurry production. There were a number of additional difficulties with slurry production in Version 1 of NMP. These included

- Grouping of different slurries (previously all slurry was “Cattle Slurry”)
- Calculation of slurry dilution where additional water/liquids added through dirty yards, FYM seepage and rainfall on open tanks
- Dealing with rainwater in uncovered tanks
- Accurately calculating the actual volume of Cattle slurry
- Ensuring that the amount of nutrient to be applied to land reflects reality to a reasonable degree

To deal with all these issues a similar division between storage and production has been developed.

Slurry Produced					
From Animals					
Animal	No. on Slurry	Weeks slurry produced	Weeks slurry required	Total Slurry Produced (m ³)	Storage requirement (m ³)
Cattle > 2 years	10	16	16	41.6	41.6
Cattle (18-24 months old)	50	18	16	234.0	208.0
Cattle (5-12 months old)	50	18	16	135.0	120.0
Dairy cow	50	16	16	264.0	264.0
Lowland ewe	50	6	6	9.0	9.0
Total Slurry Produced				683.6 m ³	150458.8 Gallons
Total Storage Required				642.6 m ³	141440.1 Gallons

In NMP Online, as with the FYM, slurry storage requirement and slurry production will be treated separately. In the example below the slurry production differs from the storage requirement for a number of categories of animals. From the FYM / Slurry Storage Balance the figure for

- Total Storage required goes into a process of calculating the adequacy of storage.
- Total Slurry Produced is divided into different slurry types – In this example
 - Cattle Slurry – This goes into a calculation of total volume of cattle slurry which includes the addition of seepage, dirty water, rain water etc to give a total volume of cattle slurry and a dilution factor.
 - Sheep Slurry – This goes to the Organic Fertiliser Page as sheep slurry

Calculation of Storage Requirement

Calculation of Volume of Cattle Slurry = Produced
 +/- Imports / Exports
 + Additional Waters / Seepage
 → Total Volume for application and Concentration

Slurry - Slurry Storage Balance

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Farm Slurry Storage Balance

Slurry Produced (Animals)	720.4	m ³		
Cattle Slurry Imported				
Cattle Slurry Exported				
Slurry Produced (Dirty Yards)	69.1	m ³		
Slurry Produced (FYM Seepage)	167.8	m ³		
Slurry Produced (Dairy Washings)	28.6	m ³		
Slurry Produced (Rainfall in open tanks - 18 weeks)				
Total Slurry Produced	985.9	m³		
	216867.4	Gallons		
Dilutes Added to Slurry				
Dilution factor				
Total Available Net Storage	522.3	m³		
Additional Storage Required	463.6	m³		

Total Slurry to be stored on Farm

720.4	m ³
69.1	m ³
167.8	m ³
28.6	m ³
985.9	m ³
216867.4	Gallons

Volume of Cattle Slurry for Spreading

540.0	m ³
100.0	m ³
0.0	m ³
69.1	m ³
167.8	m ³
28.6	m ³
93.5	m ³
999.0	m ³
219749.0	Gallons
359.0	m ³
64.1	%

- As can be seen above the storage requirement for statutory purposes for all slurry types is 985.9m³. This comprises neat slurry of 720.4 m³ and Dirty water, seepage and Dairy wash of 265.5 m³.
- This is compared with the Total Available Net Storage (Net means Volume of storage less freeboard and allowance for water entering open tanks) to give a Slurry Storage Balance
- The Volume of neat cattle slurry (excludes other slurry types) from animals is 540m³ based on weeks actual production from animal numbers section
- Total slurry produced is 999m³ which is based on the figures above which add in Slurry imports/exports dirty water, seepage, dairy wash and rainwater in open tanks. This 999 m³ is carried forward to the estimated volumes in the organic fertiliser page.
- All slurry produced will appear in the organic manures page. Various slurry types from different animal types are separated, whilst all FYM produced (from any animal type except poultry) appears as FYM. See screen shot below.
- Users should check plans copied forward or created for 2018 before the update to ensure that the volume of slurry for application matches the amount applied.

Manure Allocation Table

The manure allocation table now reflects more accurately the actual volumes of manures and slurries to be applied

Manure Allocations			
Fertiliser	Estimated T	Applied T	Balance T
Cattle Slurry	811	814	0
Sheep Slurry	9	9	0
Pig Slurry	507	0	507
Farmyard Manure	2,630	2,009	621

Organic Manure page has no changes to the layout, however the workings of the calculations are explained below.

Total P in Manures (Grazing + Non-Grazing 280.0)	280	This is the Total P in grazing Livestock manures x weeks storage required/52) + (Total P in non-grazing livestock on the farm). Figures in brackets in this example is that from grazing Livestock
Manure P allocated	404	This is actual P allocated/spread based on actual manure produced. This will often vary from the Total P in manures as the calculations of P produced based on animal numbers differs from the figures for P in the manure volumes as specified by DAFM
Manure P remaining	0	Thus figure should be zero when estimated manure is all allocated
Total Manure P on Index 1&2	141	This is the manure P allocated on P Index 1 and 2 lands
Total Manure P on Index 3&4	139	
Total Available P (kg)	210	This is Total Available P from the top row above
Total Unavailable P (kg)	70	This is the Total unavailable P - 50% of Total Manure P on Index 1&2

NMP Online is designed to be flexible in meeting the needs of users in relation to producing a plan. However, it is important for users to know what to do in individual circumstances to get reasonably accurate results from the system, particularly in relation to getting a true picture of the value of manures. The table below is designed to help you decide what to use in an individual plan.

Scenario - Brief	Scenario - Detail	What to do in the plan
GLAS – Very Little Dilution	Calculation of Volume and Constituents accurate in NMP	Use Estimated Volume & Cattle Slurry in drop down for application to plots
GLAS – Moderate or High Dilution – Option 1	A - No additional dilutants entered (Manure Storage Details not entered) B – Additional Dilutants entered – Dirty Yards, open storage etc	A1 – If moderate level of dilutants <ul style="list-style-type: none"> • Use Cattle Slurry 7% • Exceed Estimate by 20~40% A2 –Significant level of dilutants <ul style="list-style-type: none"> • Use Cattle Slurry 3% • Exceed Estimate by 50~100% B – Use Estimated Volume & Cattle Slurry
All Derogation	You are required to calculate an accurate storage volume	Use Estimated Volume & Cattle Slurry

4. Land and Fert Max page changes

Land and Fert maximum page has minor changes to the layout and calculations will appear to be different due to NAP changes

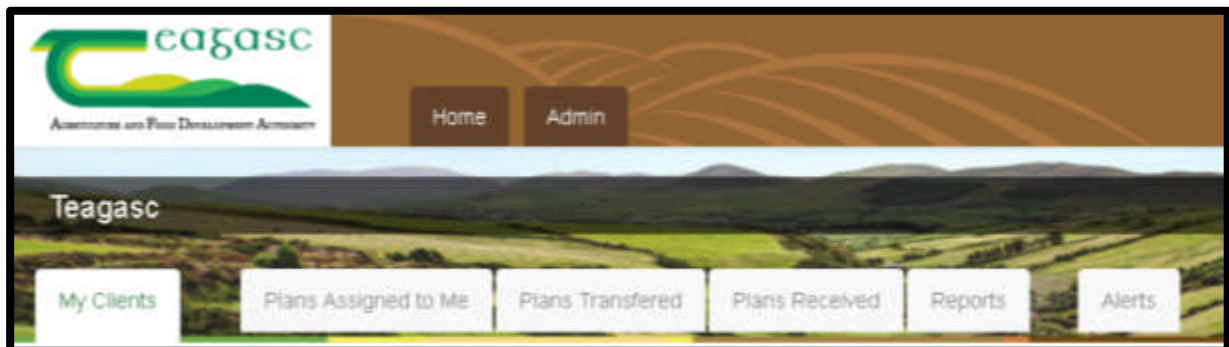
N allowance	(Kgs)	Notes	
Maximum total available N	10,858.30	Based on Available N allowances for grassland and tillage (N Index) x Ha's	A
- Available N produced on holding (0 from Grazing from 2018)	0.0	Will appear as zero if only grazing Livestock on the holding. If non-grazing livestock on the holding the available N will appear for non-grazing livestock.	B
- Available N in manures Imported	0	Available N from imported manures based on Table 9 and 9A of NAP	C
+ Available N in manures Exported (Max 742.0)	0.0	Available N from imported manures based on Table 9 and 9A of NAP	D
Maximum Chemical N fertiliser allowed	10,858.30	(A+D) - (B+C)	

P allowance	(Kgs)	Notes	
Maximum total available P	679.3	Based on Available N allowances for grassland and tillage (N Index) x Ha's	A
- Total P in Manures produced on holding (0 from Grazing from 2018)	0.0	Will appear as zero if only grazing Livestock on the holding. If non-grazing livestock on the holding the available P will appear	B
+ Manure P not available (Applied to index 1 & 2)	0.0	Total Unavailable P (kg) in organic manures page	C
- Total P in manures Imported	0	Total P from imported manures	D

+ Total P in manures Exported (Max 280.0)	0.0	Total P from exported manures based on Table 9 and 9A of NAP. Figure in brackets is the total P from Grazing livestock x weeks storage/52 plus total P from non-grazing livestock	E
Total P in Concentrate Feeds Used	129.4		
Discounted P in feeds (up to 300kg)	59.3		
- Net P in concentrate feeds used	70.1	Check Concentrate feeds for Net P contributing to Available Allowance	F
Maximum Chemical P fertiliser allowed	609.2	(A + C + E) - (B + D + F)	

5. Soil Sample reports

Reports on home page can now help users create reports showing out of date soil samples.



Select Generate report and this create a report for each agent showing out of date soil samples.

Plan Id	Type	Plan Year	Farmer	Herd	Sample Id	Lab Code	Sample Date	Status	Sampled Area	Soil Type
5765	Derogation	2016	Eugene O'Neill	D2240450	1	1	01/02/2015	ExpiringThisYear	2.07	Loam
5765	Derogation	2016	Eugene O'Neill	D2240450	2	2	03/03/2015	ExpiringThisYear	3.59	Loam
5732	Non-Derogation/ Non-GLAS	2016		D2222222	Stage P Index 2	188826	18/03/2014	Expired	14.47	Loam
5732	Non-Derogation/ Non-GLAS	2016		D2222222	Stage P Index 4	188826	18/03/2014	Expired	44.89	Loam

Under this page there is a green button “export Report” that can extract this data to a CSZ format. This report is only based on the plans last edited by the specific agent and not on an agency basis. Select my clients to return to the home page.

6. Livestock – Org N&P Summary Previous Years GSR

In accordance with DAFM guidelines, there is an optional setting s allows users to input this data as per the screen grab below. (See Appendix 4 for further information). Where previous years GSR is used the user must turn plan safety and Limit N&P allowed to 170 kg level to no. If previous years GSR is not used and planned GSR is used then select plan safety to yes when the warning message appears to select yes.

Field	Value
Herd Number	G2341068
County	Cork
Plan Safety	No
Limit N&P allowed to 170 Kg Level	No
Use Historic Grassland Stocking Rate	Yes
Insert GSR from previous year	95

New data section to show previous years Grassland Stocking Rate with planned grassland stocking rate and planned Whole Farm Stocking Rate

Whole Farm Stocking Rate Current Year	Grassland Stocking Rate Current Year	Grassland Stocking Rate Previous Year
87	87	95

When previous years Grassland Stocking Rate selected in accordance with DAFM regulation (Appendix 4), the NMP system will also show in the Plan Summary details under each page in NMP online.

Plan Summary

Grassland Stocking Rate: 87 Kg/Ha
 Whole Farm Stocking Rate: 87 Kg/Ha
 Previous Year Grassland Stocking Rate: 95 Kg/Ha
 Farm Area: 69.0 Ha
 Grass Land Area: 69.0 Ha
 Non Grass %: 0

This will also appear in the Land and Fert Max Page and Max Grassland Allowances will be based on this.

Fertiliser Plan - Land & Fert Max

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	N	P Index 1	P Index 2	P Index 3	P Index 4
Max Grassland Allowance (Previous Year Grassland SR:95 kg/Ha)	205	30	20	10	0

Where the user selects to 'Use Historic Grassland Stocking Rates' the system will use the entered figure as a basis for the statutory limits for the use of N and P. Recommended levels will continue to be based on the Green Book recommendations for the grassland stocking rate.

7. Plan Notes

The user can now insert some Report Notes which will appear on the front page of the NMP/fertiliser plan. The Soil Organic Matter status of lands and FAS sign off on mineral soils is an example of comments that can be included here.

Advisor notes ✓

Farmer notes ✓

Report notes ✓

This plan is prepared by Teagasc as a test. It provides a detailed plan of all nutrients to be applied and is fully compliant with all regulation



This plan is prepared by Teagasc as a test. It provides a detailed plan of all nutrients to be applied and is fully compliant with all regulation

8. Map Viewer and print job changes

- Maps produced for a farm will be visible to all planners for that farm (Previously limited to the adviser who produced the maps)
- Maps will be shown in reverse chronological order
- When adding a new map it will default to 1:5000

Appendix 1



Circular 02/2018 9th February 2018

To: GLAS Advisors

Re: Note on Soil Samples and Nutrient Management Plans (NMPs) in GLAS

Dear Advisor,

Please see attached appendix, detailing soil sample and NMP requirements for GLAS. Appendix

1. All GLAS participants must have a GLAS Nutrient Management Plan (NMP) produced by a GLAS Advisor in line with the requirements of Statutory Instrument (SI) 31/2014, European Union (Good Agricultural Practice for Protection of Waters) Regulations 2014, within the timeframe set down in the GLAS Tranche 1, 2 and 3 Terms and Conditions. Nutrient Management Plans produced in 2018 must be in accordance with the requirements of Statutory Instrument (SI) 605/2017, European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017.
2. The NMP must outline the total chemical Nitrogen (N) and chemical Phosphorus (P) for whole farm.
3. Adjustments must be made by the GLAS Advisor when drawing up the NMP for GLAS area based actions that have a chemical N restriction, for example, LIPP, THM, Hen Harrier etc. Therefore in these cases, the limit for these parcels is the maximum imposed by the GLAS action. All other Nitrogen advice for grassland should be based on chapter 12 of the Teagasc publication Major and Micro Nutrient Advice for Productive Agricultural Crops, 1st April 2016 (The Green Book) 2 and in particular with tables 9.5 and/or 9.6. For Nutrient Management Plans produced in 2018 all other Nitrogen advice for grassland should be based on Statutory Instrument (SI) 605/2017, European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017, in particular tables 12 and 14.
4. Commonage lands must not receive/be allocated chemical N and chemical P in the GLAS NMP. There is no requirement to soil sample these lands.
5. Mountain land and rough grazing lands may also be excluded from soil sampling. However in these cases, the lands must not receive/be allocated chemical N and chemical P and these areas must be clearly identified on the Teagasc NMP system.
6. All other land farmed (whether owned/leased/rented) must be sampled.

7. Soil samples previously taken must be in accordance with article 16(2) and Schedule 1 of SI 31/2014. Therefore for the GLAS NMP, once soils are within the five-year rule set out in Article 16(2) of SI 31/2014 on the date of drawing up the GLAS NMP, a GLAS NMP can be prepared. However, this will mean that the NMP will have to be updated during the GLAS contract by taking new soil samples. All soil samples taken in 2018 are valid for a period of four years as provided for under article 16(3) of SI 605/2017.
8. Soil analysis undertaken for this purpose shall be carried out by laboratories that have obtained ISO/IEC 17025:2000 accreditation for the test in question. Accreditation to compatible standards by other Member States, such as UKAS in UK, is also acceptable.
9. For samples to be valid in the year the GLAS NMP is prepared, they must be taken after the 15th September, five years previously. Therefore for samples to be eligible for 2018, they must have been taken after 15th September 2013. If taken on 1st September 2013, these samples expired on 31st December 2017.
10. All soil samples taken in 2018 are valid for a period of four years as provided for under article 16(3) of SI 605/2017.
11. Nitrates Derogation farmers who are also in GLAS must sample all lands farmed and take samples in accordance with the Nitrates Derogation Terms and Conditions and SI 31/2014 or SI 605/2017 as appropriate in place at the time of taking the soil samples. However they must not apply/allocate chemical N and chemical P to mountain/rough grazing and commonage lands.

All GLAS participants must have a NMP in place at all times during the GLAS contract.

GLAS glas@agriculture.gov.ie

Appendix 2

DAFM Nitrates Div. Circular No. 01/2018 - FAS Advisers

Subject: Good Agricultural Practice for Protection of Waters Regulations (S.I. No 605/2017)

A. Soil Phosphorus Build-Up Programme

Under article 16(5) of the Good Agricultural Practice for Protection of Waters Regulations (S.I. No 605/2017), effective from 1 January 2018, grassland farmers now have the option of using increased Phosphorus (P) build-up levels to rectify soil phosphorus deficiency. This new provision applies only to the more intensively stocked grassland farmers, with stocking rates of 130+ kg N/ ha.

1. Farmers wishing to avail of increased P build-up levels must ensure that a Nutrient Management Plan (NMP) is submitted to DAFM using the Teagasc on-line NMP, prepared by a Farm Advisory Service (FAS) advisor. Soil analysis is required including for soil Organic Matter (OM) content unless it is certified that soils on a holding are mineral soils, or the advisor certifies they are organic soils and build up rates will not be used. The P build-up programme shall be valid for a period of 4 years.
2. For those farmers applying for a Nitrates Derogation in 2018 and who wish to use the new P build-up rates (as contained in table 13B of S.I. 605/2017), the on-line NMP submitted satisfies DAFM notification requirements.
3. For non-derogation farmers who wish to use the new P build-up rates, a copy of the Teagasc on-line NMP must be emailed to DAFM at pbuildup@agriculture.gov.ie by 31 Dec 2018.
4. To ensure the protection of the environment, farmers using the increased P build-up rates are required to participate in a dedicated KT programme, delivered by a FAS advisor, by 31 December 2018.

Teagasc is providing training for FAS advisors who wish to deliver the P build-up KT programme to farmers. This training will include nutrient management planning for best environmental outcomes, phosphorus loss risk & mitigation, maximising organic manures.

The dates for delivery of this training for FAS Advisers are -

- Tuesday 20 February 2018 - Firgrove Hotel, Mitchelstown, Co Cork
[Click here to register](#)

- Friday 23 February 2018 – Abbeyleix Manor Hotel, Abbeyleix, Co Laois
[Click here to register](#)
- Tuesday 6th March 2018 at Athlone Springs Hotel, Athlone
[Click here to register](#)

FAS advisors wishing to participate in this KT programme must register, this is done by clicking on the above relevant link.

FAS advisors are required to deliver this training module to farmers by 31 December 2018. Please note that farmers will not receive payment for attendance at this course.

B. Soil Organic Matter Testing in Designated ‘Peaty’ Areas

Article 16(3)(d) of the Regulations requires that from 1 January 2018 where a soil test is being carried out in a designated ‘peaty’ area (soil OM content of 20%+), as defined on the Teagasc/ EPA Indicative soils map, the test must include soil organic matter analysis.

1. Farmers and advisors can determine if a land parcel is in this ‘peaty’ area by means of the DAFM LPIS mapping system and applying the OM layer.
2. Soil OM analysis is not required where a FAS advisor certifies that soils are mineral soils. This declaration must be provided to the herd-owner stating relevant details i.e. herdowner name, address, herd number, LPIS parcel number(s), signed and dated by the advisor.
3. Soil OM analysis is not required where a FAS advisor certifies that the soils in question are ‘peaty’ soils and build-up rates will not be used.
4. The P fertilisation rate for soils with 20%+ OM content must not exceed the amounts permitted for Index 3 soils as per footnote 2 of Tables 13A and 13B of S.I. No 605/2017.

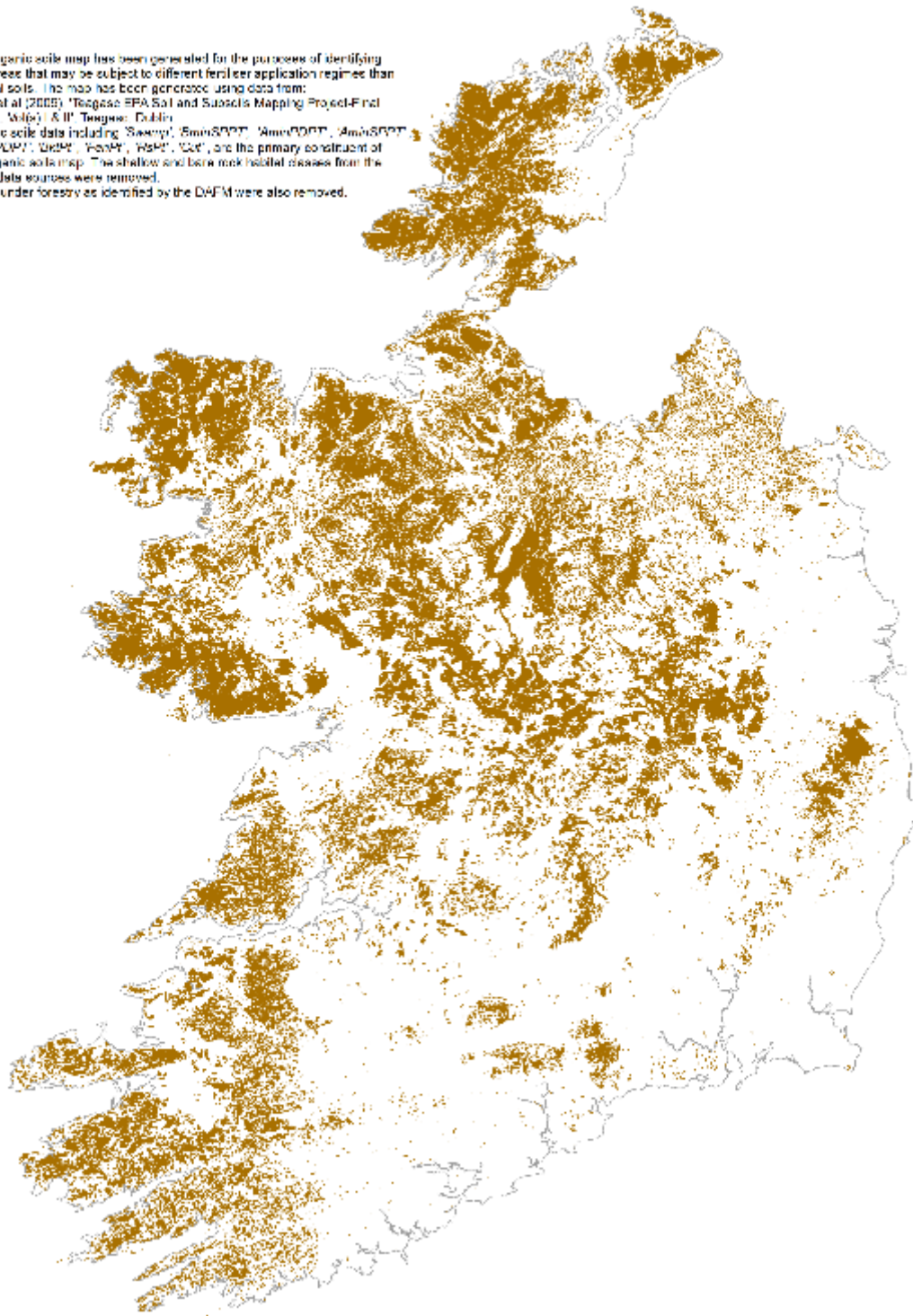
Dated 12 February 2018

Appendix 3

Soils with organic matter content >20% (forestry excluded)


Note:

This organic soils map has been generated for the purposes of identifying areas that may be subject to different fertilizer application regimes than mineral soils. The map has been generated using data from: Faaly et al (2005) 'Teagasc EPA Soil and Subsoils Mapping Project-Final Report' (Vol 1) & II, Teagasc, Dublin.
Organic soils data including 'Swamp', 'AmnSPTT', 'AmnDPTT', 'AmnSPPT', 'AmnDPTT', 'AmnSPPT', 'AmnDPTT', 'AmnSPPT', 'AmnDPTT', 'AmnSPPT', and the primary constituent of the organic soils map. The shallow and bank mark habitat classes from the same data sources were removed.
Lands under forestry as identified by the DAFM were also removed.

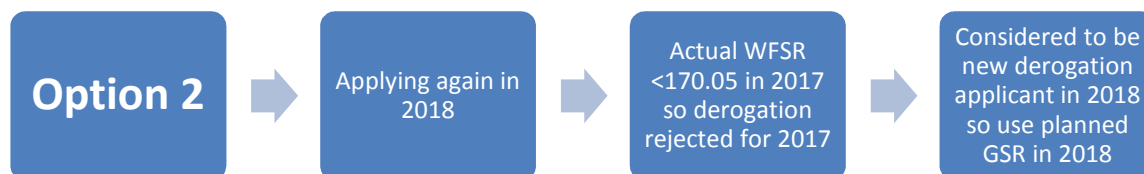
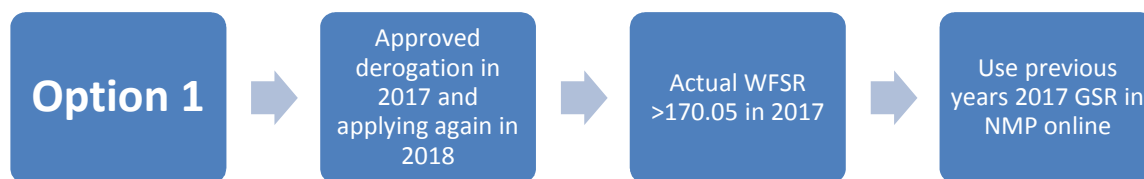


0 30 60 Kms

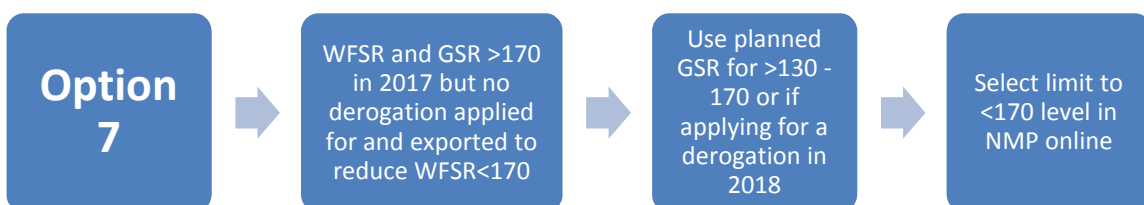
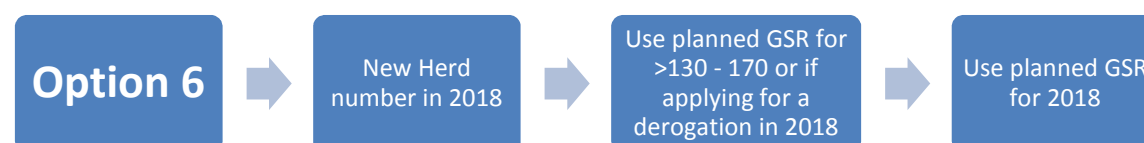
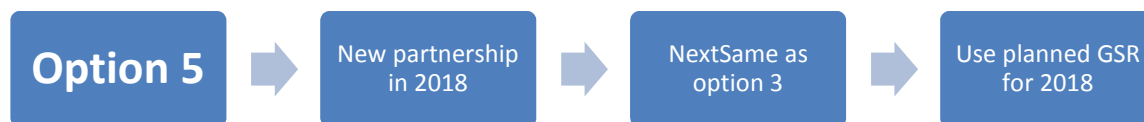
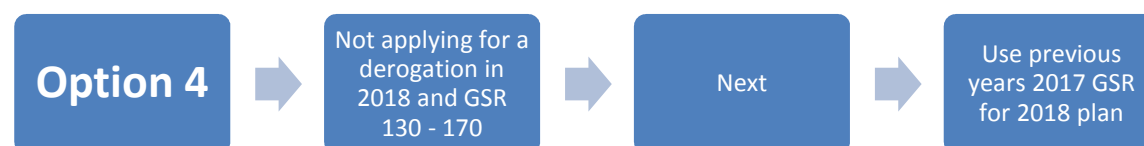
Data Source: EPA / OSI / DAFM / Coillte
Date: 21/12/2017

 Organic Soils

Appendix 4 Previous years GSR – DAFM Clarification March 2018



- Derogation application is invalid for 2017 due to actual GSR.



- If allowances based on planned GSR in 2018 (New Derogation Applicant – Options 2,3,5,& 6) the farmer will be allowed the 210-250 N per Ha available N and P figures. Inspections will be based on he submitted planed GSR for 2018
- *Abbreviations: WFSR - Whole Farm Stocking Rate; GSR – Grassland Stocking Rate*
- Inspectorate will use previous years GSR where this is used to calculate fertiliser allowances
- Inspectorate will use planned GSR where this is used to calculate fertiliser allowances
- Option 4 and 7 if >5% tillage can use the >170GSR allowances