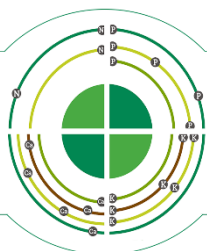


NMP Online User Update

Issue 22 | September 2022



NMP
Online

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1. General notes

The NMP online webpage is @ <https://www.teagasc.ie/environment/soil/nmp/>

[NMP bulletin 21](#) on Nitrates Action Programme changes from earlier in 2022 and the OSI layer 1:5,000.

[NMP bulletin 20](#) provides a link to videos on the upgraded mapping functionality.

[NMP bulletin 19](#) on mapping improvements.

[NMP bulletin 18](#) may also be of interest on how to extract soil sample data

2. Dairy Cow Banding

From 2023 onwards, the appropriate cow band should be selected for all dairy farms. We are aware that some advisers may already have created a 2023 plan for their client. So please update the correct cow type at your convenience.

The GAP Regulation was updated in March 2022 (SI 113/2022) and can be located @ <https://www.irishstatutebook.ie/eli/2022/si/113/made/en/print>

There was an amendment to the GAP regulation in July (SI 393/2022), which can be located @ <https://www.irishstatutebook.ie/eli/2022/si/393/made/en/print>

You can see in table 6 below (taken from SI 113) that three additional cow bands have been added.

Cow 1, 80kg N/hd/year and 12kg P/hd/year;

Cow 2 92kg N/hd/year and 13.60kg P/hd/year;

Cow 3 106kg N/hd/year and 15.80kg P/hd/year.

The existing dairy cow *9 kgs n/hd/year) is being replaced in 2023 with the Dairy cows below.

Livestock type	Total Nitrogen kg/year	Total Phosphorus kg/year
Dairy cow ⁷ (2022 only)	89	13
Dairy cow band 1 ⁸ (from 2023)	80	12
Dairy cow band 2 ⁹ (from 2023)	92	13.6
Dairy cow band 3 ¹⁰ (from 2023)	106	15.8

In NMP online a new list of cows now appears in the animal number section to take account of the 3 dairy cow types 80, 92 or 106kgs N/hd/year as per the DAFM Cow banding calculator @ [DAFM Nitrates Banding Calculator](#)

Edit live stock

Live Stock type: Dairy cow

Average Number of animals over year: Cattle (0-1 year old), Cattle (1-2 year old), Cattle > 2 years

Average Number of animals over winter: Dairy cow

Week storage required: Dairy cow 106kg N/hd (>6,500kgs), Dairy cow 80kg N/hd (4,500kgs), Dairy cow 92kg N/hd (4,500 - 6,500kgs), Lambs Finishing/Store Lambs

Weeks of Manure Production: Lowland ewe & lambs, Lowland Hogget, Mountain ewe & lambs, Mountain Hogget, Rams, Suckler cow

Show monthly

Buttons: Delete, Save, Save + New, Cancel

In 2023 plans users must only use one of the three dairy cow types 80, 92 or 106kgs N/hd. In the screen, shot below we have included all the dairy cows in NMP online to show that the N and P/hd is also changing depending on dairy cow selected. Currently there is no change to the slurry production/dairy cow regardless of the dairy cow selected.

Livestock - Animal Numbers					
Average Stock Numbers for the Year - Grazing Livestock					
Animal	No. Animals	N/head	N Total	P/head	P Total
Dairy cow	10	89.0	890.0	13.0	130.0
Dairy cow 92kg N/hd (4,500 - 6,500kgs)	20	92.0	1,840.0	13.6	272.0
Dairy cow 80kg N/hd (4,500kgs)	30	80.0	2,400.0	12.0	360.0
Dairy cow 106kg N/hd (>6,500kgs)	40	106.0	4,240.0	15.8	632.0

These cows will appear in the FYM and slurry production pages – example below.

Slurry - Slurry Produced					
Slurry Produced From Animals					
Animal	No. on Slurry	Weeks slurry produced	Weeks slurry required	Total Slurry Produced (m3)	Storage requirement (m3)
Dairy cow	120	18	18	712.8	712.8
Dairy cow 106kg N/hd (>6,500kgs)	5	18	18	29.7	29.7
Dairy cow 80kg N/hd (4,500kgs)	5	18	18	29.7	29.7
Dairy cow 92kg N/hd (4,500 - 6,500kgs)	5	18	18	29.7	29.7

Total Slurry Produced: 801.9 m³ 176415.1 Gallons

Total Storage Required: 801.9 m³ 176415.1 Gallons

3. Slurry import and Export changes

DAFM have a useful manual to help farmers and agents with online organic manure exports/imports which is located @ <https://assets.gov.ie/125742/56f98f17-72c0-4f23-bbcf-7e6e228f906b.pdf>

There has been changes to the N and P content in cattle slurry and broiler litter which are outlined in the table 1 below (Table 2 has the broiler litter changes). The date of export put into AgFood online movements or the paper Record 3 will use the figures below. This is now an upgrade in NMP online.

Table 1 Cattle Slurry N and P /m3 changes 2022

Dates Cattle Slurry	Nitrogen Kgs/m3 1m3 = 1T	Phosphorus Kgs/m3	Potassium Kgs/m3
01 st Jan – 11 th Mar	5	0.8	3.5
11 th Mar –28 th July	2.4	0.8	3.5
29 th July to year end	2.4	0.5	3.5

Table 2 Broiler/deep litter N and P/T changes 2022

Dates Broiler/deep litter	Nitrogen Kgs/T	Phosphorus Kgs/T	Potassium Kgs/T
01 st Jan – 11 th Mar	11	6.0	18
11 th Mar – year end	28	6.0	18

4. Existing 2022 NMP's with imports or exports already in the NMP:

Where there is a 2022 NMP that has imports already in it then when the user goes into the plan the reports will be locked down and additional warning will now appear for imports and exports.

Warning! Date of Import for Organic Fertiliser Imports must be populated from 2022.

Warning! Date of Export for Organic Fertiliser Exports must be populated from 2022.

The user will have to go into the imports or exports whichever is relevant and there is a new cell “date of export” to be populated, which will have to be completed for imports and exports to unlock the reports.

Edit Manure Export

Manure Type: Cattle Slurry

Quantity: 500 t

N, P & K Contents: Default (Regs)

Date of Export:

	N	P	K
Content	2.4 Kg/T	0.5 Kg/T	3.5 Kg/T
Total	1200 Kg	250 Kg	1750 Kg
Availability	40 %	100 %	100 %
Available	480 Kg	250 Kg	1750 Kg

Buttons: Delete, Save, Save + New, Cancel

Edit Manure Export

Manure Type: Cattle Slurry

Quantity: 500 t

N, P & K Contents: Default (Regs)

Date of Export:

	N	P	K
Content	2.4 Kg/T	0.5 Kg/T	3.5 Kg/T
Total	1200 Kg	250 Kg	1750 Kg
Availability	40 %	100 %	100 %
Available	480 Kg	250 Kg	1750 Kg

Buttons: Delete, Save, Save + New, Cancel

Depending on date selected the N and P content/m3 will change to match Table 1 or 2 above for cattle slurry and broiler litter. However for all other organic manure types imported/exported then the cell “date of export” to be populated.

Edit Manure Import

Manure Type: Cattle Slurry

Quantity: 10 t

N, P & K Contents: Default (Regs)

Date of Import: 01/09/2022

	N	P	K
Content	2.4 Kg/T	0.5 Kg/T	3.5 Kg/T
Total	24 Kg	5 Kg	35 Kg
Availability	40 %	100 %	100 %
Available	9.6 Kg	5 Kg	35 Kg

Buttons: Delete, Save, Save + New, Cancel

5. Adding new imports or exports to a 2022 NMP

For new imports/exports added to NMP from 22/09/2023 the date of export will be populated with the date that export is added but this can be changed by the user to match the actual date of import/export.

Add New Manure Export

Manure Type: Cattle Slurry

Quantity: quantity t

N, P & K Contents: Default (Regs)

Date of Export: 23/09/2022

	N	P	K
Content	2.4 Kg/T	0.5 Kg/T	3.5 Kg/T
Total	0 Kg	0 Kg	0 Kg
Availability	40 %	100 %	100 %
Available	0 Kg	0 Kg	0 Kg

Buttons: Delete, Save, Save + New, Cancel

6. Organic fertiliser and Land & Fert Max page changes:

- Due to the changes in Table 1 above the organic manure fertilisers section is updated to take Table 1 into account and now uses the N & P content/m3 from this table to populate the nutrients applied section in the organic fertiliser page based on the date the plan was created.
- There are some slight knock-on effect to the sections below and to the chemical fertiliser allowed on farms. These changes have been introduced to comply with the two changes in the regulations in 2022.

Nutrients Applied (Units/Acre)	Nutrients Advice (Units/Acre)	Nutrients Balance (Units/Acre)
N P K	N P K	N P K

Fertiliser	Estimated T	Applied T	Balance T
Cattle Slurry	500	500	0
Total P in Manures (Grazing + Non-Grazing 0.0)			400
Manure P allocated			400
Manure P remaining			0
Total Manure P on Index 1&2			400
Total Manure P on Index 3&4			0
Total Available P (kg)			200
Total Unavailable P (kg)			200

	N(kg)	P(kg)	K(kg)
Chemical Recommended	5,543	1,448 (100%)	1,528
Max Chemical Allowed	5,543	1,448	
Chemical Usage	0	0	0

7. Top Tips

- Use Chrome as your browser
- Delete your cache and cookies
- Turn off “Plan Safety” unless doing a set of records for a farm that was >170 kg N/ha WFSR and didn’t apply for a derogation
- Do not forget if updating plans. You will need to review fert advice due to the 10% cut in N
- If you have any questions contact the NMP Helpdesk

8. Deadlines for Exports:

a) Non-Derogation farmers

Submitted on-line by exporter by **31st December**

Accepted on-line by Importer by **31st December**

b) Derogation farmers

Submitted on-line by exporter **31st October**

Accepted on-line by Importer before **31st October**

9. Slurry Calculation Figure Changes, how will this affect farmers?

Table 1 Cattle Slurry N and P /m3 changes 2022

Dates Cattle Slurry	Nitrogen Kgs/m3 1m3 = 1T	Phosphorus Kgs/m3	Potassium Kgs/m3
01 st Jan – 11 th Mar	5	0.8	3.5
11 th Mar –28 th July	2.4	0.8	3.5
29 th July to year end	2.4	0.5	3.5

10. Example Dairy Farmer Export Calculations:

- Cow produces 89kg/N per year in 2022.
- Farmer is stocked at 190Kg/N/Ha & is farming 45Ha
- 190Kg x 45Ha = 8,550kg/Org N produced on the farm
- Target stocking rate 165Kg x 45ha = 7,425kg/N
- 8,550 -7,425 = How much Org N we need to export 1,125Kg/N of Org N

Pre March 11th

1,125/5Kg/N = 225m3 of Slurry (180kgs P exported)

From March 11th up to midnight 28th July

1,125Kg/N Org N/2.4Kg/N = 468m3 Slurry (180kgs P exported)

From 29th July

1,125Kg/N Org N/2.4Kg/N = 468m3 Slurry (234kgs P exported)

11. Limiting Factors for Person Importing:

- Be wary you do not exceed 170kg/N/Ha by importing organic manures (this year's projected total N from livestock and this year's imports). Changed in 2022 as in 2021 it was the previous year's WFSR and the 2021 imports was added to the 2020 WFSR.
- Do not exceed your chemical Phosphorous allowance. (SI 113 Table 17)
- Ensure to count Phosphorous bought in chemical fertiliser in year of import
- Feed given grazing animals on the farm in the previous year. P in feed must be counted also. Feed given to animal will reduce allowances further. The first 300Kg Fed per 85kg can be discounted.
- In 2022 all farms >170 kgs N/ha in 2021 must assume P index 4 on all lands without soil samples.
- **In 2023 all farms >130 kgs N/ha in 2022 must assume P index 4 on all lands without soil samples.**
- In 2023 all arable lands are P 4 where there is no soil samples for this land.

12. Example Tillage farmer importing:

- No stock so has a stocking rate of zero. Limiting factor is P allowance.
- No soil samples, so assume index three. Winter Barley index 3 has an allowance of 25Kg/P/Ha x 20 ha Farmed = 500Kg/P allowance
- Farmer bought 4T of 10:10:20. There is 400Kg of P in the 4T of 10:10:20
- 500 - 400 = 100Kg/P of an allowance left.
 - Before 29th July = 100 / 0.8 = 125m³ of Slurry allowed to be Imported.
 - From 29th July = 100/0.5 = 200m³ of Slurry allowed to be Imported.

13. Example farmer with livestock and a bit of spring barley

- Grassland stocking rate of GSR 110Kg/ha & WFSR of 90Kg/ha in 2022 on 40ha's.
- No soil samples so assume index 3.
- Spring barley index 3 has an allowance of 25Kg/P/Ha x 5 ha Farmed = 125Kg/P allowance
- Grassland at 110kg has an allowance of 10kg/ha x 35ha farmed = 350kg/P

Total P allowance 475Kg P

Farmer bought 4T of 10:10:20. There is 400Kg of P in the 4T of 10:10:20.

475 – 400 = 75Kg/P of an allowance left.

Before July 31nd = 75/0.8 = 93m³ of Slurry allowed to be Imported

After Aug 1st = 75/0.5 = 150m³ of Slurry allowed to be imported

Note: This does not take into account feed given to animals on the farm. P in feed must be counted also. In this case if this farm had fed more than 14T of meal then m3 would have to reduce accordingly.

14. Banding of Dairy Cows Examples

Bands	Milk yields	Excretion rate
Band 1	< 4,500 kg of milk	80kg Organic N/cow
Band 2	4,500-6,500 kg of milk	92kg Organic N/cow
Band 3	>6,500 kg of milk	106kg Organic N/cow

Proposed bands and excretion rates
Source: DAFM

Farm in 2022, Stocked at 190Kg/Ha on 50Ha of Land

Usually exports to go below 170Kg/Ha (using 165kgs N/ha as the safety net when exporting)

- Cows 91 x 89 = 8,099
- 1 Bull x 65 = 65
- Cattle (1-2) 15 x 57 = 855
- Cattle (0-1) 20 x 24 = 480

9,500 Kg Org N produced on the farm ÷ 50Ha = 190Kg/Ha

Slurry Export

Target stocking rate 165Kg/Ha x 50 = 8,250 – 9,500= 1,250Kg/Org/N ÷ 5 = 250m3 of Slurry

OR 1,250 ÷ 2.4 = 521m3 of Slurry

For 2023, Farmer moves into Band 2: 92Kg/N

- Cows 91 x 92 = 8372
- 1 Bull x 65 = 65
- Cattle (1-2) 15 x 57 = 855
- Cattle (0-1) 20 x 24 = 480

9,772 Kg Org N produced on the farm ÷ 50Ha = 195Kg/Ha

Slurry Export

Target stocking rate 165Kg/Ha x 50 = 8,250 - 9772 = 1,522 ÷ 2.4 = 634m3

For 2023, Farmer moves into Band 3 106Kg/N

Cows 91 x 106 = 9646

1 Bull x 65 = 65

Cattle (1-2) 15 x 57 = 855

Cattle (0-1) 20 x 24 = 480

11,046 Kg Org N produced on the farm ÷ 50 = 221Kg/Ha

Slurry Export

Target stocking rate 165Kg/Ha x 50 = 8,250 - 11,046 = 2,646 ÷ 2.4 = 1,102m³

Farmers Options to mitigate against these rises:

- Contract Rearing of replacement stock
- Move unwanted calves/beef stocked off farm ASAP
- Rent/Buy more land
- Short term rental (6/7 months)/record 5 ground
- Export Slurry

15. Application of Slurry by low emissions Requirements:

- Low emission slurry spreading equipment must be used for the application of slurry on holdings with grassland stocking rates of :
- 170 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding (2022).
- 150 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2023.
- 130 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2024.
- 100 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2025.
- Slurry produced by pigs on any holding from 1st January 2023.
- From 1st January 2023, low emission equipment shall be used to apply livestock manure to arable land or the livestock manure shall be incorporated within 24 hours. (SI No.393 of 2022)

16. Soil sampling Requirement

- All holdings grassland stocking rate of 170 kg nitrogen per hectare or above prior to export of livestock manure to take soil tests and shall assume P index 4 until soil tests are taken.
- From 1st January 2023 this applies to stocking rates above 130 kg nitrogen per hectare
- From 1st January 2023 all occupiers of holdings on all arable land shall take soil tests and shall assume P index 4 until soil tests are taken.
- For late harvested crops, a minimum uncultivated buffer of 6m shall be put in place to protect any intersecting watercourses.

Contact the Helpdesk by email or phone

NMP.Helpdesk@teagasc.ie

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