

NMP Standard Format Version 10.0 Released – October 2024

The Nutrient Management Program has updated the Nutrient Management Plan (NMP) Spreadsheet to Version 10.0. Several updates were added to resolve identified issues and provide additional information.

Planners must use NMP Version 10.0 when planning for crop year 2026 and beyond.

Highlights of these updates include:

1. Appendix 3 Manure Group Information Printout / Manure Average Printout

- 1.1. Updated the Appendix 3 Manure Group Information printouts so "Average will be displayed when two or more years of manure analyses reports are entered in the manure average input worksheet.

Appendix 3 Manure Group Information Printout Example

Appendix 3 Manure Group Information	Laying Hen			
Manure Report Date(s) (Refer to 5-yr Manure Average Printout)	10/05/2023 (Average)			
Laboratory Name	Dandy Don's Lab			
Manure Type	Poultry			
Manure Unit (lbs/ton or 1000 gal)	lb/ton			
Total Nitrogen (N) (lbs/ton or 1000 gal)	70.00			
Ammonium N (NH ₄ -N) (lbs/ton or 1000 gal)	35.00	Manure Report Date The Manure Report Date is transferred from the Manure Average Input tab. It's the report date from the most recent analysis report for the manure group. If a manure group name is selected and the report date is blank then "complete report date" will be displayed" The value can be a single year analyses or an average of up to 5 years. Refer to the 5-year Manure Average printout.		
Total Organic N (lbs/ton or 1000 gal)	35.00			
Total Phosphate (P ₂ O ₅) (lbs/ton or 1000 gal)	45.00			
Total Potash (K ₂ O) (lbs/ton or 1000 gal)	45.00			
Percent Solids	25.00			
PSC Value (analytical or book value)	0.61			
Percent Moisture	75.00			
Manure Group AEU's	31.30			

Manure Group Analyses 5 year Average Printout Example

Manure Analysis 5 Year Running Average						
Manure Average	Laying Hen					
	Average (If Applicable)	1 year ago	2 years ago	3 years ago	4 years ago	5 years ago
Manure Report Date	10/05/2023 (Average)	Oct 05 2023	Sep 29 2022			
Laboratory Name	Dandy Don's Lab	Dandy Don's Lab	AASL			
Manure Type	Poultry	Poultry	Poultry			
Manure Unit (lbs/ton or 1000 gal)	lb/ton	lb/ton	lb/ton			
Total Nitrogen (N) (lbs/ton or 1000 gal)	70.00	60.00	80.00			
Ammonium N (NH ₄ -N) (lbs/ton or 1000 gal)	35.00	30.00	40.00			
Total Organic N (lbs/ton or 1000 gal)	35.00	30.00	40.00			
Total Phosphate (P ₂ O ₅) (lbs/ton or 1000 gal)	45.00	50.00	40.00			
Total Potash (K ₂ O) (lbs/ton or 1000 gal)	45.00	40.00	50.00			
Percent Solids	25.00	20.00	30.00			
PSC Value (Enter analytical or book value)	0.61	0.66	0.55			

2. Appendix 4 Crop & Manure Management Input / Printout Worksheets

- 2.1. The manure type lookup for Animal Group 6 uncollected manure in Manure Group 5 was updated to report the correct manure type.
- 2.2. Updated late fall and winter ammonium nitrogen values for next summer use after unharvested cover crop to be consistent with Penn State Agronomy Guide Table 1.2-12.

Appendix 4 Crop & Manure Management Printout version 9.0 vs 10.0 Example

App. 4: Crop Yrs. 2025			
CMU/Field ID	2		
Acres	15		
Soil Test Report Date	Go to NMP Index October 2, 2023		
Laboratory Name	AASL		
Soil Test Levels (Mehlich-3 P & K) (Show conversions to ppm in Appendix 10)	ppm P	ppm K	pH
	150	200	6.8
P Index Part A Evaluation	No to All Part A		
Part A Result	N Based		
Crop	Corn for Silage (No-till)		
Planned Yield	21 ton/A		
PSU Soil Test Recommendation	N	P2O5	K2O
	160	0	0
User Soil Test Recommendation (lb/A)			
Other Nutrients Applied (lb/A) (Nutrients applied regardless of manure)	10	20	10
P Index Application Method			
Double Crop Carryover N (lb/A)	0		
Manure History Description	20	Frequently - Summer Crop	
Residual Manure N (lb/A)	0	No Legume Residual N Credit	
Net Nutrients Required (lb/A)	130	-20	-10
Manure Group	Fall Dairy Liquid		
Application Season: Management (Incorporation, cover crops, etc.)	Late Fall: Next summer use after unharvested cover crop		
Nitrogen Availability Factors (NH4-N & Organic N)	NH4-N	Org. N	
	0.00	0.35	
P Index Application Method			
N Balanced Manure Rate (ton; gal/A)	21595 gal/A		
P Removal Balance Manure Rate (ton or gal/A; If required by P Index)	5333 gal/A		
	Crop P Removal	64.0	
P Index Value			
Planned Manure Rate (ton or gal/A)	5000 gal/A		
Nutrients Applied at Planned Manure Rate (lb/A)	30	60	115
Nutrient Balance after Manure	100	-80	-125
Supplemental Fertilizer (lb/A)	100	0	0
P Index Application Method			
Final Nutrient Balance (lb/A)	0	-80	-125
Multiple Application			

App. 4: Crop Yrs. 2025			
CMU/Field ID	2		
Acres	15		
Soil Test Report Date	Go to NMP Index October 2, 2023		
Laboratory Name	AASL		
Soil Test Levels (Mehlich-3 P & K) (Show conversions to ppm in Appendix 10)	ppm P	ppm K	pH
	150	200	6.8
P Index Part A Evaluation	No to All Part A		
Part A Result	N Based		
Crop	Corn for Silage (No-till)		
Planned Yield	21 ton/A		
PSU Soil Test Recommendation	N	P2O5	K2O
	160	0	0
User Soil Test Recommendation (lb/A)			
Other Nutrients Applied (lb/A) (Nutrients applied regardless of manure)	10	20	10
P Index Application Method			
Double Crop Carryover N (lb/A)	0		
Manure History Description	20	Frequently - Summer Crop	
Residual Legume N (lb/A)	0	No Legume Residual N Credit	
Net Nutrients Required (lb/A)	130	-20	-10
Manure Group	Fall Dairy Liquid		
Application Season: Management (Incorporation, cover crops, etc.)	Late Fall: Next summer use after unharvested cover crop		
Nitrogen Availability Factors (NH4-N & Organic N)	NH4-N	Org. N	
	0.50	0.35	
P Index Application Method			
N Balanced Manure Rate (ton; gal/A)	11905 gal/A		
P Removal Balance Manure Rate (ton or gal/A; If required by P Index)	5333 gal/A		
	Crop P Removal	64.0	
P Index Value			
Planned Manure Rate (ton or gal/A)	5000 gal/A		
Nutrients Applied at Planned Manure Rate (lb/A)	55	60	115
Nutrient Balance after Manure	75	-80	-125
Supplemental Fertilizer (lb/A)	75	0	0
P Index Application Method			
Final Nutrient Balance (lb/A)	0	-80	-125
Multiple Application			

Only affects late fall and winter manure applications to unharvested cover crop.

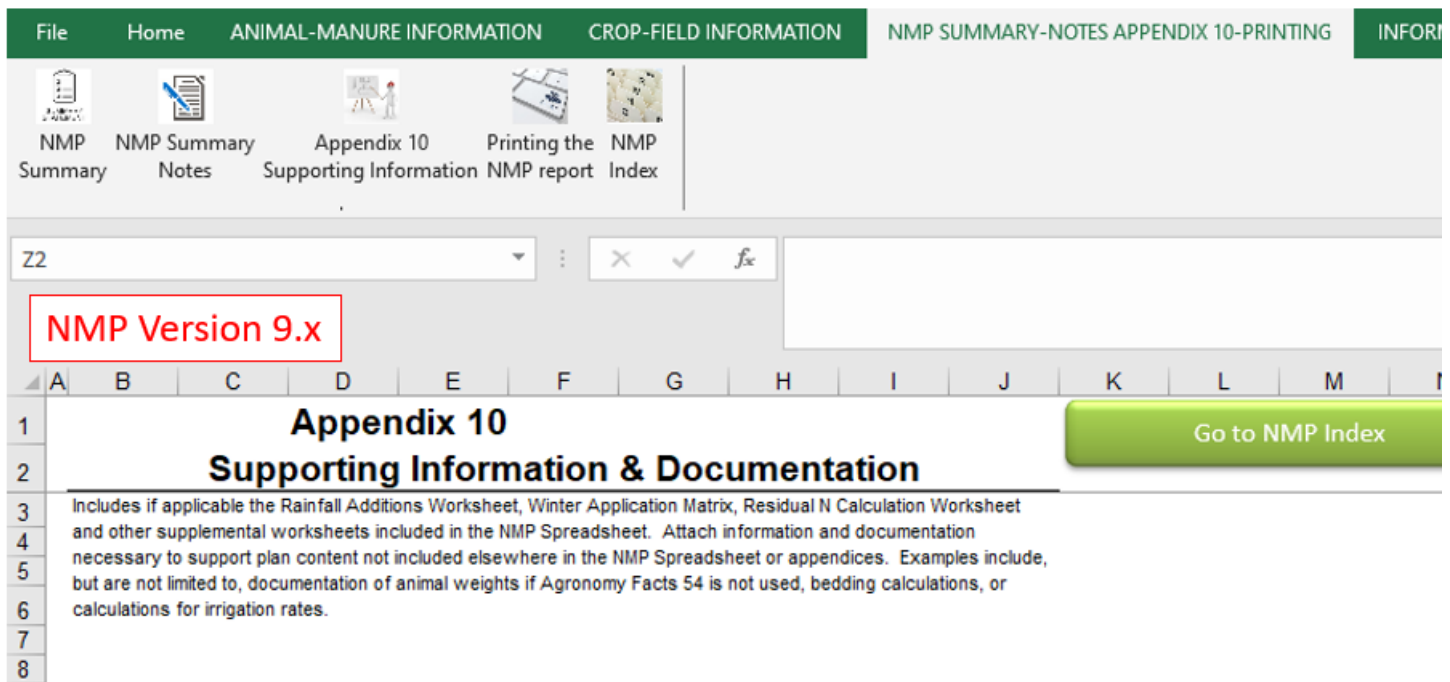
Update shows less supplemental fertilizer needed after manure.

Only affects late fall and winter manure applications to unharvested cover crop.

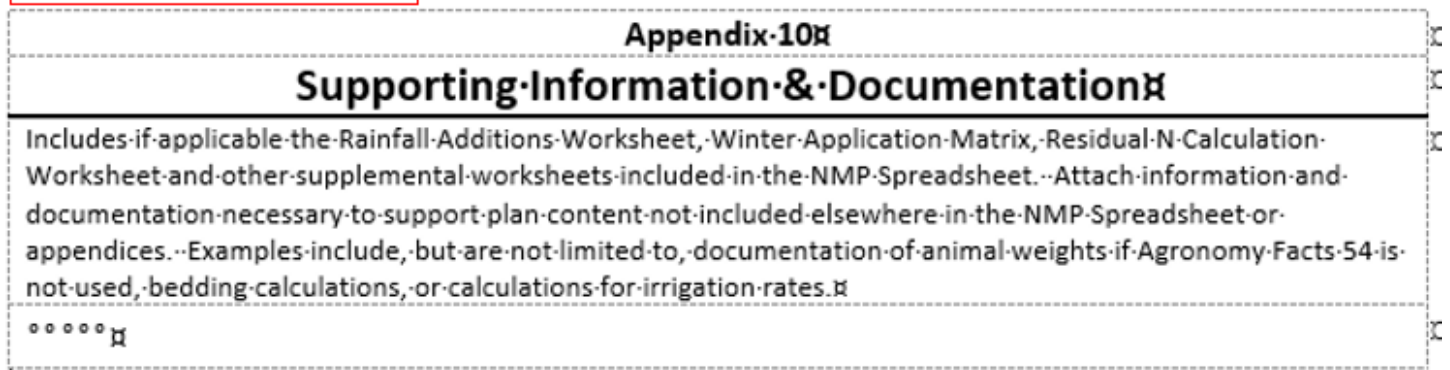
Update shows less supplemental fertilizer needed after manure.

3. Appendix 10 Supporting Information & Documentation

3.1. NMP Appendix 10 has been moved from the Excel to the Word file.



NMP Version 10.0



4. Optional Worksheet - Grazing Calculator

4.1. Updated individual field information so animal group uncollected manure is shown.

Grazing Calculator Printout version 10.0 vs 9.x Example

Calculator to determine manure nutrients deposited by grazing animals

NMP Version 10.0

			Grazing Season Information						Total Uncollected Manure deposited on the field Tons	Animal Group Uncollected Manure Tons/A	Planned Manure Rate	Weighted Average Manure Nutrients (lb/ton)				Grazing Note
Field or CMU ID	Acres	Field and Grazing Group Name	Animal Group	Animal Number	Days on Pasture	Begin Month	End Month	Hours / Day on Pasture			Uncollected Manure Tons/A	NH ₄ -N	Org-N	P ₂ O ₅	K ₂ O	
Pasture	3.79	Field Pasture - Grazing Calculator	Sheep - Uncollected	15	240	Apr.	Nov.	12	29.27	1.66	7.72	1	16	6	12	The grazing group includes the following animals on pasture: 15 sheep from the Sheep animal group, 12 hours per day for 240 days, from Apr. to Nov. 15 sheep from the Lambs animal group, 12 hours per day for 240 days, from Apr. to Sep. 1 sheep from the Ram animal group, 12 hours per day for 240 days, from Apr. to Nov. 12 beef finishers from the Steers animal group, 8 hours per day for 210 days, from May. to Nov.
Clear Grazing Field			Lambs - Uncollected	15	240	Apr.	Sep.	12		0.76						
			Ram - Uncollected	1	240	Apr.	Nov.	12		0.14						
			Steers - Uncollected	12	210	May.	Nov.	8		5.16						

Calculator to determine manure nutrients deposited by grazing animals

NMP Version 9.x

			Grazing Season Information						Total Uncollected Manure deposited on the field Tons	Planned Manure Rate	Weighted Average Manure Nutrients (lb/ton)				Grazing Note
Field or CMU ID	Acres	Field and Grazing Group Name	Animal Group	Animal Number	Days on Pasture	Begin Month	End Month	Hours / Day on Pasture		Uncollected Manure Tons/A	NH ₄ -N	Org-N	P ₂ O ₅	K ₂ O	
Pasture	3.79	Field Pasture - Grazing Calculator	Sheep - Uncollected	15	240	Apr.	Nov.	12	29.27	7.72	1	16	6	12	The grazing group includes the following animals on pasture: 15 sheep from the Sheep animal group, 12 hours per day for 240 days, from Apr. to Nov. 15 sheep from the Lambs animal group, 12 hours per day for 240 days, from Apr. to Nov. 1 sheep from the Ram animal group, 12 hours per day for 240 days, from Apr. to Sep. 12 beef finishers from the Steers animal group, 8 hours per day for 210 days, from May. to Nov.
Clear Grazing Field			Lambs - Uncollected	15	240	Apr.	Sep.	12							
			Ram - Uncollected	1	240	Apr.	Nov.	12							
			Steers - Uncollected	12	210	May.	Nov.	8							

5. Previous NMP Version Transfers

Previous versions of NMP 8.x and 9.x files can be transferred to NMP Version 10.0.

As a reminder, there is a detailed description of all the updates in the Version Updates tab of the NMP spreadsheet. It is also posted on the website in the "Latest News" section.

The standard format Excel file: **NMP Version 10.0 2024-10 (2007-2019 Excel)** is now available on the Nutrient Management Website under planning tools.

If you have any questions regarding the updated spreadsheet version, please contact:

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