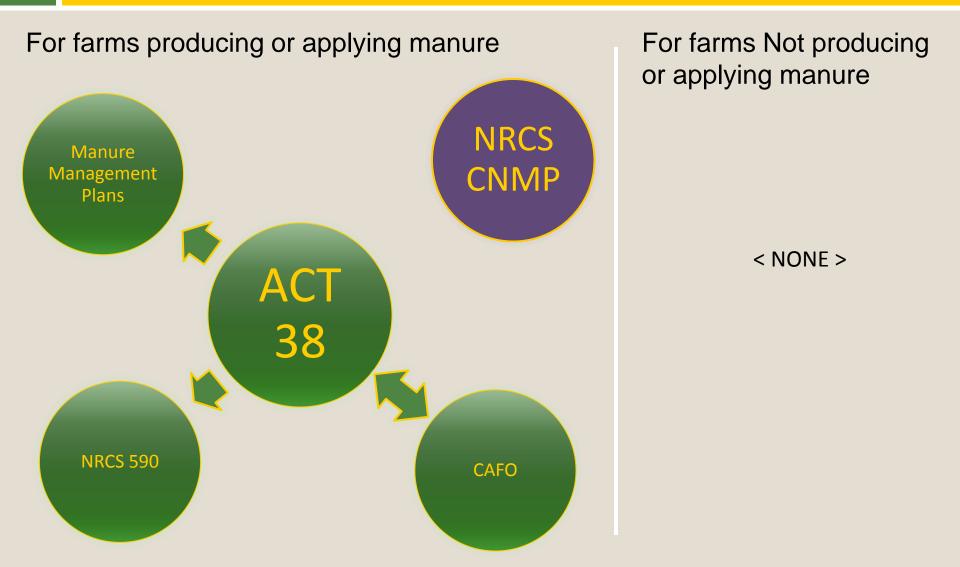




#### NUTRIENT MANAGEMENT & THE CHESAPEAKE BAY EXPERIENCE: ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

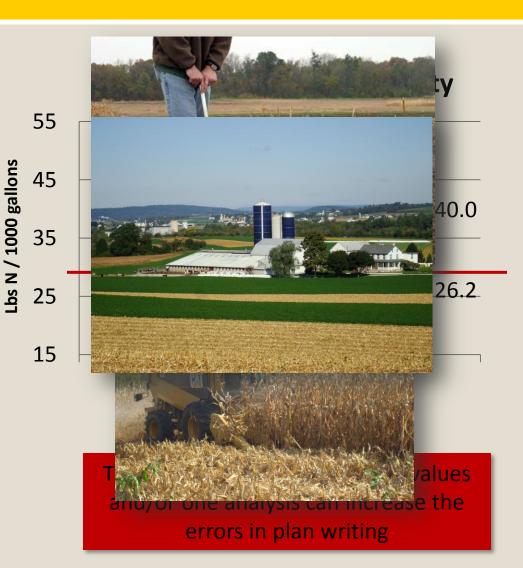
A Certified Crop Adviser's Perspective

## Levels of Planning (Pennsylvania)



## Necessary info for plan development

- Soil analysis
- Manure analysis
- Rotation/Tillage
- Producer records
  - Manure production
  - Crop Yield
  - Animal numbers
  - Pasturing periods



#### Nutrient Management Plan Summary

Total acres reported in NMP Summary:

1681.6

Crop Year(s) 2013

		Summary.		1001.0							orop	rear(s)	2010			
Whole Farm Note:							Starter/Other Fertilizer (Ib/A)			Supplemental Fertilizer (Ib/A)			Nutrient Balance (Ib/A) <sup>1</sup>			Notes
CMU/Field ID	Acres	Crop	Manure Group	Application Season	Application Management	Planned Manure Rate	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> 0	(Select "Yes")
1	10.9	Alfalfa with manure	Thin Dairy Slurry	Late Fall	Spring use by grass or small grains	4000 gal/A	0	0	0	0	0	0	0	-13	-49	
10	10.4	Small Grain Silage/Com Silage(Com Silage based yield)	Thin Dairy Slurry	Early Fall	Incorporated after 7 days or none	6000 gal/A	0	0	0	65	0	0				
10-Spring	10.4	Small Grain Silage/Com Silage(Com Silage based yield)	Thin Dairy Slurry	Spring	Incorporated after 7 days or none	6000 gal/A	0	0	0	0	0	0				
10-Spring2	10.4	Small Grain Sil Silage(Com Si yiel	Thick Dairy Slurry	Spring	Incorporated after 7 days or none	6000 gal/A	0	0	0	93	0	o <sup>°</sup>	0	-25	-280	Yes
11	15.1	Com : ge	Thin Dairy ਼ਿ"ਾਸy	Early Fall	Incorporated after 7 days or i e	6000 gal/A	0	0	0	0						
11-Pen	15.1	Comige			F ne u y so No ver op	e la compañía de		R			0	0				
11-Spring	15.1	Com S ve	ik Di silurry	Spring	Incorporated after 7 days or none	6000 gal/A	0				0	0	6	-186	-569	Yes
12	18.7	Small Grain S Silage(Com Sila Jased yield)	Thin Dairy Slurry	Early Fall	Incorporated after 7 days or none	6000 gal/A	0	0	0	65	0	0				
12-Spring	18.7	Small Grain Silage/Com Silage(Com Silage based yield)	Thin Dairy Slurry	Spring	Incorporated after 7 days or none	6000 gal/A	0	0	0	0	0	0				
12-Spring2	18.7	Small Grain Silage/Com Silage(Com Silage based yield)	Thick Dairy Slurry	Spring	Incorporated after 7 days or none	6000 gal/A	0	0	0	93	0	0	0	-105	-330	Yes
13	20.2	Small Grain Silage/Com Silage(Com Silage based yield)	Thin Dairy Slurry	Early Fall	Incorporated after 7 days or none	6000 gal/A	0	0	0	65	0	0				
13-Spring	20.2	Small Grain Silage/Com Silage(Com Silage based yield)	Thin Dairy Slurry	Spring	Incorporated after 7 days or none	6000 gal/A	0	0	0	0	0	0				
13-Spring2	20.2	Small Grain Silage/Com Silage(Com Silage based yield)	Thick Dairy Slurry	Spring	Incorporated after 7 days or none	6000 gal/A	0	0	0	93	0	0	0	-105	-330	Yes

<sup>1</sup> Positive numbers = nutrient deficit; Negative numbers = nutrient excess

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## Economics vs. Regulation

### Overlapping Goals:

- Increased nutrient use efficiency
  - Manure injection, nitrogen stabilization products, plant analysis, timely nutrient applications, etc.
- Protection of soil resources
  - No till planting, cover crops, etc.
- Addressing animal concentration areas
  - Animal housing facilities, manure storages, etc.



# Thank You!





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