

Summary of Effort to Revise Nutrient Coefficients

- Historically, the NRCS coefficients were used for planning purposes but NCDA&CS coefficients were used for actual land application. The INMC 's goal was to evaluate the coefficients from both tables, as well as additional available research, such that NC would have only one Nutrient Coefficient table that would be used for both planning and application. See attached document, Comparison of Nutrient Availability Coefficients.

- Jot Smyth presented several different methods of defining PAN (plant available nitrogen)

It is difficult to find literature regarding organic P in manure vs. inorganic Phosphorus. Through the information presented, it was determined that manure P was behaving much like inorganic P. Therefore there would not be a need to differentiate the coefficients between the two sources.

Jot will summarize his presentation and place on the INMC website.

- Through the presentation by Jot, it was determined that the changes in Phosphorus and Potassium are more of a function of quantity instead source. Therefore, the INMC recommends using a coefficient of 1 for both Phosphorus and Potassium regardless of source.
- There is no NC data or literature on situations that are similar to NC conditions for either incorporated or injected application methods, nor could the committee determine how many producers are applying N using the injected method. Therefore it was recommended to combine the application methods for Incorporated and Injected. The recommended rates were based on the tendency of subsurface placement of manure to reduce volatile losses, unlike Broadcast and Irrigated applications which tend to increase the loss potential.
- The below table represents the current nitrogen coefficient recommendations by the INMC :

	Broadcast	Incorporated	Injected	Irrigated
All Swine	0.5	0.6	0.6	0.5
Dairy Slurry	0.4	0.6	0.6	0.4
Dairy Scraped	0.4	0.6	0.6	0.4
Horse	0.4	0.6	0.6	0.4
Beef	0.4	0.6	0.6	0.4
Poultry Solids	0.5	0.6	0.6	0.5

It is likely that these coefficient changes will have only a minimal impact on producers.

- The INMC recommended that the revised Waste Data Tables and Nutrient Coefficient Table be combined into one table for ease of use. This will be placed on the INMC website with an effective date of July 1, 2012. The NCDA&CS Agronomic Lab should be able to make any required adjustments by this date as well.
- It is unknown at this time how the updated tables will be able to be revised in the new Nutrient Management Software. Joe Hudyncia, Vernon Cox and Natalie Woolard will look at how to update the tables in the current Nutrient Management Software. Until that time, it should be sufficient to use the coefficients in the current software in the interim as they will be more conservative.
- The INMC will begin discussions of the RYE updates at the next scheduled meeting.