Nutrient Management Plans
(How to make them simpler and easier to implement)

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CAFO Nutrient Management Program

- Nutrient Management Program
  - 2 FTE
  - Nutrient Management Program Coordinator
    - NMP Review
    - Manure Hauling Audits
    - Program Policy Development
    - Training, Education, Outreach
    - Cross agency collaboration (DATCP, NRCS, EPA)
- Nutrient Management Plan Reviewer
  - NMP Review
  - Education and Outreach
  - Manure Hauling Audits
  - 2 LTE
  - Nutrient Management LTE
    - Substantial Revision review
    - Program Administration/ Special Projects
CAFO Nutrient Management Program

- Centralized nutrient management workload
  - More timely reviews
  - More consistent reviews
  - More consistent approvals
  - Relieves Regional Specialists of responsibility
Plan Submittal and Reporting

• 5-year NMP required for permit issuance/re-issuance
  – NMP for full permit term
  – Fields meet all rotational and code requirements
  – Plan shows adequate land base for manure and process wastewater applications

• Annual Report (~ January 31\textsuperscript{st})
  – Production site inspections, 180 days of storage, Animal units, Planned changes

• NMP Update (~ March 31\textsuperscript{st})
  – Past/planned applications, Field verification logs, New fields, Fields removed, Manure and soil test results, Equipment calibrations, Other information requested
Sharepoint

- ePermitting system
  - Submittal of Permit Applications
  - 5-year NMPs
  - Substantial Revisions
  - Engineering Evaluations
  - Engineering Plans and Specs
- Intake and Routing
  - Intake completed by specific staff
  - Submittals requiring review are routed to proper staff
  - Staff and public can access document sets and review materials
- Ease for applicants
  - Required documents are identified in application
  - All required documents must be attached before proceeding
Manure Hauling Audits

- Complaint & Spill/Runoff audits commonly done.
  - Higher priority.
  - Tend to be reactive.
- Compliance Audits have been emerging more recently.
  - May evolve into a spill/runoff audit.
  - Tend to be proactive.
- Audits Reinforce the work we do.
  - Permit
  - NMP
- Proactive means of protecting water quality.
- Opportunity for education and questions from farmers, NM Planner, Professional Haulers.
Annual CAFO Workshops

- 8 locations around the state
  - Different parts of state have different issues, questions, concerns
- Program updates, NMP topic, Engineering topic, misc. topic, UW-Extension
- Opportunity for questions, outreach, information
  - Questions after presentations and open WDNR panel after workshop
- Attendees: NM Planners, Crop Consultants, Farm operators, County Staff, internal and external agency staff
SnapPlus

• Soil Nutrient Application Planner
  – Wisconsin’s nutrient management planning software
  – Design, programming, upkeep, and advancement by University of Wisconsin SnapPlus team
    • Funded by WDNR, DATCP, UW
  – Helps farmers make the best use of their on-farm nutrients, as well as make informed and justified commercial fertilizer purchases
  – Calculates potential soil and phosphorus runoff losses on a field-by-field basis
  – Assists in the economic planning of manure and fertilizer applications

• Programmed with A2809 crop nutrient recommendations
  – Written and Published by UW researchers
  – WI specific crop recommendations
    • N, P, K emphasis with micronutrient information
  – Continuously conducting additional research and updating publication
SnapPlus

- Programmed with WI NRCS 590 standard and NR 243 (WI CAFO WPDES permit requirements)
  - Program will flag compliance issues that violate NRCS 590 and/or NR 243
  - Will give an explanation of what the compliance issue is
  - WDNR and DATCP continuously work with SnapPlus team to ensure up-to-date code requirements are understood and entered into the program
- Program is used for planning and for tracking past practices and applications
  - Past practices and applications will change future recommendations
SnapPlus

Field Information:
- Soil Type
- Routine soil tests
- Field Slope
- Field Slope Length
- Tillage
- Rotation crops and yields
- Manure Applications
- P Fertilizer Applications
- Downfield Slope to Surface Water
- Distance to Surface Water

Calculators
- Nutrient application rate calculator
- Phosphorus Index
- RUSLE2

Results by field:
- N – P2O5 – K2O Surplus/Deficit
- WI P Index
- Erosion (ton/a/yr)
Questions?