NUTRIENT MANAGEMENT

EFFICIENT UTILIZATION OF ALL CROP NUTRIENTS

- ON-FARM (MANURE, LEGUMES, SOIL TEST)
- PURCHASED FERTILIZER
- OTHER (SLUDGE, WHEY, ETC.)

WHY THE CONCERN

- ECONOMICS
  SAVE TIME AND MONEY
  INVEST THOSE DOLLARS ELSEWHERE

- ENVIRONMENTAL
  IT’S THE WATER STUPID
  PHOSPHORUS AFFECTS SURFACE WATER
  (EUTROPHICATION)
  NITROGEN AFFECTS GULF OF MEXICO
  (HYPOXIA)
  DISEASE ORGANISMS

- VOLUNTARY PROGRAMS HAVE NOT WORKED

- AGENCIES PREFER TO USE THE CARROT RATHER THAN THE STICK

WHAT IS A FARM NUTRIENT MANAGEMENT PLAN (NMP)

A STRATEGY OF NUTRIENT UTILIZATION THAT WILL OBTAIN MAXIMUM RETURN BY ACCOUNTING FOR ON-FARM NUTRIENTS FIRST, WITH SUPPLEMENTATION BY FERTILIZER. NUTRIENTS ARE MANAGED IN A MANNER THAT PROTECTS THE QUALITY OF SURFACE AND GROUND WATER.

PLANS ARE DEVELOPED IN COMPLIANCE WITH THE USDA-NRCS 590 NUTRIENT MANAGEMENT STANDARD AND THE FARM CONSERVATION PLAN
BASIC COMPONENTS OF A WISCONSIN 590 NMP

- SOIL TEST RECOMMENDATIONS IN ACCORDANCE WITH UWEX A2809
- INVENTORY OF ON-FARM NUTRIENT RESOURCES (MANURE, LEGUMES)
- CREDITING FOR ON-FARM NUTRIENTS ACCORDING TO UWEX RECS.
- MANURE SPREADING PLAN
- OTHER NUTRIENTS MANAGED ACCORDING TO NRCS 590
- UPDATED ANNUALLY

CURRENTLY NMP IS LIMITED TO SPECIFIC SITUATIONS

- PRODUCERS WITHIN A PRIORITY WATERSHED WHO SEEK COST SHARING ON MANURE STORAGE, BARNYARD IMPROVEMENT, OR COUNTY SPECIFIC PRACTICES
- COUNTY MANURE STORAGE ORDINANCES
- LARGE OPERATIONS – DNR WPDES PERMIT (WI POLLUTANT DISCHARGE ELIMINATION SYSTEM)

MORE THAN 1,000 ANIMAL UNITS
1 ANIMAL UNIT = 1000 LB STEER

700 MILKING COWS
910 HEIFERS (800 – 1200 LB)
5000 CALVES
2,500 FINISHING HOGS
55,000 TURKEYS
200,000 BROILING CHICKENS

NR 243 ESTABLISHES THE NEED FOR RUNOFF CONTROL, STORAGE, AND NUTRIENT MANAGEMENT PLANNING

- NOTICE OF DISCHARGE (NOD)
SMALLER OPERATIONS MAY BE REQUIRED TO TAKE CORRECTIVE ACTION IF WASTE IS CAUSING WATER QUALITY PROBLEMS

WHAT IS USDA-NRCS 590

A NATURAL RESOURCE AND CONSERVATION SERVICE TECHNICAL STANDARD DEVELOPED TO PROVIDE UNIFORM STANDARDS FOR A VARIETY OF PROGRAMS REQUIRING NMP

I. MINIMUM REQUIREMENTS

GENERAL

1. SOILS TESTED AT LEAST EVERY 4 YEARS
2. FIELD BY FIELD NUTRIENT BUDGET CONSISTENT WITH UWEX RECS.
3. N RATE CAN NOT EXCEED CROP NEED, EXCEPT THAT IF MANURE OR LEGUMES ARE THE ONLY SOURCE THE RATE MAY BE EXCEEDED BY 20%
4. NO COMMERCIAL FERTILIZATION ON FROZEN GROUND EXCEPT FLAT GRASS PASTURES NORTH OF WAUSAU (HWY 29) AND WINTER GRAINS

MANURE AND ORGANIC BY-PRODUCTS APPLIED TO CROPS

1. BY-PRODUCTS SHALL BY ANALYZED FOR NUTRIENT CONTENT
2. USE APPROPRIATE RECOMMENDATIONS
3. APPLIED MATERIALS SHALL NOT RUNOFF SITE DURING APPLICATION

MANURE AND ORGANIC BY-PRODUCTS APPLIED TO NON-CROPLAND

1. LIQUID MUST BE INJECTED ACROSS SLOPES GREATER THAN 3%
2. CAN’T EXCEED 75 lb P2O5 TOTAL OVER 5 YEARS
3. APPLY BETWEEN 15 JULY AND FREEZE-UP

II. CRITERIA FOR GROUNDWATER PROTECTION
SANDS AND LOAMY SANDS: FALL LIQUID MANURE SHALL CONTAIN A NITRIFICATION INHIBITOR IF APPLIED WHEN SOIL TEMPS ARE ABOVE 50 F

NO FALL APPLICATION OF COMMERCIAL N ON SANDS AND LOAMY SANDS

MANURE CAN NOT BE APPLIED TO THE FOLLOWING UNLESS INJECTED OR INCORPORATE WITHIN 72 HOURS

1. 200 FT. ABOVE SINKHOLES, WELLS, CRACKED BEDROCK
2. LOCALLY ID'd AREAS HAVING A HIGH POTENTIAL TO POLLUTE GROUNDWATER

COMMERCIAL N RATES CAN NOT EXCEED UWEX RECS.

III. CRITERIA FOR SURFACE WATER PROTECTION

MANURE SHALL NOT BE APPLIED AT RATES EXCEEDING 75 lb P2O5/a/year UNLESS INCORPORATED WITHIN 72 HOURS. IF INCORPORATED N BECOMES RESTRICTING NUTRIENT

SOIL LOSS ON FIELDS RECEIVING MANURE OR ORGANIC BY-PRODUCTS SHALL NOT EXCEED “T”

MANURE AND ORGANIC BY-PRODUCTS SHALL NOT BE SPREAD IN WATERWAYS, WETLANDS, TERRACE CHANNELS, ETC.

MANURE AND ORGANIC BY-PRODUCTS SHALL NOT BE APPLIED TO THE FOLLOWING UNLESS INJECTED OR INCORPORATED WITHIN 72 HOURS

1. 10 YR. FLOODPLAIN OR WITHIN 200 FT. OF A LAKE OR STREAM
2. 200 FT. UPGRADE OF SINKHOLES, WELLS, CRACKED BEDROCK

MANURE AND ORGANIC BY-PRODUCTS SHALL NOT BE APPLIED ON FROZEN OR SNOW COVERED GROUND IN THE FOLLOWING AREAS
1. 10 YR. FLOODPLAIN OR WITHIN 200 FT. OF A LAKE OR STREAM
2. 200 FT. UPGRADENT OF SINKHOLES, WELLS, CRACKED BEDROCK
3. SLOPES GREATER THAN 9% (EXCEPTION: UP TO 12% IF CONTOUR STRIPPED WITH SOD, OR CONTOUR FARMED WITH FULL CORN RESIDUE REMAINING)

MANURE AND ORGANIC BY-PRODUCTS CAN BE APPLIED ON FROZEN OR SNOW COVERED GROUND ON LOCALLY ID’d AREAS WITH A LOW POTENTIAL TO POLLUTE SURFACE WATER

COMMERCIAL P FERTILIZER RATE CANNOT EXCEED UWEX RECS.

WHAT IS NEEDED TO WRITE A PLAN

1. SOIL TEST RECS.
2. SOIL CONSERVATION PLAN (CROP ROTATION, SOIL TYPES, SLOPES, CONS. PRACTICES, WATERBODIES)
3. FIELD IDENTIFICATION SCHEME
4. ON-FARM NUTRIENT INVENTORY

WHO CAN WRITE AND APPROVE A NUTRIENT MANAGEMENT PLAN

CURRENTLY ANYONE CAN WRITE THE PLAN

SIGN-OFF REQUIRES SPECIFIC CREDENTIALS

- ARCPACS
- NAICC
- CCA
- OTHERS APPROVED BY WDATCP