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# Wisconsin's Performance Standard for Agriculture: NR 151

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# NR 151 History

- 1994 - **DNR Animal Waste Advisory Committee**
- 1998 - **Nonpoint Source Program Redesign Initiative**
  - Recommends performance standards, technical standards and implementation and enforcement strategy
- 2002 - **Chapter NR 151 performance standards adopted**
  - Nutrient Management Plans (WI NRCS 590 standard)
  - Manage livestock areas & access to streams
  - Manure storage structures & stacking near waterways
  - **Cost share requirement— 70%-90%**
  - **DATCP identifies practices to meet NR 151 performance standards**
  - Standard buffers dropped to cost share questions
  - Senate Ag committee requests buffer research and NR 151 revision



# NR 151 History

- **2005 - Wisconsin Buffer Initiative Report**
  - Buffers by themselves will not result in desired water quality outcomes but must be part of a larger conservation system
  - Adaptive management approach
    - Use upland management practices first
    - If these fail, compliment with riparian buffer
  - Use Wisconsin Phosphorus Index & RUSLE 2 models within SNAP+ software
  - Rank watersheds for action
    - (1) Improve Stream WQ; (2) Protect/restore aquatic life communities; (3) Sustain Lake WQ
  - Focus limited resources on fields/farms causing disproportionate nutrient loading (sediment, phosphorus)



# NR 151 History

- **2010 - NR 151 modified to reflect:**
  - 2005 Wisconsin Buffer Initiative report
  - Focus on nutrient impaired waters and TMDLs
  - Recent models for calculating phosphorus and sediment delivery
  - Allow higher levels of non-point source pollution control in areas where TMDLs are approved via rule making; additional requirements
  - Address other pollution sources (urban areas, pastures, process wastewater)



# NR 151

## New Standards - 2010

- Phosphorus Index
- Tillage Setback
- Process wastewater
- TMDLs – Total Maximum Daily Loads



# Phosphorus Index (PI)

- Requires using Wisconsin PI on all fields
- PI better than soil test P for calculating P delivery to surface waters
- Alternative methods allowed if PI does not apply and DNR approves such method
- Applies to croplands, pastures and winter grazing areas
- Average PI may not exceed 6 over accounting period; annual PI maximum 12
- Accounting Period uses mix of historical and planned data

# Phosphorus Index

- Account Period is rolling average not to exceed 8 consecutive years
- No direct mechanical applications of manure/nutrients to surface waters
- Use conservation practices and technical standards in ATCP 50
- First applies to Pastures – July 2012





# Tillage Setback

- Protect waters from bank breakdown and soil deposition
- P Index assumes no bank erosion
- Applies to all lakes, naturally flowing streams; not grassed waterways or farm ponds
- Setback is 5 – 20 feet; Maintain 70% vegetative cover across whole area
- Cropping, grazing and nutrients still allowed



# Process Wastewater

- No 'significant' discharge of process wastewater to waters of the state
- Process wastewater defined in NR 243
- 'Significance' to consider:
  - Volume and frequency of discharge
  - Location and source relative to receiving water
  - Means of conveyance
  - Slope, Vegetation, Rainfall and other delivery factors



# Total Maximum Daily Loads - TMDL's

- More stringent standards (e.g., PI of 4) must be codified in NR 151.004 prior to implementation – rule making
- Conservation practices and technical standards specified in ATCP 50
- Nutrient Trading option – NR Board Investigation; DNR report July 2011



Questions?

Please ask during panel discussion

