## Green County Livestock Facility Study Group

# RECOMMENDATIONS BY DEPARTMENT Green County Land & Water Conservation Department

The Green County Land and Water Conservation Department was identified as the lead organization for the following recommendations. Recommendation numbers correspond with the numbers within the Livestock Facility Study Group Report & Recommendations document.

# **COMMUNITY MAPPING & MONITORING (page 25)**

## MONITORING (page 25)

- 3. Coordinate well water test results, which are required to be taken every 15 months, to establish water quality trend data.
  - Rationale: This can be used to make decisions to reduce groundwater contamination.
  - Note: The Green County Land and Water Conservation Department, Green County Health
    Department, and Green County UW-Extension were all identified as lead stakeholders for this
    recommendation.
- 4. Increase surface water monitoring near potential impaired waterways.
  - Rationale: This can be used to monitor and make decisions to reduce and prevent surface water runoff.

#### TESTING (page 26)

- 6. DNR or county offices have the right to obtain a manure or effluent slurry sample from any livestock facility or private septic system to use as they see fit to track down pollution sources.
  - Rationale: Would allow trace-back to sources of contaminated wells using DNA technology.
- 7. Green County Board and Green County Land and Water Conservation Department request to the Wisconsin Department of Natural Resources to consider for all e. coli positive samples an investigation using microbial source tracking testing if offsite livestock contamination seems plausible.
  - Rationale: Initiate an investigation and allow trace-back to sources of contaminated wells using DNA technology.
  - Note: The Green County Land and Water Conservation Department and the Green County Board were both identified as lead stakeholders for this recommendation.

# BEST PRACTICES & OUTREACH (page 27)

## OUTREACH (page 27)

- 1. Notify neighbors of off farm spills or spills impacting surface water as soon as possible but within 24 hours.
  - Rationale: Disclosure to area landowners of spills that may lead to private water supplies.
- 4. Increase education and outreach to landowners regarding the Wisconsin Manure Runoff Prediction website.
  - Rationale: Increase awareness of weather-related impacts on surface water runoff.
  - Note: The Green County Land and Water Conservation Department and Green County UW-Extension were both identified as lead stakeholders for this recommendation.
- 6. Inform haulers and farmers of requirement that all land applicators have, at a minimum, one set of spreading restriction maps and written instructions present for land application sites where manure is actively being applied.
  - Rationale: Ensure proper application of manure and nutrients.

## **BEST PRACTICES (page 28)**

- 7. Request NRCS to provide incentives for composting, separating, and treating manure.
  - Rationale: Reduce runoff and odor from manure applications.

# **RULES & REGULATIONS (page 29)**

## SETBACKS (page 30)

- 5. Revise county code to modify setback distance to 250 feet for manure storage from private wells and 1,000 feet for public wells.
  - Rationale: Reduce potential for surface water and groundwater contamination and odor concerns.
- 6. Revise county code to increase property line setbacks for feedlots over 1,000 animal units.
  - Rationale: Large farms over 1,000 animal units should have a greater setback to reduce odor and potential for ground and surface water contamination in neighboring wells.
  - Note: Both the Green County Land and Water Conservation Department and the Green County Land Use and Zoning Department were identified as lead stakeholders for this recommendation.
     On further discussion, it seems the Green County Land & Water Conservation Department would be the predominate stakeholder to take the lead on this action.
- 7. Review and establish proper setbacks for land spreading manure.
  - Rationale: Reduce surface water runoff and odor concerns.

### PERMITTING & FEES (page 30)

- 8. Only a certain amount of well capacity permitted per square mile to relieve the "straw effect."
  - Rationale: Reduce the amount of water taken from one specific area.
  - Note: Both the Green County Land and Water Conservation Department and the Green County Land Use and Zoning Department were identified as lead stakeholders for this recommendation.
- 9. New manure storage permittee applicants must ensure that sufficient funds will be available for pollution clean-up, nuisance abatement, and proper closure of the manure storage if it is abandoned or otherwise ceases to operate as planned and permitted.
  - Rationale: Livestock owners should be responsible for cleanup and proper closure to eliminate contamination of surface water.
- 10. Revise manure storage ordinance permit fee to have a sliding fee schedule per animal unit, not one set fee for everyone.
  - Rationale: Current fees do not cover the current cost to the county and a sliding scale would be a more appropriate fee format.

## **OPERATIONS ORDINANCE (page 31)**

- 11. Create CAFO operations ordinance.
  - Rationale: Would allow County to have more oversight and monitoring of CAFOs.
- 12. Require fall cover crops on fields following corn silage, including sweet corn silage, and soybeans.
  - Rationale: Research has shown this practice reduces soil erosion and unleashing of nutrients and runoff.
- 13. Establish best management practices for odor and noise and require windbreaks around barnyards and storage for new and modified structures.
  - Rationale: Reduce odor and noise issues caused by large livestock facilities.

## MANURE STORAGE (page 32)

- 14. Require all new or modified manure storage structures to be double-lined (have a liner of clay plus something additional i.e. HDPE, concrete, etc).
  - Rationale: Reduce potential for groundwater contamination.
- 15. Increase manure storage for all farms building new or modifying existing manure storage structures for a minimum of 3 months and CAFOs to have a minimum of 1 year storage.
  - Rationale: To enable spreading at more optimal times. Eliminates hauling manure on high-risk days.

#### NUTRIENT MANAGEMENT & APPLICATION (page 32)

- 16. Require all Green County livestock and crop operations to have an approved Nutrient Management Plan.
  - Rationale: County is currently at 17% of cropland acres in nutrient management plans. Nutrient management plans greatly benefit groundwater and surface water and prevent soil erosion.
- 17. Conduct more land application hauling audits/oversight in sensitive areas.
  - Rationale: Monitoring applications may improve surface and groundwater quality.
- 18. Restrict winter spreading. Encourage winter no-spread and frozen ground manure regulations that restrict January through March manure spreading to reduce nutrient runoff.
  - Rationale: Reduce nutrient runoff and groundwater contamination.
- 19. Do not incorporate or inject manure greater than 4 inches below the soil surface.
  - Rationale: Would help reduce leaching of nitrate into groundwater and keep nutrients in the plant root zone.
- 20. On soils with less than 12" to bedrock, no manure applications of liquid manure is allowed. Liquid manure is defined as having less than 12% solids content. Avoid mechanical application of manure on these soils and use other available acres, OR, if avoidance is not possible, implement at least two of the following mitigation practices:
  - a. No liquid manure applications;
  - b. No fall manure applications;
  - c. Apply only solid manure in spring;
  - d. Limit solid manure application rate to 20 tons/acre/year;
  - e. Apply within 10 days or less from planting date or apply on a growing crop/cover crop treatment;
  - f. Manure treatment.
  - Rationale: Would help reduce leaching of nitrate into groundwater and encourage better use of nutrients for plant growth.
- 21. Incorporate manure management prohibitions into Green County's storage ordinance.
  - Rationale: Reduces potential for surface and groundwater contamination.

#### **ENFORCEMENT & MONITORING (Page 34)**

- 23. If self-monitoring of manure storage has not been done properly, the county should have the right to force the violator to hire county personnel for a fee.
  - Rationale: Ensure accountability for current self-reporting regulations when needed.

## IMPLEMENTATION & STAFFING (page 34)

- 24. Increase staff in the Green County Land & Water Conservation Department beyond what is already planned.
  - Rationale: Additional staff needed to assist with implementation.