**PROJECT NAME:** Livestock Waste Education, Information and Assistance Program

**PRINCIPLE INVESTIGATORS:** Teresa Dvorak, Livestock Nutrient Management Specialist, DREC;

Ron Wiederholt, Nutrient Management Specialist, CREC

**REPORTING PERIOD:** Annual report - October 1, 2006 to September 1, 2007

**PROJECT PERIOD:** March 1997 through November 2009

## **ANNUAL PROGRESS UPDATE:**

Task 1 Develop and assemble educational programs that focus on the location, design, and management of livestock facilities, focusing on waste management to prevent impacts on water quality.

- A former publication was updated into the NDSU Extension bulletin (NM-1320) Resource Guide for Livestock Manure Management
- The bulletin (NM-1306) ND CAFO Operators Record Book was developed to assist CAFO operators with the records they need to keep in accordance with the EPA's CAFO regulations.
- A workshop was organized to address the environmental issues facing swine production, Casselton
  - o Current Challenges and Future Strategies: Environmental Management in Swine Production

Task 2 Hold meetings, workshops, and tours to educate producers and those who advise and work with producers about livestock waste management to prevent impacts on water quality. Use mass media and newsletters to inform producers and the public about efforts to reduce impacts on water quality.

- Presentations have been given at the following locations:
  - i. Management of Swine Facilities, Bottineau
  - ii. 4-H water quality camp, Washburn
  - iii. Beef Field Day, Carrington
  - iv. Feedlot Tour, Jamestown
  - v. Pork and Dairy Convention, Fargo
  - vi. Feedlot School, Carrington
  - vii. Feedlots of the Future, Fargo
  - viii. CAFO Conference, Carrington, Dickinson
  - ix. NC Animal Science Meetings, Sioux City, IA
  - x. Pfizer Livestock Meeting, Carrington
  - xi. Dickinson State University Capstone Class, Dickinson
  - xii. Extension Livestock Inservice, Washburn
  - xiii. Waste Management Day, Beach
  - xiv. Livestock Update Meetings, Crosby, Powers Lake, Towner, Antler, Rugby
  - xv. Nutrient Management Meetings, Linton and Wishek
  - xvi. Livestock Management Strategies, Dickinson
  - xvii. NDSU Dairy Management, Fargo
  - xviii. DREC Field Day, Dickinson
- A training course for extension livestock agents was organized to educate them with hands-on evaluation of livestock operations. Agents toured three operations to evaluate them for pollution potential and determine the changes that needed to be made. Educational binders were developed for the agents to be used when working with producers.
- Press release on odor management practices at CAFO's.

- Newsletter article in Dunn County Extension Update Newsletter on "Improving Water Quality"
- Radio interview on manure management broadcast in Dickinson area

## Task 3 Develop and deliver educational materials and programs that focus on the utilization of livestock waste nutrients for crop production.

- Several presentations focused specifically on the utilization of livestock waste nutrients for crop production. Those presentations were made at the:
  - i. Extension Livestock Inservice, Washburn
  - ii. Extension All Agents Conference, Fargo
  - iii. Advisory Board Meeting, Carrington
  - iv. Walsh County Beef Day, Park River
  - v. Lake Region Round-up, Devils Lake
  - vi. AgVise Labs Conference, Fargo
  - vii. Water Quality Conference, Savannah, GA
  - viii. Northern Plains Sustainable Ag Conference, Aberdeen, SD
    - ix. KFYR Ag Show, Bismarck
    - x. Sustainable Ag Agent Training, Carrington
    - xi. Composting Demonstration, Carrington
  - xii. Soil and Water Society Conference, Carrington
  - xiii. National Association of Ag Agents Conference, Grand Rapids, MI
  - xiv. Dickinson State University Crop Production Class, Dickinson
  - xv. DREC Field Day, Dickinson

Task 4 Provide technical and education support for 319 funded projects that have livestock waste management components.

- Watershed meeting, Wells County (2)
- Pipestem Watershed Meeting, Foster County
- Watershed Coordinators Conference, Aberdeen, SD
- Dickey County Watershed Meeting, Ellendale
- NDSA Feedlot Tour, western ND
- Mott County Ag Waste Tour, New England
- Roundtable meeting discussions were held with NRCS and SCD personnel in the following locations:
  - o Mott, Hettinger, Bowman, Mercer, Center, Dickinson, Carson, Steele, Linton, McClusky, Turtle Lake, Bismarck, Mandan and Selfridge

## Task 5 Provide one-on-one consultations to producers to evaluate specific options available to the individual for waste storage, handling, and utilization.

• In the current reporting period, contacts and site visits have been made with twenty-eight livestock producers. Visits include discussion on the Assessment Tool for New and Existing Animal Feeding Operations, manure utilization, consultation on management practices, containment systems and non point source regulations.