

# **Livestock Waste Management and Education Assistance Program**

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**M**any North Dakota organizations and individuals are promoting various livestock development projects as a way to diversify the state's agriculture and improve profitability and sustainability. Most of these projects involve concentrating numbers of livestock into animal feeding operations (AFOs). Concentrating animals in AFOs results in concentrated manure nutrient production.

Livestock manure is a resource that can supply valuable nutrients for crop production while improving soil physical condition, as well. However, manure out of place can pollute the environment with excess nutrients and other substances, leading to eutrophication of surface waters, fish kills, high nitrates in groundwater, offensive odors, and other problems.

Under the Clean Water Act, rules and regulations have existed for some time governing handling of livestock waste. The objective has been to contain manure and runoff from outdoor AFOs to prevent impacting water quality. Manure is often spread on land in amounts that result in excess soil nutrients. Manure nutrients that were initially contained find their way into water through the processes of leaching, runoff, and soil erosion. Managing livestock waste has become one of the biggest conservation issues in agriculture today.

To address these issues, the NDSU Extension Service has implemented the Livestock Waste Management Education and Assistance Program, using EPA Section 319 grant funds. Educational programs, presentations, and publications have been developed to help livestock producers with management and utilization of livestock waste to protect water quality and the environment. In addition to presentations at workshops and seminars, the livestock waste management specialist is available for farm visits to help individual producers assess their own situation.

Future objectives of the program are:

- Create awareness among livestock producers of the importance of good manure management practices.
- Enable producers to assess their own operations with respect to regulatory compliance.
- Enable producers to select and manage waste handling systems that are feasible for their operations while providing regulatory compliance.

Emphasize manure nutrient management to fully utilize manure resources.