USDA-CSREES 2006 National Water Quality Conference

The Big Picture Keeps Getting Bigger

Forty years ago up-to-date manure handing involved improving efficiency and reducing manual labor in getting manure from where the animals left it to someplace else. Most went on land but application rates were often related to the physical restraint of application methods. Crop needs were met with chemical fertilizers. When surface water quality issues were linked to manure handling methods efforts were increased to assure that manure applied to land would stay on the land. Nitrogen that escaped to the air allowed an increase in manure application levels to the soil. In hind sight it appears like we have been in a manure shell game. Like the proverbial shell and pea game manure was moved from the land shell to the water shell or the air shell and then on to another shell. This worked until the size of the manure pile become too much for one shell and often too large for two shells or maybe all three. Animal agriculture isn't the only sector of society that is interested in using these shells or their quality. Competition and conflict for land use among various sources of manure, other organic nutrient material and non agricultural land use is increasing. Most solutions to excess manure center on end of pipe technology or management. Attention must be shifted towards the bigger picture of not just what's happening in the three shells but the impact of policy, economic and managerial models that encourage increasing concentration of animals and thus nutrients in certain regions. Every year it seems the manure picture gets bigger. In 2005 the big picture expanded to include ammonia emissions concerns with the advent of EPA's Animal Feeding Operation Consent Agreement.

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