

Water Quality Update

Newsletter of Extension Water Quality Programs

July 1999

The AFO Plan

After more than a year of preparation, the Unified National Animal Feeding Operation Strategy has been released. The plan calls for operators to implement a complete nutrient management plan (CNMP). For the majority of the more than 450,000 AFOs nationwide, this is to be done voluntarily.

These CNMPs address methods for feed management, manure handling and storage, land application of manure, land management, record keeping, and other waste utilization options (composting, sale of manure, etc.) By encouraging AFO operators to develop these plans, it is hoped that the new strategy will help reduce the potential for contamination of the nation's surface and ground water supplies.

Approximately 15-20,000 AFOs have been termed "concentrated animal feeding operations," or CAFOs, and will be required to obtain National Pollutant Discharge Elimination System (NPDES) permits under the authority of the Clean Water Act. This includes the 6600 operations with greater than 1000 animal units that have been so categorized due to significant manure production. Some smaller operations have been designated CAFOs for unacceptable conditions or for being significant contributors to water quality impairment.

The strategy does provide for some of the smaller CAFOs to exit the regulatory program if they correct the problem or implement methods to that end in their CNMP.



The plan also targets seven "strategic issues" for future EPA efforts in this area. These include (1) building capacity for CNMP development and implementation, (2) accelerating voluntary, incentive-based programs, (3) implementing and improving the existing regulatory program, (4) coordinated research, technical innovation, compliance assistance, and technology transfer, (5) encouraging industry leadership, (6) data coordination, and (7) performance measures and accountability.

In their March 18, 1999 issue, *Watershed Currents* (Vol 3, No 2) stated that response to the strategy has been varied. Some environmental groups have pointed out areas they feel were overlooked, while some agricultural groups feel EPA overstepped its bounds. Other agricultural groups were more accepting. The National Chicken Council was pleased that the plan gives the smallest operations some leeway and the National Pork Producers Council found that the plan mirrored many aspects of the National Environmental Dialogue on Pork Production.

According to the article, "The most contentious aspect of the plan is a provision that requires states to hold major meat producers and contract growers jointly responsible for the manure that their animals produce. This provision could have significant consequences for the poultry industry."
- TLP

A Goodyear[®] for Erosion?

In order to cover some budget shortfalls, the Oklahoma legislature recently transferred \$10 million of surplus monies from various accounts to the state's general fund. This included \$4.3 million from the Oklahoma Waste Tire Indemnity Fund. Money for this account comes from the fee you pay to cover disposal of your old tires any time you put new ones on your car or truck.

Some of those opposed to this measure maintain that utilizing this money in the general fund is, in effect, an indirect method of increasing taxes and therefore a violation of State Question 640, which requires that any tax increase be approved by a vote of the people.

Other opposition to the transfer has come from members of the tire-recycling industry, who receive compensation from this fund for each tire they utilize. They are concerned about losing a source of income. This group includes those who receive compensation for utilizing waste tires in a streambank stabilization or erosion control structure.

In the midst of this legal traffic jam, there is a water quality issue at hand. Proponents of these structures maintain that they utilize waste material to stabilize streambanks, helping prevent erosion and saving room in landfills. Others, however, have questioned the use of tires for erosion control on riverbanks.

Concerns include (1) failure rate, (2) obstruction of channels by loose tires, (3) public opinion regarding aesthetics, (4) long-term fate of tires, (5) adequacy of standards, (6) rate of tire decay vs rate of decay of tie cables, and (7) effects of inadvertently discarded refuse and debris.

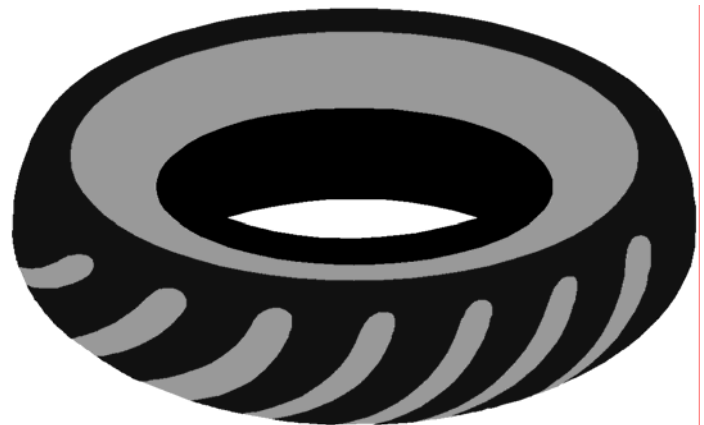
Extension Water Quality Coordinator Michael Smolen would like to see a study of (1) effectiveness of tires for embankment stabilization, (2) effect of tire structures on

ecosystems, (3) standards for use of tires, and (4) extent to which the standards are being followed.

Others, including Jim Criswell, Extension Pesticide Education Coordinator, have voiced concern for mosquito production potential in these structures. According to Dr. Russell Wright, professor of entomology at OSU, "The Asian tiger mosquito is a container breeder and was imported to North America in used tires. Eggs and larvae of this mosquito readily develop in standing water in used tires. This mosquito is widespread in much of Oklahoma and has become a serious pest in some areas. It bites in the daytime in shady areas. Exposed tires that catch and hold water could increase populations of this pest."

The controversy surrounding the financial gymnastics of the money transfer is an issue of constitutionality and will be decided in the courts, as suit has already been brought against the state. As to the use of waste tires in erosion control structures, it appears that the jury is still out on that, too. - TLP

Information for this article was compiled from coverage by [The Tulsa World](#) and personal communications.



If you need a copy of any articles, contact Shawna Stiockoff at (405) 744-5653 or sshawna@okstate.edu.

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Riparian Workshops

The final Riparian Area Management Workshop was held in Tulsa in conjunction with the Tulsa Blue Thumb program's monthly meeting on June 3, ending a statewide tour by the Extension Water Quality staff. From Tahlequah to Cheyenne and from Alva to Altus, 226 participants from state, tribal, and federal agencies, private industry, and grassroots organizations attended nine workshops over an eight-month period.

The workshop focused on the Riparian Area Management Handbook. During the morning lecture session, speakers from cooperating agencies and OSU addressed the importance of riparian areas, their function in maintaining water quality, features of riparian areas within the ecoregion of each workshop location, and wildlife, grazing, forestry and other management options. An afternoon field trip illustrated many of the concepts.

Individuals expressed overall satisfaction with the program, with several desiring more technical information (e.g., stream restoration techniques). There is more work to be done, and the Extension Water Quality office plans to continue education on riparian issues. - TLP

Copies of the Riparian Area Management Handbook (OSU Publication E-952) can be obtained by contacting the Extension Water Quality Program Office at 405-744-



Poultry Education Update

Oklahoma mandated nine hours of initial training and three hours of annual continuing

education for poultry operators. Extension developed three, three-hour sessions of initial training. Session I has been offered thirteen times, session II eleven times, and session III fifteen times at eleven locations since Feb 1998.

Extension mailed out 1117 certificates to those who completed the initial training, including 370 who completed recent make-up sessions. Replies to surveys sent with the certificates of completion indicate that 88% said they learned something new, 89% said the material was delivered at an appropriate level to understand, and 86% said the information would help them in the future.

Continuing education events must be pre-approved for credit. Operators may carry up to two hours of continuing education credit over to the next year. The current schedule for the rest of the year includes:

- Aug 12 Fall Fertilization of Bermuda & Fescue
- Sept 9 Lake Eucha Tent Meeting & Tour
- Oct 14 Dead Bird Composter Operation
Briggs Ranch N-based, P-based
Poultry Litter Grazing Field Day
- Oct 26 Making your Records Pay Off:
Maximize Gain from Fertilized
Pastures and Hayfields
- Nov 9 NE Okla. Soil & Litter Testing
Program: Maintaining a Profitable
Recordkeeping System
- Dec 14 Same as Nov 9

This article is courtesy of Tami Krehbiel, Coordinator of the Poultry Waste Management Education program. For exact locations and times, or for any further information on the program, please contact Tami at 405-744-7444.

Riparian Report Card

What participants already knew:

- Straightening a creek does not reduce flooding
- Riparian vegetation helps regulate water temperature
- Recreational leasing of cropland can be more profitable than production

What participants learned:

- An "S" shaped channel is the most efficient
- Livestock exclusion is not always necessary
- Bridges can cause erosion
- Invasive species decrease biodiversity
- Trees and shrubs hold soil in riparian areas better than grass and forbs

ADDRESS CORRECTION REQUESTED

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DATELINE

- Aug 26-27, 1999** – Cincinnati, OH – **NPDES Storm Water Permit Compliance** - American Society of Civil Engineers – 1.800.548.2723 or www.asce.org
- Aug 31-Sept 2, 1999** – Dallas, TX – **Abiotic In-situ Technologies for Groundwater Remediation** – US EPA – www.epa.gov/tbnrml
- Sept 13-16, 1999** – Phoenix, AZ – **The Clean Water Compliance Institute** – 301.921.2345 or www.govinst.com
- Sept 16-17, 1999** – Austin, TX – **Design of Waste Containment Liner and Final Closure Systems** – American Society of Civil Engineers – 1.800.548.2723 or www.asce.org
- Sept 27-29, 1999** – St. Louis, MO – **Alliance for Environmental Stewardship: A Comprehensive Approach** – Contact: Richard Reynnells, 202.401.5352 or rreynnells@reusda.gov
- Sept 29-30, 1999** – San Antonio, TX - **NPDES Storm Water Permit Compliance** - American Society of Civil Engineers – 1.800.548.2723 or www.asce.org
- Oct 9-13, 1999** – New Orleans, LA – **WEFTEC '99 – 72nd Annual Exhibition & Technical Conference on Water Quality and Wastewater Treatment** – Water Environment Federation – 1.800.666.0206 or www.wef.org/docs/conferences.html
- Jan 12-15, 2000** – Phoenix, AZ – **Technology for the 21st Century – Technology Expo & Internat'l Symposium: Small Drinking Water and Wastewater Systems** – Contact: H. Diane Snyder, 505.843.9119 or rwref@nm.net
- Feb 7-10, 2000** – Chicago, IL – **Tools for Urban Water Resource Management and Protection** - US EPA Office of Wastewater Management, US-EPA Region 5 Office, and Northeastern Illinois Planning Commission – Contact: Bob Kirschner, 312.454.0401, ext. 303 or bobkirs@nipc.org