

Approved: January 23, 2001
Date

MINUTES OF THE SENATE AGRICULTURE COMMITTEE.

The meeting was called to order by Chairperson Derek Schmidt at 8:30 a.m. on January 16, 2001 in Room 423-S of the Capitol.

All members were present except:

Committee staff present: Raney Gilliland, Legislative Research Department
 Jill Wolters, Revisor of Statutes
 Betty Bomar, Secretary

Conferees appearing before the committee:

Bill Howgill, Legislative Liaison, Office of the Governor
William L. Hargrove, Director, Kansas Center for Agricultural Resources
 and the Environment, Kansas State University
Steven Graham, Kansas State University Research and Extension Program
Milton Krainbill, Watershed Specialist
Tracy Streeter, Executive Director, Kansas Conservation Commission
Mike Beam, Kansas Livestock Association

Others attending: See attached list

Upon motion by Senator Huelskamp, seconded by Senator Umbarger, the Minutes of the January 10th meeting were unanimously approved.

Upon motion by Senator Morris, seconded by Senator Huelskamp, the Committee unanimously agreed to introduce a resolution supporting agricultural biotechnology and a bill relating to crop destruction.

Bill Howgill, Legislative Liaison, Office of the Governor, testified relating to the Governor's Buffer Initiative Program. Mr. Howgill stated the Governor has supported and sponsored efforts throughout his tenure to improve the quality of Kansas water. \$80,000 was appropriated in FY 2001 to implement a Buffer program in the Lower Republican River Basin, which had been the only basin in the state for which TMDL standards have been set. The Kansas Water Authority has recently established TMDL standards in the Lower Arkansas Basin, the Upper Arkansas Basin and the Cimarron River Basin. The FY 2002 budget recommendation is for an enhancement of \$185,134 to establish Buffer strips in these areas. As additional river basin standards are developed, additional funding will be recommended. (Attachment 1)

Steven Graham, Kansas State University (KSU), appeared on behalf of Dean Marc Johnson, who could not attend the meeting. Mr. Graham distributed a copy of the *K-State Research and Extension 2000 Annual Report* (A copy is on file in the office of Legislative Research).

As part of its five-year work plan, KSU Research and Extension has identified four core mission themes which are: Agricultural Industry Competitiveness; Natural Resources and Environmental Management; Food, Nutrition, Health, and Safety; and Youth, Family, and Community Development. Natural Resources and Environmental Management is the focus of today's meeting.

William Hargrove, Director, Kansas Center for Agricultural Resources and the Environment, distributed copies of recent News Releases relating to Nutrient Management Practices, the Establishment of production guidelines to improve and protect water quality, and the Use of Modern Technology in the utilization of nuisance or hazardous waste. Mr. Hargrove summarized the K-State study of animal waste lagoons, stating the risk of groundwater contamination is determined by the soil properties underneath the lagoon and the depth to groundwater. Due to the variation of such factors from location to location, site specific guidelines are needed for lagoon design, permitting, and closure. KSU has developed such guidelines and they have been delivered to the Kansas Department of Health and Environment (KDHE)

CONTINUATION SHEET

Mr. Hargrove stated K-State Research and Extension has appointed five new watershed specialists who will provide watershed management expertise and watershed development educational programs in multi-county areas. The watershed specialists work with K-State Research and Extension agents, specialists and researchers - as well as industry representatives and other water quality experts - to develop and implement action plans to improve water quality throughout the state. (Attachment 2)

Milton Krainbill, Watershed Specialist, stated he is assigned to the Delaware River Basin to work one on one with producers to identify problems and management options in addressing issues that will lead to improved water quality. The specialists will achieve these objectives through demonstration and educational programs, and the implementation of projects in the Basin. Mr. Krainbill stated there are monies and grants available to assist persons through various state and federal programs,

Tracy Streeter, Executive Director, State Conservation Commission, testified that with the development of Total Maximum Daily Loads (TMDL), the targeted area for water quality improvement has narrowed to the watersheds designated high priority for TMDL implementation. While the elements of the Water Quality Initiative include education, incentives, technical assistance, research and data collection, the focus has shifted to address TMDL concerns. (Attachment 3)

The State Conservation Commission is charged with preparing an inventory of practices needed to address the impairments identified in TMDL areas. With the use of existing data, the input and assistance from KSU, KDHE, and the Natural Resources Conservation Service (NRCS) the inventory has been completed for the Kansas Lower Republican (KLR) River Basis. The total estimated cost to treat the affected watersheds is approximately \$87 million. The inventory process for the Cimarron, Lower and Upper Arkansas River Basis commenced last fall and will be completed in February. The Buffer Initiative enhancement proposed by the Governor allows for continued enrollment in the KLR in addition to newly identified TMDL areas in the Cimarron, Lower Arkansas and Upper Arkansas River Basis. The budget also includes additional funding for the Non Point Source (NPS) Pollution Control Program that will be targeted to TMDL areas. Mr. Streeter testified that there are a number of agencies involved in the delivery of technical assistance in assisting landowners in stream bank stabilization, riparian area restoration and wetland restoration/enhancements. Landowners also utilize private engineering consultants in the development of confined livestock waste systems.

Mike Beam, Kansas Livestock Association, testified that the goal of the "TMDL Agriculture Working Group", comprised of Kansas Agriculture Aviation Association, Kansas Association of Conservation Districts, Kansas Association of Wheat Growers, Kansas Cooperative Council, Kansas Corn Growers Association, Kansas Dairy Association, Kansas Farm Bureau, Kansas Fertilizer & Chemical Association, Kansas Grain & Feed Association, Kansas Grain Sorghum Producers Association, Kansas Pork Producers Council, Kansas Seed Industry Association and the Kansas Soybean Association is to inform and assist farmers and ranchers in implementing the new water quality initiative. There have been 5 meetings held during 1999 and 2000. (Attachment 4)

The meeting adjourned at 9:30 a.m.

The next meeting is scheduled for January 17, 2001.

Others attending:

SENATE AGRICULTURE COMMITTEE GUEST LIST

DATE: January 16, 2001

NAME	REPRESENTING
Bill Hargrove	KCARE/K-State
Tracy Steeter	SCC
Steven Graham	K-State Research + Extension
Matt Rainbill	K-State Research Extension
Dag Wareham	KGFA/KFCA
Julie Givner	KGFA
Justin Holstin	Ks Loop Council
David Miller	DOB
KERRY WEDEL	State Conservation Commission
John D. Pinegar	The Garden City Company
Bill Fuller	Kansas Farm Bureau
Idd Johnson	KLA
Doug A. [unclear]	KDA
Tom Bruno	Farm Credit Council
Bill Hougill	Gov's Office
Rebecca Zepck	Sen. Barnett
Joe Fvnd	KDHE
Andy Shaw	Kearney Law Office
Jim Allen	Sea board

~~Kenneth~~

STATE OF KANSAS

BILL GRAVES, *Governor*
State Capitol, 2nd Floor
Topeka, Kansas 66612-1590



(785) 296-3232
1-800-748-4408
FAX: (785) 296-7973

OFFICE OF THE GOVERNOR

TO: Senate Committee on Agriculture

FROM: Bill Howgill, Legislative Liaison

RE: Buffer Initiative Program

DATE: January 16, 2000

Mr. Chairman and members of your committee, thank you for the opportunity to speak to you this morning on behalf of the Governor and his Buffer Initiative Program.

As you know, Bill Graves has supported and sponsored efforts throughout his two terms as governor to improve the quality of Kansas water, as is evidenced by the creation of the Governor's Water Quality Initiative. Protecting and improving the state's natural water resources from non-point source pollutants is an endeavor to which the Governor remains strongly committed. In FY 2001, \$80,000 was appropriated to the Buffer program for implementation in the Kansas-Lower Republican River Basin. The Lower-Republican was the only basin in the state for which TMDL standards had been set at the time of that appropriation.

Last summer, the Kansas Water Authority established TMDL standards in three additional basins: the Lower Arkansas, the Upper Arkansas, and the Cimarron River Basins. In FY 2002, an enhancement of \$185,134 has been recommended by the Governor to establish Buffer strips in these areas. As the state's remaining basins have standards developed, it is the intention of the Governor's office to recommend funding for Buffer program implementation there as well.

Mr. Chairman, on behalf of the Governor, I would like to thank you and your committee for your interest in and commitment to this issue. I will be happy to answer any questions.

Senate Agriculture Committee

Date 1-16-01

Attachment # 1

K-STATE RESEARCH AND EXTENSION'S PROGRAMS AIMED AT MEETING WATER QUALITY STANDARDS IN KS

TESTIMONY PRESENTED TO THE SENATE AND HOUSE AGRICULTURE COMMITTEES JANUARY 16-17, 2001

W.L. HARGROVE, DIRECTOR, KCARE

A voluntary compliance approach to meeting TMDLs is being utilized in Kansas by the Governor's Water Quality Initiative and KDHE. Fundamental to the success of a voluntary compliance approach in agriculture are several key steps:

- producers are aware of and understand water quality issues related to their operation*
- producers have management options (based on scientific information and evaluation) for changing practices to address issues and enhance water quality*
- producers have access to technical and financial assistance to implement practices*

K-State Research and Extension plays a key educational role in making producers aware of water quality issues, evaluating and identifying management options for improving water quality, educating citizens about best management practice options, and identifying sources of technical and financial assistance. We wish to highlight some of the new initiatives and ongoing programs of K-State Research and Extension that are aimed at helping citizens meet TMDLs in KS under a voluntary compliance approach.

Statewide TMDL Communications Plan

Under the leadership of our Communications Department and in collaboration with several state agencies and private agricultural groups, we developed a statewide TMDL communications plan. The goal of the communications plan is to **provide objective, science-based information, that will inform citizens on: 1) what are TMDLs; 2) their responsibility in meeting TMDLs; and 3) how to improve water quality and help them meet TMDL requirements on a local and voluntary basis.** Target audiences include our own county level extension staff, agricultural producers and commodity groups, media, urban residents, and decision makers. Current and planned actions include disseminating fact sheets and background information, supporting the work of the watershed specialists, news releases on TMDLs for local newspapers, hosting a media day, sharing success stories, and hosting a tour for decision-makers.

Integrated Agricultural Management Systems for Protecting Water Quality

This is an ongoing program, started three years ago, and funded primarily by the KS Corn Commission, KS Grain Sorghum Commission, KS Soybean Commission, KS Wheat Commission, KS Fertilizer Research Fund, and K-State Research and Extension. The goal is to develop, evaluate, and disseminate to producers, cost-effective management options that will protect water quality. A network of six experimental sites has been established around the state in the Kansas River Basin, the Marais des Cygnes Basin, the Neosho Basin, and the Lower Ark Basin. Sites are designed to capture runoff from field size areas with various combinations of

Senate Agriculture Committee

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Attachment # 2-1 thru 2-10

BMPs and monitor water quality as impacted by the BMPs. Funding from the commodity commissions is scheduled to end next year.

Watershed Specialists

This “centerpiece” of our program was initiated in November, 2000 to provide educational assistance to agricultural producers aimed at meeting TMDLs on a voluntary basis. The program is funded primarily by an EPA 319 grant with additional support from the State Conservation Commission, the KS Department of Agriculture, and K-State Research and Extension. It provides support currently to six Watershed Specialists, five extension agents and one NRCS conservationist, assigned to high priority TMDL watersheds, and dedicated to working one on one with producers in that watershed to identify problems and management options to address issues that will lead to improved water quality. Watershed Specialists have been hired for the Upper Big Blue River, the Upper Delaware River, the Lower Kansas River, the Lower Arkansas River, the Cheney Reservoir watershed, and the Upper Arkansas between Garden City and Dodge City. The Cheney Reservoir Watershed Specialist is a joint program with USDA/NRCS.

State and Federally Funded Programs

A listing of other projects funded by grants from federal and state sources follows.

State Contracts

- BMPs for Reducing Fecal Coliform Contamination of Streams - Dr. Chuck Rice; funded by State Conservation Commission, Department of Agriculture, and KS Water Office
- Ecological Livestock Pollution Control Project - Dr. Kyle Mankin; funded by KDHE from State Water Plan funds
- Demonstration of Sediment Load Reduction on a Watershed Scale - Dr. Richard Nelson; funded by KDHE from State Water Plan funds

Federal Grants

EPA 319

- Dairy Environmental Cooperative - Dr. Joe Harner
- Grazing Land Water Quality Project - Dr. Paul Ohlenbush
- Kansas Environmental Leadership Program - Dr. Morgan Powell
- KS Urban Water Quality Restoration and Protection Planning - Dr. John Leatherman
- Farmer Water Quality Monitoring to Achieve TMDL Goals - Dr. Rhonda Janke
- Reducing Atrazine Runoff in the Blue River and Delaware River Basins - Dr. Dan Devlin
- Lime Application to Reduce P Loading in Cheney Watershed - Dr. John Schmidt
- Water Quality Improvement of Vegetated Riparian Areas - Dr. Charlie Barden
- Waste Management Water Quality Protection Learning Center - Dr. Bill Hargrove

USDA

- BMPs in the Blue River - Dr. Chuck Rice
- River Friendly Farm Training - Dr. Bill Hargrove

US Forest Service

- Green Topeka: Tree-Based Buffer Planning - Dr. Bill Hargrove

USGS

- Phosphorus in Surface Runoff: Evaluation of BMPs - Dr. Gary Pierzynski

From Kansas State University's Agricultural Experiment Station and Cooperative Extension Service

**K-State Research and Extension
Department of Communications**
News, 113 Umberger Hall
Manhattan, KS 66506-3402
785-532-5806 Fax: 785-532-6458
<http://www.oznet.ksu.edu/news>

Released: Jan. 16, 2001

State Officials Favor Local, Voluntary Water Cleanup Efforts

MANHATTAN, Kan. – Bill Hargrove is comfortable with Kansas citizens taking control of cleaning up the state's waterways. In fact, he encourages it.

As director of the Kansas Center for Agricultural Resources and the Environment, located at Kansas State University, Hargrove is working on a project that will help Kansans institute local cleanup practices. In the long run, local residents will not only take the credit for cleaning streams and rivers, but they won't face increased federal regulation to get it done.

"Pollution prevention," Hargrove said, "is a good way to go."

It's not a message lost on the state's top elected official. Since 1995, Gov. Bill Graves has pushed a multi-agency effort to clean and manage the state's waterways, highlighted by the Governor's Water Quality Initiative.

"There's no question that clean water is the lifeblood of every community," Graves said. "State agencies are taking a proactive approach, and are working locally so that Kansans can voluntarily improve water quality, without federal intervention."

In November, Kansas State University – with support from 16 industry groups – hired five water specialists that will coordinate work in watersheds across the state, including the Upper Blue (Northeast Kansas); Lower Arkansas (Southcentral Kansas); Kansas-Lower Republic (Northeast Kansas); Upper Delaware (Northeast Kansas); and Upper Arkansas (Southwest Kansas).

The watershed specialists will be working with landowners and farmers within the watersheds to develop action plans based on the water quality concern of that watershed.

"What works in one area may not work in another, so we need to tailor individual tactics for achieving improved water quality to conditions within a specific watershed," said Kansas Secretary of Agriculture, Jamie Clover Adams. "It's a more efficient use of our limited resources."

The push to clean waterways is not exclusive to Kansas. Upon passing the Clean Water Act of 1972, members of the U.S. Congress required all states to restore and maintain the nation's waters. The

-more-

Officials Urge Local Efforts/Page 2

act's specific objectives include eliminating the discharge of pollutants into navigable waters and creating programs that reduce non-point pollutants.

"Over the past 25 years, cleanup efforts have focused on point source pollution from municipal, industrial and other sources," Hargrove said. "The current emphasis is on reducing water pollution due to nonpoint source pollutants – or, pollution that comes from runoff from a variety of land uses, such as livestock waste from farms, oil from service stations, or fertilizer from home lawns."

In 1995, the Kansas Natural Resources Defense Council and the Kansas Sierra Club sued the U.S. Environmental Protection Agency for the federal agency's alleged failure to develop total maximum daily loads (TMDLs) in Kansas. A TMDL is a written, measurable assessment of a stream segment and its water quality problems and contributing pollutants.

The lawsuit was settled out of court and the Kansas Department of Health and Environment agreed to establish water quality standards for the state. The action allowed KDHE and various state agencies the opportunity to institute local, voluntary efforts to clean water, rather than be subjected to broad, federal rules.

"This is an issue that is close to home for everyone," said Marc Johnson, the director of K-State Research and Extension. "We all know how important clean water is in our lives. Part of the university's responsibility is to bring information to every community so that people become involved in keeping their water safe."

Persons interested in more information about water quality and how communities are implementing best management practices can contact their local Extension office. More information also is available on-line at <http://www.oznet.ksu.edu/kcare>.

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K-State Research and Extension is a short name for the Kansas State University Agricultural Experiment Station and Cooperative Extension Service, a program designed to generate and distribute useful knowledge for the well-being of Kansans. Supported by county, state, federal and private funds, the program has county Extension offices, experiment fields, area Extension offices and regional research centers statewide. Its headquarters is on the K-State campus in Manhattan.

Story by:

Pat Melgares, News Coordinator
pmelgare@oznet.ksu.edu
K-State Research and Extension

For more information:

Bill Hargrove is at 785-532-7419

"Knowledge for Life"

All educational programs and materials available without discrimination on the basis of race, color, national origin, sex, age, or disability. Kansas State University, County Extension Councils, Extension Districts, and the U.S. Department of Agriculture cooperating.

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From Kansas State University's Agricultural Experiment Station and Cooperative Extension Service

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Released: Jan. 16, 2001

BMP Research Establishes Water-Friendly Guidelines

MANHATTAN, Kan. – Research at Kansas State University is helping Kansans establish production guidelines to improve and protect water quality.

Dan Devlin, K-State Research and Extension agronomist, has developed a series of publications that outline best management practices (BMPs) for Kansas producers. These BMPs include guidelines and management tips to minimize the environmental impact of agriculture practices.

“BMPs are management practices that maximize economic benefit and minimize environmental impact,” Devlin said. “The resulting increase in profitability – coupled with the ability to be good environmental stewards – encourages citizens to implement these practices.”

BMPs are established through extensive research and testing. Once a BMP has been identified, publications and web pages help inform citizens about these recommendations. Demonstration plots and tours, public meetings and one-on-one advising help further increase the implementation of BMPs in Kansas. The addition of watershed specialists to K-State Research and Extension's team further adds to the implementation process, Devlin said.

“The watershed specialists will be able to work with the farmers in a one-on-one setting, further helping farmers adopt BMPs in their operation,” he said.

K-State Research and Extension has identified BMPs for a number of practices, including the following:

- * atrazine timing and incorporation;
- * deep banding of phosphorus fertilizer;
- * no-till and reduced tillage cropping practices; and
- * livestock waste management systems.

Devlin said that through BMPs and other research efforts, K-State Research and Extension continues to establish and encourage the implementation of conservation practices to protect our water, soil, and air.

To obtain copies of Devlin's publications, interested persons can contact their local Extension office, or on the World Wide Web, visit <http://www.oznet.ksu.edu/library/>, then select “Water Quality.”

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Story by:

Linda Sleichter, Communications Specialist
lsleicht@oznet.ksu.edu
K-State Research and Extension

For more information:

Dan Devlin is at 785-532-5776

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Released: Jan. 16, 2001

Subsurface Drip Irrigation May Be Option For Farmers Seeking Best Management Practices

COLBY, Kan. – Researchers in western Kansas think they've found a good way to use modern technology to bring millions of dollars in value to livestock waste.

They're using subsurface drip irrigation (SDI) to apply waste from lagoons to adjacent cropland, which not only fertilizes the land but also reduces the risk of that waste reaching public water supplies. According to Freddie Lamm, an irrigation engineer with Kansas State University, the practice takes a "nuisance or hazardous waste" and creates a financial benefit.

In one study, the estimated benefit is as much as \$4.2 million. That study estimated the annual runoff from beef lagoons in the Great Plains at 15,000 acre-feet, which could irrigate 10,000 corn acres worth \$4.2 million. Lamm and others also are studying the benefits of using swine waste.

Livestock waste has been used successfully as a fertilizer, especially for corn. SDI allows researchers to apply the fertilizer more directly to crops.

The research, which is funded through 2001, is the K-State group's newest study to improve the efficiency of irrigation, particularly in western Kansas where an estimated 2.24 million acres are under irrigation. It's also another viable option for Kansas officials – including Gov. Bill Graves – who are promoting local, voluntary efforts to protect and clean the state's waterways.

"When we began studying SDI in 1989, we really weren't in a crisis situation at the time; essentially no one in Kansas was using SDI for row crops," said Lamm, who works for K-State Research and Extension in Colby. "So before people were beating down our doors looking for answers, we got ahead of the curve and now we are able to give answers to common questions."

SDI utilizes underground lines (drip tapes) which run the length and breadth of a field. Its pronounced advantages over center pivot sprinklers is that SDI can cover square areas -- sprinklers limit irrigation to a circle in a square field -- and water and nutrients are fed directly to the plant's roots.

Lamm notes that the value of annual water savings associated with widespread adoption of SDI on currently furrow-irrigated areas of western Kansas has been estimated to range between \$175 to \$350 million. That's also important because of recent years' news reports that the region's lifeblood – the large, underground stream known as the Ogallala aquifer – is rapidly depleting.

SDI An Option For Livestock Waste/Page 2

Kansas is the sixth largest irrigated state with nearly 3 million irrigated acres. In western Kansas, irrigation accounts for nearly 95 percent of the total water use. Nearly 10,500 acres currently are under subsurface drip irrigation, but Lamm thinks approximately 750,000 acres of lower efficiency surface irrigation could be suited for SDI.

A lingering question for farmers considering installing an SDI system is cost efficiency. So far, K-State researchers estimate that an SDI system must last 15-20 years for the farmer to recover his initial investment.

“This is possible, provided the systems are properly maintained,” Lamm said. “The trends in irrigation improvements and the constraints facing irrigators indicate that SDI acres will continue to increase.”

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Story by:

Pat Melgares, News Coordinator
pmelgare@oznet.ksu.edu
K-State Research and Extension

For more information:

Freddie Lamm is at 785-462-6281, or flamm@oznet.ksu.edu

From Kansas State University's Agricultural Experiment Station and Cooperative Extension Service

**K-State Research and Extension
Department of Communications**
News, 113 Umberger Hall
Manhattan, KS 66506-3402
785-532-5806 Fax: 785-532-6458
<http://www.oznet.ksu.edu/news>

Mailed: Dec. 14, 2000

Nutrient Best Management Practices Can Bolster Farm Profits

MANHATTAN, Kan. – All the talk about water quality, TMDLs, WQS and BMPs can be confusing and downright frustrating, but one thing seems clear – adding nutrients to farmland in precise amounts and at specific times of the growing season can reinforce a farm's bottom line, according to Kansas State University agricultural economists.

Such practices, also known as Best Management Practices (BMPs), have been touted since the late 1980s as a means of protecting and improving the quality of surface waters in the state by reducing potentially harmful chemical runoff from farm fields. But BMPs also bring an added benefit, said Dan Bernardo, head of the agricultural economics department at K-State.

“There's a very positive relationship between the adoption of those (nutrient management) BMPs and farm profits,” said Bernardo, who along with other K-State economists, conducted a survey among farmers earlier this year regarding economic issues surrounding the use of best management practices. He added, however, that there was also a small negative relationship between the use of herbicides, BMPs and farm income.

The reasons for the improved profitability when applying nutrients using best management practices aren't clear, but by carefully measuring the amounts used and not over-applying, and by applying at optimal times with respect to weather and the growing season, growers may be saving money on their nutrient inputs while at the same time enhancing their yield prospects, Bernardo said.

The survey was part of the Integrated Agricultural Management Systems (IAMS) project which was launched in 1998 by K-State Research and Extension. The goal is to evaluate agricultural management operations that address major agriculture-related contaminants that threaten the quality of surface waters, while also maintaining or improving the competitiveness of production agriculture.

The IAMS project is funded by the Kansas Corn Commission, the Kansas Grain Sorghum Commission, the Kansas Soybean Association, and the Kansas Fertilizer Research Fund.

The survey was mailed to farmers who participate in the Kansas Farm Management Association program. Through the program, KFMA economists provide production and financial management

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Best Management Practices/Page 2

information to 2,700 farms and 3,400 families. A total of 963 producers responded to the survey.

“This study is the first to use actual farm-level economic and BMP adoption data to determine the relationship between BMP use and farm profitability. K-State researchers had the rather enviable situation where we could mesh the survey responses with KFMA income data,” Bernardo said.

Key elements of nutrient best management practices include:

- * Determining optimal nitrogen rates to use on the site and applying no more than necessary;
- * Using the appropriate source of nitrogen for the plant, soil, and residue situation; and
- * applying the nitrogen at the correct time.

Survey results also showed that the financial incentives necessary for farmers to adopt specific best management practices differ significantly from one producer to the next, across geographic areas and specific crops, which indicated that there’s no “universal formula” for encouraging BMP adoption.

While the survey showed a positive correlation between applying nutrients under best management practices, it also showed a small negative correlation between herbicide BMPs in corn and sorghum production and profits, Bernardo said.

“On the herbicide side, for corn or sorghum, there was a small but statistically significant negative relationship that would imply a small yield drag may exist,” he said. “That doesn’t imply that when BMPs are employed correctly, that there’s an adverse effect on profits.”

Further study is needed to determine if the farmers surveyed are in fact using BMPs correctly when applying herbicides and if more education is called for, Bernardo added.

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Story by:

Mary Lou Peter, Communications Specialist
mlpeter@oznet.ksu.edu
K-State Research and Extension

For more information:

Dan Bernardo is at 785-532-4493

Watershed Specialist Summary

K-State Research and Extension is boosting its water quality initiative with the appointment of five new watershed specialists. These specialists will provide watershed management expertise and develop watershed educational program activities in multi-county areas. The specialists, who are currently undergoing training and assessing the needs of their assigned watersheds, are:

- **Mike Christian**, Upper Blue watershed specialist. Christian is located in the northeast area office and can be reached at 785-532-5833.
- **Ron Graber**, Lower Arkansas watershed specialist. Graber is located in the south central area office and can be reached at 316-663-5491.
- **Doug Musick**, Lower Kansas watershed specialist. Musick is located Douglas County and can be reached at 785-843-8058.
- **Milton Krainbill**, Upper Delaware watershed specialist. Krainbill is located in the Jackson County office and can be reached at 785-364-4125.
- **Bob Frisbee**, Upper Arkansas watershed specialist. Frisbee is located in Edwards County and can be reached at 316-659-2149.

As watershed specialists, the five will provide management expertise and develop educational program activities in multi-county areas. They will be working with landowners and farmers within the watersheds to develop action plans, based on the concerns within the watersheds. The specialists will strive to improve water quality through educational programs, including on-farm demonstrations, workshops, seminars and other teaching methods.

The watershed specialists will work with K-State Research and Extension agents, specialists and researchers – as well as industry representatives and other water quality experts – to develop and implement action plans to improve water quality throughout the state. This initiative is one of many that illustrates K-State Research and Extension's dedication to improving water quality in Kansas.



State Conservation Commission

109 SW 9th Street
Suite 500, Mills Building
Topeka, KS 66612-1215

Telephone: (785) 296-3600 • Fax (785) 296-6172



MEMORANDUM

January 16, 2000

MEMO TO: Senate and House Agriculture Committees

FROM: Tracy Streater, Executive Director

SUBJECT: Total Maximum Daily Load (TMDL) Status Report

The State Conservation Commission (SCC), along with KSU, Department of Agriculture, Water Office, Department of Health and Environment, Department of Wildlife and Parks, Forest Service and the USDA – Natural Resources Conservation Service, play various roles in the water quality arena. Initially, these agencies joined forces to implement the Governor’s Water Quality Initiative. However, with the development of Total Maximum Daily Loads, the targeted areas for water quality improvement have been narrowed to the watersheds designated high priority for TMDL implementation. While the elements of the Water Quality Initiative continue to be carried out and include education, incentives, technical assistance, research and data collection, the focus has shifted to address TMDL concerns.

Below is a summary of the major activities relative to TMDL implementation:

TMDL Needs Inventory – SCC is charged with preparing an inventory of practices needed to address the impairments identified in TMDL areas. Using existing data, and input and assistance from KSU, KDHE, NRCS and the county conservation districts, the Inventory was completed for the Kansas Lower Republican (KLR) River Basin. The total estimated cost to treat the affected watersheds is approximately \$87 million. SCC began the inventory process for the Cimarron, Lower and Upper Arkansas River Basins last fall. The inventory for these basins will be completed in February.

Program Funding – Funding initially targeted to the KLR under the Governor’s Water Quality Initiative has been redirected to the TMDL watersheds within the basin. The Buffer Initiative has been expanded to include all TMDL areas as well. The Buffer Initiative enhancement proposed by the Governor would allow for continued enrollment in the KLR in addition to newly identified TMDL areas in the Cimarron, Lower Arkansas and Upper Arkansas River Basins. The Governor’s budget also includes additional funding for the NPS Pollution Control Program that would be targeted to TMDL areas as well.

Senate Agriculture Committee

Date 1-16-01

Attachment # 3-1 thru 3-2

Watershed Specialists – SCC is also providing matching money to this effort through the NPS Pollution Control Program. The Watershed Specialists fill a void at the local level by working cooperatively with conservation districts and NRCS in providing education and information to landowners and livestock producers.

Fecal Coliform Bacteria Study – The majority of the identified TMDL areas are impaired by fecal coliform bacteria (FCB). To better target program resources, KSU has recently completed a study of FCB sources and their relative impacts on surface and groundwater. A major focus of this study was directed at the impact of failing onsite wastewater or septic systems.

Development and Evaluation of Best Management Practices (BMP) – KSU has played a major role in establishing BMP's for pesticides and other NPS pollutants. In conjunction with the FCB study, the effect of buffer or filter strips in reducing runoff from confined livestock operations was also evaluated.

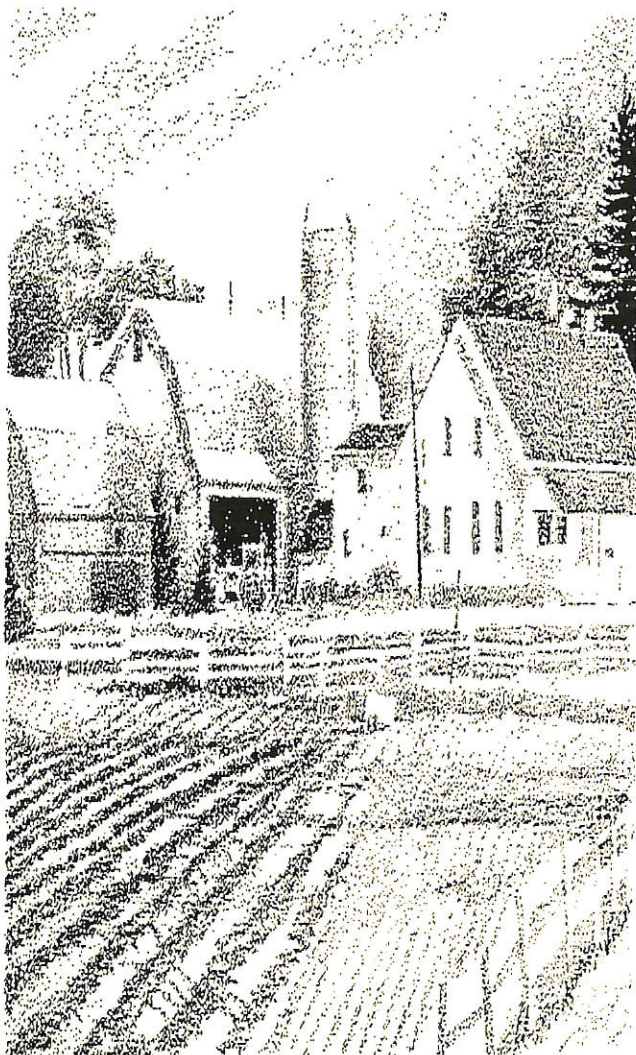
TMDL Ag Working Group - SCC, KSU and the Department of Agriculture assisted the major agriculture organizations in a number of outreach efforts aimed to inform local ag leaders of the TMDL issue. Meetings were held at various locations in each of the river basins thus far affected by TMDL's.

Technical Assistance (TA) – A number of agencies are involved in the delivery of technical assistance. NRCS, with staff located in every county, is the main provider of TA at the local level. KSU's ag engineering staff has designed a number of innovative livestock waste management systems throughout the state. SCC, KDHE, Department of Wildlife and Parks and Forest Service staff has assisted landowners in stream bank stabilization, riparian area restoration and wetland restoration/enhancements. Landowners also utilize private engineering consultants in the development of confined livestock waste systems.

This concludes a brief rundown of the major agency activities relative to TMDL's. I will address any questions you might have at the appropriate time.

TMDL

Agriculture Working Group



Members:

Kansas Agricultural Aviation Assn.
Kansas Assn. of Conservation Districts
Kansas Assn. of Wheat Growers
Kansas Cooperative Council
Kansas Corn Growers Assn.
Kansas Dairy Assn.
Kansas Farm Bureau
Kansas Fertilizer & Chemical Assn.
Kansas Grain & Feed Assn.
Kansas Grain Sorghum Producers Assn.
Kansas Livestock Assn.
Kansas Pork Producers Council
Kansas Seed Industry Assn.
Kansas Soybean Assn.

Cooperators:

Kansas Department of Agriculture
K-State Research & Extension
State Conservation Commission

...agriculture working to protect water quality!

Senate Agriculture Committee
Date 1-16-01

Attachment #4-1 thru 4-4

Why?

TMDL Agriculture Working Group

The goal of the "TMDL Agriculture Working Group" is to inform and assist farmers and ranchers in implementing this new water quality initiative.

The intent of these informational meetings is to address a number of questions for agricultural producers:

- ✓ What are TMDL's?
- ✓ Why are TMDL's being established?
- ✓ What will be the responsibilities of landowners?
- ✓ How do we inform and encourage farmers and ranchers to become involved?
- ✓ Is technical assistance available?
- ✓ Will there be cost-share programs?
- ✓ Who will administer the program?

AGENDA

“TMDL Meetings for Agricultural Leaders”

October 12, 1999

Washington 12:00 noon
Holton 6:00 p.m.

Opening Remarks	
Introductions.....	Bill Fuller Kansas Farm Bureau
Overview.....	Allie Devine Kansas Livestock Assn.
The Problem.....	Tom Stiles Kansas Dept. of Health & Environment
Questions & Answers	
Possible Management Solutions.....	Jere White Kansas Grain Sorghum Producers Assn. Kansas Corn Growers Assn.
	Mike Beam Kansas Livestock Assn.
Financial & Technical Assistance.....	Tracy Streeter State Conservation Commission
Local Action.....	Doug Wareham Kansas Grain & Feed Assn. Kansas Fertilizer & Chemical Assn.
Questions & Answers	
Adjourn	

AGENDA

“TMDL Meetings for Agricultural Leaders” February 28 - 29, 2000

Garden City February 28, 2000 at 6:30 P.M.
Great Bend February 29, 2000 at 12:00 Noon
Newton February 29, 2000 at 6:30 P.M.

Opening Remarks,
Introductions & Overview.....Allie Devine
Kansas Livestock Assn.

The Problem..... Tom Stiles
Kansas Dept. of Health & Environment

Dale Lambley
Kansas Department of Agriculture

Questions & Answers

Possible Management Solutions.....Jere White
Kansas Corn Growers Assn.
Kansas Grain Sorghum Producers Assn.

Financial & Technical Assistance..... Tracy Streeter
State Conservation Commission

Local Action..... Doug Wareham
Kansas Grain & Feed Assn.
Kansas Fertilizer & Chemical Assn.

Questions & Answers

Adjourn