



109 SW 9<sup>th</sup> Street 2A  
Topeka, Kansas 66612-1283

## **MINUTES OF THE STATE CONSERVATION COMMISSION**

1. The State Conservation Commission meeting was called to order by Rod Vorhees, Chairman and Area V Commissioner at 2:00 p.m., Sunday, November 24, 2013 at the Double Tree by Hilton Hotel Wichita Airport, Wichita, Kansas.

2. **ATTENDANCE:**

**Elected Commissioners:**

Ted Nighswonger, Area I Commissioner  
Andy Larson, Area II Commissioner  
Brad Shogren, Area III Commissioner  
John Wunder, Area IV Commissioner  
Rod Vorhees, Area V Commissioner

**Ex-Officio & Appointed Members:**

Eric Banks, State Conservationist, USDA, Natural Resources Conservation Service (NRCS)  
Chad Voigt, P.E., Water Structures Program Manager, Kansas Department of Agriculture (KDA), Division of Water resources (DWR)  
Dan Devlin, Director, Kansas Care for Agricultural Resources and the Environment (KCARE), K-State Research and Extension  
Peter Tomlinson, Ph.D., Associate Professor, Extension Specialist for Environmental Quality Agronomy Department, Kansas State University

**Division of Conservation (DOC), Kansas Department of Agriculture Staff:**

Greg Foley, Executive Director  
Scott Carlson, Mined Land Reclamation Program Manager  
Donna Meader, Public Service Executive  
Don Jones, Water Quality Programs Manager  
Dave Jones, Conservation District Coordinator  
Hakim Saadi, Watershed & Water Supply Program Manager  
Amanda Hunsaker, Program Consultant

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### **Guests:**

Herb Graves, State Association of Kansas Watersheds (SAKW)

Representative Kyle Hoffman, District 116

Jarrold Bowser, Chairman, Jackson County Conservation District

Sarah Bowser, Jackson County Resident

Doug Blex, Chairman, Montgomery County Conservation District

Joyce Bracken, Vice-Chairman, Wilson County Conservation District (arrived @ 4:25 pm)

Gail Harshaw, District Manager, Wilson County Conservation District (arrived @ 4:25 pm)

### **3. ADDITIONS, AMENDMENTS AND APPROVAL OF AGENDA:**

**Motion by Andy Larson to approve the agenda as presented . Seconded by John Wunder. Motion carried.**

### **4. MINUTES OF THE PREVIOUS MEETING:**

a. Approve the September 12, 2013 meeting minutes as mailed.

**Motion by Ted Nighswonger to approve the September 12, 2013 meeting minutes as mailed. Seconded by Brad Shogren. Motion carried.**

### **5. COMMENTS FROM GUESTS:**

a. Herb Graves indicated that he is pleased with the three Operation and Maintenance Workshops conducted this fall by DOC, DWR and SAKW. He also expressed his interest in having DOC cover the new Funding Policy during the SAKW Annual Conference in January, 2014.

b. Representative Kyle Hoffman – Attending to be there if questions arise regarding taxing authority.

c. Jarrod Bowser – Attending to hear topics being discussed.

d. Sarah Bowser – Regional Director, National Sorghum Producers made reference to crop insurance and analysis of irrigated grain sorghum.

e. Doug Blex – Remarked that he felt it was extremely important to educate landowners on how and where to properly store poultry litter during stationary periods.

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### 6. FINANCIAL REPORT:

- a. Overview of the FY 2014 first quarter financial report see Attachment A – Donna Meader.

**Motion by Brad Shogren to approve the FY 2014 first quarter financial report. Seconded by Ted Nighswonger. Motion carried.**

### 7. COMMUNICATIONS AND ANNOUNCEMENTS:

- a. Buffer/CREP – Currently suspended until reauthorized with new Farm Bill – Greg Foley.
- b. Kansas Association of Conservation Districts (KACD) Mill Levy E-mail see Attachment B – Scott Carlson.
- c. Water Supply – Osage City Lake article – Hakim Saadi.

### 8. UNFINISHED BUSINESS:

- a. Review KACD Convention roles and responsibilities for commissioners and staff.
- b. Update on Poultry Litter Nutrient Management Special Project in Southeast Kansas see Attachment C – Don Jones.
- c. Update of Livestock Water Supply Drought Initiative see Attachment D – Dave Jones.
- d. Update on Conservation Reserve Enhancement Program (CREP) – Greg Foley.

### 9. NEW BUSINESS:

- a. Review the 2014 Spring Workshop dates and locations – Scott Carlson.

Area I – March 11, American Legion Hall at Grainfield  
Area II – March 12, KSU Experiment Station, Garden City  
Area III – March 13, NRCS Conference Center, Salina  
Area IV – March 4, Farm Bureau, Topeka  
Area V – March 5, Fredonia

- b. Overview of the FY 2015 State Conservation Commission budget – Donna Meader.
- c. Authorize Commissioner(s) and staff travel.

**Motion by Brad Shogren to approve Greg Foley, Andy Larson, Ted Nighswonger and John Wunderto attend the 2014 NACD Annual Convention in Anaheim, California, February 2-5, 2014. Seconded by John Wunder. Motion carried.**

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- d. Watershed Dam Construction Program (WDCP) – Hakim Saadi.
  - i. Rehabilitation revisited see Attachment E (Rehabilitation Recommendation 3).

**Motion by Ted Nighswonger to rescind the funding of Site 3 (Switzer Creek WD #63) and authorize the funding of \$51,739 as outlined in attachment (Revised Rehabilitation Recommendation #3). Seconded by John Wunder. Motion carried.**

- ii. Proposed FY 2014 Watershed Dam Construction Program Policy see Attachment F – Hakim Saadi.

**Motion by Brad Shogren to approve the proposed Watershed Dam Construction Program Funding Policy. Seconded by Ted Nighswonger. Motion carried.**

- e. Cost-share cancellation and reallocation. Staff recommendation is to extend two weeks until December 20, 2013 due to federal shutdown – Don Jones.

**Motion by Andy Larson to approve a December 20, 2013 cancellation of uncommitted funds. Seconded by John Wunder. Motion carried.**

- f. Review KACD resolutions and discussion topics – Scott Carlson.
  - i. Common and Cut-Leaved Teasel see Attachment G.
  - ii. FY 2015 Division of Conservation Budget see Attachment H.

### 10. REPORTS:

- a. Agency Reports:
  - i. Eric Banks presented a NRCS Report see Attachment I.
  - ii. Peter Tomlinson, KSU, Environmental Quality Agronomy Department reported that Kansas State University is to do an economic study for Local Enhanced Management Area (LEMA) in Sheridan County and the Great Plains grazing information is forthcoming.
  - iii. Chad Voigt, Kansas Department of Agriculture, DWR reported on current topics within DWR. Rain fall data update is digital on NOAA's website. FEMA floodplain changes. Corps public notice exemption on farm ponds no impact on hydrology.

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iv. Dan Devlin, KCARE, Kansas State Research and Extension reported on Kansas State University, School of Agriculture enrollment is at an all-time high and the start-up of a \$10 million study on Sorghum.

b. Conservation document submittal summary see Attachment J – Donna Meader

c. Staff reports:

i. Greg Foley reported on EQIP funds for re-introduction of the Black Footed Ferret, testimony on the Lesser Prairie Chicken to Natural Resources to US Congress sometime in December, Israel trip overview, National Association of State Conservation Agencies (NASCA) overview and recognition to Scott Carlson and Amanda Hunsaker for being involved with the new DocuWare scanning software and upcoming implementation

ii. Scott Carlson reported:

(a) DOC would like to pursue a new protocol for receiving and managing conservation district documents. The DOC will allow conservation districts to electronically send specific documents via email. A statewide email will be sent to conservation districts by the end of the year. This new protocol will take effect January 1, 2014 see Attachment K.

(b) 50% of the Conservation District Supervisors have completed the training modules.

(c) Announced the 2013 Governor's Mined Land Reclamation Award winner is Mid-States Materials, LLC, from Lecompton.

(d) Gave a new program overview of the Kansas Agricultural Liming Materials Act that the DOC is now administering.

iii. Hakim Saadi reported that the DOC, DWR and SAKW conducted three successful Operation and Maintenance Workshops in Eureka, Holton and Little River. There were 20 Watershed Districts being represented. NRCS staff could not attend any of the workshops due to the federal government shutdown.

iv. Don Jones reported on Peats Creek, 110-Mile Creek and Twin Lakes.

v. Dave Jones reported Quality Assurance Reviews have been conducted in Pratt and Lyndon Management Units.

vi. Donna Meader reported that staff would be attending the Area IV all personnel meeting in Manhattan on December 10<sup>th</sup>. She also thanked Amanda Hunsaker for her continued work on the DocuWare scanning.

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**d.** Commissioner Reports:

- i.** Area I – Ted Nighswonger reported on the Governor’s hunt in Graham County.
- ii.** Area II – Andy Larson remarked on the government shutdown; drought taken toll.
- iii.** Area III – Brad Shogren reported that he attended the Governor’s Water Conference in Manhattan on October 24<sup>th</sup> and 25<sup>th</sup>, 2013.
- iv.** Area IV – John Wunder remarked that all should be vigilant working with partners and thanks to all in conservation..
- v.** Area V – Rod Vorhees remarked that we need to market everything we do and who helps us.

**11. ADJOURN:**

The next regular Commission meeting is scheduled for Monday, February 10, 2014 at 9:00 a.m. at the Kansas Department of Agriculture Conference Room, Topeka, Kansas.

**Motion by Andy Larson to adjourn. Seconded by John Wunder. Motion carried.  
Meeting adjourned at 6:30 p.m.**



Greg A. Foley  
Executive Director

**DIVISION OF CONSERVATION, KDA - FY 2014 QUARTERLY FINANCIAL REPORT**  
**JULY 1, 2013 THROUGH SEPTEMBER 30, 2013**

	Program/Fund	Index	Appropriation/ Allocation	Total Expenditures	% of Funds Expended	Funds		Uncommitted Balance
						Committed/		
						Encumbered-Contingent		
<b>1.</b>	<b>STATE GENERAL FUND - 1000</b>							
	a. Office Operations	<b>0053</b>	472,497.00	132,025.27	27.9%	0.00		340,471.73
	<b>TOTAL - STATE GENERAL FUND</b>		<b>\$472,497.00</b>	<b>\$132,025.27</b>	<b>27.9%</b>	<b>\$0.00</b>		<b>\$340,471.73</b>
<b>2.</b>	<b>STATE WATER PLAN FUND - 1800</b>							
	<b>a. Water Resources Cost-Share</b>							
	(1) Office Operations		105,570.00	18,416.88	17.4%	21,897.47		65,255.65
	(2) WR-Webelan Programming		15,000.00	0.00	0.0%	15,000.00		0.00
	(3) CSIMS Cost-Share Assistance		2,226,676.00	136,042.07	6.1%	1,514,852.87		575,781.06
	(4) Reserve Funds		37,514.49	0.00	0.0%	0.00		37,514.49
	<b>WR - TOTAL</b>	<b>1205</b>	<b>2,384,760.49</b>	<b>154,458.95</b>	<b>6.5%</b>	<b>1,551,750.34</b>		<b>678,551.20</b>
	<b>b. Non Point Source Pollution Control</b>							
	(1) Office Operations		1,501.00	0.00	0.0%	0.00		1,501.00
	(2) NPS-Webelan Programming		15,000.00	0.00	0.0%	15,000.00		0.00
	(3) NPS-Engineering Services		50,000.00	0.00	0.0%	0.00		50,000.00
	(4) NPS-Wyandotte County CD I&E Funds		12,993.00	0.00	0.0%	12,993.00		0.00
	(5) NPS-TA Conservation Technician Positions		144,434.73	144,434.73	100.0%	0.00		0.00
	(6) NPS-TA No-Till Education Funds		42,500.00	4,375.00	10.3%	0.00		38,125.00
	(7) CSIMS Cost-Share Assistance		1,756,031.00	194,863.62	11.1%	967,314.94		593,852.44
	(8) Reserve Funds (carryover)		191,459.02	0.00	0.0%	0.00		191,459.02
	<b>NPS - TOTAL</b>	<b>1210</b>	<b>2,213,918.75</b>	<b>343,673.35</b>	<b>15.5%</b>	<b>995,307.94</b>		<b>874,937.46</b>
	<b>c. Aid to Conservation Districts</b>	<b>1220</b>	<b>2,326,147.00</b>	<b>2,034,930.25</b>	<b>87.5%</b>	<b>291,216.75</b>		<b>0.00</b>
	<b>d. CREP/WTAP</b>							
	(1) Office Operations		90,737.00	23,460.90	25.9%	0.00		67,276.10
	(2) WR-CREP CSIMS		37,677.40	0.00	0.0%	37,677.40		0.00
	(3) WTAP Projects		0.00	0.00	0.0%	0.00		0.00
	(4) Reserve Funds		371,163.60	0.00	0.0%	0.00		371,163.60
	<b>CREP/WTAP - TOTAL</b>	<b>1225</b>	<b>499,578.00</b>	<b>23,460.90</b>	<b>4.7%</b>	<b>37,677.40</b>		<b>438,439.70</b>
	<b>e. Watershed Dam Construction</b>							
	(1) Watershed Dam Cost-Share Assistance		273,200.00	0.00	0.0%	273,200.00		0.00
	(2) Rehabilitation		368,315.98	0.00	0.0%	368,315.98		0.00
	(3) Reserve (PAYBACK)		(971.98)	0.00	0.0%	(971.98)		0.00
	<b>WATERSHED PROGRAM - TOTAL</b>	<b>1240</b>	<b>640,544.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>640,544.00</b>		<b>0.00</b>
	<b>f. KS Water Quality Buffer Initiative</b>	<b>1250</b>	<b>295,393.51</b>	<b>0.00</b>	<b>0.0%</b>	<b>253,376.34</b>		<b>42,017.17</b>
	<b>g. Riparian and Wetland Protection</b>							
	(1) RW-Engineering Services		0.00	0.00	0.0%	0.00		0.00
	(2) RW-Professional Technical Services		0.00	0.00	0.0%	0.00		0.00
	(3) RW-CSIMS Demonstration Projects		171,500.54	0.00	0.0%	0.00		171,500.54
	(4) Reserve Funds		0.00	0.00	0.0%	0.00		0.00
	<b>RW - TOTAL</b>	<b>1260</b>	<b>171,500.54</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>		<b>171,500.54</b>
	<b>h. Lake Restoration-Water Supply Program</b>	<b>1275</b>	<b>286,868.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>		<b>286,868.00</b>
	<b>TOTAL - STATE WATER PLAN FUND</b>		<b>\$8,818,710.29</b>	<b>\$2,556,523.45</b>	<b>29.0%</b>	<b>\$3,769,872.77</b>		<b>\$2,492,314.07</b>

**DIVISION OF CONSERVATION, KDA - FY 2014 QUARTERLY FINANCIAL REPORT**  
**JULY 1, 2013 THROUGH SEPTEMBER 30, 2013**

FEE FUND PROGRAMS	Index	Fee Deposit Accounts	Total Expenditures	% of Funds Expended	Funds		Cash Flow
					Committed/		
					Encumbered-Contigent		
<b>1. Agriculture Liming Program - 2118</b>	<b>1200</b>	<b>23,716.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>23,716.00</b>	
<b>2. KDWP-Buffer Partnership - 2517</b>	<b>2510</b>	<b>0.18</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>0.18</b>	
<b>3. LAND RECLAMATION FEE FUND - 2542</b>	<b>2090</b>	<b>118,777.46</b>	<b>36,211.52</b>	<b>30.5%</b>	<b>0.00</b>	<b>82,565.94</b>	
<b>4. KDHE/EPA - FEDERAL FUNDS - 3889</b>	(ON THIS ACCOUNT-MONEY IS DEPOSITED AS REPORTS ARE SUBMITTED TO KDHE)				REMAINING BAL TO REQUEST		
a. KDHE/NPS Conservation Technician Positions	<b>3880</b>	40,196.48	40,196.48	0.0%	0.00	0.00	
<b>TOTAL KDHE-TA - 3880</b>		<b>40,196.48</b>	<b>40,196.48</b>	<b>0.0%</b>	<b>0.00</b>	<b>0.00</b>	
b. KDHE/Buffer Indirect Funds	<b>3705</b>	23,530.05	0.00	0.0%	20,000.00	23,530.05	
c. KDHE/NPS Indirect Funds	<b>3705</b>	4,500.00	0.00	0.0%	0.00	4,500.00	
<b>TOTAL KDHE-INDIRECT FUNDS - 3705</b>		<b>28,030.05</b>	<b>0.00</b>	<b>0.0%</b>	<b>20,000.00</b>	<b>28,030.05</b>	
<b>TOTAL- FEDERAL FUNDS - 3915</b>		<b>68,226.53</b>	<b>40,196.48</b>	<b>58.9%</b>	<b>20,000.00</b>	<b>28,030.05</b>	
<b>5. NRCS CONTRIBUTION AGREEMENT - 3715</b>	(ON THIS ACCOUNT-MONEY IS DEPOSITED AS REQUESTED FROM NRCS)				REMAINING BAL TO REQUEST		
a. NRCS/NPS Conservation Technician Positions	<b>3825</b>	86,897.79	18,564.96	21.4%	162,715.04	68,332.83	
<b>TOTAL NRCS-TA/ENGINEERING - 3825</b>		<b>86,897.79</b>	<b>18,564.96</b>	<b>21.4%</b>	<b>162,715.04</b>	<b>68,332.83</b>	
b. NRCS/WQ Indirect Funds	<b>3800</b>	53,258.97	0.00	0.0%	1,429.39	53,258.97	
<b>TOTAL NRCS-INDIRECT FUNDS - 3800</b>		<b>53,258.97</b>	<b>0.00</b>	<b>0.0%</b>	<b>1,429.39</b>	<b>53,258.97</b>	
<b>TOTAL- NRCS FUNDS - 3917</b>		<b>140,156.76</b>	<b>18,564.96</b>	<b>13.2%</b>	<b>164,144.43</b>	<b>121,591.80</b>	
<b>6. WR_WSD DROUGHT PROGRAM - 7305</b>	<b>7000</b>	<b>40,000.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>40,000.00</b>	
		<i>Deposits</i>	<i>Total Expenditures</i>	<i>Funds Expended</i>	<i>Total Encumbered</i>	<i>Cash Flow Balance</i>	
<b>FEE FUNDS GRAND TOTAL</b>		<b>\$390,876.93</b>	<b>\$94,972.96</b>	<b>24.3%</b>	<b>\$0.00</b>	<b>\$295,903.97</b>	
<b>1. *HOSPITALITY FUND - 1000</b>	<b>0054</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>	<b>0.00</b>	<b>0.00</b>	

\*Paid under KDA Budget





## Funding District Operations

Robin Lehman <robinalehman@gmail.com>  
 To: Pat Lehman <ptlehman@sunflower.com>

Tue, Sep 17, 2013 at 7:17 AM

**\*\*PLEASE SHARE THIS EMAIL WITH YOUR DISTRICT SUPERVISORS\*\***

Hello:

As reduced public funding has become more and more of a reality, I have taken several opportunities over the past year to make district supervisors and employees aware of possible alternate funding. My goal is simply to provide information as to actions districts may want to consider in case state budget constraints result in cuts to conservation funding. However, as I've explained the use of a dedicated mill levy as a potential funding source, I've become aware that there are many supervisors who aren't clear exactly how this would work. Below is an explanation of what a mill levy is as well as an overview of the current funding scheme and what it might look like if the conservation district law was amended by the Kansas Legislature:

### MILL LEVY DEFINED:

The tax rate, as it is often referred to, is called the mill levy. For each "mill" of the mill levy, you will pay one dollar for each \$1,000 of *assessed* property valuation. How is the mill levy determined? Each year, the value of all properties combined within a taxing district is totaled. The total valuation is divided by 1,000, and the result will determine how much money one mill will generate. For example, if the total property valuation in a taxing district is \$100 million, dividing this figure by 1,000 means that one mill will generate \$100,000 in tax revenues. This mill value changes from year to year as property valuations change due to appraisals and tax exemptions granted by taxing entities.

### CURRENT FUNDING OF DISTRICT OPERATIONS:

- The State of Kansas will match the local county government up to \$25,000.
- It is subject to budget necessities and can be reduced or eliminated as the state budget requires.
- County government may fund operations from its general fund.
- The amount provided is determined by the county commission.
- District may receive funding from a special mill levy from the county.
- The funds from a special mill levy may be in addition to or in lieu of any money from the general fund.
- The levy from this tax cannot exceed 2 mills or \$55,000, whichever is lower.
- The levy and amount are determined by the county commission.
- In addition, a conservation district may accept donations and may sell goods or services and lease equipment to help fund district operations.
- Conservation district revenue is public funds and must be used for a public purpose; in the case of a conservation district, to implement the Kansas Conservation District Act.

### AMENDING CONSERVATION DISTRICT LAW:

- If the Kansas Conservation District Act was amended by the Kansas Legislature to allow conservation districts to become a taxing authority for district operations, each conservation district would become a taxing authority--similar to watershed districts, fire districts, and township boards.

- A district's budget process would determine the funding needed for operations each year.
- Each conservation district would levy a property tax within their district to pay for operations.
- Conservation districts would no longer receive money from the state for operations.
- Conservation districts would no longer receive any money from their county commissions.
- The special mill levy that currently exists in state law would not be available (right now it is strictly a county commission option and districts have no authority to levy a special mill levy).

*I am not advocating a particular position on this.* It is simply my duty as KACD's executive director to inform our members when or if there are pending issues that could have a major impact and possible ways to address them. The above information should help districts understand the process should our organization wish to pursue a dedicated mill levy. Information about how a bill becomes law is available here: [http://www.kacdnet.org/How\\_a\\_Bill\\_Becomes\\_Law.pdf](http://www.kacdnet.org/How_a_Bill_Becomes_Law.pdf)

This issue will be discussed during the general session of the KACD Convention on Tuesday, November 26th, at 10:00 a.m. I strongly encourage supervisors to attend the convention and take part in the discussion. In the meantime, if you have any questions, please contact me via email or by phone at (785) 766-3743.

Thanks,  
Pat





E-1027

# Poultry Litter Nutrient Management: A Guide for Producers and Applicators

Oklahoma Cooperative Extension Service  
Division of Agricultural Sciences and Natural Resources  
Oklahoma State University



# Poultry Litter Nutrient Management: A Guide for Producers and Applicators

Authors from the Department of Biosystems and Agricultural Engineering and  
the Department of Plant and Soil Sciences, Oklahoma State University

**Josh Payne, Ph.D.**

Area Animal Waste Management Specialist

**Hailin Zhang, Ph.D.**

Professor and Nutrient Management Specialist

Oklahoma Cooperative Extension Services



Cover photo and photo above courtesy Todd Johnson, Agricultural Communications Services

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## Introduction

Over the past 50 years, much of the animal production in the United States has successfully transitioned from small-scale farms to large-scale feeding operations. This movement has resulted in a substantial increase in production, efficiency and geographic concentration, providing job opportunities, economic revenue and an affordable source of protein for humans worldwide. The economic success of the poultry industry has been attributed to its evolution into a vertically integrated business having the capacity to raise large numbers of birds in environmentally controlled production houses.

In Oklahoma, poultry production is concentrated in the eastern tier of the state, serving as a major source of employment in rural areas. The success of the poultry industry in eastern Oklahoma is directly related to the success of poultry companies (integrators) located in western Arkansas. Eastern Oklahoma has benefited from the integrator's expansion to capitalize on increased consumer demand for poultry products. In 2007, poultry production was the second largest agricultural revenue generator in Oklahoma, only trailing income from cattle and calves. Poultry receipts have grown dramatically in the past 10 years to nearly \$749 million in 2007, compared to \$447 million in 1997. Production tends to be localized in a relatively small radius around an integrator's feed mill, hatchery and processing facility. This production practice, and the ability to raise large numbers of birds in confinement, ultimately generates large amounts of manure in the form of poultry litter over a limited geographic area. Manure management remains an ongoing challenge to the industry.

### What is Poultry Litter?

Poultry litter consists of manure, bedding material and other components such as feathers and soil. Wood shavings, sawdust, and soybean, peanut, or rice hulls are all common manure carriers added to the poul-

try house floor and utilized for raising four to eight flocks on a single placement prior to complete cleanout. If multiple flocks are grown, the houses are usually "caked-out" (removal of the denser or wetter areas) between flocks. After removal from the poultry house, litter is generally applied to land as a nutrient source to pastures and cropland.

### Benefits from Litter

#### Application to Soil

Poultry litter is recognized as an excellent source of plant nutrients and organic matter. Organic matter can improve crop production by potentially increasing the infiltration of water and water holding capacity, enhancing the retention of nutrients in the soil, reducing wind and water erosion, and promoting the growth of beneficial organisms. Continual applications of litter also have been shown to maintain soil pH and may increase soil pH in some instances.



Figure 1. Poultry bedding material.

### Environmental Considerations

In the past, manure or litter was often applied at rates to meet crop nitrogen (N) needs, which could result in soil phosphorus (P) buildup. Because the nutrient ratio



in litter is different from that of plant nutrient requirements, careful consideration must be taken when land applying to avoid over-application of certain nutrients, primarily P. If poultry litter land application is not properly managed, excess P application could degrade water quality through runoff into surrounding surface water resources. Depending on application rate and timing, soil type and crop condition, there may be a concern of nitrates leaching into groundwater. Both N and P transport into waterways contribute to eutrophication.



**Figure 2. Poultry house during cleanout.**

Eutrophication, caused by nutrient enrichment of a water body, is characterized by excess plant growth and oxygen depletion in water and can result in algae blooms, taste and odor problems, and fish kills. This not only reduces attractiveness for recreation but also creates water quality concerns for drinking water supplies. Such impacts have led to environmental regulations and litigation.

Raising large numbers of birds in confinement can generate air emissions. Air emissions commonly associated with commercial poultry production include: gases (ammonia, nitrous oxide and carbon dioxide), odor and particulate matter (PM).

### *Gases*

Nitrogen is excreted from birds in the form of uric acid in the manure. Ammonia—a colorless, highly irritating gas—is formed through the microbial decomposition of uric acid. Ammonia levels above 50 ppm are detrimental to both bird and worker health. Proper ventilation should be considered.

### *Odor*

Unpleasant smells associated with animal manure decomposition can be classified as odor. Manure decomposition can generate gases and volatile organic compounds that contribute to odor. Air temperature, relative humidity, manure accumulation time, poultry house ventilation, weather conditions and dust levels can affect odor generation and distribution.

### *Particulate matter*

Particulate matter (PM) is considered a pollutant and consists of dust and liquid aerosols. Dust can originate from feed, manure, dander and feathers, while liquid aerosols can originate from bird respiration, high pressure washing of buildings and cool cell pads. Particulate matter can absorb odor, gases and bacteria and may transport them offsite.

Air pollutants can negatively affect air quality both inside and outside the poultry house. At certain levels, gases and PM can negatively impact human and animal health and cause environmental concerns. Odor emissions also can lead to negative public perception and neighbor nuisance complaints.

## **Regulations**

In the spring of 1998, the Oklahoma legislature passed the Oklahoma Registered Poultry Feeding Operations Act, pertaining to poultry farmers producing more than 10 tons of poultry waste per year and confining birds for 45 days or more in any 12-month period. Additionally, the Oklahoma Poul-





Figure 3. Algae bloom in a lake.

try Waste Applicators Certification Act was passed affecting individuals land applying more than 10 tons of poultry waste per year. The Oklahoma Department of Agriculture, Food and Forestry (ODAFF), Agricultural Environmental Management Services (AEMS) is responsible for developing rules and enforcing these acts. The Oklahoma Cooperative Extension Service is responsible for producing training curricula and conducting the required training.

To summarize these Acts, poultry **producers** must:

- Register their poultry feeding operation annually,
- Obtain and follow an animal waste management plan, and
- Allow their operation to be inspected by ODAFF staff.

Poultry litter **applicators** must:

- Obtain a license from ODAFF to apply litter, and
- File an annual litter application report to ODAFF.

Both poultry **producers** and litter **applicators** must:

- Maintain waste management reports and records,
- Attend 9 hours of initial waste management training,
- Attend 2 hours of annual continuing education,

- Follow Natural Resource Conservation Service Nutrient Management Standards, and
- Obtain recent soil and litter tests prior to litter application.

For more detailed information regarding Oklahoma's poultry waste management regulations, refer to OSU Fact Sheet AGEC-202, Broiler Production: Considerations for Potential Growers.

### Valuing Litter

The nutrient value of poultry litter is commonly estimated based on current commercial fertilizer prices (reported as price/lb nutrient) and the litter nutrient analysis (reported as lbs/ton). For example, if calculating the N, P and K value of broiler litter, we know that on average broiler litter contains 63, 61 and 50 lbs/ton of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O, respectively.

Using July 2011, commercial N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O prices of \$0.64, \$0.48 and \$0.51 per lb, respectively, and assuming long-term N availability is 70 percent, and P and K availabilities are 100 percent, we can determine the potential major nutrient value of the litter.

Litter N: \$0.64/lb x 63 lbs/ton	
x 70% availability =	\$28/ton
Litter P: \$0.48/lb x 61 lbs/ton =	\$29/ton
Litter K: \$0.51 x 50 lbs/ton =	\$26/ton
<b>Total Potential Value:</b>	<b>\$83/ton</b>

*Note: The actual value to the end-buyer depends on nutrient needs of the field. For example, there would be no P value if soil test P is already adequate. There may be additional value derived from organic matter and other nutrients found in litter, which is hard to quantify. Due to the nutrient variability in poultry litter, obtaining a recent litter nutrient analysis is critical when determining litter value. Two online tools available to assist producers when comparing the value of litter to commercial*



fertilizer include the poultry litter value calculator found at [www.ok-littermarket.org](http://www.ok-littermarket.org) and the fertilizer blending and cost calculator found at [www.soiltesting.okstate.edu/Interpretation.htm](http://www.soiltesting.okstate.edu/Interpretation.htm). Finally, loading, transportation and application costs affect the end buyer's total cost and should be considered when comparing the cost and benefits.

To encourage appropriate use of the nutrients in litter, government programs may be available to subsidize litter management costs. These programs can help reduce transportation costs, increasing litter value as it is more fully utilized as a fertilizer source where it is most needed. Information about current litter incentives and cost share programs can be found at [www.ok-littermarket.org](http://www.ok-littermarket.org) or at the local OSU County Extension office.

### Nutrient Management Plan Basics of nutrient management and whole farm nutrient balance

Animal manure and poultry litter contain all 16 essential plant nutrients as well as organic matter. They can be an economical source of plant nutrients and a valuable soil amendment to improve soil quality and maintain soil pH. Thus, manure can be a valuable asset to a poultry operation if its nutrients and organic matter are recycled through land application properly.

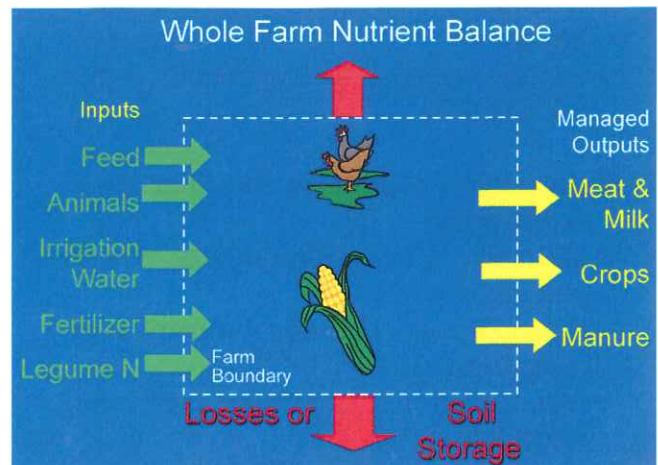
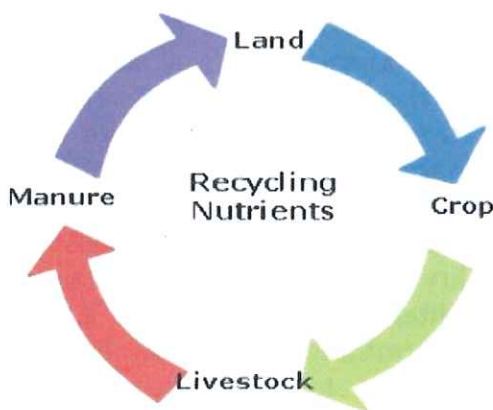
Poultry litter may cause surface and groundwater pollution if mismanaged or

over applied. The key to proper management is to determine the nutrient content of the manure, the percentages of those nutrients that are available to crops, and the nutrient requirements of the crop at a realistic yield goal. These three factors will help you apply the proper amount (agronomic rate), but the method and timing of application will ensure the nutrient effectiveness. It is important to know the nutrient balance of the operation (as shown in the diagram). The difference between nutrient inputs and outputs is approximately the amount of nutrients in the manure to be land applied. Litter should be marketed or given away if the nutrients generated are more than the available land can receive. In addition, best management practices (BMPs) need to be considered to minimize the impact of manure land application on the environment.

#### Crop nutrient requirements

There are more than 100 chemical elements known today. Only 16 of them have been identified to be essential to plant growth:

- Basic Nutrients:* chlorine, hydrogen, oxygen
- Major Nutrients:* nitrogen, phosphorus, potassium
- Secondary Nutrients:* calcium, magnesium, sulfur
- Micronutrients:* boron, chloride, copper, iron, manganese, molybdenum, zinc





Soil, water and air can supply part of the plant nutrient needs. The rest need to be provided through other sources. The amount of each nutrient to be supplied through commercial fertilizer or animal manure depends on the type of crop, yield goal and soil available nutrient content. Soil testing is the first step to obtaining information on crop nutrient needs. OSU Fact Sheet PSS-2225, [Soil Test Interpretations](#), lists nutrient requirements for common crops grown in Oklahoma. You also can obtain recommendations by using the following interactive program for a particular crop: [Soil Test Interpretation and Fertilizer Decision Support](#).

### *Soil sampling, testing and results interpretation*

Soil testing is the best guide to the wise and efficient use of fertilizers and animal manure. The first step in soil testing is the collection of a representative sample. Soil properties vary a lot in a field. The soil sample must accurately represent the whole field where manure or other fertilizers are going to be applied. A minimum of 15-20 sub-samples collected randomly is needed to make a composite sample for a field. The sampling depth in Oklahoma is 6 inches. For details on soil sampling, refer to OSU Fact Sheet, PSS-2207, [How to Get a Good Soil Sample](#).

Sample bags, soil probes and other assistance are available at the local OSU County Extension Office. Soil samples should be submitted through your County Extension office, and then the office will send your

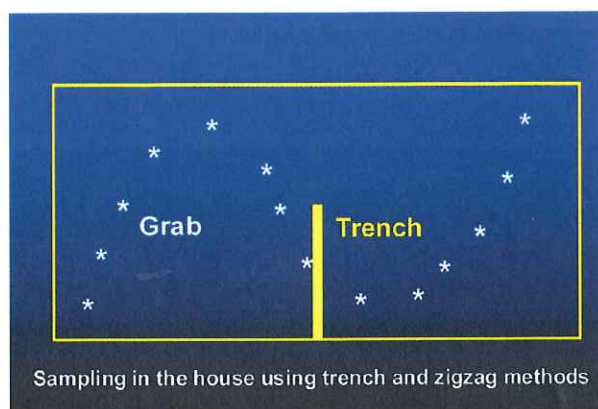


samples to OSU Soil, Water and Forage Analytical Laboratory in Stillwater, Okla. More information on agricultural testing and interpretation is available at [www.soiltesting.okstate.edu](http://www.soiltesting.okstate.edu).

### *Litter sampling and testing*

The nutrient content of poultry litter should be determined by laboratory analysis annually or when manure management procedures change. The analysis report should at least include information on dry matter percentage, soluble salts or electrical conductivity, total N, total P and total K to calculate litter application rate.

The key to an accurate litter analysis is to obtain a representative sample by using proper sampling techniques. The diagram shows two recommended methods to sample in the house. The first one is a random method to collect multiple subsamples for a composite sample, and the second is a trench method by collecting a narrow band of materials on a tarp and then taking samples from the mixed pile. A soil probe may be used to collect samples from a poultry litter pile following house clean-out. See OSU Fact Sheet, PSS-2248, [Sampling Animal Manure](#), for additional information.



### *Nutrient availability in the litter*

Nutrients in animal manure cannot be substituted for those in commercial fertilizers on a pound-for-pound basis because not all the nutrients reported on a manure analysis are readily available to a crop in the year of application. Therefore, an availabil-

ity factor is used to accurately determine the amount of litter needed.

***a. Availability of nitrogen***

Nitrogen in the organic form must be converted (mineralized) into inorganic forms (ammonium and nitrate) before it can be absorbed by roots. In general, about 50 percent of the organic N may become available the year of application. Organic N released during the 2<sup>nd</sup> and 3<sup>rd</sup> cropping years after application is usually about 15 percent and 6 percent of the original N content, respectively. Nitrogen availability may be higher if the manure is incorporated shortly after application. Inorganic N such as ammonium-N in the litter is readily available to plants although in small quantity. Therefore, the total available N for the first year is about 50-70 percent of the total N in the litter (50 percent not incorporated, 70 percent incorporated).

***b. Availability of phosphorus and potassium***

In general, at least 90 percent of the P and K in manure is considered available in the year of application compared with commercial P and K fertilizers, so typically a 90 percent availability factor is used for the amount of P and K in manure.

More details on manure nutrient availability can be found in OSU Fact Sheet, PSS-2246, Using Poultry Litter as a Fertilizer.

***How to calculate poultry litter application rates***

***a. Agronomic rate***

The agronomic rate is the amount of manure applied based on the nutrient requirement of the crop being grown. Agronomic rate ensures efficient use of manure nutrients and minimizes nutrient loss by leaching and through surface runoff. Soil testing, manure analysis and proper estimation of yield goal are necessary to calculate proper agronomic application rates of manure and fertilizers. The Agronomic Manure Application Rate Calculation Worksheet (Table 1) il-

lustrates the steps of calculating the proper amount of manure needed to meet the crop N or P requirement.

***b. Maximum amount of poultry litter allowed to apply***

In some cases, litter may be allowed to be applied even if soil test P is agronomically sufficient. Manure application rates are limited by state regulations based on: 1) not exceeding the crop N requirement, 2) not exceeding specific soil test P levels, and 3) certain field conditions such as slope. Please refer to OK NRCS Nutrient Management Code 590 Standards for P based manure application rates, and use the Oklahoma Phosphorus Assessment Worksheet to calculate the highest amount of litter that can be applied for a specific field. The rules in nutrient limited watersheds are more restrictive than those of non-nutrient limited watersheds. The P based limits are summarized in the Tables 2 and 3 (page 8).

Refer to Code 590 for exact amounts of full rates and half rates shown in the tables. The amount allowed by Oklahoma regulations to land apply is not the same as the agronomic rate discussed earlier. Phosphorus will build in the soil if excess P is applied. This may eventually lead to limited or no application in the future.

***Litter application methods and applicator calibration***

Poultry litter can be applied to land by surface broadcasting using a manure spreader, broadcasting and incorporation, or by knifing under the soil surface. Maximum nutrient benefit is realized when manure is incorporated into the soil immediately or soon after application. Immediate incorporation or injecting of manure minimizes N loss to the air and allows soil microorganisms to break down the organic fraction of the manure. It also minimizes potential nutrient runoff losses and increases their agronomic values. Incorporation of either solid or liquid manure also reduces odor prob-

**Table 1. Agronomic Manure Application Rate Calculation Worksheet.**

	<i>Example:</i>	<i>Your Numbers:</i>
<b>1a Nutrient needs of crop (lbs/acre)</b> Recommendations based on soil test results and a realistic yield goal	N = 200 P <sub>2</sub> O <sub>5</sub> = 80 K <sub>2</sub> O = 40	N = P <sub>2</sub> O <sub>5</sub> = K <sub>2</sub> O =
<b>1b Nutrients carried over in last 2 years' applications (lbs/acre)</b> 15 percent of last year's and 6 percent of the year before last year's litter N application	N = 25 P <sub>2</sub> O <sub>5</sub> = 0 K <sub>2</sub> O = 0	N = P <sub>2</sub> O <sub>5</sub> = K <sub>2</sub> O =
<b>1c Nutrient needs to meet with litter</b> Subtract line 1b from line 1a	N = 175 P <sub>2</sub> O <sub>5</sub> = 80 K <sub>2</sub> O = 40	N = P <sub>2</sub> O <sub>5</sub> = K <sub>2</sub> O =
<b>2 Total nutrients available in litter (lbs/ton)</b> Based on litter analysis of representative sample collected close to time of application	N = 64 P <sub>2</sub> O <sub>5</sub> = 55 K <sub>2</sub> O = 43	N = P <sub>2</sub> O <sub>5</sub> = K <sub>2</sub> O =
<b>3 Determine available nutrients (lbs/ton)</b> Multiply the value in step 2 by availability, 50 percent for N, and 90 percent for P and K.	N = 32 P <sub>2</sub> O <sub>5</sub> = 50 K <sub>2</sub> O = 39	N = P <sub>2</sub> O <sub>5</sub> = K <sub>2</sub> O =
<b>4 Calculate application rates to supply N and P<sub>2</sub>O<sub>5</sub> needs (tons/acre)</b> Divide values from Step 1c by values from Step 3	N = 5.5 P <sub>2</sub> O <sub>5</sub> = 1.6	N = P <sub>2</sub> O <sub>5</sub> =
<b>5 Choose between N or P<sub>2</sub>O<sub>5</sub> application rate (tons/acre)</b> Select highest rate in Step 4 to use litter as complete fertilizer. Select lowest rate to maximize nutrient use efficiency	Rate = 1.6 (based on P)	Rate =
<b>6 Determine amount nutrients applied at the chosen rate (lbs/acre)</b> Multiply the rate chosen in Step 5 by available nutrients in Step 3	N = 51 P <sub>2</sub> O <sub>5</sub> = 80 K <sub>2</sub> O = 62	N = P <sub>2</sub> O <sub>5</sub> = K <sub>2</sub> O =
<b>7 Determine supplemental nutrients (lbs/acre)</b> Subtract the nutrients applied (Step 6) from nutrients needed (Step 1c). If the difference is negative, enter 0	N = 124 P <sub>2</sub> O <sub>5</sub> = 0 K <sub>2</sub> O = 0	N = P <sub>2</sub> O <sub>5</sub> = K <sub>2</sub> O =



**Table 2. Oklahoma NRCS Annual Waste Application Rates for Non-Nutrient Limited Watersheds.**

Rating	Soil Test P Index	0 – 8% Slope Soil > 20" Deep	8 to 15% Slope Soil > 20" Deep	0 to 15% Slope Soil 10" to 20" Deep
Low	0 – 65	Full Rate	Full Rate Split Application	Half Rate
Moderate	66 – 250	Full Rate	Half Rate	Half Rate
High	251 – 400	Half Rate	Half Rate	Half Rate
Very High	> 400	Plant Removal	Plant Removal	Plant Removal
Severe	*	No Application	No Application	No Application

\* Denotes any soil test P level

**Table 3. Annual Manure Application Rates for Nutrient Limited Watersheds.**

Rating	Soil Test P Index	0 – 8% Slope Soil > 20" Deep	8 to 15% Slope Soil > 20" Deep	0 to 15% Slope Soil 10" to 20" Deep
Low	0 – 65	Full Rate	Full Rate Split Application	Half Rate
Moderate	66 – 120	Full Rate	Half Rate	Half Rate
High	121 – 300	Half Rate	Half Rate	Half Rate
Severe	> 300	No Application	No Application	No Application

lems. Nitrogen loss by ammonia volatilization from surface application is greater on dry, warm, windy days than on days that are humid and/or cold. Regardless of application method, calibration of litter spreaders is imperative to determine application rates.

Properly calibrated spreader trucks help to make the most efficient and economical use of litter as a fertilizer by allowing controlled applications that meet crop needs. If litter is under-applied, crop needs may not be met, while over-application of litter can pose environmental risks and lead to litter wastage. Calibration is the process of making the proper adjustments to the manure spreader to deliver the desired amount. Litter flow rate, travel speed and distribution pattern all affect the amount of litter that is land applied. Increased flow rates, decreased travel speeds and narrow distribution patterns result in higher litter application rates; while decreased flow rates, increased travel speeds and wide distribution patterns result in lower application rates. For instructions on how to properly calibrate a litter spread-

er, refer to Calibration of Litter Spreading Trucks at <http://www.poultrywaste.ok-state.edu/files/Calibrating%20Litter%20Spreader%202010.pdf>.

### Application Timing and Litter Availability

Ideally, poultry litter should be applied during active forage growth to reduce environmental contamination risks and maximize nutrient use efficiency. Vegetative



Figure 4. Spreader truck applying poultry litter.



cover helps reduce sediment and nutrient runoff. Plants actively uptake nutrients during the vegetative growth stage. For warm-season grasses, such as bermudagrass, late spring application is optimal. However, early fall applications work best for cool-season grasses, such as ryegrass and tall fescue.

Consideration should be given to poultry litter availability as the supply and demand fluctuates based on transportation costs, commercial fertilizer prices, replacement bedding material availability, timing of house cleanout and other factors. With this in mind, producers wishing to apply litter should have a flexible range of application dates. Some producers may wish to purchase litter during the fall when demand is low and store it under cover for a later application. This practice would help reduce the uncontrolled variables associated with litter availability allowing for application when needed at the producer's convenience.

### Best Management Practices

If mishandled, manure may contaminate water supplies with nitrogen, phosphorus, inorganic salts, organic solids and microorganisms. If present in sufficient quantities, those contaminants can cause considerable problems. Phosphorus is one of the most common and serious surface water contaminants causing eutrophication, while N loss as ammonia is a common air contaminant. Best management practices (BMPs) are site specific strategies implemented to address environmental issues. There are numerous BMPs proven to be effective in improving nutrient use efficiency and reducing nutrient losses.

#### *Riparian zone protection*

Riparian buffer zones are vegetated areas along both sides of water bodies that generally consist of trees, shrubs and grasses, and are transitional boundaries between land and aquatic ecosystems. Riparian zones act as buffers to protect surface waters from contamination and are habitats for a large variety of animals and birds. They

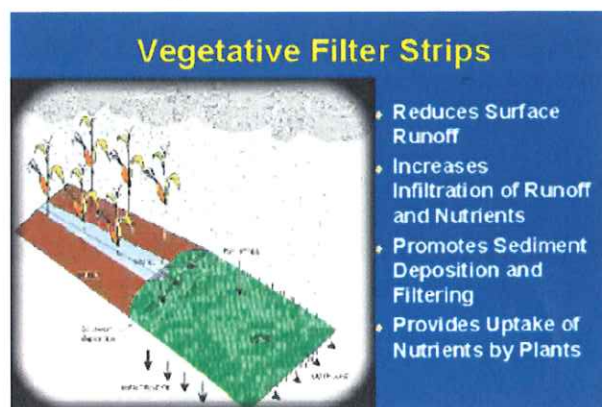


Figure 5. Riparian area.

need to be protected from grazing because they serve many functions in the landscape, such as controlling upland sources of non-point source (NPS) pollution and protecting stream banks from erosion.

#### *Filter strips*

Filter strips are vegetated areas that are situated between surface water bodies, (i.e., wetlands, streams and lakes) and cropland and grazing land. It is effective in filtering sediment, organic material, nutrients and chemicals from the runoff water. Filter strips are also called vegetative filter strips or buffer strips. To be effective, the filter strip should be maintained according to OK NRCS Nutrient Management Code 590 Standards.



#### *Set-back distances*

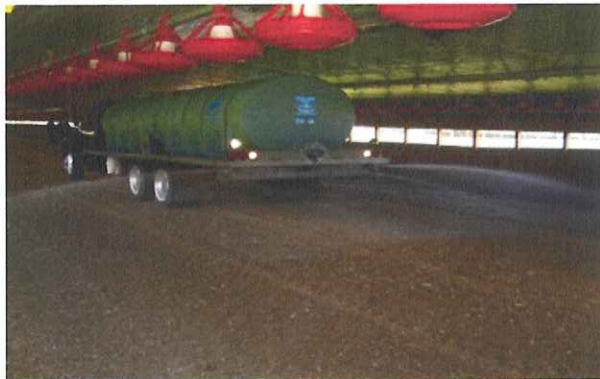
Set-back distances from waterways help reduce ground and surface water contamination by establishing a minimum distance between water bodies and manure land application areas. When properly maintained,



set-back distances help filter contaminants moving toward a water body. In Oklahoma, state regulations require set-back distances when land applying poultry litter. These requirements are outlined in the [OK NRCS Nutrient Management Code 590 Standards](#). For example, litter may not be applied within 100 feet of a perennial stream, well, pond or sinkhole, unless an established buffer is present. Additionally, litter may not be applied within 50 feet of an intermittent stream unless an established buffer is present.

### *Treating poultry litter with alum*

The water soluble P in poultry litter can be easily subject to runoff or leaching loss after land application. Alum (aluminum sulfate) added to poultry litter in certain concentrations can precipitate water soluble P and reduce the amount of P lost to water bodies. Alum addition to poultry litter has also been found to reduce ammonia emissions within the house, which results in improved air quality and bird performance. OSU Fact Sheet, PSS-2254, [Alum-Treated Poultry Litter as a Fertilizer Source](#) provides additional information.



**Figure 6.** Sprayer applying alum in poultry house.

### *Using forage to remove excess soil nutrients*

It is difficult to lower soil P once it is built to a high level. Vegetative mining of nutrients (phytoremediation) has been attempted, but it is a slow process. It may take more than 10 years to reduce soil test P by 100. The amount

of P removed depends on the yield and P content of the plant used. The biomass has to be removed from the fields to be effective. Therefore, grazing has little impact on soil P even though the forage may grow very well. Both warm-season and cool-season forages in the same field are more effective at nutrient mining than a single species grown in the field. OSU Fact Sheet, PSS-2251, [Selecting Forages for Nutrient Removal from Animal Manure](#), provides additional information about nutrient composition of selected hays.



**Figure 7.** Harvesting hay to remove excess soil nutrients.

### *Pasture management*

Pasture management is important for optimum hay production and minimum nutrient losses. Maintaining the proper stocking rate can help reduce nutrient runoff. Fields that are overgrazed or overstocked contain less vegetative cover to trap sediments and nutrients during runoff events. One of the first signs of an overgrazed field is increased weed growth. Managing livestock by limiting access to waterways helps reduce erosion and manure nutrient inputs. Heavy use areas should be located away from streams. This may include providing mineral feeders, hay rings and shade in other areas of the pasture, which lessens the likelihood of livestock congregating near a waterway or stream.

### *Poultry mortality disposal*

Proper management of on-farm animal mortalities is vital to every farming opera-



tion. Improper disposal of dead animal carcasses can negatively impact surface water and groundwater from carcass leachate. If the animal died of an infectious disease, pathogenic bacteria and viruses may be present within the carcass. These pathogens can be spread by insects, rodents, predators, and subsurface or aboveground water movement, as well as through direct contact with other livestock or poultry leading to increased disease transmission risks. In addition, Oklahoma has rules regulating the disposal of livestock and poultry mortalities. Specific to poultry producers, the animal waste management plan imposes restrictions on poultry mortality disposal. Concerns associated with improper disposal can be avoided by practicing state approved carcass disposal methods.

In the event of a catastrophic mortality loss, ODAFF must be notified immediately. Catastrophic mortalities are defined as any death loss that exceeds the capacity of the current disposal system to accommodate those losses within 24 hours.

For both routine and catastrophic mortalities, the state approved methods for carcass disposal are:

- burial
- landfills
- incineration
- rendering
- composting

For more information on proper livestock and poultry mortality disposal, refer to OSU Fact Sheet BAE-1748, [Proper Disposal of Routine and Catastrophic Livestock and Poultry Mortality](#).

### *Litter storage*

Oklahoma law regulates proper litter storage. Following removal from the poultry house, all litter being stored must be covered overhead or surrounded by a compact soil berm. Some producers construct litter storage sheds for proper storage until an appropriate time for land application. Improper



**Figure 8. Litter storage barn.**

storage of poultry litter can increase the risk of nutrient runoff. Furthermore, litter that has become wet due to excessive rainfall is prone to increased N loss from ammonia volatilization. Wet litter also is more difficult to apply with a manure spreader.

### *In-house air emissions control strategies*

Proper house ventilation and litter management can be used to control air emissions inside the poultry house. Litter amendments can be utilized to reduce ammonia levels by lowering litter pH, creating a neutralizing effect on the ammonia released. Sodium bisulfate, sulfuric acid and aluminum sulfate products are all common treatments that accomplish this task. Controlling litter moisture content through proper ventilation and the prevention of leaks from water lines ensures dryer litter. Dry litter will have less gas and odor emissions compared to wet litter. However, if the litter is too dry and dusty, PM levels may increase. Reducing manure accumulation time through annual clean-outs serves as another control strategy for reducing emissions.

### *Air emission control strategies during storage and land application*

Covering stored litter is not only a requirement in Oklahoma, but also it helps maintain dryness, thus reducing air emissions. When land applying poultry litter, incorporating or knifing the litter into the soil can reduce air emissions. If surface applying

poultry litter, avoiding hot, dry, windy conditions helps reduce N losses and transportation of odor and PM off-site. Research has shown that applying litter shortly before a light to moderate rainfall also helps reduce ammonia losses.

### **Litter Commerce**

Marketing poultry litter to more distant nutrient-deficient areas or for further processing offers one solution to the nutrient surplus problem associated with high production areas. Nutrient deficient soils suitable for litter application are abundant in farmland at a distance of 50 to 100 miles from the intensive production areas of northwest Arkansas and eastern Oklahoma. This proximity coupled with recent increases in commercial fertilizer prices has created increased demand for poultry litter as a fertilizer source. If transport distance is not too great, poultry litter may be a cheaper source of nutrients than commercial fertilizer. A self-sustaining poultry litter market can benefit sellers, buyers and service providers of poultry litter by increasing the amount of poultry litter transported out of the nutrient surplus areas and nutrient sensitive watersheds to areas with nutrient needs. Oklahoma Cooperative Extension Service hosts an Oklahoma Litter Market website [www.ok-littermarket.org](http://www.ok-littermarket.org), which includes a self-listing service for litter buyers, sellers and service providers. Additionally, the website provides fact sheets along with information on current transportation incentives, regulations, nutrient limited watershed maps and a litter value calculator, which will help the user determine the suitability and value of the product.

### **Summary**

When properly managed, poultry litter provides an excellent source of plant nutrients and organic matter for application to pastureland and cropland. Continual applications also may raise the pH of acidic soils in some cases. Many variables affect the over-

all value and cost of litter to the end-buyer and should be carefully considered before purchasing. Due to air and water quality concerns, regulations and proper nutrient management must be followed to reduce environmental impact. There are a number of BMPs that can help reduce nutrient losses during production and land application, while increasing producer profitability.

### **Appendix A. Related Extension Fact Sheets:**

- AGEC-202, Broiler Production: Considerations for Potential Growers
- BAE-1748, Proper Disposal of Routine and Catastrophic Livestock and Poultry Mortality
- PSS-2225, Soil Test Interpretations
- PSS-2207, How to Get a Good Soil Sample
- PSS-2248, Sampling Animal Manure
- PSS-2246, Using Poultry Litter as a Fertilizer
- PSS-2254, Alum-Treated Poultry Litter as A Fertilizer Source
- PSS-2251, Selecting Forages for Nutrient Removal from Animal Manure

### **Appendix B. Related Websites:**

- eXtension Animal Manure Management: [http://www.extension.org/animal\\_manure\\_management](http://www.extension.org/animal_manure_management)
- Oklahoma Litter Market: [www.ok-litter-market.org](http://www.ok-litter-market.org)
- OSU Poultry Waste Management: <http://www.poultrywaste.okstate.edu/>
- OSU Soil and Manure Testing: [www.soiltesting.okstate.edu](http://www.soiltesting.okstate.edu)
- OSU Waste Management: <http://www.animalwaste.okstate.edu/>

### **Appendix C. Other Related Material:**

- Oklahoma Phosphorus Assessment Worksheet
- OK NRCS Nutrient Management Code 590 Standards
- Calibration of Litter Spreading Trucks







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Sam Brownback, Governor

**EMERGENCY DROUGHT LIVESTOCK WATER SUPPLY INITIATIVE  
 FY 2013 FINAL REPORT**

➤ **INITIAL SIGN UP ENDING 9/15/2012**

Applications Received  
**3244**

Dollars Requested  
**\$8,073,734**

➤ **Funds Allocated to the Drought Initiative**

**Non-Point Source, Water Resources, Division of Water Resources (DWR), Conservation Districts and Watershed Districts Funds:**

	<u>Dollars Allocated</u>
Area 1(Northwest Kansas)	\$269,148
Area 2(Southwest Kansas)	\$195,442
Area 3(Central Kansas)	\$346,514
Area 4(Northeast Kansas)	\$399,597
Area 5(Southeast Kansas)	\$325,158
Conservation District Funds Used for Drought Initiative Projects	\$159,771
Watershed District Initial Allocation (9 Districts)	<u>\$330,000</u>
<i>*\$121,804 was returned to the Watershed Districts at the close of FY 2013.</i>	
<b>Total Allocated Funds</b>	<b>\$2,025,630</b>

➤ **Drought Initiative Funds Paid**

	<u>Dollars Paid</u>
Non-Point Source, Water Resources and DWR Funds	\$941,443
Watershed District Funds paid	\$208,196
Conservation District Funds Used for Drought Initiative Projects	<u>\$132,332</u>
<b>Total Funds Paid</b>	<b>\$1,281,971</b>

➤ **Drought Initiative breakdown by Practice (code)**

<u>PRACTICE</u>	<u>NUMBER COMPLETED</u>
Pond Cleanout (378D)	504
New Pond (378)	9
Water Well (642)	70
Pumping Plant for Water Supply (533)	63
Watering Facility (Tank) (614)	58
Spring Development (574)	9
<b>Total Practices Completed</b>	<b>713</b>

➤ **FY 2014 Drought Initiative Funds**

Non-Point Source, Water Resources and DWR Funds (FY 2013 Encumbered)	\$483,112
Conservation District Funds Used for Drought Initiative Projects (FY 2013 Encumbered)	\$27,439
Funds Requested from Watershed Districts for FY 2014	<u>\$42,500</u>
<b>Total FY 2014 Funds</b>	<b>\$553,051</b>

**EMERGENCY DROUGHT LIVESTOCK WATER SUPPLY INITIATIVE**

**FY 2014 UPDATE FOR SCC COMMISSION MEETING 11/24/2013**

➤ **FY 2013 Encumbered Contracts**

Contracts Paid (NPS, WR and DWR Funds)	87
Contracts Approved but not completed (NPS, WR and DWR Funds)	<u>109</u>
<b>Total FY 2013 Encumbered Contracts</b>	<b>196</b>

<b>FY 2013 Encumbered funds</b>	<b><u>Funds Paid</u></b>	<b><u>Funds Approved</u></b>
Non-Point Source Water Resources and DWR Funds	\$82,104	\$93,092
Water Resources and DWR Funds	\$115,846	\$161,703
Conservation District Funds Used for Drought Initiative Project	<u>\$14,972</u>	<u>\$12,467</u>
<b>Total:</b>	<b>\$212,922</b>	<b>\$267,262</b>

➤ **FY 2013 Encumbered Funds Breakdown by Practice (code)**

<b><u>PRACTICE</u></b>	<b><u>COMPLETED AND PAID</u></b>	<b><u>Under Contract</u></b>
Pond Cleanout (378D)	43	64
New Pond (378)	1	1
Water Well (642)	24	26
Pumping Plant for Water Supply (533)	17	17
Watering Facility (Tank) (614)	15	25
Spring Development (574)	<u>4</u>	<u>3</u>
<b>Total Completed and Paid</b>	<b>104</b>	<b>Total Under Contract 136</b>

➤ **Drought Initiative Funds Summary**

Non-Point Source Water Resources and DWR Funds	\$452,745
Conservation District Funds	\$27,439
Watershed District Funds (FY 2014)	\$90,000 <sup>-</sup>
Cancelled Contract Funds	<u>-\$30,367<sup>-</sup></u>
<b>Total Funds (Encumbered FY 2013 and Watershed Dist)</b>	<b>\$539,817</b>
<b>Total Funds Paid in FY 2013</b>	<b>\$1,281,971<sup>-</sup></b>
<b>Total Initiative funds to date (Includes all paid and remaining contracts)</b>	<b>\$1,821,788</b>

**KANSAS DEPARTMENT OF AGRICULTURE**  
**DIVISION OF CONSERVATION**  
**WATERSHED DAM CONSTRUCTION: REHABILITATION**  
**FY 2014**

	Watershed District	Site	Hazard	County	Basin	Detention (ac-ft)	Drainage (acres)	Cost/Share Requested	Cost/Share Approved
1	Delaware WJD 10	D-34	H	JA	KLR	99	210	\$35,200	\$35,200
2	Salt Creek WJD 46	107	L	LC	SOL	97	628	\$50,000	\$50,000
3	Wet Walnut WJD 58	129	L	NS	UAR	222	1,260	\$57,208	\$57,208
4	Salt Creek WJD 104	115	S	LY	MDC	158	453	\$21,855	\$21,855
5	Rock Creek WJD 28	22	H	BU	WAL	767	5,583	\$13,650	\$13,650
6	Wakarusa WJD 35	26	H	DG	KLR	1320	2,803	\$46,664	\$46,664
7	Delaware WJD 10	C-48	L	JA	KLR	134	355	\$24,000	\$24,000
8	Labette-Hackberry WJD 96	B-21	L	NO	NEO	230	778	\$40,000	\$40,000
9	Rock Creek WJD 28	21	L	BU	WAL	222	570	\$14,000	\$14,000
10	Rock Creek WJD 28	12	L	BU	WAL	257	832	\$14,000	\$14,000
11	Turkey Cr WJD 103 (Sup)	A-3	L	NE	NEO	428	1,725	\$7,164	\$7,164
12	UB Vermillion WJD 37	56	L	MS	KLR	141	416	\$45,771	\$44,575
<b>Total =</b>								<b>\$368,315.98</b>	

<b>Funds Available</b>	<b>\$315,264 + \$971.98 + \$52,080 =</b>	<b>\$368,315.98</b>
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Switzler Creek WD 63	3	L	OS	MDC	857	1,953	\$120,000	\$51,739
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Per email 9-30-2013, F Divert President of Switzler Creek WD 63 indicated that the District does not have the money or the permits and asked to hold th eapplication for the 2015 funding.

## **Watershed Dam Construction Cost-Share Assistance**

### **Proposed Administrative Policy**

November 24, 2013

In light of the changes in the Streams Obstructions Act (implementation of House Bill 2363) the Division of Conservation is adopting the following policy for Watershed Districts seeking cost-share assistance for the construction, rehabilitation or inundation mapping for flood control structures.

A flood control structure that will not be jurisdictional (no DWR dam safety permit will be required), will be eligible for state cost-share assistance if the structure meets the following:

- As proposed in the General Plan or subsequent amendments (location, hazard and class).
- Registered with the Division of Water Resources.
- Detention storage computation should be:
  1. Low Hazard, Flood Control 4% chance
  2. High or Significant Hazard, Flood Control 2% chance
- Permanent pool capable of storing the 50 yr. sediment load.
- Drawdown pipe should evacuate 90% of the volume of the permanent pool in 14 or fewer days.
- Principal spillway pipe should evacuate 95% of the of the detention storage in 14 or fewer days.

The funding priority ranking of structures shall include:

- Structure designed with sound engineering principles and practices by a Kansas Licensed Professional Engineer.
- Water Right Permit if the sediment pool storage is greater than 15 ac-ft.
- 404-permit or a Non-Jurisdictional Determination.
- Breach Inundation Map.

Prior to funding approval, the District must certify to the Division of Conservation that the structure will be constructed under the supervision of a Kansas Licensed Professional Engineer.

A certificate of completion signed by a Kansas Licensed Professional Engineer will be required prior to final payment reimbursement.

Common and Cut-Leaved Teasel-New invasive plant of the Midwest.

WHEREAS, the Common and Cut-Leaved Teasel is currently found in most of the United States.

WHEREAS, Common and Cut-Leaved Teasel was used in raising the nap on wool and other fabrics and also has been used in horticulture plantings and dried floral arrangements. Thus, Teasel often occurs near cemeteries.

WHEREAS, it disperses along roads and waterways. It occupies sunny and open spots such as riparian areas, meadows, grasslands, forest openings, and disturbed areas.

WHEREAS, after flowering the plant becomes woody and persists through the following winter and has become a problem invasive species and has rapidly spread along State and Federal highways. It is believed to be spread by late season mowing.

WHEREAS, it has already been declared a noxious weed in some states, (ex: Colorado and Missouri), early detection and rapid response can help stop the spread.

WHEREAS, Common and Cut-Leaved Teasel is so aggressive that it can invade and displace native plants within high-quality prairie fields as documented by other states.

THEREFORE, BE IT RESOLVED, that KACD encourage the State of Kansas Legislature and/or County Weed Directors Assoc. of Kansas to declare Common and Cut-Leaved Teasel a noxious weed in Kansas subject to individual County approval (Level2).

FURTHER, BE IT RESOLVE, that the Center for Invasive Species Management (CISM) be contacted for more assistance.

Submitted by Ron Brown  
For: Bourbon County Conservation District

**FINANCE AND DEVELOPMENT COMMITTEE:**

Resolution No. 1: Fiscal Year 2015 Division of Conservation Budget

WHEREAS, financial and technical assistance needs have been identified in high priority Total Maximum Daily Load watersheds of the Kansas – Lower Republican, Lower Arkansas, Marais Des Cygnes, Missouri, Neosho, Upper Arkansas, Verdigris, Walnut, Smoky Hill/Saline, Upper Republican, Cimarron, and Solomon River Basins; and

WHEREAS, a need exists to improve and sustain the State’s rivers, streams and aquifers with conservation grants; and

WHEREAS, the State Water Plan has identified the priority watershed areas that need assistance to address non-point source pollution problems, reduce urban and rural flooding, and to reduce stream bank erosion and degradation of riparian areas; and

WHEREAS, conservation districts have established a need for cost-share incentives to address local concerns; and

WHEREAS, the conservation provisions of the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) have increased the demand for conservation technical assistance; and

WHEREAS, a need for priority multipurpose small lakes projects, watershed dam construction and rehabilitation, restoration of water supply systems, and riparian and wetland protection was identified in the State Water Plan; and

WHEREAS, the Division of Conservation is responsible for carrying out programs of state assistance to conservation districts, state assistance in watershed dam construction, water resources cost-share, riparian and wetland protection, multipurpose small lakes, non-point pollution control, water quality buffer initiative, water rights purchase\water transition assistance, water supply restoration and surface mining land reclamation;

THEREFORE, BE IT RESOLVED, that the Kansas Association of Conservation Districts supports the Division of Conservation’s FY 2015 budget request as described below, and in addition, supports the Division’s request for appropriation language allowing the carry over of funds from the current fiscal year to FY 2015;

**STATE GENERAL FUNDS:**

Administrative Operations \$471,447

**STATE WATER PLAN SPECIAL REVENUE FUNDS:**

Aid to Conservation Districts	\$2,092,637	
Water Resources Cost-Share	\$1,948,289	
Water Supply Restoration	\$258,156	
Non-Point Source Pollution	\$1,858,350	
Watershed Dam Construction	\$576,434	
Riparian and Wetland Protection	\$152,651	
Water Quality Buffer Initiative	\$249,792	
Conservation Reserve Enhancement Program\WTAP	\$449,577	
Subtotal - Special Revenue Fund		\$7,585,886

**FEE FUNDS:**

Land Reclamation Fee Funds \$186,101

**FEDERAL FUNDS:**

Federal Grant Funds \$276,090

**OTHER FUNDS:**

Kansas Dept. of Wildlife, Parks & Tourism contract \$75,000

**TOTAL - FY 2015 BUDGET REQUEST**

**\$8,594,524**

**SUPPLEMENTAL BUDGET REQUEST FOR FY 2015:**

A supplemental of \$800,000 in the Riparian and Wetland Protection Program is requested for the Division of Conservation to address the reduction of sediment and nutrient loading in targeted areas above reservoirs in danger of storage losses and water quality impairment. Growing evidence shows that a significant source of sediment in our reservoirs is generated from erosion of stream channels in riparian areas. Streambank erosion can also contribute nutrients which can cause severe water quality impairments such as dangerous blue-green algae blooms. Re-constructing eroded streambanks to stable gradations with adequate riparian buffers and protection can greatly reduce sediment and nutrient loading in stream systems.





Natural Resources Conservation Service  
760 South Broadway  
Salina, Kansas 67401-4604

Phone: 785-823-4500  
FAX: 785-823-4540  
www.ks.nrcs.usda.gov

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**NRCS HIGHLIGHTS OF ACTIVITIES  
for the  
STATE CONSERVATION COMMISSION  
WICHITA, KANSAS  
November 24, 2013**

**PERSONNEL**

Reassignments

and/or Promotions: Quincy W. Coleman, Resource Conservationist, Salina State Office, from Soil Conservationist, Ann Arbor, Michigan  
Nathan M. Lind, Soil Conservationist, Johnson, to District Conservationist, Richmond, Indiana  
Candy J. Thomas, Natural Resource Specialist, Salina State Office, from Training Instructor, Fort Worth, Texas  
Justin J. Trout, Soil Conservation Technician, Manhattan Field Office, to Civil Engineering Technician, Holdrege, Nebraska  
Amy E. Williams, District Conservationist, Lawrence, to District Conservationist, Plymouth, North Carolina

Retirements: Michael L. Fengel, Soil Conservation Technician, Clay Center

**OPERATIONS**

- The annual Supervisory District Conservationist (SDC) meeting was rescheduled to December 11 and 12. The meeting focuses on leadership and management skills. The Natural Resources Conservation Service (NRCS) has been working with the Kansas Department of Agriculture Division of Conservation (DOC) and the Pheasants Forever (PF) to provide a two-day training to DOC technicians and PF biologists emphasizing the importance and purpose of their positions and the agreements that provide them. This meeting is scheduled for December 17 and 18.
- The PF partnership biologist located in Hugoton was reassigned to Abilene in November. The PF partnership biologist in Ness City resigned in October. PF is planning on refilling the positions in Ness City and Hugoton.
- The fiscal year (FY) 2014 budget outlook for NRCS is still uncertain. A Continuing Resolution (CR) was put in place until January 15, 2014.

## **PROGRAMS**

### **Conservation Security Program (CSP)**

The field offices have certified and made annual payments on 393 contracts for FY14 in the amount of \$4,603,885.24.

### **Conservation Stewardship Program (CStP)**

- A signup was conducted for FY2013. NRCS obligated 243 contracts for \$8,585,753 on 413,666.2 acres. Obligations were completed by September 30, 2013.
- Field offices have certified and made FY2014 payments on 133 contracts for \$2,937,511.

### **NRCS Easement Programs**

- **Farm and Ranchland Protection Program (FRPP)**
  - NRCS still has authorization (even without a new farm bill) to enroll new lands in the FRPP.
  - A nationwide announcement for FRPP FY2014 signup will be made in early December.
  - Assistance and reviews are being provided to Cooperating Entities as they work on various steps toward closing on conservation easements.
- **Grassland Reserve Program (GRP)**
  - Authorization for GRP expired on September 30, 2013, with the expiration of the farm bill.
  - No new applications can be taken under GRP until a new farm bill is completed.
  - NRCS continues to close on previously enrolled easements. We currently have 3 GRP easements from prior years remaining to be closed along with 4 GRP easements from FY2013 enrollments.
- **Wetlands Reserve Program (WRP)**
  - Authorization for WRP expired on September 30, 2013, with the expiration of the farm bill.
  - New applications for WRP cannot be taken until a new farm bill is passed.
  - Kansas NRCS closed on the last WRP enrollment in October. All WRP enrollments in Kansas are now closed and recorded at the appropriate county courthouse.
  - Workload is now focused on backlog of restoration work that is needed. There are 29 projects that need restoration/construction completed.
- **Easement Monitoring**
  - FY2014 Stewardship Easement Monitoring is underway with completion date of August 1, 2014. There are 302 existing easements to be monitored in Kansas under the WRP, GRP, Emergency Watershed Protection Program-Floodplain Easements, and the Emergency WRP.

### **Emergency Watershed Protection Program (EWP)**

- NRCS recently returned funds to National Headquarters for 1 EWP (debris removal) project in Labette County after significant rains in August cleared the debris and removed the hazard from its location at the county bridge.
- Kansas currently has no eligible EWP projects on the waitlist at National Headquarters.

### **Environmental Quality Incentive Program (EQIP)**

- FY2013 accomplishments
  - 1,236 contracts for approximately \$27 million on 234,819 acres
- The application evaluation period cutoff date for FY2014 has been set for November 15, 2013.
- **EQIP—Initiatives**
  - All eligible initiatives' applications through EQIP and the Wildlife Habitat Incentive Program (WHIP) were funded in FY2013.
  - Kansas requested and received additional allocations to fund all remaining eligible applications for Seasonal High Tunnel, Ogallala Aquifer, National Water Quality, and Drought Recovery initiatives.
  - FY2013 Accomplishments
    - Organic—1 contract for \$6,476 on 88 acres.
    - On-Farm Energy—11 contracts for \$49,363 on 39,785 acres
    - Seasonal High Tunnel—58 contracts for \$350,807 on 272 acres
    - Ogallala Aquifer—37 contracts for \$4,461,798 on 7,270 acres
    - National Water Quality—35 contracts for \$1,513,677 on 4,939 acres
    - Drought Recovery—135 contracts for \$1,486,959 on 28,492 acres
    - Sediment Removal Pilot—3 contracts for \$16,481 on 279 acres
    - Edge-of-Field Monitoring—no applications received
  - FY2014
    - Guidance is forthcoming from NRCS national headquarters

### **Watershed Rehabilitation Program Activities**

- Kansas NRCS requested \$2,085,000 for 8 projects for FY2014. To date, no FY14 funds have been authorized for Watershed Rehabilitation assistance.
- The Spring Creek Watershed District in Sedgwick County is moving forward with rehabilitation of their R-1 Dam near Garden Plain, Kansas. Funds have been obligated, with site showing for construction being held on November 19th. Bid opening for construction bids is scheduled for December 3, with the construction targeted to begin in the spring of 2014.
- NRCS, at the field, area and state level, continues to work with local watershed districts on NRCS-assisted watershed projects. We are currently working to ensure we have Emergency Action Plans (EAPs) developed for all 123 High Hazard Dams.
- Each year watershed districts and NRCS work together to conduct annual inspections on more than 800 flood-control structures. Through mid-November documentation has been received for approximately 28 percent of the inspections.

### **Wildlife Habitat Incentive Program (WHIP)**

- General WHIP funds were not available in FY2013.
- Lesser Prairie-Chicken Initiative (LPCI) FY2013 Accomplishments
  - 37 contracts for \$1,410,651 on 36,254 acres
- FY2014
  - Guidance is forthcoming from NRCS national headquarters
  - Kansas has requested LPCI funds be made available through EQIP instead of WHIP for FY2014

NOTE: The data provided in this report was not obtained through the Resources Economic Analysis and Planning Division (REAP) of NRCS and as such is considered unofficial.

## **TECHNOLOGY**

A new version of Customer Service Toolkit is scheduled to be released early next year. Additionally, a few new electronic tools and processes will be deployed to help NRCS streamline our planning process.

### **Division of Conservation (DOC) Streambank Agreements**

Contractors have finished construction of one of the last two projects from the second agreement and are on track to finish the other project this fall/winter.

### **Architect and Engineer (A&E) Contracts**

- Construction of the assigned streambank protection projects is continuing. One project has been completed with a second project constructed and waiting on checkout. The other six projects have been permitted and are either waiting for the contractor to be selected, being staked out, or in construction. All should be built by next spring.
- A preliminary design has been prepared for the agricultural waste management system and is ready to be shown to the producer for his approval.

### **Cover Crop Studies**

Cover crop studies continue across the state. Results from NRCS studies will be posted on the Kansas NRCS Web page.

### **2014 National Resources Inventory**

- Local data collection for 2014 is expected to begin January 2014 and be completed by August 29, 2014. There are approximately 2000 segments located across the state for data collection.
- The Grazing Land Study is expected to begin May 2014 and be completed by September 30, 2014. There are 88 range segments and 14 pasture segments for a total of 102.

## **OUTREACH**

### **Soil Moisture Study**

NRCS, working with Kansas Conservation Districts and landowners, has seven (7) soil moisture study sites operating across the state to monitor changes in soil water content with cover crops. The sites are in Barber, Cloud, Decatur, Ford, Gove, McPherson, and Wallace counties. The planned eighth site will be in the Coffey/Lyon County area.

**Conservation District Documents  
Not Received by the DOC as of 11/21/13**

**Monthly Board Meeting Minutes, Treasurer's Reports & Unpaid Bills Reports:  
(Due 10 days after each conservation district board meeting)**

Harper County – October 2013

Mitchell County – October 2013

Scott County – October 2013

Sumner County – September 2013, October 2013

**2014 Annual Work Plans (Due 9/1/2013)**

Ford County

Meade County

Phillips County

Sumner County

Thomas County

Wyandotte County

**2014 Budgets (Due 9/1/2013)**

Coffey County

Cowley County (certification page only)

Ford County

Meade County

Reno County

Sumner County



## **Conservation District Document Management Proposal**

**11-26-13**

The Division of Conservation would like to pursue a new protocol for receiving and managing conservation district documents the DOC requires conservation districts to mail to the DOC. Most of these documents are currently U.S.P.S. mailed to the DOC. Conservation Districts are required to maintain a permanent file of their documents such as monthly board meeting minutes for historical purposes. The DOC and the Kansas State Historical Society are not required to archive conservation district documents except supervisor Oaths of Office. However, the DOC would like to assist the districts in maintaining these important historical documents.

The Division of Conservation has implemented document scanning software called Docuware. This software implementation is part of a Kansas Department of Agriculture initiative to reduce hard copy filing workload, decrease file cabinet storage space, increase historical archiving efficiency, and achieve compliance with the Kansas State Historical Society/Agency Records Disposition Schedules. This system is allowing the DOC to electronically categorize and file most documents received.

### **The following is a list of documents required by the DOC that conservation districts will be send electronically:**

Monthly Board Meeting Minutes  
Budgets  
Annual Reports  
Audits and audit review form  
Annual Work Plans  
Annual Meeting Minutes  
Special Meeting Minutes

### **Documents required by the DOC that will continue to be sent hard copy:**

Supervisor Oath of Office (Original signed and notarized copy required)  
Supervisor letter of resignation

### **District savings of electronic filing:**

-Time -Paper -Envelopes -Postage -Staples -Labels -Toner -Storage space -Storage cost

### **Beginning January 1, 2014:**

All of the documents listed above in the electronic submittal list shall be emailed to the DOC at the following email address: [doc@kda.ks.gov](mailto:doc@kda.ks.gov)

Documents must contain correct information or the email will be returned noting the corrective action. Example:

*Proper report period dates on treasurer's reports should run from the day of the last board meeting to the day before the upcoming board meeting.* NOTE: Report period dates should never overlap.

### **No later than December 31, 2014:**

Hard copy documents produced prior to December 31, 2012 will need to be scanned and copied to a CD by the districts, (or if electronic – copied to a CD) mailed to the DOC, and then be uploaded by the DOC into Docuware. When the DOC confirms with the district that all records have been uploaded, the district may choose to destroy their hard copy records.

### **Other Notes:**

District minutes and Treasurer's Reports shall be in one document.

Only one document per email.

Districts may request a copy of their submitted documents be sent to them email.

Final policy and procedures will be emailed to the districts this December.