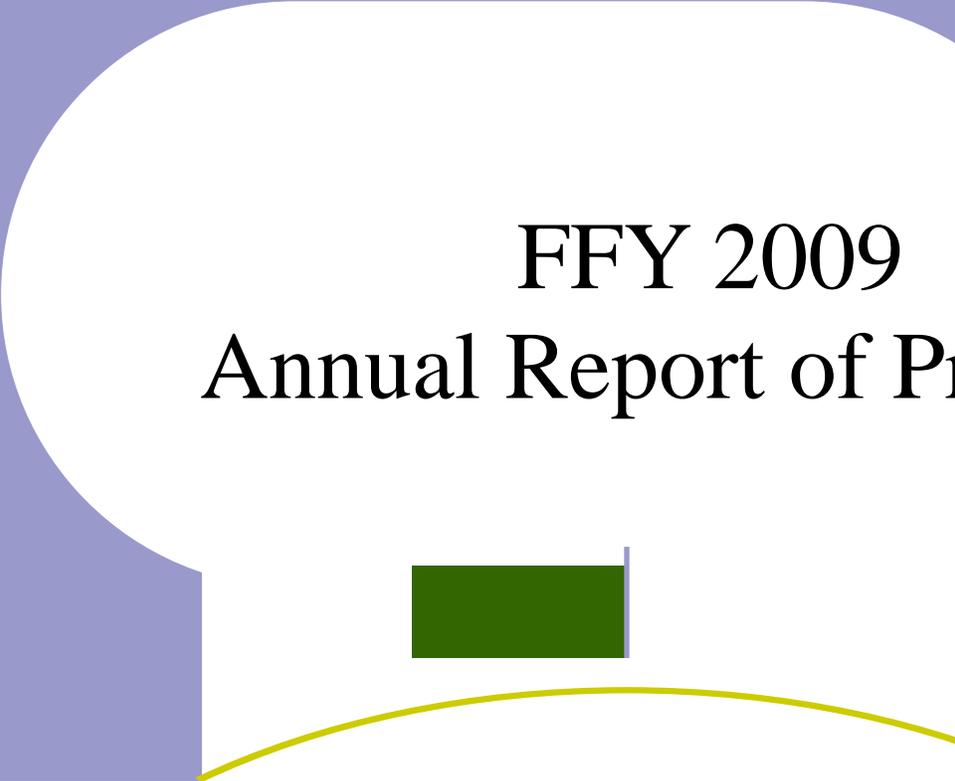




**KDHE**



**FFY 2009  
Annual Report of Progress**



**Kansas Nonpoint Source Pollution  
Control Program  
FFY 2009 Annual Report  
October 1, 2008 – September 30, 2009**



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Kansas' vision is that all nonpoint pollutant sources are implementing water quality protection measures so that Kansas' lakes, rivers, wetlands, and groundwater will be free of pollution caused by nonpoint pollutant sources. This vision will be achieved through setting and completing both long and short term goals. This report reveals the progress made to achieve these goals during the end of federal fiscal year 2009.

## Long Term Goals Nonpoint Source Management Plan

### Long Term Goal #1

Insure all of Kansas' water resources are free of water quality impairments caused by nonpoint pollutant sources. This will be achieved by:

1. Developing Total Maximum Daily Loads (TMDLs)
2. Implementing TMDLs
3. Completing source water assessments
4. Developing and implementing source water protection plans

### 2009 Update

1. **Planning and Development of TMDLs – Status of Kansas TMDL Program on October 1, 2009**
  - A. Two revised TMDLs addressing eutrophication in Marion and Council Grove Lakes in the Neosho Basin, five new TMDLs addressing eutrophication and siltation issues on Big Hill, Toronto, Fall River, Elk City and Eureka City Lakes in the Verdigris Basin and a new TMDL for eutrophication on Winfield City Lake in the Walnut Basin were approved by EPA in September 2009.
  - B. EPA approved KDHE's 2008 Section 303(d) list on December 18, 2008. The list emphasized impairments in the Northwest Kansas Basins (Smoky Hill – Saline; Solomon; Upper Republican) for TMDL development in FFY 09 and for the third round of TMDL development in the Kansas – Lower Republican Basin in FFY 10.
  - C. As part of the 2008 303(d) list, more detailed analysis and documentation for justifying a 4B status (impairment addressed by means other than a TMDL [e.g., a watershed plan] was made for atrazine in the Little Arkansas Watershed. Description of efforts in targeted subwatersheds and initial analysis

of consequential atrazine load reductions were made. Acceptance of the 2008 list included approval of the Little Arkansas Watershed 4B plan making it one of the first in the nation dealing with solely non-point source pollution.

- D. As a result of the 2008 303(d) list, 13 new TMDLs are currently under development for impairments in the Northwest Kansas Basins. These TMDLs will be submitted to EPA in March, 2010.
- E. Three total phosphorus TMDLs are under development for the Smoky Hill River near Russell, including Big and Fossil Creeks, and the Upper and Lower Prairie Dog Creeks.
- F. Four TMDLs addressing excessive total suspended solids [TSS sediment] are under development for two reaches along the Lower Smoky Hill River, the Lower Solomon River and Big Creek.
- G. Four E. coli bacteria TMDLs are under development for Big Creek, the Lower NF and SF Solomon Rivers and the Smoky Hill River above Salina.
- H. Big Creek also has a nitrate TMDL drafted.
- I. Deer Creek, a tributary of the Lower North Fork of the Solomon had a revised selenium and sulfate TMDL developed.

## **2. Implementing TMDLs**

- A. Briefings to Watershed Restoration and Protection Strategy (WRAPS) groups were made throughout FFY 09. In particular, the Watershed Planning Section has supported assessment and planning activities of WRAPS in the Middle Kansas, Lower Kansas, Delaware, Banner Creek Lake, Milford, Missouri, Toronto, Kanopolis, Marion, Neosho Headwaters, Tuttle Creek, Cheney, Little Arkansas, Clarks Creek, Eagle Creek, Cottonwood and the Upper Wakarusa watersheds. These briefings centered on existing and pending TMDLs in those watersheds as well as current water quality conditions in lakes and streams within the WRAPS areas.

- B. Water quality assessments were made for certain TMDLs to identify possible delisting opportunities and water quality improvement. These assessments were used in developing 9-Element watershed plans by each of the WRAPS groups.
- C. The North Fork Ninescah River above Cheney Lake showed modest improvement with reduced suspended solids and phosphorus under certain flow conditions. Ongoing assessment of KDHE and USGS data continues to evaluate 15 years of BMP installation on watershed and lake quality.
- D. Bacteria levels on Clarks Creek in Morris and Geary counties have been reduced through non-point source abatement by those county conservation districts. Clarks Creek will be recommended for delisting its bacteria impairment in the 2010 Section 303(d) list.
- E. Banner Creek Lake was cited as a 319 Success Story by EPA because of its delisting in the 2008 Section 303(d) list and watershed BMP installation by Jackson County Conservation District.
- F. Watershed Planning Section has assisted Watershed Management with incorporating TMDL information into individual 9-Element watershed plans by specific WRAPS, including deriving existing pollutant loads and necessary load reductions interpreted from TMDLs, identifying interim milestones to show water quality improvement and establishing a monitoring plan for each watershed plan.

#### 303d List:

EPA approved the 2008 Kansas Section 303(d) list in December, 2008 after KDHE submitted the 2008 303d list to EPA in April. That list consolidated the inventory of impaired waters identified in 2006 and 2008. Emphasis was placed on impaired waters in Northwest Kansas (Smoky Hill-Saline, Solomon and Upper Republican Basins) and the Kansas-Lower Republican Basin, in anticipation of TMDL development work over 2008-2010. After consultation with WRAPS groups in the four basins and the respective Basin Advisory Committees, 13 impaired waters were slated for TMDL development in Northwest Kansas. As of September 30, those TMDLs were under development. The primary impairments addressed were total phosphorus, total suspended solids and bacteria in streams.

The potential Kansas – Lower Republican Basin TMDLs were isolated to a few key issues in

the Middle Kansas Subbasin (Rock Creek bacteria and Lake Shawnee eutrophication) and the Delaware Basin (Perry Lake eutrophication and Mission Lake siltation). These are priorities of the two respective WRAPS as they prepare their 9-Element Watershed Plans in 2010. Additionally, a phosphorus budget for the Kansas River is slated for development to address the numerous impairments along the river and to identify the critical areas for targeting watershed planning and implementation.

During September 2009, the methodology for listing and delisting of waters was revised and preparations were made for deriving the Section 303(d) list for 2010. This list will emphasize waters in the Marais des Cygnes, Missouri, Lower Arkansas, Upper Arkansas and Cimarron basins for work over 2010 – 2012. Additionally, a number of waters will be proposed for delisting, e.g., moving from Category 4A (water with a TMDL) or 4B (water with impairment addressed by alternative means) to Category 2 (water now has a portion of its impairment removed and achieves some of its water quality standards). Among those will be Clarks Creek for its bacteria impairment addressed with a TMDL in 1999. Implementation by Morris and Geary counties has reduced the loading of pollutants into the creek, such that, the water quality standards for bacteria and recreation are now being achieved. Several other TMDLs from 1999-2003 will be evaluated for movement to Category 2, based on data from 2000 – 2009.

### **3. Completing Source Water Assessments**

In 1996 each state adopted a Source Water Assessment Program (SWAP). Source Water Assessments were required for each Public Water Supply that treats and distributes raw source water.

As of June, 2004 KDHE finished the implementation of the Kansas SWAP and 763 local source water assessments were completed. A final Kansas SWAP report was submitted to EPA for review and comment. Local source water assessment reports can be downloaded at <http://www.kdhe.state.ks.us/nps>. SWAP information was included in the 2004 Consumer Confidence Reports and regional press releases were initiated regarding the availability of local source water assessment reports.

### **4. Developing and implementing Source Water Protection Plans**

The Source Water Protection Program is a part of the Watershed Management Section and section staff assists communities with the source water protection planning process. WRAPS Project Officers provide review and final approval for completed plans in their assigned basins. Additionally, Kansas Rural Water Association, funded through a USDA grant, assists communities with completing source water protection plans.

Activities for the time period October 1, 2008 - September 30, 2009 include:

1. Assisted the City of Seneca and a local contractor in determining activities that would protect a spring serving as a public drinking water supply adjacent to a proposed development. City of Seneca was drafting their source water protection plan during this reporting period.
2. Several source water protection plans were completed and submitted to KDHE for review and approval. The Cities of Alma, Dorrance, and Valley Falls are all now operating under approved plans.
3. WRAPS projects play a large role in source water protection efforts, and across Kansas, 31 WRAPS Projects encompass many public water supplies. The following table lists the name and location of these WRAPS projects and public water supplies.

<b>WRAPS</b>	<b>PWS</b>
Banner Creek	Public Wholesale WSD 18
Cheney Lake	Wichita, City of
Cottonwood Watershed	Cottonwood Falls, City of
Delaware River	Valley Falls, City of
	Public Wholesale WSD 18
	Horton, City of
	Jefferson Co. RWD 11
	Holton, City of
Elk City Lake	Longton, City of
	Moline, City of
	Elk City, City of
	Howard, City of
Upper Fall River	Eureka, City of
Hillsdale Lake	Miami Co. RWD 2
	Spring Hill, City of
	Gardner, City of
Kanopolis Lake	Russell, City of
	Ellsworth Co. RWD 1
Lake Olathe	Olathe, City of

<b>WRAPS</b>	<b>PWS</b>
Lower Fall River and Lower Upper Verdigris	Severy, City of
	Yates Center, City of
	Buffalo, City of
	Fredonia, City of
	Neodesha, City of
	Altoona, City of
	Thayer, City of
Lower Kansas	Lawrence, City of
	Gardner, City of
	Water District 1 of Johnson Co.
Lower Smoky Hill from Kanopolis Dam to Solomon	Salina, City of
Lower Smoky Hill from Solomon to Junction City	Herington, City of
Marais des Cygnes Basin	Ottawa, City of
	Osawatomie, City of
	Franklin Co. RWD 6
	Garnett, City of
	Richmond, City of
Marion Lake	Marion, City of
	Hillsboro, City of
Marmaton River	Bronson, City of
	Fort Scott, City of
	Uniontown, City of
Melvern Lake	Lebo, City of
	Osage City, City of
	Public Wholesale WSD 12
Middle Kansas Watershed	Alma, City of
	Eskridge, City of
	Topeka, City of
Milford Lake	Milford, City of
Missouri Basin	Atchison, City of
	Kansas City Board of Public Utilities
	Leavenworth Water Department
	Sabetha, City of
	Water District 1 of Johnson Co.
Neosho Headwaters	Emporia, City of
Middle Neosho	Chetopa, City of
	Crawford Co. RWD 6
	Erie, City of
	Kansas Army Ammunition Plant
	Oswego, City of
	Parsons, City of
	St. Paul, City of

WRAPS	PWS
Upper Neosho	Burlington, City of
	Chanute, City of
	Humboldt, City of
	Iola, City of
	New Strawn, City of
	Public Wholesale WSD 5
	Woodson Co. RWD 1
	Yates Center, City of
Oologah Lake / Big Hill Lake	Cherryvale, City of
	Coffeyville, City of
	Independence, City of
	Public Wholesale WSD 4
Pomona Lake	Burlingame, City of
	Harveyville, City of
	Osage Co. RWD 3
Prairie Dog Creek	Norton, City of
Spring River Watershed	Baxter Springs, City of
Upper Verdigris / Toronto Lake	Madison, City of
	Toronto, City of
Twin Lakes	Council Grove, City of
Upper Wakarusa	Carbondale, City of
	Clinton Reservoir
	Douglas Co. RWD 3
	Lawrence, City of
Waconda Lake	Osborne, City of

## Long Term Goal #2

Achieve Kansas Water Plan 2010 Objectives:

Objective 1. Reduce the average concentration of bacteria, biochemical oxygen demand, dissolved solids, metals, nutrients, pesticides, and sediment that adversely affect the water quality of Kansas' lakes and streams.

Objective 2. Reduce the average concentration of dissolved solids, metals, nitrates, pesticides and volatile organic chemicals that adversely affect the quality of Kansas' groundwater.

Objective 3. Ensure that water quality conditions are maintained at a level equal to or better than year 2000 conditions.

## 2009 Update

As previously reported in the 2008 Annual Report of Progress, the State of Kansas will not be developing pollutant specific implementation strategies as previously indicated in the NPS Management Plan. The Watershed Restoration and Protection Strategy planning process, which focuses on implementing pollutant specific water quality protection measures in TMDL areas, will be accomplishing the above mentioned objectives. Please refer to pages 35-39 of Attachment 1: Grant Annual Performance Report for C900740514, for a table of active 319 projects including all implemented Best Management Practices comprising the pollutant specific water quality measures being put into practice. Additionally, several agencies are charged with these goals including the Local Environmental Protection Program (LEPP) and the State Conservation Commission (SCC). Please refer to Attachment 2 (page 146) and Attachment 3 (page 161) for the LEPP annual report and the SCC annual report, respectively.

## Long Term Goal #3

All nonpoint pollutant sources in Kansas implement measures and practices that reduce the discharge of nonpoint pollutants to the maximum extent practicable. This will be achieved by the following;

1. Reviewing federal development and permitting programs for consistency with the Kansas NPS Management Plan
2. Developing and demonstrating the effectiveness of NPS control and water quality protection measures
3. Assuring that on-site wastewater treatment systems are properly designed, installed, and maintained
4. Assuring that riparian areas and wetlands are protected and restored
5. Cropland has the highest level of residue attainable, livestock production activities have no significant pollution potential
6. Assuring that Kansas' range and pasture land is managed for sustainable production
7. Urbanized and developed lands have no significant pollution potential.

## 2009 Update

1. Reviewing federal development and permitting programs for consistency with the Kansas NPS Management Plan:

Please refer to page 19 of Attachment 1: Grant Annual Performance Report for C900740514, for an update regarding Clean Water Act Section 404 and 401 permitting and certification activities for the reporting period.

2. Developing and demonstrating the effectiveness of NPS control and water quality protection measures

Multiple 319 projects accomplish these management plan goals. The Kansas WRAPS Program has many on the ground projects currently demonstrating the effectiveness of water quality protection measures. Please refer to page 25 of Attachment 1: Grant Annual Performance Report for C900740514, for a table of active 319 projects and a summary of their actions during this reporting period. See also the LEPP Annual Report ( Attachment 2, page 146), the State Conservation Commission Annual Report ( Attachment 3, page 161), and the Natural Resources Conservation Service Annual Statement ( Attachment 5, page 246) for management measures being put into place by other agencies.

In addition, work continues on the EPA 2006/2007 Targeted Watershed Grant (TWG) Project Implementation Grant. KDHE, Hillsdale Water Quality Project, Lake Region RC&D, Osage County RC&D (Missouri) and the leadership team continue the work to implement water quality protection management practices through this grant. Failing onsite wastewater systems were identified in the target areas and cost share has been provided to six landowners in Kansas and three in Missouri. Livestock Practice BMP Auctions were held in Kansas and Missouri during the summer months of 2009; landowners were awarded contracts in August and installation of the identified practices will begin in Fall 2009. SWAT and APEX models were developed to assist with the auction. Twenty-three sites in Kansas and one site in Missouri were identified as potential project for installation of Riparian Forestry practices. Bioassessments have been completed for 18 sites. The first of three TWG Basin Leadership Institutes completed two classes. The final class for this first session is scheduled for December 2009.

3. Assuring that on-site wastewater treatment systems are properly designed, installed, and maintained

Please refer to the LEPP Annual Report , Attachment 2, page 146 for progress towards this goal.

#### 4. Assuring that riparian areas and wetlands are protected and restored

KDHE is part of the Riparian Work Group whose mission statement is “To provide a forum for Natural Resource Professionals and Organizations to develop criteria for the identification of healthy riparian and wetland areas for Kansas eco-regions”. This mission includes developing an educational shared website, using field excursions to identify these areas, and working collaboratively for a positive result.

In addition, the Kansas Forest Service has received a \$231,076 USDA grant with a focus on the Delaware River Watershed and the Delaware WRAPS Project, since this watershed contains a federal reservoir and is facing heavy sedimentation from riparian are degradation. The purpose of the grant will be to assess the riparian forest surrounding Perry Lake using GIS and on-the-ground reconnaissance and identify areas where protection, management, and establishment can most benefit the reduction of sediment loads. The data will be used to develop a riparian forest classification system to guide policy and program implementation which can be applied in other watersheds. In addition to the assessment work, 10 forestry BMPs will be demonstrated within the watershed.

5. Cropland has the highest level of residue attainable, livestock production activities have no significant pollution potential
6. Assuring that Kansas’ range and pasture land is managed for sustainable production
7. Urbanized and developed lands have no significant pollution potential.

KDHE is striving to accomplish these objectives through projects that address such issues. Many of our WRAPS projects are targeting cropland and are implementing a significant amount of cropland BMPs in order to reduce the impact agriculture has on water quality. Additionally, some WRAPS projects are taking the same initiative regarding implementing sustainable rangeland practices. The WRAPS program is also making strides toward reducing the pollution potential of urbanizing lands, with projects in large urban areas addressing development directly. Please refer to pages 35-39 of Attachment 1: Grant Annual Performance Report for C900740514, for a table of active 319 projects including all implemented Best Management Practices contributing to reduced cropland, livestock, rangeland, and urbanizing lands pollution potential.

## Long Term Goal #4

All Kansas' watersheds have a documented Watershed Restoration and Protection Strategy (WRAPS) completed and under implementation. This will be achieved by:

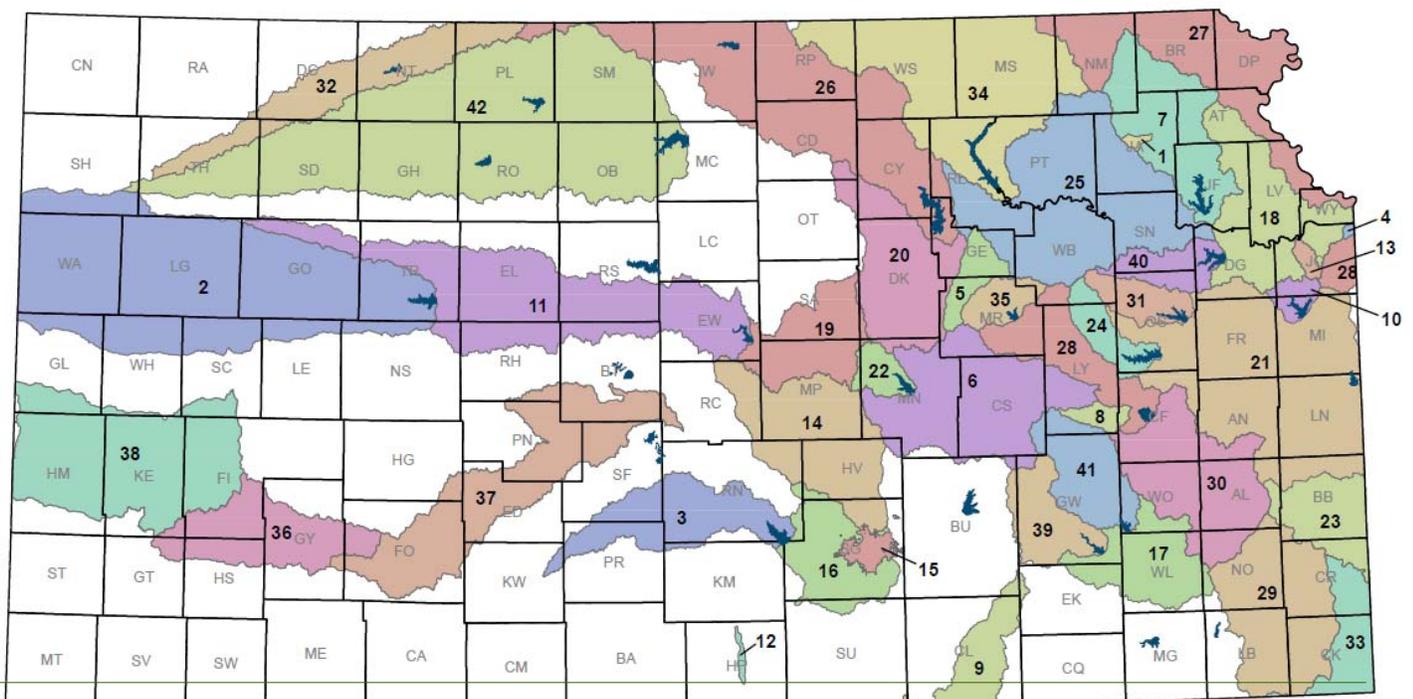
1. Completing a WRAPS for each of Kansas' 90 HUC 8 watersheds.
2. Helping WRAPS Projects develop a state approved 9 element watershed plan.

### 2009 Update

1. As outlined in the NPS Pollution Management Plan, Kansas has adopted the goal to complete a Watershed Restoration and Protection Strategy in all 90 of the HUC 8 watersheds in Kansas. In the fall of 2008, KDHE staff and other Kansas WRAPS Work Group members met with the majority of the WRAPS Stakeholder Leadership Teams to discuss the vision of the KS WRAPS program and to receive input on how to improve state/local partnerships through WRAPS. Currently, Kansas has 91 active WRAPS grants which make up 42 project areas working to develop a WRAPS in a total of 47 HUC 8 watersheds throughout the state. Most of these project areas focus on watersheds at either an individual HUC 8 or multiple HUC 8 scale. However, some of the WRAPS projects concentrate efforts to HUC 10 or 12 scales. The map below shows watersheds that are currently served by active 319 and State Water Plan WRAPS projects.

### Kansas WRAPS Projects

Stakeholder Leadership Team Areas  
as of September 2009



## Project Key and Contact Information

1 Banner Creek Contact: Roberta Spencer Jackson Co. Conservation District 785.364.4638	12 Lake Anthony Contact: Roger Masenthin Sunflower RC&D 620.896.7378	21 Marais des Cygnes Basin Contact: Gale Salzman Lake Region RC&D 913.829.9414	32 Prairie Dog Creek Contact: Twila Dizmang Norton Co. Conservation District 785.877.2623 ext 40
2 Cedar Bluff Watershed Contact: Darla Juhl Smoky Hill RC&D 785.346.4706	13 Lake Olathe Contact: Rebecca Bilderback City of Olathe 913.971.9116	22 Marion Lake Contact: Peggy Blackman Flint Hills RC&D 620.382.2541	33 Spring River Watershed Contact: Crystal Eisele See-Kan RC&D 620.431.6180
3 Cheney Lake Contact: Lisa French Reno Co. Conservation District 620.665.0231	14 Little Arkansas Watershed Contact: Dan Devlin Kansas State University 785.532.0393	23 Marmaton River Watershed Contact: Kara Niemeir Marmaton Joint Watershed District 102 620.756.1000	34 Tuttle Creek Lake Contact: Gary Satter Glacial Hills RC&D 785.945.6292
4 City of Mission Hills / Brush Creek Contact: Courtney Christensen City of Mission Hills 913.362.9620	15 Lower Arkansas River (City of Wichita) Contact: Rebecca Lewis Dept. of Environmental Health 316.268.8355	24 Melvern Lake Contact: Paul Ingle Flint Hills RC&D 785.640.2645	35 Twin Lakes Contact: Bruce Wells Flint Hills RC&D 620.343.0113
5 Clarks Creek Contact: Angela Beavers Flint Hills RC&D 785.238.4251	16 Lower Arkansas River (outlying counties and Wichita urban fringe) Contact: Cherrie Nolden Sedgwick Co. Conservation District 316.660.7289	25 Middle Kansas Watershed Contact: Rick Davis Kansas Alliance for Wetlands & Streams 785.233.5632	36 Upper Arkansas River Basin Arkansas Dodge City Watershed Contact: Robert Wilson Kansas State University 785.532.7823
6 Cottonwood Watershed Contact: Robert Wilson Kansas State University 785.532.7823	17 Lower Fall River and Lower Upper Verdigris Contact: Robert Wilson Kansas State University 785.532.7823	26 Milford Lake Contact: Robert Wilson Kansas State University 785.532.7823	37 Upper Arkansas River Basin Coon Pickerel Watershed Contact: Robert Wilson Kansas State University 785.532.7823
7 Delaware River Contact: Marlene Bosworth Glacial Hills RC&D 785.284.0080	18 Lower Kansas Contact: Rick Davis Kansas Alliance for Wetlands & Streams 785.233.5632	27 Missouri River Contact: Carl Johnson Glacial Hills RC&D 913.991.7942	38 Upper Arkansas River Basin Middle Arkansas Lake Mckinney Contact: Robert Wilson Kansas State University 785.532.7823
8 Eagle Creek Contact: Mary Lou Ponder Coffey Co. Conservation District 620.364.2182 ext 3	19 Lower Smoky Hill from Kanopolis Dam to Solomon Contact: Dan Devlin Kansas State University 785.532.0393	28 Neosho Headwaters Contact: Robert Wilson Kansas State University 785.532.7823	39 Upper Fall River Contact: Bernie Obermeyer Flint Hills RC&D 620.583.6461
9 Grouse-Silver Creek Contact: Jennifer Carr Watershed District No. 92 620.221.1850	20 Lower Smoky Hill from Solomon to Junction City Contact: Janet Meyer Dickinson County Department of Environmental Services 785.263.4780	29 Neosho, Middle Contact: Robert Wilson Kansas State University 785.532.7823	40 Upper Wakarusa Contact: Tom Huntzinger Kansas Alliance for Wetlands & Streams 785.820.1619
10 Hillsdale Lake Contact: Gale Salzman Hillsdale Water Quality Project 913.829.9414		30 Neosho, Upper Contact: Robert Wilson Kansas State University 785.532.7823	41 Upper Verdigris / Toronto Lake Contact: Robert Wilson Kansas State University 785.532.7823
11 Kanopolis Lake Contact: Stacie Minson Kansas State University 785.650.1282		31 Pomona Lake Contact: Lori Kuykendall Osage Co. Conservation District 785.828.3458	42 Waconda Lake Contact: Carolyn Nichols Solomon Valley RC&D 785.346.4706

Spatial extent updated: February 2009; Contact information updated: September 2009.



Map produced by  
Kansas Department of Health & Environment  
Bureau of Water, Watershed Management  
September 2009

Guidance for meeting EPA's 9 required elements for watershed plans to restore impaired waters was developed by the KS WRAPS Work Group and KDHE in the spring of 2009. This guidance was disseminated to WRAPS projects via regional seminars in early summer 2009. Additionally, in late summer 2009, KDHE developed a schedule for reviewing existing WRAPS projects watershed plans and began providing extensive technical support to WRAPS projects just beginning to develop a 9 element plan. See the following tables for details regarding individual projects and 9 element watershed plan status.

Plans to be submitted				
Watershed Name	Project Officer	Date Plan is to be submitted to KDHE	Status - 10/28/09	Comments sent to cooperator
Tuttle	Amanda Reed	Summer 2009	Draft submitted	Pending Final Approval
Upper Lower Smoky	Constance Buckner	Summer 2009	Draft Submitted	Preliminary Review Complete
Lower Ks	Amanda Reed	Fall 2009	Winter 2009	KDHE Reviewing
Middle Ks	Amanda Reed	Fall 2009	Winter 2009	KDHE Reviewing
Toronto	Ann D'Alfonso	Fall 2009	Winter 2009	KDHE Reviewing
Hillsdale	Matt Unruh	Fall 2009	Winter 2009	KDHE Reviewing
Missouri	Matt Unruh	Fall 2009	Fall 2009	
Middle Neosho	Ann D'Alfonso	Fall 2009	Spring 2009	January 26, 2010
Clarks Creek	Ann D'Alfonso	Fall 2009	Winter 2009	
Neosho Headwaters	Ann D'Alfonso	Fall 2009	Winter 2009	
Milford	Amanda Reed	Winter 2009	Winter 2009	
Upper Neosho	Ann D'Alfonso	Spring 2010	Summer 2010	
Pomona	Matt Unruh	Summer 2010	Summer 2010	
Marmaton	Matt Unruh	Summer 2010	Summer 2010	
Waconda	Constance Buckner	Summer 2010	Summer 2010	
Cedar Bluff	Constance Buckner	Summer 2010	Summer 2010	
Prairie Dog	Constance Buckner	Summer 2010	Summer 2010	
Lower Lower Smoky	Constance Buckner	Summer 2010	Summer 2010	
Cottonwood	Ann D'Alfonso	Winter 2010	Winter 2010	
Spring River	Ann D'Alfonso	Winter 2010	Winter 2010	
Lower Ark - City	Scott Satterthwaite	Winter 2011	Winter 2011	
El Dorado	Scott Satterthwaite	Winter 2011	Winter 2011	

Submitted Watershed Plans			
Watershed Name	Project Officer	Plan to be reviewed by KDHE	Comments sent to cooperator
Delaware	Amanda Reed	August 30, 2009	9/1/2009
Twin Lakes	Ann D'Alfonso	August 30, 2009	9/4/2009
Upper Wakarusa	Amanda Reed	September 30, 2009	10/7/2009
Upper Fall River	Ann D'Alfonso	September 30, 2009	10/9/2009
Grouse Creek	Scott Satterthwaite	September 30, 2009	10/12/2009
Kanopolis	Constance Buckner	October 31, 2009	11/12/2009
Little Ark	Scott Satterthwaite	October 31, 2009	11/12/2009
Marion	Ann D'Alfonso	October 31, 2009	11/5/2009
Melvern	Ann D'Alfonso	October 31, 2009	11/5/2009
Eagle Creek	Scott Satterthwaite	October 31, 2009	11/24/2009
Upper Ark	Scott Satterthwaite	October 31, 2009	11/12/2009
Cheney	Scott Satterthwaite	December 31, 2009	1/11/2010
Banner Creek	Amanda Reed	December 31, 2009	
Upper Verdigris	Ann D'Alfonso	December 31, 2009	

## Long Term Goal #5

Kansas has a high instructional capacity to restore and protect Kansas' water resources from nonpoint source pollutant impacts. This will be achieved by:

1. Providing financial assistance
2. Instituting a revolving loan fund
3. Graduating at least 24 students each year from the Kansas Environmental Leadership Program (KELP)
4. Preparing and distributing the report "Progress in Abatement of Nonpoint Source Pollution in Kansas"
5. Reviewing and updating the management plan
6. Making effective use of EPA's Grants Reporting Tracking System (GRTS)
7. Establishing and using an Advisory Committee
8. Utilizing the Clean Water Neighbor Pledge
9. Clean Water Celebrations
10. Using technology to administer grants
11. Maintaining and enhancing the Kansas Local Environmental Protection Program
12. Establishing and maintaining effective relationships among federal, state, and local government agencies, public and private institutions, non-governmental organizations, businesses, and individuals.

## 2009 Update

### 1. Providing financial assistance

The Watershed Management Section administers section 319 funding to organizations and agencies that propose NPS pollution abatement projects. The Watershed Management Section selected 47 new NPS projects for funding this year. This addition brings the total number of active projects to 175. These projects address various nonpoint source categories including information and education, streambank stabilization, soil profiling, and Watershed Restoration and Protection Strategies (WRAPS). Below is a list of the 47 new section 319 projects for October 1, 2008 - September 30, 2009.

Tuttle Creek Lake Watershed WRAPS Planning  
 KS WRAPS: Lower Portions of Fall River and Upper Verdigris WRAPS Development  
 KS WRAPS Pomona Reservoir Watershed Implementation  
 KS WRAPS: Lower Smoky Hill from Solomon to Junction City Assessment  
 Marais des Cygnes Basin WRAPS Implementation Livestock Project Part II FFY 07  
 KS WRAPS Neosho Basin Planning  
 KS WRAPS: KSU Assessment & Planning Technical Assistance (FFY 08)  
 KS WRAPS: KSU SFY 08 Technical Assistance Services (FFY 08)  
 KS WRAPS: KAWS (FFY 08)  
 Water Quality Buffer Partnership - SFY 09 WRAPS Focus (FFY 08)  
 TWG - Kansas State University BMP Auction  
 KS WRAPS: Lower/Middle Kansas and Upper Wakarusa (FFY 08)  
 KS WRAPS: Lower Smoky Hill from Kanopolis Dam to Solomon Assessment and Planning (FFY 08)  
 KS WRAPS: Marmaton Watershed Assessment (FFY 08)  
 Marais des Cygnes Basin WRAPS Implementation Livestock Project Part III FFY 08  
 KS WRAPS: Lower Smoky Hill from Kanopolis Dam to Solomon McPherson CCD (FFY 08)  
 KACEE WRAPS Information & Education (FFY 08)  
 PRIDE Initiated Community Water Quality Action Plans Part 3  
 Milford Lake Watershed WRAPS Planning  
 KS WRAPS: Hillsdale Reservoir WRAPS Planning and Implementation  
 KS WRAPS: Milford WRAPS Kansas Crossroads RC&D BMP Assistance  
 KSU Information & Ed Project (FFY 08) - EARTH, PRIDE, Citizen Science, WaterLINK  
 KS WRAPS - Kansas City MARC WRAPS Development Support Year 2 (FFY 07)  
 Rockers Livestock Relocation Project  
 KS WRAPS: Missouri River WRAPS Assessment and Planning (FFY 08)  
 KS WRAPS: Marion, Melvern, Twin Lakes, Upper Fall River, Clarks Creek (FFY 08)

KS WRAPS: Kansas Rural Center (FFY 08)  
 Whispering Hills  
 KS WRAPS: Kanopolis Reservoir – Big Creek, Middle Smoky Hill River WRAPS Implementation  
 KS WRAPS: Little Arkansas WRAPS Implementation  
 KS WRAPS: Riparian Forest Management and Coordination Technical Assistance  
 KS WRAPS: Pomona WRAPS Implementation  
 Riparian restoration on Brush Creek- Mission Road Improvement, Fairway  
 Kansas Environmental Leadership Program Redesign (FFY 2007)  
 CWN: Kanopolis Rain Barrel Project  
 KS WRAPS: Grouse - Silver Creek Watershed District #92 Implementation (FFY 08)  
 CWN: Douglas County no-till cover crop demonstration project  
 KS WRAPS: KAWS Watershed Assessment Technical Assistance  
 KS WRAPS: Delaware River WRAPS Implementation  
 KS WRAPS: Water Quality Buffer Partnership State FY 2010  
 KS WRAPS: Tri-County BMP Design Technical Assistance  
 KS WRAPS: Lower Kansas River WRAPS Implementation  
 KS WRAPS: Middle Kansas River WRAPS Implementation  
 KS WRAPS: Watershed Specialist Kansas Lower Republican  
 KS WRAPS: Watershed Specialist Lower Blue Lower Republican  
 KS WRAPS: Watershed Specialist Marais des Cygnes River Basin  
 CWN - Douglas County No-Till Cover Crop Demonstration Project  
 Stormwater Information and Education - City of Holton

## **2. Instituting a revolving loan fund**

In the spring of 2009, KDHE WMS began working with the KDHE Municipal Programs Section to solicit NPS green infrastructure projects for funding with provided 2009 ARRA provided to the state's Clean Water Revolving Loan Fund. It is anticipated that this will provide a basis for continued cooperation in using the CWSRF program for NPS projects in the future.

## **3. Graduating 24 Students from the Kansas Environmental Leadership Program**

One of our program goals outlined in the NPS Management Plan is to increase the capacity to achieve nonpoint source goals. The Kansas Environmental Leadership Program was developed to increase the number of leaders with water quality intelligence from various backgrounds statewide. Please refer to page 11 of Attachment 1: Grant Annual Performance Report for C900740514, for an update regarding the KELP Program activities for the reporting period.

#### **4. Preparing and distributing the report “Progress in Abatement of Nonpoint Source Pollution in Kansas”**

This is completed on an annual basis. The 2008 Annual Report was compiled, edited and submitted during the beginning of the FFY 2009 reporting period. It was completed and submitted to EPA on February 17, 2009.

#### **5. Reviewing and updating the Kansas NPS Pollution Management Plan**

The process of updating the Kansas Nonpoint Source Pollution Management Plan was initiated in September 2008 with organization of an interagency subcommittee of the Kansas Watershed Restoration and Protection Strategy (KS-WRAPS) Work Group. The Governor’s Natural Resources Sub-Cabinet was briefed on the update process in January of 2009. During the spring of 2009, the KS-WRAPS subcommittee worked on developing a set of revised plan goals, objectives and strategies and prepared discussion material on key issues and options being considered in the plan update process. Statewide water quality monitoring data was also assessed and reviewed as part of this process. The revised plan material was presented to the full KS-WRAPS Work Group in June of 2009 for input and discussion. In late June 2009, the plan update material was presented via webinar to members of the State’s River Basin Advisory Committees (BACs). Watershed Restoration and Protection Strategy (WRAPS) projects and Local Environmental Protection (LEP) groups were also invited to participate. The webinar material was posted on the KDHE Watershed Management website to provide additional opportunity for public review and input. This topic was discussed at subsequent BAC meetings conducted in July 2009 and input from these meetings was provided to KDHE for further consideration in the update process. The plan update process has also been discussed with other groups and input solicited on the preliminary goals, objectives, strategies and issues being considered.

A preliminary draft of an updated NPS Management Plan was scheduled for completion in the fall of 2009. The development of this plan has been delayed due to the increased workload in the KDHE Watershed Management Section resulting from implementation of the American Recovery and Reinvestment Act of 2009. The Watershed Management Section has been actively engaged since January 2009 in working with the KDHE Municipal Programs Section to help solicit and administer green reserve NPS projects as part of the ARRA Clean Water State Revolving Fund allocation for Kansas, including several WRAPS related projects. A preliminary draft of the updated NPS Management Plan is anticipated

by early spring of 2010. Additional public review and input will be solicited on the draft plan when completed. A final plan will be prepared following a public comment period. The final plan will be presented to the KS-WRAPS Work Group and the Governor's Natural Resources Sub-Cabinet for concurrence, prior to formal submission to EPA.

## **6. Making effective use of EPA's Grants Reporting Tracking System (GRTS)**

Throughout the year, continuing emphasis was placed on reporting project results to the EPA through the Grants Reporting and Tracking System (GRTS). Annual reports were entered for each active project within 60 days of the end of reporting periods ending on September 30. KDHE Watershed Management Section staff managed approximately 175 active projects. GRTS reports were completed for those projects for which KDHE had up-to-date information. Reports for the remainder of the projects will be completed as the information is gathered.

In addition, load reduction estimates for nitrogen, phosphorous, and sediment were entered into GRTS for all projects for which Best Management Practices were installed, providing those BMPs were amenable to load reduction calculations. Load reduction estimates were calculated using the Region 5 model available from EPA ([http://it.tetrattech-ffx.com/stepl/models\\$docs.htm](http://it.tetrattech-ffx.com/stepl/models$docs.htm)). The BMPs upon which these load reduction estimates were based, were also reported in GRTS for each project.

## **7. Establishing and using an Advisory Committee**

A WRAPS Work Group has been established to discuss 319 and State Water Plan NPS funding on a bi-monthly basis. The WRAPS Work Group is the advising body for the WRAPS program and is comprised of the member agencies of the Kansas Natural Resources Sub-Cabinet and other state and federal agencies. The Work Group assures that all Kansas' water resources meet the expectations of all stakeholders by facilitating a collaborative relationship among state, federal, local government and private sector interests so that financial, programmatic and technical assistance resources are directed to the priority water resource needs of Kansas' citizens. Please refer to pages 44-70 of Attachment 1: Grant Annual Performance Report for C900740514, for a complete view of all Work Group Meetings that occurred during the reporting period.

## **8. Utilizing the Clean Water Neighbor Pledge**

Devise a means of securing “pledges to protect” Kansas water quality from individuals, local and state governmental entities, business and industrial organizations. KDHE Watershed Management Section designed a Clean Water Neighbor Pledge sheet for individuals to sign if they were committed to protecting water quality. In addition, a certificate of recognition was designed to reward participants for their commitment. Approximately 5,000 certificates have been printed in anticipation of receiving 5,000 signatures. For every individual that signs the CWN pledge, they are encouraged to obtain five additional signatures for the pledge and they then receive a Clean Water Neighbor mug. Please refer to page 10 of Attachment 1: Grant Annual Performance Report for C900740514, for a complete view of the Clean Water Pledge activities occurring during the reporting period.

## **9. Clean Water Celebrations**

As part of the NPS Management Plan, Kansas has a goal to have a water quality celebration in each of Kansas’ 105 counties. In 2002, KDHE awarded the Kansas Association for Conservation and Environmental Education a 3 year 319 grant to achieve this goal. This project is being extended until the December of 2008. Prior to the grant, Kansas hosted water celebrations in 16 counties out of a total of 105. Currently, 60 counties are being served by water celebrations. Over 50% of the state is served by a celebration. Please refer to page 9 of Attachment 1: Grant Annual Performance Report for C900740514, for the Clean Water Celebration update for this reporting period.

## **10. Using technology to administer grants**

The Kansas Clean Waters (KCW) continues to facilitate project management. This system allows the cooperator to submit ideas for projects in a general format. If Watershed Management Section staff believe it is a feasible project, a fully developed project implementation plan (PIP) is then developed by the cooperator and submitted through the KCW. The PIP is distributed by the KCW to reviewers both inside and outside of the section, including the regional EPA project officer. Revisions are made as necessary and a grant agreement is generated, all within the KCW. Quarterly progress reports and affidavit of expenditures are also submitted through the KCW.

The KCW has allowed for electronic processing of documents and provided readily accessible centralized database of project related documents. This affords access to relevant project data by all members of the staff and provides for more efficient project management.

Activity Accomplishments: The following changes were implemented by Kalechi Design

- 7/13/2008      Programming changes to fix the LEPP Performance Report.
- 8/2008          Overhaul of the KCW system was initiated to provide for migration to another platform to allow for continued operation and support.

#### **11. Maintain and enhance the Kansas Local Environmental Protection Program**

KDHE reviews and approves local codes adopted under Kansas Local Environmental Protection Program (LEPP) to assure consistency with minimum state requirements. Local codes establish administrative procedures and standards for on-site wastewater treatment systems and protection for private drinking water supplies. Additionally, each LEPP develops a management plan that addresses subdivision water and wastewater, solid waste, hazardous waste, nonpoint source pollution control, and public water supply protection. During the reporting period, KDHE Topeka Office staff: 1) provided technical assistance on local codes and state minimum standards upon request; 2) reviewed and commented on proposed revisions to six local codes; and 3) approved one new code and revisions to three existing codes. Two additional counties joined the program during this reporting period which increased participation to 99% percent of 105 counties. Please refer to the LEPP Annual Report, Attachment 2, page 146 for additional information about LEPP.

#### **12. Establish and maintain effective relationships among federal, state, and local government agencies, public and private institutions, non-government organizations, businesses, and individuals**

Annually the Watershed Management Section compiles an extensive e-mail list of individuals that have Pledge. Notices of upcoming events, grant opportunities and other items of interest are sent to this group on an as needed basis. In addition, the Watershed Management Section creates and maintains a working relationship with numerous state, and local government agencies, public and private institutions, non-government organizations, businesses and individuals through our grant administration. We have countless NPS Project sponsors and team members working with us on NPS projects. The WMS is an active member of the USDA State Technical Committee and actually participates in the State's water planning process. For more information regarding our partners, please refer to Attachments 2 – 8 to view year end reports from various government agencies that help to achieve the goals of the Kansas Nonpoint Source Management Plan.

## Nonpoint Source Pollution Load Reduction Estimates

Program accomplishments reported in this section are a result of collaborative efforts between KDHE and many organizations, universities, and state agencies. These cooperating agencies and organizations work together to best meet the needs of the state of Kansas, through implementing Best Management Practices (BMPs) that reduce nonpoint source pollution loads in Kansas rivers, streams, and reservoirs. Many of the 175 currently active 319 projects in Kansas reported BMP implementation from October 1, 2008 to September 30, 2009. KDHE utilizes this reported information along with EPA's Region 5 and STEPL load reduction modeling software to estimate total load reductions achieved from the BMPs implemented. Please refer to pages 35-39 of Attachment 1: Grant Annual Performance Report for C900740514, for a table of active 319 projects including all implemented Best Management Practices contributing to total load reduction figures.

For the reporting period of October 1, 2008 to September 30, 2009 (FFY09), it is estimated that the implemented BMPs reduced yearly nutrient and sediment loads in Kansas by the following quantities:

- ◆ Nitrogen was reduced by 318,757.5 lbs/yr
- ◆ Phosphorus was reduced by 118,087.3 lbs/yr
- ◆ Sediment was reduced by 26,914.3 tons/yr

Attachment 1:  
Grant Annual Performance Report  
FFY07 (C9007405 14)

Kansas Department of Health and Environment

Bureau of Water

Watershed Management Section

Grant Annual Performance Report

**Final**

EPA Grant # C9007405 14

Reporting Period December 1, 2007 to October 15, 2009

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## Budget Overview:

The Kansas Department of Health and Environment Bureau of Water – Watershed Management Section was the recipient of \$3,557,800.00 for the federal fiscal year 2007 Section 319 grant. Sixty-nine percent of the grant was used to support cooperative projects sponsored by other entities. About thirty-one percent of the Section 319 grant was retained by KDHE to support the operations of the Watershed Management Section. The sponsors of cooperative projects are required to provide at least 40 percent of the total project value. For the \$ 2,464,172.69 granted for cooperative projects, the non-federal amount provided by project cooperators was at least \$1,642,782.00.

For the federal fiscal year 2007 grant the NPS Program Implementation portion totaled \$697,935.43 and was expended over a one year period starting on July 1, 2008 and ending on June 30, 2009. The overall expenditure of the Watershed Management Section implementation dollars was distributed as follows: 63.82 percent for program personnel, 20.66 percent for contractual services, 1.39 percent for travel expenses, 2.91 percent for supplies, 2.63 percent for ‘other’ expenses and 8.59 percent for indirect costs.

Category	Amount
Personnel	\$697,935.43
Contractual Services	\$225,994.50
Travel	\$15,189.84
Supplies	\$31,837.47
Other	\$28,801.07
Indirect	\$93,869.00
<b>Program Implementation Total</b>	<b>\$1,093,627.31</b>
Cooperative Projects	\$2,464,172.69
<b>Total</b>	<b>\$3,557,800.00</b>

## Work plan Overview:

### EPA Strategic Plan Component: Goal 2 Clean and Safe Water

#### 1. Objective 2.1 Protect Human Health

1. Sub-objective 2.1.1 Water Safe to Drink: Reduce exposure to contaminants in drinking water through source water protection.

#### 2. Objective 2.2 Protect Water Quality

##### 1. Sub-objective 2.2.1 Improve Water Quality on a Watershed Basis by

- a. Developing effective watershed plans based on both pollution prevention and restoration approaches.

Implementing an effective nonpoint source pollution control program.

To track achievement of EPA strategic plan objectives, outcomes have been developed. An “outcome” is the result, effect or consequence that will occur from executing a program or activity. Outcomes represent a desired future condition resulting from the expenditure of resources. They may be expressed as “programmatic”, “behavioral” or “environmental”. Outcomes may actually occur at sometime after resources have been expended. An output is a measurable product of an activity. It may be a report, meeting, trained individual, etc. Outputs are produced over a period of time or by a specific time and are produced over the time period of resource expenditure. A baseline for measuring progress (Benchmark) is established.

Outcome 1: The Kansas nonpoint source pollution control program assures efficient and expeditious achievement of nonpoint source pollution controls which support attainment of the Clean Water Act Goals in Kansas

Outcome 2: Individuals, business and industrial owners and managers, organizations, and governmental units in Kansas are aware of the water quality impacts of their decisions and consistently act to avoid or minimize adverse water quality impacts

Outcome 3: Kansas’s water resources are free of pollution attributable to nonpoint pollutant sources

# Chapter 1:

## Outcome 1

The Kansas nonpoint source pollution control program assures efficient and expeditious achievement of nonpoint source pollution controls which support attainment of the Clean Water Act Goals in Kansas.

### **Performance Measure A**

Kansas Stakeholders have access to and are knowledgeable of the goals, objectives and status of the Kansas nonpoint source pollution control program and activities

### **Established Baseline for Measurement/Benchmark**

Benchmark will be determined at a later date.

### **Measurement Instrument**

The number of persons taking the Kansas Clean Water Pledge and participating in NPS Advisory Committee meetings will be randomly surveyed for knowledge of goals, objectives, and status of implementation activities. Clean Water Neighbor Pledgers will be surveyed quarterly by e-mail. Advisory committee members will be surveyed during advisory committee meetings.

## Work Plan Activities

- 1. Maintain KDHE Watershed Management Section WEB site (<http://www.kdheks.gov/nps/>) as principal means of providing general public access to Kansas Nonpoint Source Pollution Management Plan, guidance, work products and reference materials.**

Activity Accomplishments: During the July 1, 2008 – June 30, 2009 reporting period 41 updates were made to the Watershed Management Section Website.

- 2. Maintain and update approved Kansas Nonpoint Source Pollution Management Plan. Current management plan was updated in 2000, a five year update frequency is stipulated.**

a - e. Activity accomplishments: No Activity.

- 3. Nonpoint Source Advisory Committee meets quarterly. To provide access to all stakeholders, the advisory committee meets at different Kansas locations. An individual attending at least one advisory committee meeting every two years is considered a “member in good standing.”**

Activity Accomplishments: Advisory Committee Members participated in 3 Regional Meetings during this reporting period. The first meeting was on September 16, 2008 in Castleton, KS. Tour stops included: Unruh grazing system, Beachy dairy, Ground-truthing model information, and Sanders Farm. The second meeting on February 11, 2009 was held in Smith Center, KS. Speakers included Steve Wingerson, Solar-Powered Livestock Watering System; Hi Lambert, Using Goats to Control Noxious Weeds and Salt Cedar; Dan Nagengast, Community Wind and Wind for Schools Program; and Jim Lehr, Ins and Outs of Raising and Selling Organic Produce. The third meeting was held on April 8, 2009 at the Hideout Hunting Lodge near Admire, KS. Speakers included Paul Liechti, Kansas Biological Survey and Tom Stiles, KDHE. Other topics addressed were Water Quality Monitoring from the Agency Staff Perspective, Federal Agency Water Quality Monitoring Programs and Resources, and Citizen Science.

- 4. KDHE – Watershed Management Section, Nonpoint source program management services.**

- a. Prepare Semi-annual EPA Program Implementation Reports, which include reporting on EPA Program Assessment Measures.**

Activity Accomplishments:

- b. Prepare Annual Report of Progress in Abatement of Nonpoint Source Pollution in Kansas.**

Activity Accomplishments: No Activity.

- c. Submit necessary GRTS reports addressing project status, load reduction, etc for approximately 140 active projects.**

Activity Accomplishments: During this reporting period, KDHE Watershed Management Section staff maintained projects on the GTRTS system. Activities included updating the status of projects on GRTS, completing and attaching GRTS reports to projects in GRTS, and completing load reduction calculations and entering the data into the GRTS system.

# Outcome 1

The Kansas nonpoint source pollution control program assures efficient and expeditious achievement of nonpoint source pollution controls which support attainment of the Clean Water Act Goals in Kansas

## **Performance Measure B**

Cooperative project/demonstration project applications are received from a wide diversity of stakeholders.

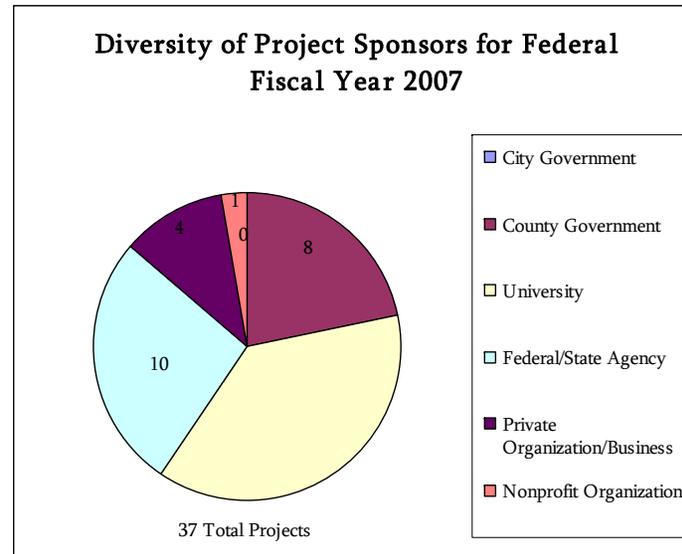
## **Established Baseline for Measurement/Benchmark**

This report will be using FFY2003 as project diversity benchmark

## **Measurement Instrument**

Annually, as an entry in the annual report, the sponsors of active projects will be arrayed in a table showing the number of projects by type of organization (conservation district, city, county, NGO, college or university, etc.)

Performance Measure Update: Below is a chart displaying the number of projects by project sponsor type, or diversity. The chart shows the breakdown for the 37 FFY05 funded projects.



## Work Plan Activities

- 5. Maintain Kansas Clean Waters System – (<http://kcw.kdhe.state.ks.us/kcw/>), KCW is KDHE’s web based system for receiving project proposals for financial assistance from financial resources available to KDHE Watershed Management Section, including Clean Water Act – Section 319, Kansas Water Plan Fund, Kansas WRAPS fund, etc.**

Activity Accomplishments: The following changes were implemented by Kalechi Design

- 7/13/2008 Programming changes to fix the LEPP Performance Report.
- 8/2008 Overhaul of the KCW system was initiated to provide for migration to another platform to allow for continued operation and support.

- 6. Prepare and submit annual Section 319 Grant Application**

Activity Accomplishments:

KDHE announced a Request for Proposals for the WRAPS program and WRAPS Service Providers in the October of 2008. Grant applications were accepted beginning January – March 3<sup>rd</sup>, 2009 on a new Kansas Clean Water System. Proposals were evaluated

internally by KDHE Project Officers, Kansas Water Office Basin Planners, as well as by the Kansas Water Office and State Conservation Commission Work Group representatives and a SFY 10 Work Plan recommendation was made to the WRAPS Work Group in April of 2009. Upon concurrence, the work plan was taken to the Governor’s Natural Resources Subcabinet in May of 2009. On an as needed basis PIPs for FFY 09 were finalized and sent to EPA for review and revised if necessary. The FFY 2009 Grant Application was submitted to EPA on March 10, 2009. Upon approval of the application and receipt of the grant award, grant agreements between KDHE and the cooperator were generated and project activities began in the summer of 2009.

**7. Establish and maintain partnership relationships with state, federal, and local government agencies and institutions, non-governmental organizations, business and industrial establishments and individuals.**

Activity Accomplishments: During this reporting period the Watershed Management Section referred approximately 403 individuals to state, federal or local government institutions, organizations, businesses or industrial establishments involved in partnerships with KDHE. Examples of partners to which referrals were made include: Other sections within KDHE’s Bureau of Water, County LEPP Programs, The Kansas Geological Survey, The Corp of Engineers, Kansas Association for Conservation and Environmental Education, The Hillsdale Water Quality Project, Kansas Rural Water Association, KCC, KELP, The Groundwater Foundation, EPA, KSU Extension, USDA, The Kansas Water Office, The Kansas Department of Agriculture, E.A.R.T.H., and other 319 project managers.

**8. Establish and maintain an effective Nonpoint Source Information and Education Program.**

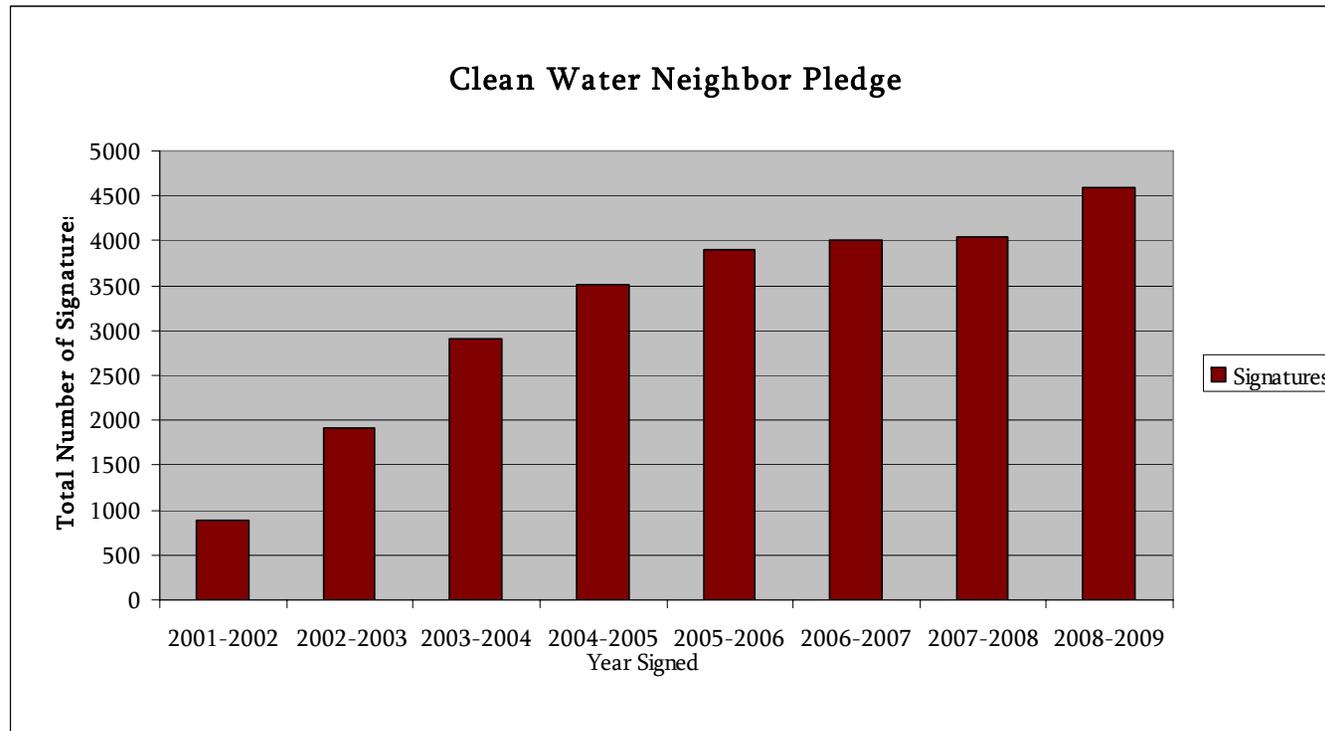
**a. Each of Kansas’ 105 counties has access to an annual Water Festival.**

Activity Accomplishments: Not all counties are currently provided access to an annual Water Festival, however, the number of counties is growing every year. The following Kansas counties to date have access to a Water Festival:

Allen	Decatur	Graham	Logan	Phillips	Sheridan
Atchison	Dickinson	Gray	Lyon	Pottawatomie	Sherman
Barton	Douglas	Greenwood	Marshall	Rawlins	Smith
Butler	Elk	Harvey	McPherson	Reno	Thomas
Chase	Ellis	Jackson	Miami	Riley	Trego
Cheyenne	Ellsworth	Jefferson	Montgomery	Rooks	Wabaunsee
Clay	Finney	Johnson	Morris	Russell	Wallace
Coffey	Franklin	Kearny	Norton	Saline	Wilson
Cowley	Geary	Kingman	Osage	Sedgwick	Woodson
Crawford	Gove	Leavenworth	Osborne	Shawnee	Wyandotte

**b. Clean Water Pledges are offered by KDHE – Watershed Management Section and those taking the pledge.**

Activity Accomplishments: At the end of this reporting period there were approximately 4,600 individuals who had taken the Clean Water Neighbor Pledge from 103 Kansas Counties.



**c. Offer Service Learning related to water quality protection/Nonpoint source pollution control to Kansas college students**

Activity Accomplishments:

In Fall 2008, five projects were funded and completed:

1. Julie Irish Torseth, Hesston College - 80 students participated
2. Lee Skabelund, Kansas State University - 8 students participated
3. Carol Borchers, Fort Hays State - 14 students participated
4. Jean Gleichsner, Fort Hays State - 25 students participated
5. Humberton Blanco, Kansas State University - 6 students participated

In Spring 2009, four projects were funded and completed:

1. William Langley & Ali Sean Jhansooz, Butler County Community College - 3 students participated

2. Jim Triplett, Pittsburg State - 13 students participated
3. Jean Gleichsner, Fort Hays State - 23 students participated
4. Robert Stephenson, Fort Hays State - 20 students participated

**d. Annually, offer the Kansas Environmental Leadership Program (KELP) to a class of 20 to 26 individuals.**

Activity Accomplishments: During this reporting period, one KELP class graduated (Class 9 – KELP 2008). The last two sessions of KELP class 2008 were held Aug. 13-15 in Ft. Scott and Oct. 29-31, 2006 in Hutchinson, 23 participants graduated and are listed below. State Senator Carolyn McGinn (KELP Pilot Class graduate) addressed the group and presented certificates. There was no KELP class in 2009, KELP took a year off to update curriculum and plan to have a new class in 2010. Each year through an Applied Leadership Project (ALP) KELP team members produce several projects that bring environmental awareness to Kansans.

**KELP Class 9, 2008 (23)**

Angela Beavers	Junction City	Geary County Consv. Dist.
Peggy Blackman	Marion	Marion County Consv. Dist.
Scott Bowen	Wichita	Sedgwick County
Constance Buckner	Topeka	KDHE
Julie Coleman	Lawrence	KDHE
Jeff Conley	Cheney	KDWP
Ann D'Alfonso	Topeka	KDHE
Evelyn Davis	Wakarusa	Shawnee County Consv. Dist.
Kay Drennen	Wichita	City of Wichita
Trevor Flynn	Topeka	KDHE
Keri Harris	Ottawa	Franklin County. Consv. Dist.
Brian Lindley	Wamego	No-Till on the Plains
Sondra Megrail	Topeka	KDHE
Cheri Miller	Overland Park	Wyandotte County Consv. Dist.
Connie Pantle	Effingham	Kansas Rural Center
Cameron Peirce	Hutchinson	Ag. Producer
Renda Robertson	No. Newton	Middle School Teacher
Leon Staab	Olathe	Burns & McDonnell
Keith VanSike	Norton	Norton Cnty. Extension
Wallace Weber	Dorrance	Ag. Producer
Danial Wells	Hays	KDHE
Michael Wilson	Derby	City of Derby
Travis Zwenger	Colwich	ICM

**a - d:** Activity Accomplishments: Not applicable during this reporting period.

## Outcome 1

The Kansas nonpoint source pollution control program assures efficient and expeditious achievement of nonpoint source pollution controls which support attainment of the Clean Water Act Goals in Kansas.

### **Performance Measure C**

Cooperator project reports and KDHE performance reports are completed in a timely manner

### **Established Baseline for Measurement/Benchmark**

1. Project status reports are submitted by the 15th day following the end of the quarterly reporting period.
2. Semi-annual program implementation reports are submitted to EPA on June 1 (Oct - Mar) and Dec 1 (Apr - Sep)

### **Measurement Instrument**

At the time project cooperators submit status reports, the number of days “overdue” will be determined. An average number of “days overdue” will be determined for all projects.

## Work Plan Activities

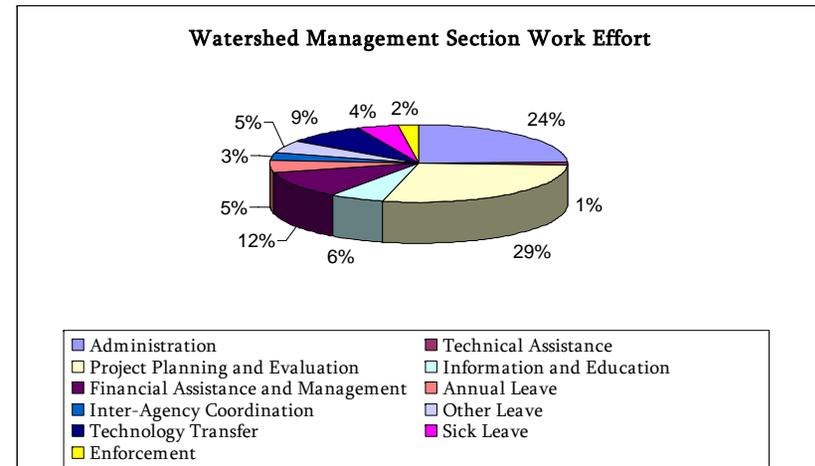
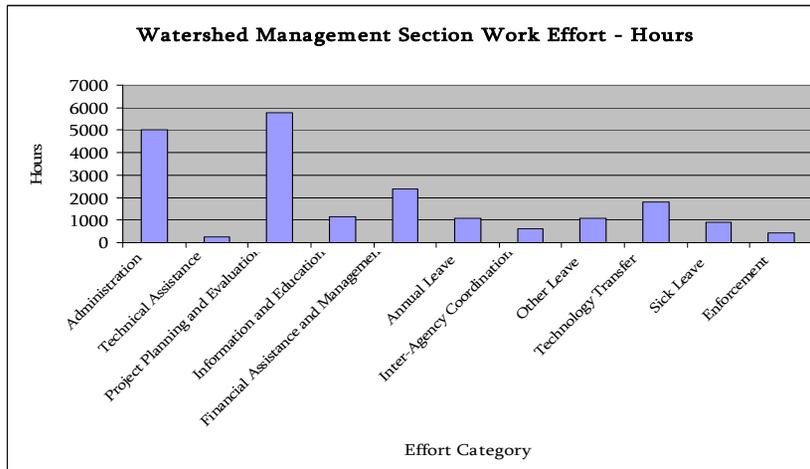
### 10. KDHE – Watershed Management Section, nonpoint source program management services.

#### a. Administer cooperative project grant agreements via KCW System and assigned project officers.

Activity Accomplishments: 49 new projects were initiated during this reporting period. Grant Agreements were completed and the projects have begun. Grant Agreements were completed and the projects have begun.

#### b. Submit necessary GRTS reports addressing project status, load reduction, etc

Activity Accomplishments: Please refer to section 4c.



## Chapter 2:

### Outcome 2

Individuals, business and industrial owners and managers, organizations, and governmental units in Kansas are aware of the water quality impacts of their decisions and consistently act to avoid or minimize adverse water quality impacts.

#### **Performance Measure A**

All Stakeholders are aware of goals, objectives, program status, and resources available to implement nonpoint source pollution controls

#### **Established Baseline for Measurement/Benchmark**

A benchmark has not been established at this time. An initial survey completed prior to December 31, 2005 will provide the benchmark.

#### **Measurement Instrument**

1. Send individuals, randomly selected from various KDHE - Watershed Management Section contact databases, a survey questionnaire to determine their awareness and knowledge of the goals objectives, program status and resources available through the Kansas Nonpoint Source Pollution Control Program.
2. Assess impact of Information and Education efforts by sending individuals, randomly selected from various public databases the same survey described above.

## Work Plan Activities

**11. Conduct Survey to determine stakeholder awareness and knowledge of Kansas' nonpoint source pollution control program goals, objectives, program status and resources available through the Kansas nonpoint source pollution control program.** Measurement Instrument: Assess impact of Information and Education efforts by sending individuals, randomly selected from various public databases the same survey described above.

**a. Develop survey questionnaire**

Activity Accomplishments:

**b. Administer surveys to**

**i. 100 randomly selected individuals from Watershed Management Section databases including – Clean Water Pledges, NPS Advisory Committee, Kansas Watershed Partnership**

Activity Accomplishments: No Activity.

**ii. 100 randomly selected individuals from public databases**

Activity Accomplishments: No Activity.

**c. Analyze and interpret results of survey, incorporate results into Annual Report of Progress in Abatement of Nonpoint Source Pollution in Kansas**

Activity Accomplishments: No Activity.

## Outcome 2

Individuals, business and industrial owners and managers, organizations, and governmental units in Kansas are aware of the water quality impacts of their decisions and consistently act to avoid or minimize adverse water quality impacts.

### **Performance Measure B**

Individuals in Kansas responsible for producing goods and services, (manufacturing, farming, and governmental services) are expected to be aware of measures and practices described in the *Kansas Best Management Practices Catalog* and make decisions that avoid or minimize water quality impacts.

### **Established Baseline for Measurement/Benchmark**

A benchmark has not been established at this time.

### **Measurement Instrument**

1. Individuals randomly selected from KDHE contact databases are surveyed to determine if water quality impacts are considered when making decisions and if decisions that minimize or avoid adverse water quality impacts are taken.
2. Associations and organizations including Kansas Farm Bureau, League of Kansas Municipalities, KS Livestock Association, etc will be asked to express an opinion of how their members avoid adverse water quality impacts.

## Work Plan Activities

**12. Conduct Survey to determine decisions stakeholders have made to protection water quality from nonpoint pollutant discharges.**

**a-c.**

Activity Accomplishments: No Activity

**13. Market Kansas Catalog of Best Management Practices for Nonpoint Source Pollution Control (Appendix I, KS NPS Management Plan) to stakeholders.**

**a-c.**

Activity Accomplishments: No Activity

**14. Cross reference relevant state and federal programs and activities that impact or provide water quality protection benefits.**

**a - b.**

Activity Accomplishments: No Activity

## Outcome 2

Individuals, business and industrial owners and managers, organizations, and governmental units in Kansas are aware of the water quality impacts of their decisions and consistently act to avoid or minimize adverse water quality impacts.

### **Performance Measure C**

Stakeholders implement nonpoint source pollution controls at a rate that will assure all nonpoint sources in Kansas implement recommended best management practices by 2031 (*Kansas Nonpoint Source Pollution Management Plan – 2000 update*)

### **Established Baseline for Measurement/Benchmark**

To be established

### **Measurement Instrument**

To be established

## Work Plan Activities

15. **Implement Section 319 Requirements** {Clean Water Act Section 319(b)(2)} stipulates state management programs use, as appropriate, enforcement, technical assistance, financial assistance, education, training, technology transfer and demonstration projects to achieve implementation of best management practices by nonpoint pollutant sources.

- a. **Enforcement** Kansas' relies on voluntary implementation of nonpoint source pollution control, however, certain nonpoint pollutant sources are subject to state, federal or local rules and regulations and enforcement of these requirements may be invoked if voluntary response fails. Nonpoint pollutant sources subject to regulatory requirements include – onsite wastewater treatment systems (local), livestock production systems (KDHE), abandoned wells (KDHE), pesticide use (KS Dept of Ag), and stream channel modifications (Ks Dept of Ag).

Activity Accomplishments: KDHE section staff referred approximately 68 complaints to enforcement agencies. This included LEPP, Corp of Engineers, Ks Department of Agriculture, KDHE District Offices, KDHE Livestock Waste Section.

- i. **Clean Water Act Section 404 & Kansas Environmental Coordination Act** address activities that in some way modify stream channel cross section. Section 404 authorizes the U.S. Army Corps of Engineers to administer a program of permitting the discharge of dredge and fill material to the nation's waterways. Permits may not be issued until the State has issued, pursuant to Clean Water Act Section 401 a statement certifying the activity is not likely to violate State Water Quality Standards. The Kansas Environmental Coordination Act requires the Kansas Department of Agriculture – Division of Water Resources seeks comments from Kansas' environmental agencies before issuing permits to modify stream channel cross sections. The Watershed Management Section reviews Section 404 permits and prepare Section 401 water quality certifications intended to assure that the permitted activity will not result in a violation of Kansas water quality standards. A similar water quality certification is prepared under authority of Kansas water quality standards for state permitted stream channel modification activities

Clean Water Act Section 404 and Kansas Environmental Coordination Act addresses activities that in some way modify a stream channel cross section. Section 404 authorizes the U.S. Army Corps of Engineers to administer a program of permitting the discharge of dredge and fill material to the nation's waterways. Permits may not be issued until the State has issued, pursuant to Clean Water Act Section 401, a statement certifying the activity is not likely to violate State Water Quality Standards.

The Watershed Management Section reviews Section 404 permits and prepares conditional Section 401 water quality certifications intended to assure that the permitted activity will not result in a violation of Kansas surface water quality standards. A similar water quality certification is prepared pursuant the Kansas water quality standards to K.A.R. 28-16-28 etc. seq., for KDA-DWR permitted

stream channel modification and floodplain fill activities. [Pursuant to KSA 82a-326(a) (4) and (b) of the Kansas Environmental Coordination Act required by the Kansas Department of Agriculture – Division of Water Resources]. Activities considered by the USACE either by definition or at the discretion of the regulatory project manager, are generally a threshold of one tenth to one half acre may only require a Section 404 Nation Wide Permit (NWP). Meeting this threshold and other criteria may result in the project to a minimum impact to the waters of the U.S. The NWPs are issued with regional conditions established by a state/federal agency work group. They do not require mitigation for loss of resources. These projects do not go on public notice, however, some have an agency pre-construction notification (i.e. stream bank stabilization, etc.) requirement. Federal law requires a review of existing permits and reauthorization (if desired) every five years. Approximately 49 different nationwide permits were issued by the USACE for different activities pertaining to Kansas water resources and conditions. In the reporting period there were 471 NWPs issued by the USACE, and 25 water quality certifications for individual permits resulting in a total of 491 water quality certifications issued by KDHE for the reporting period. See: [http://www.nwk.usace.army.mil/regulatory/nwp\\_information/ks\\_nwp\\_401.pdf](http://www.nwk.usace.army.mil/regulatory/nwp_information/ks_nwp_401.pdf) for more information on Section 404 Nationwide Permits.

Finally, KDHE made efforts to educate and inform the agencies reviewing and commenting on the public notices issued by the USACE on the Kansas WRAPS process. The national effort by federal government to utilize a watershed approach in such things as permit conditions and mitigation complimented the State's efforts. The KDHE also participated in the discussion and drafting of guidance for mitigating streams and riparian areas in Kansas. It was approved by the Kansas Natural Resources Sub-cabinet, accepted by the USACE and has been initiated for use. Its purpose is to standardize protocol and assist 404 applicants in preparing mitigation plans early on in the process instead of at the end of their permit approval or project. This will provide them opportunities to plan their financial strategy and increase time for more use of effective mitigation and planning resources.

- ii. **Local Sanitary / Environmental Codes** Review local codes adopted under Kansas Local Environmental Protection program to assure consistency with minimum state requirements. Local codes establish administrative procedures and standards for on-site wastewater treatment systems, private drinking water supply protection, etc.

Activity Accomplishments: KDHE reviews and approves local codes adopted under Kansas Local Environmental Protection program to assure consistency with minimum state requirements. Local codes establish administrative procedures and standards for on-site wastewater treatment systems, private drinking water supply protection, etc. During the reporting period, KDHE Topeka Office staff: 1) provided technical assistance on local codes and state minimum standards upon request; 2) reviewed and commented on proposed revisions to eight local codes; and 3) approved revisions to two local codes. District Office Staff: 1) Provided technical assistance via telephone to approximately 386 customers and provided on-site technical assistance approximately 7 times; 2) participated in 9 code reviews and 3 code meetings; 3) Addressed 42 complaints and performed 0 program audits.

**b. Technical Assistance, nonpoint source pollution control technical assistance is provided through KDHE personnel as well as through cooperative project agreements with Kansas' colleges and universities and non-governmental organizations.**

Activity Accomplishments: During this reporting period the Watershed Management Section referred approximately 403 individuals to state, federal or local government institutions, organizations, businesses or industrial establishments involved in partnerships with KDHE. Examples of partners to which referrals were made include: Other sections within KDHE's Bureau of Water, County LEPP Programs, The Kansas Geological Survey, The Corp of Engineers, Kansas Association for Conservation and Environmental Education, The Hillsdale Water Quality Project, Kansas Rural Water Association, KCC, KELP, The Groundwater Foundation, EPA, KSU Extension, USDA, The Kansas Water Office, The Kansas Department of Agriculture, E.A.R.T.H., and other 319 project managers.

**Significant Technical Assistance Activities and Events**

<u>Date</u>	<u>Recipient</u>	<u>Description</u>
7/6/2007	ONEOK-	Pipeline repair and construction 401 wqc.
7/9/2007	WRAPS Conference Planning Committee	Plan and organize the annual WRAPS Conference
7/10/2007	KAWS	KAWS I-70 Chapter Meeting
	Citizens of Six Mile / Lynn Creek Watersheds and Shawnee	
7/12/2007	County Conservation District	Six Mile / Lynn Creek WRAPS Project Meeting
7/12/2007	Shawnee County CD- 6 mile WRAPS	Explained KDHE WRAPS workgroup and Concept
7/13/2007	Frankln County CD- Marias des Cygnes (Livestock)	Explained KDHE WRAPS workgroup and Concept, evaluated 319 proposals
7/17/2007	Marion Surface Water Advisory Board Meeting	Project Planning Assistance
7/18/2007	Middle Kansas SLT	Project Planning Assistance
7/19/2007	Kaw Valley Heritage Alliance	Upper Wakarusa Project Planning
7/19/2007	Melvorn WRAPS SLT	Project Planning Assistance
7/24/2007	Marion WRAPS Watershed Tour and Meeting	Project Planning Assistance
7/24/2007	WRAPS Work Group Meeting	Administrative oversight committee regarding the WRAPS program.
7/30/2007	Marais des Cygnes WRAPS	Project Planning Assistance
7/30/2007	MDC Basin Meeting	Project Planning Assistance
8/1/2007	Sandra Erlick -Ercon	Pipeline repair and construction 401 wqc. near creek
8/2/2007	Marion WRAPS SLT	Project Planning Assistance
8/7/2007	Lower Ark City of Wichita / Sg County Project Meeting	Project Planning Assistance
8/7/2007	Middle Kansas SLT	Project Planning Assistance
8/8/2007	KACEE	Statewide Water Celebration Project Meeting
8/8/2007	Linda Lesclair- resident	building a septic system in a flood plain question
8/9/2007	Spring River	Project Planning Assistance
8/10/2007	David Seddick- ATC Associates	Kansas Wetland laws, water quality standards, 401

<u>Date</u>	<u>Recipient</u>	<u>Description</u>
8/14/2007	KDOT and others long range planning for projects	development and construction
8/14/2007	Ms. Folsom	Onsite wastewater repair- funding source
8/15/2007	Mid America Ag network- 319	Met with their new project manager to get them up to speed
8/15/2007	Mr. Hatesol	Defintion of failing septic system and B 4-2
8/16/2007	Kaw Valley Heritage Alliance	Upper Wakarusa Project Planning
8/22/2007	Environment Committee for Outreach	KDHE committee to organize and coordinate I & E / Outreach activities for the Division of Environment
8/24/2007	Louis Merlin- EDAW consultants	Asked about buffers and stream setbacks in Kansas
9/5/2007	Christie Kanbull- in Lebo	Interpretation of Bulletin 4-2 (KS ONSWW Standards)
9/5/2007	Hillsdale Project Mgmt	Project Planning Assistance
9/6/2007	Upper Wakarusa SLT	New Sponsoring Organization Presentations
9/10/2007	EPA Targeted Watershed Grant	Project Planning Assistance
9/11/2007	Coffey County CD - Eagle Creek WRAPS	Help them evaluate project proposals for cost share and next year's funding
9/12/2007	Project Officers	Review of SFY 08 Applications
9/12/2007	WMS	SFY08 WRAPS Application Review
9/18/2007	MARC	Project Planning Assistance
9/20/2007	Pomona SLT	Project Planning Assistance
9/26/2007	Aligning State Land Use and Water Protection Programs	Follow up to grant application
9/27/2007	EPA Targeted Watershed Grant	Project Planning Assistance
9/27/2007	Spring River	Project Planning Assistance
9/27/2007	State Conservation Commission	Buffer Coordinator Project Meeting
9/28/2007	KSU	KLR Project Meeting
10/2/2007	Mike Christian- Blue River Watershed Specialist	cattle wintering in riparian area, practices & funding
10/2/2007	Neosho Headwaters WRAPS PMT	Project Planning Assistance
10/3/2007	KDHE	DOE Biennial Report subcommittee
10/8/2007	State Conservation Commission	CWN Program and County Conservation Districts
10/11/2007	WMS	WRAPS Conference Planning Committee Meeting
10/11/2007	WRAPS Conference Planning Committee	Plan and organize the annual WRAPS Conference
10/12/2007	MdC Livestock WRAPS	Project Planning Assistance
10/16/2007	Kurt Cammon- consultant	Water quality protection plan for pipeline const. & repair
10/17/2007	Stream Mitigation Task Force	Assure consistency with KS NPS management plan practices and principles
10/18/2007	Banner Creek WRAPS	Project Planning Assistance
10/18/2007	Melvern WRAPS SLT	Project Planning Assistance
10/22/2007	Marion WRAPS	Modeling planning assistance
10/23/2007	Marion Surface Water Advisory Board Meeting	Project Planning Assistance
10/23/2007	WRAPS Work Group Meeting	Administrative oversight committee regarding the WRAPS program.
10/24/2007	City of Eureka	Source Water Assessment and planning for protection plan
10/24/2007	Middle Kansas SLT	Project Planning Assistance
10/25/2007	EPA Targeted Watershed Grant	Project Planning Assistance

<u>Date</u>	<u>Recipient</u>	<u>Description</u>
10/26/2007	Sarah Larison- SEEKAN RC&D	Agri-tours, ideas for water quality, funding sources.
11/2/2007	Bridgette Miranda- BP Windsources	401 and water quality protection planning for windfarms
11/13/2007	Pomona SLT	Project Planning Assistance
11/14/2007	Neosho SLT	Project Planning Assistance
11/15/2007	WMS	WRAPS Conference Planning Committee Meeting
11/18/2007	ASWIPCA- for Raponos vs. USCOE court case	Kansas Wetland laws, water quality standards, 401
11/27/2007	Norm Bowers- County Stormwater Engineer	Special aquatic life use waters and NWP 401
11/30/2007	KACEE	WRAPS Capacity Building Project Meeting
12/13/2007	Grazing land water quality protection - Lynn Creek	Help with developing a project for WRAPS with KSU
12/18/2007	Max Biney Wildcat Construction	401 wq certification and water quality protection planning
1/4/2008	Darrel Meirhoff- Flinthills LEPP	Interpretation of Bulletin 4-2 (KS ONSWW Standards)
1/10/2008	WRAPS Conference Planning Committee	Plan and organize the annual WRAPS Conference
1/11/2008	Bill Drake- consultant	construction stormwater practices for less than an acre
1/11/2008	Bill Drake- consultant	construction stormwater practices for less than an acre
1/15/2008	Lower Kansas SLT	Project Planning Assistance
1/17/2008	Hillsdale WRAPS SLT	Project Planning Assistance
1/17/2008	Middle Kansas SLT	Project Planning Assistance
1/18/2008	KSU	KDHE / KSU Project Team meeting
1/23/2008	Delaware WRAPS	Project Planning Assistance
1/24/2008	Upper Wakarusa WRAPS	Project Planning Assistance
1/29/2008	WRAPS Work Group Meeting	Administrative oversight committee regarding the WRAPS program.
2/4/2008	Waconda SLT	Project Planning Assistance
2/5/2008	Open Records Act Request for Law Office and KDHE	ORAR for all records on 404 related activities in the Verdegris River.
2/5/2008	Open Records Act Request for Law Office and KDHE	ORAR for all records pertaining to any 404 activities in the Verdegris River.
2/5/2008	Tuttle SLT	Project Planning Assistance
2/6/2008	Marmaton	Project Planning Assistance
2/6/2008	Pomona	Project Planning Assistance
2/7/2008	KSU	Pride Project Meeting
2/8/2008	Cedar Bluff Project Mgmt Team	Project Planning Assistance
2/8/2008	Flint Hills Project Mgmt	Project Planning Assistance
2/8/2008	Hillsdale Project Mgmt	Project Planning Assistance
2/11/2008	Cheney SLT	Project Planning Assistance
2/12/2008	KSU	WaterLINK Project Meeting
2/13/2008	Lower Lower Smoky Project Mgmt	Project Planning Assistance
2/14/2008	Delaware WRAPS	Project Planning Assistance
2/14/2008	Eagle Creek WRAPS	Project Planning Assistance
2/19/2008	WRAPS Outreach Committee	Project Planning Assistance
2/20/2008	WMS	WRAPS Conference Planning Committee Meeting

<u>Date</u>	<u>Recipient</u>	<u>Description</u>
3/3/2008	Bobbi Strait- Marion County Sanitarian	resident wanted us to override the local decision to not allow a variance.
3/3/2008	Bobbi Strait- Marion County Sanitarian	resident was asking us to override the local decision to not allow a variance.
3/5/2008	Twin Lakes SLT	Project Planning Assistance
3/6/2008	MARC	Project Planning Assistance
3/11/2008	2008/2009 NRWA/USDA SWP Operating Plan Meeting	Project Review and Planning Assistance
3/11/2008	WMS	WRAPS Conference Planning Committee Meeting
3/12/2008	Marmaton WRAPS	Project Planning Assistance
3/17/2008	WRAPS Outreach Committee	Project Planning Assistance
3/18/2008	Marais des Cygnes Livestock WRAPS	Project Planning Assistance
3/24/2008	Randy Root, Burns and McDonald	recommended practices and discussed 401 expectations
3/24/2008	Randy Root, Burns and McDonald	recommended practices and discussed 401 expectations
3/24/2008	WRAPS Outreach Committee	Project Planning Assistance
4/6/2008	EPA Targeted Watershed Grant	Project Planning Assistance
4/9/2008	WMS	WRAPS Conference Planning Committee Meeting
4/21/2008	Lower Kansas SLT	Project Planning Assistance
4/22/2008	EPA Targeted Watershed Grant	Project Planning Assistance
4/24/2008	EPA Targeted Watershed Grant	SLT meeting - Project Planning Assistance
4/24/2008	Grouse Silver Creek WRAPS	Tour and Project planning and assistance
4/24/2008	Oologah Watershed COE meeting	Discussion of COE watershed plan and next steps
4/29/2008	Middle Kansas SLT	Project Planning Assistance
5/1/2008	Delaware WRAPS	Project Planning Assistance
5/21/2008	KACEE	Green Schools committee Meeting
5/22/2008	EPA Targeted Watershed Grant	SLT meeting - Project Planning Assistance
5/22/2008	MARC	Project Planning Assistance
6/5/2008	Upper Wakarusa WRAPS	Project Planning Assistance
6/6/2008	KSU	KDHE / KSU Project Team meeting
6/11/2008	Marais des Cygnes Livestock WRAPS	Project Planning Assistance
6/11/2008	Oologah Watershed COE meeting	Discussion of COE watershed plan
6/12/2008	WRAPS Administrative SubCommittee	Planning for grant applications
6/24/2008	KVHA	Project Planning Assistance
6/25/2008	EPA Targeted Watershed Grant	BMP Auction planning meeting
6/26/2008	EPA Targeted Watershed Grant	Project Planning Assistance
6/26/2008	WMS	WRAPS Conference Planning Committee Meeting
6/30/2008	EPA Targeted Watershed Grant	Modeling planning assistance
27/2007	Neosho Headwaters WRAPS	Project Planning Assistance

**Please see section 10 for staff time and work efforts.**

**i. Best Management Practices Catalog - maintain**

Activity Accomplishments: No Activity

**c. Financial Assistance**

**i. Section 319 Grant Supported projects**

Activity Accomplishments: The table below summarizes the status and accomplishments of all grants funded from C9007405 14

GRTS Project #	State Project #	Title	Status	Project Description
01	2007-0002	Mid America Agriculture Network Radio Programming Coordination for Water Quality- Part 3	on schedule	Communicating the "clean water message" through radio advertising and avaiing themselves to collaborating with KDHE to participate in farmshows for distributing water quality aptitude surveys are the main focus. KDHE is awaiting submittal of their project completion report
02	2007-0001	Kansas Agriculture Network Radio Programming for Water Quality - Part 3	Accepted	Accepted by EPA 2-12-09
03	2007-0012	KS WRAPS Cheney FFY07 Implementation	on schedule	Converting CRP to profitable, yet sustainable and water quality friendly land use is the focus. Grazing practices and no-till have been implemented on several 100 acres.
05	2007-0014	KS WRAPS - Delaware WRAPS Implementation	on schedule	The Delaware River WRAPS completed a streambank assessment in summer '09 and is now utilizing ARRA funding along with project implementation dollars to install streambank restoration BMPs.
06	2007-0023	Kansas Rural Center: River Friendly Farms- State WRAPS Focus-Part 4	on schedule	Using the River Friendly Farms Assessment to identify producers and landowners to implement BMPs has been the focus. The transition from statewide financial assistance and also more focus on WRAPS support is this projects expectations . They are receiving funds as a WRAPS service provider for the next grant round.
07	2007-0024	KS WRAPS Forestry to Protect Water Quality Technical Assistance (SFY 08)	on schedule	This project isl funding riparian forestry services to WRAPS SLTs.
08	2007-0025	KS WRAPS - KSU SFY 08 Technical Assistance Services (08 SWP / 07 319)	on schedule	Two-part project funded out of FFY 07 and FFY 08. Objectives include funding the watershed specialists to serve high priority watersheds focused on cropland and livestock technical assistance; Improving the conditions on grasslands and protect water quality by providing Rangeland and Natural Area Services; Monitoring and evaluating water quality in relation to WRAPS activities; Providing technical analysis to WRAPS groups including watershed modeling, watershed economic analysis, and other technical analysis.

GRTS Project #	State Project #	Title	Status	Project Description
10	2007-0028	KS WRAPS Cottonwood Development, Assessment & Planning / Neosho Headwaters Assessment and Planning	on schedule	This project is on schedule. A SWAT model including groundtruthing as been completed. The first SLT meetings were held in August of 2009. A strong Project Management Team is established.
11	2007-0031	KS WRAPS - Upper Verdigris / Toronto Lake WRAPS Planning	on schedule	This project is on schedule. A nine element plan will be completed by the end of 2009. The project has a strong SLT and they are using information from the SWAT model to target.
12	2007-0032	KS WRAPS - Marion, Melvern, Twin Lakes, Upper Fall River, Clarks Creek FFY 07	on schedule	This project is on schedule. Marion, Melvern, Twin Lakes and Upper Fall River are all implementing their watershed plans. Clarks Creek is in the planning stage and will have a nine element plan by the end of 2009.
13	2007-0033	KS WRAPS - Lower/Middle Kansas and Upper Wakarusa (SWP 08 / FFY 07)	on schedule	3 WRAPS projects combined, all are currently in implementation. Lower and Middle Kansas have implemented several BMPs focusing on e.coli, while Upper Wakarusa has implemented several retention wetland projects.
14	2007-0034	Melvorn Trail Curriculum Development (CWN)	on schedule	This grant is almost complete. The project manager is gathering the final data and will be submitting a final report soon. Accomplishments of the project include training, activity supplies, and continuing credits to area teachers so they will have the capability to hold stream workshops, etc. on the newly developed melvern trail.
15	2007-0029	KS WRAPS: Kanopolis Reservoir, Big Creek and Middle Smoky Hill River Watersheds	on schedule	This grant continues to provide I&E and assistance to landowners within the watershed for BMP implementation. Close monitoring of water quality conditions through watershed-wide sampling also continues.
17	2007-0003	KS WRAPS: Waconda Assessment	on schedule	Waconda WRAPS is currently working with KAWS to develop a GIS-based assessment of the watershed. This assessment will take place for either a targeted subwatershed within the basin or targeted stream segments.

GRTS Project #	State Project #	Title	Status	Project Description
18	2007-0005	KS WRAPS Marmaton Watershed Assessment	on schedule	Marmaton WRAPS is currently working on assessment activities within the watershed. Water quality monitoring is currently underway, and Marmaton WRAPS is currently working with KAWS to determine an appropriate assessment activity for the watershed.
19	2007-0022	KS WRAPS: Lower and Upper Prairie Dog Creek WRAPS	on schedule	This grant is providing I&E activities as well as demonstrations projects within the Lower and Upper Prairie Dog Creek watershed. A solar pump demonstration is currently being planned, and other demonstration activities are being discussed
20	2007-0035	Water Quality Buffer Partnership - SFY 09 WRAPS Focus (FFY 07)	on schedule	Project is aimed at funding 46 Buffer Coordinators (primarily part time) for half a year. Coordinators are responsible for educating landowners on the CRP and assist with program sign up.
21	2007-0037	KS WRAPS Grouse - Silver Creek Watershed District # 92 Implementation	on schedule	Development of a true SLT and installing BMPs such as sediment pond for preventing erosion caused by oil brine vegetation kill to enter a stream. Awaiting project completion report submittal.
22	2007-0039	KS WRAPS: Upper Arkansas Planning	on schedule	Preparing a "9 element watershed plan" for the 3 hucs is the focus of the project. KDHE is in the process of reviewing them.
23	2007-0040	KS WRAPS: Lower Smoky Hill from Kanopolis Dam to Solomon Assessment and Planning	on schedule	This project is currently working on development of a 9 Element watershed plan. The Watershed Institute will also be assessing cropland, rangeland, and stream conditions within the watershed
24	2007-0041	KS WRAPS: Kanopolis Reservoir, Ellsworth CCD Implementation Assistance	on schedule	This project provides cost share funds within Trego, Ellis, Russell, and Ellsworth counties to assist landowners with terrace rebuilding.
25	2007-0042	KS WRAPS Little Ark - Kansas State University	on schedule	Information and education for upcoming focus of sediment and nutrients has accompanied atrazine BMPs being applied to 23,663.2 acres and \$83,425.21 was committed to farmers.
26	2007-0043	Marais des Cygnes Basin WRAPS Implementation Livestock	on schedule	This project provides cost share funds within the Marais des Cygnes River Basin to assist producers with livestock-related BMPs.
27	2007-0006	KS WRAPS: Cedar Bluff WRAPS Assessment	on schedule	Cedar Bluff WRAPS is working with KAWS to do a GIS assessment on a priority subwatershed within the project area. Development of a 9 Element watershed plan is a focus of the SLT as well

GRTS Project #	State Project #	Title	Status	Project Description
28	2007-0015	KS WRAPS - Missouri River WRAPS Assessment and Planning	on schedule	For this grant, KAWS did a GIS assessment of the Wolf River watershed. Missouri WRAPS is currently working on completion of a 9 Element watershed plan.
29	2007-0044	KS WRAPS Neosho Basin Planning	on schedule	SWAT Modeling from a previous grant has led to a successful planning project. This project is currently writing a plan due to be submitted to KDHE by December, 2009.
30	2007-0036	University of Kansas Rain Garden Demonstration Project	on schedule	Installed 5500 square foot rain garden in highly visible area of campus. Installation is complete and RG being evaluated by landscape architect students.
31	2007-0004	KS WRAPS Pomona Reservoir Watershed Implementation	on schedule	Pomona WRAPS utilizes BMP auctions in an attempt to place the most cost effective BMPs on the ground in targeted areas of the watershed. I&E activities also take place to educate landowners on no-till, fertilizer application, pollution control practices, etc.
32	2007-0013	KS WRAPS: Lower Smoky Hill from Solomon to Junction City Assessment	on schedule	The SLT for this project is in the process of determining primary needs of the watershed. Having worked closely with KDHE Watershed Planning (TMDL) section, streambank erosion and sedimentation are the likely focus of this group.
33	2007-0045	PRIDE Initiated Community Water Quality Action Plans Part 3	on schedule	PRIDE has implemented the development of 2 healthy communities in Rossville, KS and Melvern, KS and are currently developing informational materials.
34	2007-0046	KS WRAPS: Milford WRAPS Kansas Crossroads RC&D BMP Assistance	on schedule	This project is currently assisting the Milford WRAPS process in planning and meeting efforts.
35	2007-0047	KS WRAPS - Kansas City MARC WRAPS Development Support Year 2 (FFY 07)	on schedule	Project has been participating in public awareness events, manning WRAPS displays, attending river/stream clean ups, and ecofriendly events to support the WRAPS effort in the Kansas City area.
36	2007-0016	KS WRAPS Eagle Creek WRAPS Implementation	on schedule	BMP auctions for sediment and nutrients are the focus of the project. They are also revising their watershed plan to meet the EPA 9 elements. Some funds are being used to support ESU in monitoring a stretch of stream where BMPs have been installed.
37	2007-0048	Kansas Environmental Leadership Program Redesign (FFY 2007)	on schedule	This project is currently on task reviewing and redesigning the KERP curriculum.

**i. Kansas WRAPS Fund**

Activity Accomplishments: Kansas WRAPS Fund- The term “Kansas WRAPS Fund” refers to the combination of State Water Plan Funds and Section 319 Grant Funds committed to the support of the Kansas WRAPS initiative. The fund was established July 1, 2006 with an \$800,000 appropriation of Kansas Water Plan funds by the Kansas Legislature. KDHE committed \$1.2 million Section 319 grant funds to the fund. In succeeding state fiscal years, state-funding requests will be based on the work products of individual WRAPS projects. At this point the majority of Section 319 grant funds (base and incremental) are allocated the KS – WRAPS process.

**iii. The Kansas State Conservation Commission administers the Kansas Nonpoint Source Pollution Control Fund. It is funded through the Kansas Water Plan Fund. The fund is used to implement nonpoint source pollution controls identified in county nonpoint source pollution management plans.**

Activity Accomplishments:

State Fiscal Year	Contract Count	Practice Count	Actual Cost	Amount Requested
2008	1302	1654	\$5,380,724	\$2,769,486

**v. Other federal funds – USDA NRCS and FSA have significant financial resources that support implementation of measures that protect water quality. While there are statutory limitations on targeting to priority watersheds, we actively encourage individuals with water quality protection needs and interests to pursue funding through these agencies.**

Activity Accomplishments: Approximately 119 referrals were made to other agencies with significant financial resources. Such agencies included EPA, SCC, KACEE, and NRCS.

**I. USDA – NRCS State Technical Committee, KDHE Watershed Management Section is a member of the committee and uses this a forum to encourage use of EQIP funds to address Kansas’ priority water quality needs.**

Activity Accomplishments: No Activity.

**d. Information & Education: The purpose of Information and Education is to achieve water quality protection and restoration by changing behavior of individuals and organizations. Information and education is integrated through out the nonpoint source pollution control program and addresses the broad spectrum of children, the general public and decision makers.**

**i. Water Festivals Kansas’ goal is that each of its 105 counties has access to an annual water festivals.**

Activity Accomplishments: Please refer to section 8a.

- ii. **Clean Water Neighbor Pledges** are a simple means of helping individuals recognize that nonpoint source pollution problems begin with the decisions that individuals make. The Kansas Clean Water Pledge provides individuals the opportunity to make a commitment to protect water quality. During public meetings, workshops, water festivals individuals are invited to take the pledge. Those that accept the offer receive a certificate signed by the Secretary of the Kansas Department of Health commemorating the pledge. The address, phone number and e-mail address of individuals taking the pledge is obtained and entered into a database. Persons taking the pledge periodically receive information about how they can protect water quality.

Activity Accomplishments: Please refer to section 8b.

- iii. **Kansas Environmental Leadership (KELP)** is a cooperative effort of KDHE and Kansas State University. KELP prepares individuals to practice collaborative leadership to bring about positive environmental change for the future of Kansas. The objective of KELP is to equip individuals interested in water resources with the basic principles of leadership and water resource / water quality management. Each year, a class of 20 to 26 individuals is selected for participation in KELP. The class meets in five sessions of two and half days. Session locations are in different areas of the state to provide exposure to the diversity of Kansas water resource issues and the leadership responses that emerge from this diversity. More detailed information is available at <http://www.oznet.ksu.edu/kelp/>

Activity Accomplishments: Please refer to section 8c.

- iv. **Nonpoint Source Advisory Committee** is an information and education activity and provides an opportunity for Watershed Management Section to inform individuals interested in nonpoint source issues of programs, activities and opportunities as well as feedback on the effectiveness of nonpoint source activities and strategies.

Activity Accomplishments: Please refer to section 3.

- v. **Service Learning** is a cooperative effort of KDHE and Kansas State University to offer college students the opportunity to participate in real world water quality protection and restoration projects. Communities submit project ideas to the Service Learning Coordinator. Instructors and students are recruited and assigned to the project. Students earn college class credit while working on a practical problem of importance to a community. The project was initiated with FFY Section 319 grant funding.

Activity Accomplishments: Please refer to section 8c.

e. **Training** Successful implementation of nonpoint source pollution control measures required a workforce trained in the basic principles of water quality restoration and protection, watershed management, project management, nonpoint source pollution control Training is provided to KDHE staff as well as other agencies and NGO's.

i. **Watershed Coordinator Training** Experience has shown that successful watershed projects require a watershed coordinator. To date most of the watershed coordinators have been self trained on the job. As watersheds projects become more frequent and common and performance reporting (especially load reduction data) becomes more demanding more formal coordinator training will be needed. Watershed Management Section will initiate a formal coordinator-training curriculum.

Activity Accomplishment: During this reporting period there were two WRAPS capacity Building Workshops. The first workshop was held on December 17, 2008 in McPherson, KS. Speakers included Katie Miller, Peggy Blackman, John George, and Gary Satter, Innovative Ideas from the Field; Constance Buckner, Funding Sources; Jeff Gross, Don Jones, and Frank Austenfeld, Updates from Funding Sources for WARPS Projects; and Funding Source Roundtables. The second meeting was held on May 7, 2009 at Rock Springs Ranch in Junction city, KS. Speakers include Roberta Spenser, Lisa French, Tom Huntzinger, Keri Harris, Dana Charles, and Katie Miller Information and Education Ideas and Strategies from the Field; Share Fair; Dr. Steven Davies and Shari Wilson, Partnering with Local Schools; and Sherry Davis, Growing Community Partnerships.

ii. **Participate in annual GRTS User's Training**

Activity Accomplishments: Several GRTS/OBI Webcasts were attended by the Watershed Management Section staff. Please see the table in the following section.

iii. **Watershed Management Section staff attend selected instate and out of state conferences and seminars.**

Activity Accomplishments:

**Staff Training and Development Activities and Events**

Date	Description
7/15/2008	Kanopolis Lake watershed- Stream Restoration
7/31-8/1/08	Stream Assessment Workshop V, Lyon County
8/7/2008	Mc Pherson County-Little Ark WRAPS Tour
8/8/2008	Curtis Building- Azure Room- KSU's Watershed Manager Demo
8/13-8/15/08	KELP
8/18/2008	Curtis Building at my desk- EPA's GRTS INFORMATION WEBINAR
8/19/2008	Marais des Cygnes Riparian Forestry Roundtable

<u>Date</u>	<u>Description</u>
8/27/2008	Range and Pond Management Workshop
9/16/2008	Professional Conduct Training
9/18/2008	Memorial Hall, KDHE mandatory information security
9/25/2008	Stream assessment training- Ellsworth County with the Kansas Riparian Working Group
10/7/08 - 10/08/08	EPA Heartland Training
10/7/2008	EPA Webcast-Moving Forward on Gulf Hypoxia
10/8/2008	Grouse-Silver Ck WSD #92- WRAPS-outreach meeting, there
10/15-10/18/08	NAAEE
10/29-10/31/08	KELP
11/6/2008	Little Ark WRAPS- WRAPS-outreach meeting, there
11/13/2008	Marais des Cygnes TWG Forestry Field Day
11/19/2008	KU GIS Day
11/20/2008	Outlook training
12/2/2008	USDA Forest Service and the Center for Watershed Protection - Watershed Forestry Resource Guide
12/3/2008	Using Rain Gardens to Reduce Runoff -- Slow it down, spread it out, soak it in!
12/17/2008	WRAPS Capacity Building
2/4/2009	Environmental Engineering Conference
2/11/2009	WRAPS Regional Watershed Seminar
2/25/2009	Oracle Business Intelligence Training - Webinar
3/11/2009	Kansas Source Water Protection Workshop
3/26/2009	Water and the Future of Kansas Conference
4/2/2009	KSU Leadership Seminar
4/7 - 4/10/2009	Stream Investigation, Stabilization, & Design Workshop
4/8/2009	Watershed Seminar, Admire
5/7/2009	WRAPS Capacity Building Forum
5/19/2009	GRTS OBI Training - Webcast
5/20/2009	EPA Targeted Watershed Grant Environmental Leadership Program Workshop
5/28/2009	KS Stream mitigation assessment
6/3-4/09	EPA Region VII - 319 grant management and watershed plan development
6/10-11/09	Heartland Regional WQ Project- Modeling watersheds
6/22-25/09	SORA Conference - Atlanta, GA
6/30/2009	No- Till Workshop - Holton

#### iv. Staff Information and Education Presentations

<u>Date</u>	<u>Place</u>	<u>Title</u>	<u># Attending</u>
7/9/2008	Topeka, KS	Watershed Field Coordinators Meeting	16
7/24/2008	Shawnee Mission	Shawnee Mission Waterfestival	300
8/1/2008	Capitol Plaza Hotel; Topeka, KS	"The Significant Impact of Low Impact Development" presentation to Presentation American Council of Engineering Companies	30
8/2/2008	Lenexa, KS	Water Festival	250
8/16/2008	Olathe Aquafest	Olathe, KS	600
8/27/2008	Kansas City, KS	Delaware Ridge Elementary	100
9/6-9/9/08	Hutchinson, KS	State Fair, KDHE Booth	4000
9/10/2008	Topeka, KS	Watershed Field Coordinators Meeting	5
9/18/2008	Topeka, KS	Topeka Water Festival	1100
9/19/2008	Bonner Springs, KS	A Day at the Lake in Bonner Springs	300
9/24/2008	Council Grove, KS	Twin Lakes Water Festival	1000
9/25/2008	Ozawkie, KS	John Dewey Learning Academy	300
10/3/2008	Salina, KS	Safari Ed-Venture Day	400
10/14/2008	ElDorado, KS	Walnut River Water Festival	500
10/21/2008	McPherson, KS	McPherson Children's Water Festival	600
12/9/2008	Topeka, KS	Watershed Field Coordinators Meeting	12
12/17/2008	Salina, KS	"Wildlife & Watersheds: Creating Mutualistic Symbiosis between KDWP and WRAPS" presentation to KDWP staff	20
2/11/2009	Holiday Inn, Lawrence	Kansas Section 401 and water protection planning	15
3/4/2009	McPherson, KS	"Alternative Funding Sources" presentation to WRAPS coordinators, partners, and service providers	30
3/18/2009	My office	Stormwater BMPs and 401 certification	1
4/17/2009	Kansas City, KS	Wyandotte County Water Rally	600
4/20/2009	Lawrence, KS	Douglas County EARTH	300
4/21/2009	Leavenworth, KS	Leavenworth County EARTH	200
4/22/2009	Ottawa, KS	Franklin County EARTH	400
4/28/2009	Wichita, KS	Sedgwick County EARTH	400
5/14/2009	Lawrence, KS	Northeast Kansas Sanitarians Meeting	35
6/10/2009	Nebraska City, NE	Utilization of EPA Region 5 Load Reduction Model for Calculation of Load Reduction Estimates	15
6/25/2009	Olsson and Associates-Manhattan	Kansas Section 401 and water protection planning	35
1/21-22/09	Topeka, KS	Watershed Field Coordinators Meeting	18
2/13-14/2009	Expo Center, Topeka	Display booth for the Topeka (Lawn and) Garden Show- Middle KS WRAPS	700
2/17-18/09	Hutchinson, KS	Kansas Small Flows Conference	65

- f. **Technology Transfer** New and improved nonpoint source pollution control technology is developed and perfected through demonstration projects the available of this technology must be transferred to users. In addition to quarterly watershed management seminars, special technology transfer seminars are scheduled as necessary. Watershed Management Seminars Concurrently with quarterly NPS Advisory Committee meetings, KDHE Watershed Management Section hosts a watershed management seminar to present information on results of nonpoint source pollution control projects that have received financial assistance through the Watershed Management Section.

Activity Accomplishments:

Significant Technology Transfer Activities and Events:

<u>Date</u>	<u>Description</u>
1/10/2007	Cheney Lake project update with KSU activities
8/9/2007	Watershed Field Coordinator Meeting
8/9/2007	Watershed Field Coordinators Meeting
9/17/2007	USCOE Regional coordination for AG 404 permits
10/10/2007	JO County Wetlands Mitigation Bank visit
12/19/2007	Field trip to Bedford Iowa for Dredging demos
1/8/2008	Model buffer ordinance discussion with Ms. Oswald
2/1/2008	Farm Profit Seminar - water quality protection on the farm- Olpe
2/6/2008	Stormwater BMPs webinar
3/25/2008	Farm Profit Seminar - water quality protection on the farm- Fairview
4/26/2008	John redmond feasibility study (USCOE, KWO, KDHE0
5/14/2008	Neosho River Log jam- solutions
5/26/2008	BMP Auction for Eagle Creek WRAPS
1/23-1/24/2008	Heartland Regional WQ meeting Nand P planning
4/7-4/11/2008	Wetland and Watersheds Conference
6/17-6/19/2008	Heartland Regional WQ meeting- project assessment

- g. **Demonstration Projects** Demonstration projects are cooperative projects receiving Section 319 grant funds for the purpose of testing and evaluating innovative nonpoint source pollution control technology, demonstrating watershed management practices, etc. The Watershed Management Section maintains a Project Roster of projects that includes planned, active and completed projects. The project roster is a critical element of the annual Section 319 work program

Activity Accomplishments:

Project Number	Project Name	BMP Implemented	Number Installed	Unit of Measure
KS WRAPS Pomona Reservoir Watershed Implementation	2007-0004	Terrace	3,750	Linear Foot
		Terrace	4,830	Linear Foot
		Access Road	20	Acre
		Terrace	1,184	Linear Foot
		Terrace	75	Acre
		Critical area Planting	10	Acre
		Critical area Planting	15	Acre
		Critical area Planting	2	Acre
		Terrace	14	Acre
		Terrace	54	Acre
		Terrace	8	Acre
		Terrace	40	Acre
		Dike	9	Acre
		Terrace	12	Acre
KS WRAPS Cheney FFY07 Implementation	2007-0012	Pumping Plant - Water Control	1	Each
		Grassed Waterway	1	Acre
		Terrace	3,237	Linear Foot
KS WRAPS Forestry to Protect Water Quality Technical Assistance (SFY 08)	2007-0024	Riparian Forest Improvement	3	Acre
		Forest - Stand Improvement	19	Acre
		Tree/Shrub Establishment	2	Acre
		Forest - Site Preparation	2	Acre
		Forest - Stand Improvement	24	Acre
		Tree/Shrub Establishment	2	Acre
		Riparian Forest Improvement	57	Acre
		Forest - Stand Improvement	10	Acre
		Forest - Site Preparation	2	Acre
		Forest - Stand Improvement	17	Acre
		Tree/Shrub Establishment	2	Acre
		Tree/Shrub Establishment	1	Acre
		Forest - Stand Improvement	42	Acre
		Forest - Stand Improvement	37	Acre
		Riparian Forest Improvement	57	Acre
Forest - Stand Improvement	2	Acre		

Project Number	Project Name	BMP Implemented	Number Installed	Unit of Measure
KS WRAPS Forestry to Protect Water Quality Technical Assistance (SFY 08)	2007-0024	Forest - Stand Improvement	15	Acre
		Forest - Stand Improvement	18	Acre
		Forest - Stand Improvement	1	Acre
		Forest - Stand Improvement	3	Acre
		Forest - Stand Improvement	23	Acre
		Forest - Stand Improvement	4	Acre
		Forest - Stand Improvement	2	Acre
		Forest - Stand Improvement	1	Acre
		Forest - Stand Improvement	3	Acre
		Tree/Shrub Establishment	2	Acre
		Forest - Stand Improvement	3	Acre
		Tree/Shrub Establishment	3	Acre
		Forest - Stand Improvement	13	Acre
		Forest - Stand Improvement	7	Acre
		Forest - Stand Improvement	48	Acre
		Tree/Shrub Establishment	1	Acre
		Forest - Stand Improvement	24	Acre
		Riparian Forest Buffer	1,035	Linear Foot
		Forest - Stand Improvement	8	Acre
		Tree/Shrub Establishment	1	Acre
Tree/Shrub Establishment	4	Acre		
KSU SFY 08 Technical Assistance Services (08 SWP/07 319)	2007-0025	Roof Runoff Management	0	Acre
		Watering Facility	160	Acre
		Filter Strip	75	Animal Units
		Watering Facility	50	Animal Units
		Filter Strip	50	Animal Units
		Filter Strip	75	Animal Units
		Livestock Waste Management System	30	Animal Units
		Livestock Waste Management System	35	Animal Units
		Livestock Waste Management System	15	Animal Units
		Livestock Waste Management System	50	Animal Units
		Filter Strip	15	Animal Units
		Livestock Waste Management System	30	Animal Units
		Filter Strip	30	Animal Units
		Filter Strip	270	Animal Units
		Livestock Waste Management System	15	Animal Units
		Atrazine Management Practices	1,283	Acre
		Atrazine Management Practices	3,318	Acre

Project Number	Project Name	BMP Implemented	Number Installed	Unit of Measure
KSU SFY 08 Technical Assistance Services (08 SWP/07 319)	2007-0025	Atrazine Management Practices	1,821	Acre
		Atrazine Management Practices	1,971	Acre
		Atrazine Management Practices	4,368	Acre
		Atrazine Management Practices	1,877	Acre
		Pond - Sealing or Lining		Acre
		Grasses/Legumes Rotation		Acre
		Watering Facility		Acre
		Watering Facility	30	Acre
		Pipeline	20	Acre
		Livestock Waste Storage Facility	5	Acre
		Watering Facility	5	Acre
		Watering Facility	5	Acre
		Riparian Buffer Protection Code/Ordinance	3	Acre
				Acre
		Filter Strip	1	Acre
		Watering Facility		Acre
		Fence	2	Acre
		other		Acre
		Watering Facility		Acre
		Pipeline		Acre
		Watering Facility		Acre
		Diversion	10	Acre
		Watering Facility	80	Acre
		Livestock WASTE MANAGEMENT System	149	
		Livestock WASTE MANAGEMENT System	89	Animal Units
		Livestock WASTE MANAGEMENT System	600	Animal Units
		Livestock WASTE MANAGEMENT System	50	Animal Units
		Livestock WASTE MANAGEMENT System	100	Animal Units
		Livestock WASTE MANAGEMENT System	150	Animal Units
		Livestock WASTE MANAGEMENT System	250	Animal Units
		Livestock WASTE MANAGEMENT System	250	Animal Units
		Livestock WASTE MANAGEMENT System	100	Animal Units
Livestock WASTE MANAGEMENT System	90	Animal Units		
Livestock WASTE MANAGEMENT System	800	Animal Units		
Livestock WASTE MANAGEMENT System	287	Animal Units		
Livestock WASTE MANAGEMENT System	200	Animal Units		

Project Number	Project Name	BMP Implemented	Number Installed	Unit of Measure
KSU SFY 08 Technical Assistance Services (08 SWP/07 319)	2007-0025	Livestock WASTE MANAGEMENT System	89	Animal Units
		Livestock WASTE MANAGEMENT System	280	Animal Units
		Livestock WASTE MANAGEMENT System	306	Animal Units
		Livestock WASTE MANAGEMENT System	50	Animal Units
		Livestock WASTE MANAGEMENT System	50	Animal Units
		Livestock WASTE MANAGEMENT System	75	Animal Units
		Livestock WASTE MANAGEMENT System	95	Animal Units
		Watering Facility	50	Animal Units
		Livestock Waste Management System	140	Animal Units
				Animal Units
		LIVESTOCK EXCLUSION	45	Animal Units
		Watering Facility	100	Acre
		Pumping Plant - Water Control	1	Acre
		Filter Strip	4	Acre
		Dam-Diversion	2	Acre
		Proper stocking rates	140	Acre
		Grass fertilization rates	140	Acre
		Pasture weed control including noxious weeds	140	Acre
		soil testing	140	Acre
		Grasses/Legumes Rotation	140	Acre
		pasture rotational grazing	140	Acre
		pasture rotational grazing	40	Acre
		Watering Facility	2	Acre
		Filter Strip	2	Acre
		Filter Strip	1	Acre
		Livestock WASTE MANAGEMENT System	15	Acre
KS WRAPS - Marais des Cygnes Basin WRAPS Implementation: Riparian Forestry Part 5	2007-0026	Riparian Forest Improvement	8	Acre
		Riparian Forest Improvement	9	Acre
		Tree/Shrub Establishment	1	Acre
		Riparian Forest Improvement	14	Acre
		Riparian Forest Improvement	11	Acre
		Riparian Forest Improvement	44	Acre
		Riparian Forest Improvement	9	Acre
		Riparian Forest Improvement	14	Acre
		Riparian Forest Improvement	30	Acre
		Wildlife - Upland Area Management	22	Acre
		Tree/Shrub Establishment	3	Acre
		Tree/Shrub Establishment	12	Acre
		Riparian Forest Improvement	29	Acre
		Range Planting	15	Acre
		Tree/Shrub Establishment	1	Acre
		Forest - Stand Improvement	16	Acre

Project Number	Project Name	BMP Implemented	Number Installed	Unit of Measure
KS WRAPS - Lower/Middle Kansas and Upper Wakarusa (SWP 08 / FFY 07)	2007-0033	Riparian Herbaceous Cover	2	Acre
		Stream Channel Stabilization	960	Linear Foot
Water Quality Buffer Partnership - SFY 09 WRAPS Focus (FFY 07)	2007-0035	Field Border	28	Acre
		Filter Strip	345	Acre
		Grassed Waterway	170	Acre
		Wetland Restoration	0	Acre
		Field Border	145	Acre
		Filter Strip	379	Acre
		Grassed Waterway	65	Acre
		Wetland Restoration	256	Acre
		Field Border	267	Acre
		Filter Strip	228	Acre
		Grassed Waterway	77	Acre
		Wetland Restoration	177	Acre
University of Kansas Rain Garden Demonstration Project	2007-0036	Urban Infiltration Basin	0	Acre
KS WRAPS Grouse - Silver Creek Watershed District # 92 Implementation	2007-0037	Access Road	1,300	Linear Foot
		Terrace	6,514	Linear Foot
		Grassed Waterway	1	Acre
		Riparian Forest Buffer	5,600	Linear Foot
		Grassed Waterway	1	Acre
		Grade Stabilization Structure	7	Acre
KS WRAPS: Kanopolis Reservoir, Ellsworth CCD Implementation Assistance	2007-0041	Terrace	650	Linear Foot
		Terrace	5,100	Linear Foot
		Terrace	3,854	Linear Foot
		Terrace	1,650	Linear Foot
		Terrace	7,408	Linear Foot
		Terrace	7,834	Linear Foot
		Terrace	8,467	Linear Foot
		Terrace	5,318	Linear Foot
		Terrace	753	Linear Foot
		Terrace	3,340	Linear Foot
		Terrace	9,005	Linear Foot
		Terrace	2,230	Linear Foot
PRIDE Initiated Community Water Quality Action Plans Part 3	2007-0045	Recreation Trail/Walkway	500	Linear Foot
		Trash and Litter Control	40	Acre
		Habitat Development/Management	2,500	Each
		Brush Management	40	Acre

16. **Watershed Restoration and Protection Strategies (WRAPS)** The *Kansas Nonpoint Source Pollution Management Plan – 2000 Update* (page 23) identified Watershed Restoration and Protection Strategy as a planning process to identify all the water quality protection and restoration needs of a watershed. WRAPS was intended to integrated TMDL implementation, water quality restoration, water quality protection and source water protection. In late 2003 the Kansas Water Planning Process adopted the WRAPS concept as a more comprehensive water resource planning and management process for Kansas. An interagency work group was established to develop this more comprehensive WRAPS concept. WRAPS has been memorialized through a Memorandum of Agreement (MOA) signed by the seven members of the Kansas Natural Resources Sub-cabinet (Kansas Department of Wildlife and Parks, Kansas Department of Health and Environment, Kansas Department of Agriculture, Kansas Water Office, Kansas Corporation Commission and the Kansas Animal Health Department). WRAPS projects can be Development, Assessment, Planning and Implementation

a. **WRAPS Work Group Meetings**

Activity Accomplishments: Please see attached meeting notes (Attachment 1).

b. **KS Watershed Partnership Members**

Activity Accomplishments:

The purpose of the Kansas WRAPS Partnership is to provide advice to the WRAPS Work Group and promote stakeholder participation in WRAPS projects. Any person or organization may apply to be a WRAPS Watershed Partner. Partners can include any public or private organization that applies for membership and accepts the Statement of Principles and the duties and obligations within the Partnership Agreement. A membership application form is available online at: <http://www.kswraps.org/partners/>. Current WRAPS Partners include: The Groundwater Foundation, The State Association of Kansas Watersheds, The Watershed Institute, Kansas Rural Center, No-Till on the Plains, Inc., Kansas Alliance for Wetlands and Streams, Kansas Association for Conservation and Environmental Education, Grassland Water Quality Stewardship Program, and the Kansas Rural Water Association.

**Active WRAPS Projects**

Activity Accomplishments: Please see attached WRAPS Program Annual Report (Attachment 2).

17. **Local Environmental Protection Program (LEPP)** The LEPP is a financial assistance program funded through the Kansas State Water Plan. The program provides financial assistance to local government units (most typically county health departments). These grants administered by a population-based formula are used to develop, maintain and implement a local environmental project plan. The

**local environmental protection plan includes a sanitary code, subdivision water and wastewater plan, solid waste management plan, hazardous waste management plan, and nonpoint source pollution control plan. The LEPP is Kansas' main tool for managing on-site wastewater systems. Each Kansas county is eligible to participate in the program, as of 2005 there are 100 participating counties.**

**a) 100 + participants**

**Local Environmental Protection Program**

The Local Environmental Protection Program (LEPP) is established through the Kansas State Water Plan and is authorized by Kansas Statute (KSA 75-5657). The program is administered by the Kansas Department of Health and Environment, Bureau of Water, Watershed Management Section. Funding for the program is provided through the Kansas State Water Plan Fund. The program is designed to enhance local management of nonpoint pollution sources through financial and technical assistance to local entities, primarily county health departments. The program emphasizes adoption of local environmental codes and plans for management of on-site sewage disposal systems and private well water supplies, as well as public education and cooperation with other local entities. The Local Environmental Protection Plans address private wastewater and water supplies through a sanitary code, subdivision water and wastewater plan, solid waste management plan, hazardous waste management, public water supply protection plans, and nonpoint source pollution control plan. Presently 101 of Kansas' 104 counties are participating in the program.

Financial assistance totaling 1.5million dollars from the Kansas Water Plan fund was awarded to the program during this year. During SFY 2009, target grants totaling \$7,111 were made to 10 LEPPs. One hundred and four counties received base grants with a minimum of \$7,000.00 and a maximum of \$125,000.00. During SFY 2009, there were forty eight single county programs and 8 multi-county programs.

**Sanitary Codes**

One hundred and four counties receive grant funds through the Local Environmental Protection Program. Statewide, 103 counties have adopted local sanitary codes. NO counties have codes approved by KDHE but not yet adopted by County Commissioners and one county is developing a code. This leaves one county that does not at this time have codes adopted.

## Chapter 3:

### Outcome 3

Kansas's water resources are free of pollution attributable to nonpoint pollutant sources.

#### Performance Measure A

Water quality improvements are identified, observed and documented

#### Established Baseline for Measurement/Benchmark

1. Water quality conditions presented in Appendix A & B of *Kansas Nonpoint Source Pollution Management Plan – 2000 Update*
2. Estimated 2000 HUC 8 watershed pollutant loads for total suspended solids, nitrogen and phosphorus

#### Measurement Instrument

1. Water quality data determined through operation of KDHE Water Quality Monitoring Network (administered by KDHE – Bureau of Environmental Field Services) will be analyzed annually and compare to benchmark conditions.
2. STEP-L model for estimating nonpoint source pollutant loads. At the end of each calendar year, pollutant loads for each Kansas HUC 8 watershed will be estimated and compared to the benchmark.

**18. KDHE Pollutant Load Reduction Analysis Watershed Management Section (WMS) has selected the STEP-L pollutant load estimating model as the tool for nonpoint source load estimates. Pollutant load estimates will be determined for Section 319 grant expenditures, USDA –EQIP, FSA-CRP, Kansas State Conservation Commission programs, other government programs and private sector activities. The pollutant loading data base will be organized to capture implementation practices at the HUC 14 level. Total load estimate reports will be prepared for HUC 8 watersheds and Kansas River Basins as well as statewide totals. Reports will summarize load reductions achieved by various funding source. Results of the load reduction estimates will be included in the report - Annual Report of Progress in Abatement of Nonpoint Source Pollution in Kansas**

**a. Nonpoint source / water quality protection measures through expenditure of Section 319 grant funds will be compiled through project cooperator reports submitted through the Kansas Clean Water System.**

Activity Accomplishments: Activity Accomplishments: Project status reports are submitted on a quarterly basis, January 1 - March 31, April 1 - June 30, July 1 - September 30, October 1 - December 31st.

**c. Complete annual load estimate.**

Activity Accomplishments: No Activity.

**19. EPA Program Assessment Measures will be reported through the Annual Report of Progress in Abatement of Nonpoint Source Pollution in Kansas. Program Assessment Measures to be reported are -**

**a. PAM 48 – Number of watershed based plans (and water miles / area covered), supported under Section 319 grants since beginning of FF2002 under development and being implemented.**

Activity Accomplishments: Please see the attached WRAPS Program Annual Report (Attachment 2).

**b. PAM 49 – Number of watershed based plans (miles and area) substantially implemented**

Activity Accomplishments: Please see the attached WRAPS Program Annual Report (Attachment 2).

**c. PAM 56 – Number of waterbodies identified on 2000 - 303d or a subsequent 303d list being primarily impaired by nonpoint sources partially or fully attaining designated uses.**

Activity Accomplishments: No Activity.

**d. PAM 57 – Annual reduction in nitrogen, phosphorus and sediment loads from nonpoint sources.**

Activity Accomplishments: No Activity.

# Attachment 1

WRAPS Work Group Meeting Minutes

### Meeting Notes

1. Introductions
2. Previous meeting notes - approved
3. Sub-Committee Reports
  - a. Administrative –presented the two grant application options from the sub-committee, as well as two additional options from KDHE project officers. Comments on the four options: Not comfortable with ranking of service providers. Should be more task oriented. WRAPS groups should ID tasks for upcoming year, then id which Service Provider (SP) aid them to complete that task. What do we want to accomplish? Who? 1st, wraps ID tasks, then, based on tasks, have application period for SP's to purchase those tasks. SP's want to know sooner than later – whether their services are desired by WRAPS projects. KDHE must still play a role in helping to select SP's. Possible compromise where Stakeholder Leadership Teams (SLT's) id tasks – then KDHE identify the appropriate SP's. General comments: need to be more results oriented. Need evaluation framework. All would benefit if wraps projects can plan 3-5 years out. Final proposal will be brought to work group on August 26<sup>th</sup>.
  - b. WRAPS Outreach – roughly on timeline. 40 SLT's received invitations. Majority have responded. Several work group members & partners willing to participate. Goal is to complete these meetings by end of November.
  - c. Sediment Management (1:30pm meeting at KWO) - Sediment sub-committee meeting needing to evaluate the research strategy. May need to re-define strategy. Water Office has completed draft of sediment policy. Looked into regulatory options for wetland and riparian protection and additional input for tax incentives to enter land into conservation easements and other options (as advised by BAC's). Hope to release draft for public input after taking to the KWA. Sediment White Papers are published and complete. Copies are available.
  - d. Evaluation - need to reconvene sub-committee. How does evaluation fit into wraps program? Evaluation is linked to assessment and planning phases. Must have baseline of watershed conditions and identified priorities as result of planning process. Evaluation is a continuum. Social / behavioral side vs. targeted implementation results. Ultimately must answer improvement – better adherence to water quality standard attainment. Evaluation must wrap back into re-assessment and re-planning. Failure is an option – as we tweak the program and assessment / planning activities as a result. Evaluation is fifth phase of wraps process.

1. Priorities for FY2009 SCC WRAPS Implementation Funding – SCC presented FFY 09 priorities. FY08 focus was on streambank stabilization projects. 09 priorities - similar to previous year – Streambank and riparian protection, livestock waste, sediment control, and wetland restoration practices highest priorities; other nps practices would be lower priority. Cost-share rates will vary depending on county rates. County conservation districts and WRAPS SLT’s will need to coordinate. Proposed implementation funding priorities approved by the Work Group. SFY 2010 SWP funds – Both SCC and KDHE will be requesting the same amount of WRAPS funding. KWA looking at increasing revenue to keep the budget the same as in years prior.
2. USDA Forest Service grant - federal funds (USDA forest services) moving to competitive grant process with clear baselines and achievement. KFS must submit applications for funds. KFS considering project above federal reservoirs and need to establish baselines for forests above the reservoirs. Forests contribute significantly to the reduction of sediment into federal reservoirs. Seeking partners to accomplish grant goals. Proposal could interface well with sediment policy priorities at state level. The baseline information alone would greatly benefit the state for our high priority watersheds. KWO has identified the federal reservoirs with greatest sediment load – that data could help to identify priority areas needing baseline information. Resolution for GIS depends on software. KAWS and KSU discussing BMP auction for riparian bmp’s. Could consider the bmp auction in their grant. NRCS getting ready to submit healthy forests grant which includes federal reservoirs. The baseline information would greatly benefit that grant – if awarded.
3. 2009 WRAPS Conference – Conference planning committee recommends to move conference to every 18 months – in fall of 2009. Sept. 14 – 16 09 is the sediment national meeting. Conference moved to Fall 2009 approved.
4. Announcements
  - a. Work Group Members:
    - i. KFS – new state forester September 11th, Larry Biles. Would like him to meet agency representatives.
    - ii. KSU sponsoring 1 day symposium on sustainability of Biofuels September 16th.
  - b. Visitors
    - i. Stream Assessment workshop – turning people away this year – many interested. July 31 and August 1st.
  - c. WRAPS Work Group Meeting Schedule
    - i. August 26, 2008

### Meeting Notes

1. Introductions
2. Previous meeting notes - approved
3. Sub-Committee Reports
  - a. Administrative (Jaime Gaggero, KDHE)
    - i. Proposed Application & Allocation Process for SFY10/FFY09 WRAPS funding presented
      1. Comments: Who will determine funding criteria? Keep funding caps as firm caps. How do we define a watershed?
        - a. WRAPS Implementation funding: If WRAPS caps do not include SCC BMP funds (only demos), do they need \$200,000? WRAPS projects have to convince conservation districts and respective boards to apply for SCC BMP funds. The intent is that the application for BMP funds will be a joint application from the conservation districts and the WRAPS SLT to address WRAPS priorities. Some conservation districts not fully supportive of the WRAPS program. What is considered a demonstration project? Can BMP projects be used as match for application? Can be a problem if SP provides TA for a BMP – and uses that BMP as match – but then the SCC / CCD decides not to approve that BMP and then the state has purchased TA but no BMP and the sponsoring organization has no match. How do SP get match for TA? How does the state insure that BMP's from which TA is provided are implemented? EQIP has buy out clause....We need to clearly define what a “demonstration” project is vs. implementation BMP. Again need to stress definition of demo.
        - b. Service provider list – do we want to fund K-12 education with WRAPS funding? Should we weigh the survey results by highest priority watershed? Can the state provide budget guidelines for each of the top services within the \$150,000 cap? Need the number of watersheds estimated to provide that service.

- a. WRAPS Outreach (Laura Downey, KACEE & Kerry Wedel, KDHE)
  - i. Status of WRAPS Stakeholder Leadership Team outreach meetings -  
Approximately 25 people have volunteered to help facilitate. Over half have received facilitator training. We are in the process of finalizing the master calendar for the outreach meetings. If WG members are interested in attending any of these meetings please contact the respective KDHE project officer (list of tentative dates and project officers distributed).
- b. Sediment Management - 1:30pm meeting at KDA, 4<sup>th</sup> Floor Training Room (Susan Metzger, KWO)
  - i. At last meeting revised the approach to assess sediment baseline conditions – 7 parameters were identified. Agencies designed an approach for each parameter and will present the approach at the meeting.
- c. Evaluation (Tom Stiles, KDHE)
  - i. Met two weeks ago to define central themes and begin looking at applying themes to MDC WRAPS. Discussed what evaluation hinges on...philosophically. Evaluation hinges on good assessment. Modeling is helpful with targeting, monitoring is for evaluation. Existing KDHE monitoring network may be too big in scope to identify improved water quality. MDC – tied to TMDLs written in 2001. Current plan needs more targeting. There is no real focus in terms of strategy. Six other WRAPS (2 implementation strategies). Unclear to what degree sub-watersheds truly did stem from overall watershed plan. Key questions. How do we evaluate water quality improvement for BMP's implemented that are not funded through WRAPS program (i.e. leveraging other funds)? We will never be able to capture the 'what else is happening' within these watersheds. Just because a WRAPS project is successful in terms of the process that is designated for evaluation does not necessarily mean that there will be water quality improvement – and that is a challenge. Must balance the planning phase with targeting. A secondary problem is we do not monitor HUC 12's, which is the approximate geographic scale needed for targeting. KDHE monitoring data needs to be shared with WRAPS groups post interpretation.

2. FY2009 SCC WRAPS Implementation Funding – Application Process Update (Don Jones, SCC)

- a. No additional comments.

1. KWA SFY 2010 Budget Recommendations (Susan Metzger, KWO)
  - a. Memo from KWA materials distributed. Approved the recommended approach. Approach two fold – expand SWP fees and ELARF (Expanded Lottery Act Revenue Funds). Fees have not been increased since 1989 so proposing 50% increase in each fee for revenue of \$14 million dollars. Have a great deal of outreach to respective entities of which the fee increase will effect. ELARF proposal that water infrastructure needs improvement. Requesting 10% of total ELARF. Secure storage, restore impaired conditions.
  
2. Announcements
  - a. Work Group Members
    - i. KWO – EPA notified KWO of initial approval for Wetland grant to characterize wetlands in Upper Wakarusa and Marmaton.
    - ii. KSU hosting one day meeting on Biofuels production and processing September 16<sup>th</sup>.
    - iii. KWO / KSU KCARE to host water issues forum on the connection between water and energy conservation in Wichita and Hays. Primary audience is for BAC members. Will share agenda soon. December 10<sup>th</sup> and 11<sup>th</sup> (Wichita and Hays).
  - b. Visitors
    - i. KAWS applied for an EPA TMDL evaluation grant for Rock and Stranger Creeks.
    - ii. Kansas Natural Resources Conference January 29<sup>th</sup> and 30<sup>th</sup>. Alternative energy and the effects on the environment. KAWS is sponsoring – hosted in Wichita.
  - c. WRAPS Work Group Meeting Schedule
    - i. September 23, 2008
    - ii. October 28, 2008
    - iii. November 18, 2008
    - iv. December 16, 2008

Meeting Notes

1. Introductions – Self Introductions
2. Previous meeting notes - Approved
3. Sub-Committee Reports
  - a. Administrative – Cheney CEAP project has sociologist working collaboratively and will be hosting facilitated meetings. This information may be helpful to OEIE work and work charged to this committee.
  - b. WRAPS Outreach – Meetings are being held and generally going well. Don Jones gave an update on Kanopolis outreach meeting. Would be good to hear feedback from SLT's. KACEE could request feedback on behalf of Work Group.
  - c. Sediment Management (1:30pm meeting at KWO Conference Room)
  - d. Evaluation – Concluded that MDC basin not the best watershed from which to initiate an evaluation framework. Framework will address “How does the SLT demonstrate progress?” In answering this question there are minimum elements that should be considered. The effort will focus on three watersheds - Cheney, Little Ark and Banner to identify aspects of minimum elements. Goal is to have a draft framework by end of 2008 and finalize the framework (post watershed review) by Spring of 2009. What were concerns of MDC? Do we believe that baseline assessment will be a time issue? Other question – how do we handle projects stemming from other resources? How do we capture that data? Capturing and guiding resources from other sources will be a key to WRAPS success. Ultimately want to capture and reprioritize other program resources. How do we achieve TMDL goals as that is what the EPA 9 elements are aimed at? TMDL goals are the big / long term picture but we need short term measureable goals as well. Need to get watershed plans up to date with the 9 element requirements. Submitting plans to KDHE and having required changes takes away from the plan being truly their own (locals). It would have been better if watershed coordinators had known the 9 elements during planning process. What are the 9 elements? Heartland group meeting October 7-8th (4 states and EPA region 7) to obtain clarification on 9 elements. KDHE doesn't want to push the 9 elements too quickly because it is not clear what EPA expects to meet the 9 elements. EPA's experience is that many groups like to have guidance when developing watershed plans. Many of our KS plans lack an evaluation component. Information and education must also be included. Put review of 9 elements on the agenda for next meeting – KDHE will brief Work Group on Heartland meeting results.

## 1. Application Process for SFY10/FFY09 WRAPS Funds

### a. Prioritization of WRAPS Implementation Projects for application process

i. Identified which wraps would be in the implementation phase and focused only on those watersheds for the prioritization process. Handout provided for priority ranking details. List of priority watershed groupings will be included with the RFP. It was suggested that an explanation of how the list was created be included in the RFP. There was a lot of work with the SIP, LIP & HIP scoring system – it seems this is a redefine of the SIP scores. Is there a way to factor this new framework into the SIP only – leaving the LIP and HIP as it stands. How much does it change the ratings? If it changes them a lot then a significant effort needs to be made to explain how. Some of the bonus points are additive. Some water plan priorities were given added weight. We had had the process established and some concerned was expressed that if we adjust it this year we will be adjusting continually every year. Impression in the field is that wraps groups don't understand the prioritizing process. We came up with original scores, now some things are changing in priority and as a result have added weight to the priority scheme and this is new process. Transparency important – make everything as transparent as possible. If you don't know the rules it's impossible to play by them. Need guidance in terms of expectations (and what they will be evaluated on). Need to be able to fully fund what their plan for a twelve 12 month period. It is devastating when we provide just a portion of funds for them to do a piece of their plan.

b. Priority Services Survey Update – Survey completed September 19<sup>th</sup> and data is being summarized. SCC, KWO and KDHE will meet this week to discuss priority services.

c. Demonstration Projects – new proposed definition. Handout provided. Is there a need for an evaluation component for #2? How does that play into the evaluation framework? Could be benefits to post monitoring. An evaluation component should be considered or evaluation of demo projects should be considered in the evaluation component of the 9 element watershed plan. Not all SLT's have capacity or resources to evaluate each demo project. For the I and E language add something about the landowner should be a leader in the community to have greater influence on the adoption rate. Document the why when failure occurs or lessons learned. Are demos limited to a phase for a wraps? What is the difference between implementation and demonstration? Demo should be limited to after assessment phase. Demos in development, assessment and planning phases do keep momentum going during process. Demo should be piggybacking with EQIP and other state, federal and local resources.

1. KS-WRAPS Website Update – KEWL – Ann D’Alfonzo provided demonstration of an on-line library for water related projects and reports available on the KSWRAPS.org website.
2. Future Meeting Topics
  - a. Consider update on WRAPS projects from KDHE Project Officers. Consider also inviting WRAPS coordinator. Report on mature, intermediate, new WRAPS . More than one a meeting. Get same info from all groups. Will also share wraps annual report with WG in spring.
  - b. Other: Consider having other agencies discuss their watershed work related to WRAPS SLT’s. Consider Work Group recognition for wraps that are achieving results and are successful. Committee to design recognition program for wraps (Susan Metzger, Jaime Gaggero, Andy Ziegler). Wetland assessment grant project and the WARP plan recently accepted by Gov. NR SubCabinet should be shared.
3. Announcements
  - a. Work Group Members
  - b. Visitors
    - i. KACEE – No child left inside legislation – passed the house and going to the Senate.
    - ii. KFS – Fall field day. October 16<sup>th</sup> south of Lawrence. Exhibits are invited.
    - iii. Ks Riparian Work Group is having a site visit at Ellsworth at 10:00 on Thursday.
    - iv. City of Topeka – Sustainability Board meeting. Email your city council person for more information. On the city of Topeka’s website there is a copy of the ordinance being considered.
  - c. WRAPS Work Group Meeting Schedule
    - i. October 28, 2008
    - ii. November 18, 2008
    - iii. December 16, 2008

### Meeting Notes

1. Introductions
2. Previous meeting notes
  - a. No Comments
3. Update on SLT Outreach Meetings
  - a. Overall positive experience. Good for Work Group members to get out and meet groups and discuss state perspectives. Information presented has been general – specific information about watershed priority rankings outlined in the RFP has not been presented.
4. Update on Request for Proposals SFY 2010/FFY 2009 WRAPS Funds
  - a. The RFP is out and on the website. Thanks to all who helped prepare this guidance. FAQ's will be prepared as questions come in. The due date for submittal of applications is February 28<sup>th</sup>, 2009.
5. Review Criteria for Expending SFY 2009 WRAPS Funds
  - a. Draft criteria presented. Proposal is to use SFY 09 WRAPS funds to cover the funding gaps for some projects. All wraps projects and service providers have submitted information on what their anticipated funding gaps are. The preliminary requests for funding gap was over \$900,000 beginning as early as April 1, 2009. Gap estimates are being refined and a proposed allocation for SFY 09 SWP funds will be presented at the December 16 WG mtg and then to the Governor's Natural Resources Sub-Cabinet.
  - b. WRAPS Coordinator expense guidance – general salary level and other expenses for WRAPS Coordinators was discussed. A need for flexibility was noted due to the different funding situations of the coordinators (e.g. employee, contracted services, etc).

1. Process for Changing SLT Sponsoring Organizations
  - a. The general process being followed by KDHE for advising WRAPS groups on changing sponsoring organizations was discussed. It was suggested that KDHE consider a way to verify the adequacy of a prospective sponsoring organization. There were no substantive changes recommended by the WG.
2. Crop Tillage and Residue Management Survey Proposal
  - a. Don Jones, SCC, discussed a proposal for a KSU crop tillage and residue management survey. General interest in proposal with specific comments. Don will set up a meeting with interested work group members and KSU contact to discuss in more detail.
3. EPA Nine Elements for Watershed Plans
  - a. A summary of the Heartland Water Quality Coordination discussion of the EPA Nine elements was presented. Draft guidance for addressing the nine elements in Kansas WRAPS plans will be presented at the next WG mtg.
4. Update on WRAPS Evaluation Subcommittee
  - a. Tom Stiles reviewed some draft material being considered by the Evaluation sub-committee. Additional refinement will be made based on further sub-committee work.
5. Draft Grand Lake Watershed Plan
  - a. Overall the plan was generally well received. Some comments were made regarding monitoring and data gaps; more specific water quality goals for Grand Lake; importance of watershed/stream impairments important; Natural Resource Damage assessments will be important in mining region.
6. Announcements
  - a. Work Group Members
    - i. There will be no December mtg
  - b. Visitors
  - c. WRAPS Work Group Meeting Schedule
    - i. December 16, 2008
    - ii. Discuss 2009 meeting schedule
      1. May consider going to every other month meeting

### Meeting Minutes

1. Introductions – Margaret Townsend, Bob Atchison, Kerry Wedel, Brock Emmert, Paul Ingle, Susan Metzger, Harold Klaege, Tom Stiles, Lindsey Douglas, Paul Leichti, Don Jones, Jaime Gaggero, Bill Hargrove, Bryan and Jana Lindley,
2. Previous meeting notes – Change December to November. No other changes.
3. Update on SLT Outreach Meetings
  - a. Kerry provided a list of meetings conducted so far. Total of 36 meetings conducted. Received needs from WRAPS projects which is being compiled. Examples included: funding for coordinators, BMPs, service providers, etc; more information on potential sources of funding; assistance with information and education activities, press releases, etc; coordination with other state and local agencies – e.g. KDOT, Farm Bureau, League of Municipalities, etc; water quality monitoring data – needing assistance in obtaining and interpreting data; assistance with identifying high priority areas; more user friendly kswraps.org website; getting more info to SLT's about success stories; streamline grant reporting process; coordinate base programs better. A more comprehensive list will be provided at the next WG meeting. SLT's have reported outreach meetings useful.
4. Update on SFY 2010/FFY 2009 RFP Process
  - a. Three workshops held with good attendance. Most comments were about buffer coordinators and multi-funding commitment. Many projects are still struggling to first identify watershed needs.
5. Update SCC WRAPS Funding
  - a. CCD's were instructed to work with SLT's to identify BMP's to be funded through WRAPS. First deadline to submit applications is January 16<sup>th</sup>. Few applications received to date. Another email reminder sent out. Looking to have landowners also apply through EQIP, which the deadline has been extended to 31<sup>st</sup> of January. Next application extension will be February 28<sup>th</sup> if necessary. As RFP's come in for KDHE WRAPS funds we can also consider using SCC funds to address BMPs identified through those applications.

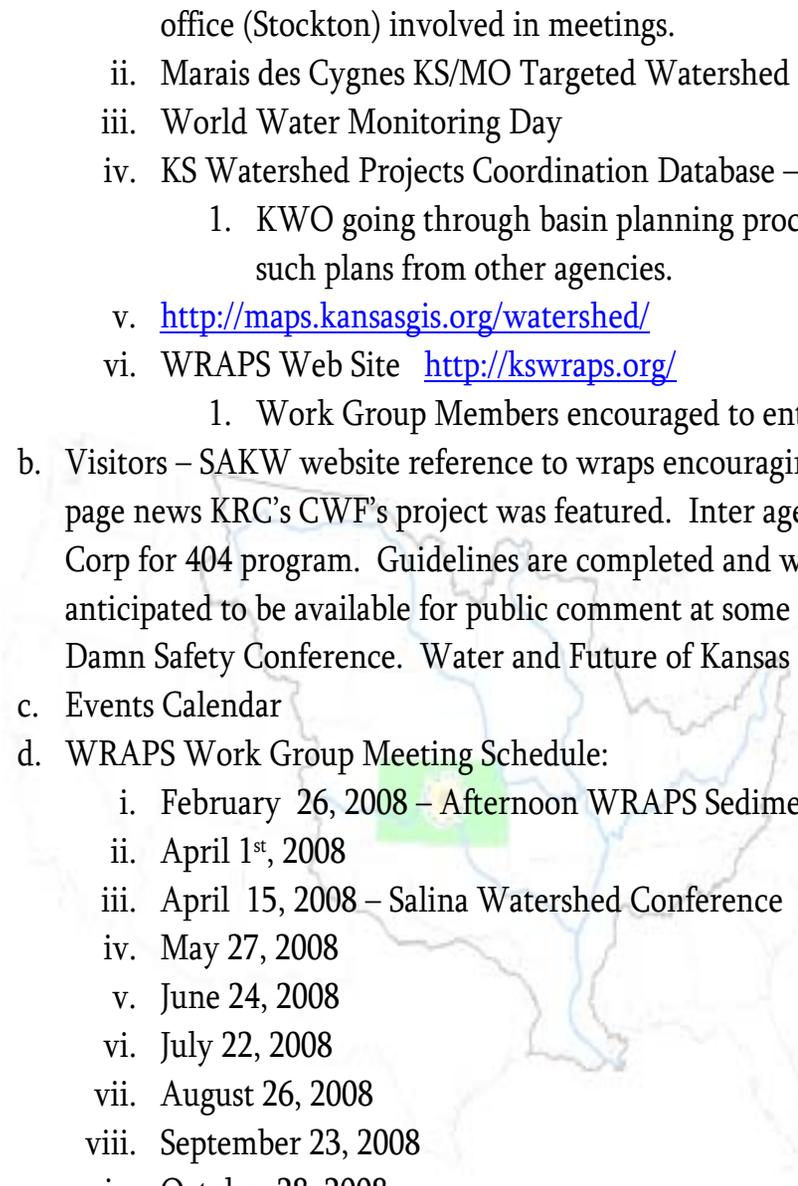
1. Review of Proposed WRAPS Allocations for SFY 2009 State Water Plan Funds
  - a. Presentation of funding gap proposal for current projects. Brief history of issue, review of criteria and updated gap numbers were presented. Goal is to start new projects with SFY2010/FFY2009 funding by July 1, 2009. Work Group concurred on the recommendations. Projects will submit amendment to existing grants for gap funding.
  
2. Review Preliminary Guidance on EPA Nine Elements for Watershed Plans
  - a. Presented draft 9 element guidance that outlined minimum acceptable information. We still have a second step after this guidance is accepted, to detail the “what” for the minimum acceptable. Balance of offering “minimum” – don’t want to eliminate creativity and flexibility for SLT’s to write own documents. Agency support is anticipated for projects that already have plans to help identify deficiencies and update their plans. Load reductions cannot just be percentages - must be unit of measure for the specific pollutant. Guidance document will be updated with comments from meeting and distributed to all Work Group members for review and comment. WRAPS emphasis shifting to implementation and monitoring. Many projects are moving into implementation now, but we aren’t ready for monitoring quite yet. Need to focus on easy / inexpensive indicators before extensive water quality monitoring. SCC BMP implementation funding can also be an indicator of BMP need.
  
3. Evaluation Framework Project - KSU
  - a. Linda Thurston’s presentation was postponed due to weather. Proposals will be submitted by end of this week. Linda has been focusing on social indicators. Gentleman from Wisconsin gave examples of what they are doing. Administrative indicators (bean counting), water quality monitoring indicators (Evaluation subcommittee), and social indicators that indicate change in attitudes, level of understanding, skills and capabilities. Linda is focusing on the 3<sup>rd</sup> component. She is using the Great Lakes Water Quality project and their tools and protocols to develop tool box and indicators for Kansas. Linda will present an update at the next Work Group meeting.

1. Update on KWO/KAWS EPA Wetland Grant and KS Wetlands & Aquatic Resources Plan (WARP) - Harold Klaege, KAWS
  - a. WARP plan completed in cooperation with SCC – update on wetland and riparian issues. SCC provided funds (through EPA grant) to KAWS to update framework and offer recommendations. Framework prepared in September 2008. Currently, great deal of focus on WRAPS - limited interest in writing aquatic plan for state. May be grant opportunities to implement framework. Framework was accepted and some aspects will be implemented. 404 permits now have stream mitigation guidelines. From WARP framework developed current EPA wetlands grant with KAWS & KWO to develop process for restoration prioritization. Will look at Wakarusa and Marmaton– determine how to identify wetlands and define what characteristics make them up. GIS will be used to identify wetlands. Scientist will be hired to confirm / revise characteristics then revise GIS approach. Goal is to develop GIS methodology to identify wetlands and riparian resources for any watershed in state. WRAPS SLT’s could use this approach to identify wetland resources. Kansas doesn’t have updated NWI like other states. This might be an opportunity to meet this need.
  
2. Announcements
  - a. Work Group Members
    - i. KERP Update – program being evaluated to meet current needs
  - b. Visitors
    - i. Kansas Riparian Work Group – comment about coordination with the WARP group/focus. Working on a plant description for each ecosystem.
    - ii. Jan 29<sup>th</sup> / 30<sup>th</sup> Ks Natural resources conference – Hilton in Wichita – opportunity for booths available.
    - iii. Tall Grass Legacy Alliance meeting
    - iv. State Association of Kansas Watersheds conference – 3<sup>rd</sup> week in January
  - c. WRAPS Work Group 2009 Meeting Schedule
    - i. No January meeting. Next regularly scheduled meeting is February 24<sup>th</sup>

1. Introductions
2. Previous meeting notes – Ground Rules
3. Watershed Partner Applications – Jaime Gaggero
  - a. Watershed Land Trust Application – Accepted, Don will email everyone list of current partners.
4. SFY 2008 WRAPS - Status
  - a. Sub-cabinet Action – Map and map updates. Presented twice to sub-cabinet. First presentation requested concurrence from all WG members on recommended allocation. Second presentation did not include additional 319 funds, rather only 2 million wraps fund. Sub-cabinet concurred but expressed concern about total amount of funds to KSU and Playa Lake Joint Venture as well as a suggestion to consider future watershed conditions in our priority score system. SWP funds will be available mid-February.
  - b. Grant Agreements
  - c. Other Funding
  - d. SCC Implementation Funding – Don Jones
    - i. Handout – update of committed funds, funds in que and funds not earmarked. Remaining funds SCC will solicit new projects.
  - e. Flint Hills RC & D Comments on SFY 2008 Process

General Comments – Need committee to make recommendations for program improvements. Need to focus more on monitoring and evaluation. Need to make awards based on performance and need performance measures. Paul – How to integrate wraps into state natural resources holistically. Implementation money is hard to come by – we need to do a better job of using other agency implementation programs. Pieces of program seem out of balance, implementation, TT, TA, I and E, coordination, etc. Next application season, need clearer expectations. Cut back on number of projects and provide more funding to fewer. Need success for program, otherwise lose support from locals and funding agencies. Does NRCS do pre / post monitoring of BMP and would they refer such requests to wraps program? Would they be willing? WRAPS teams can influence NRCS specs and the farm bill, example streambank stabilization project. **WRAPS teams are not understanding how to utilize other agency's funds or resources to implement watershed action plans.**

- i. Don – important to fund as many SLT’s as feasible. Not doing a good job of leveraging resources already out in the state – Edge of field modeling but what is the effect on watershed scale in terms of water quality improvement. NRCS SEE analysis almost complete. Development phase and forming SLT’s is lacking philosophy and success. Teams are limited scope and too little time is expended educating them on the issues. Coordinators are not ‘interviewing’ local leaders. asking wrong questions? Ask – What do we want from water, rather than what are your water concerns. Coordinator should bridge gap between scientists and landowners. What are ‘products’ as a result of successful development phase Testimonials?
  - ii. WG Needs to discuss how to integrate all natural resource areas.
  - iii. KDHE or KWO representative meet with all wraps projects in calendar year 2008 to clarify wraps philosophy. Need to be working on SFY 09 application – focusing on deliverables and performance. Also consider monitoring and evaluation Development phase assistance (SLT development). Leverage resources offered by other natural resource agencies.
  - iv. 1<sup>st</sup> committee – work on presentation / publications for wraps – Laura, Kerry, Don, Jaime. 2<sup>nd</sup> committee – administrative aspects of application process, performance based evaluation, expectation guidance, etc. – Jaime, Mary Fund, Paul (Fli RC&D).
  - v. Share limitations of funding sources with WG and include this information in wraps 101 presentation.
2. SFY 2009 WRAPS Appropriations – Kerry Wedel
3. Work Group Review of WRAPS Project Work Products – Jaime Gaggero
- a. Want access to review if necessary. Evaluation tools so that teams can do so themselves. We need to provide guidance on ‘at end of this phase this is what you should have accomplished’....suggested checklist. KDHE PO’s simply validate that work was done. Phase ‘best practices’ worksheet to provide assistance to wraps groups.
  - b. Share quarterly reports for wraps on kswraps.org website??? Other work products??? Final Reports???
  - c. KDHE will post all products on wraps and coordination dbase website and notify work group members via email.
4. Announcements
- a. Work Group Members
    - i. Evaluation Team meet at 1:30 Meadowlark Conference Room – Tom Stiles
    - ii. Sediment Strategy Update – White papers almost ready for publication. Corps of Engineer meeting in Dallas. Regional conference on research of sedimentation – submitted grant application for conference funding with USDA. Kansas, Oklahoma, Texas, Arkansas – top 4 states that rely on federal reservoirs as PWS in the country.

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- i. NW KS – SW NB Watershed Project Discussion 9/5/2007 Norton – Don met with RC&D discuss Ks, NB, CO project to protect Harland Lake. Lake is the accounting point for the Republic river compact. Suggest getting DWR field office (Stockton) involved in meetings.
  - ii. Marais des Cygnes KS/MO Targeted Watershed Grant – Have funding available, finalizing grant agreements.
  - iii. World Water Monitoring Day
  - iv. KS Watershed Projects Coordination Database – Kerry Wedel
    - 1. KWO going through basin planning process and hoping to update the dbase with information that supports such plans from other agencies.
  - v. <http://maps.kansasgis.org/watershed/>
  - vi. WRAPS Web Site <http://kswraps.org/>
    - 1. Work Group Members encouraged to enter “service provider” information.
  - b. Visitors – SAKW website reference to wraps encouraging them to become involved. Grass and Grain Ag Newspaper front page news KRC’s CWF’s project was featured. Inter agency task force for stream mitigation guidelines – proposed to used by Corp for 404 program. Guidelines are completed and will be sent to corp requesting to be adopted. The guidelines are anticipated to be available for public comment at some point in the near future. Presentation was given to SAKW and Damn Safety Conference. Water and Future of Kansas Conference – Topeka, March 25<sup>th</sup>.
  - c. Events Calendar
  - d. WRAPS Work Group Meeting Schedule:
    - i. February 26, 2008 – Afternoon WRAPS Sediment Management Team Meeting 1:30 KWO Conference Room
    - ii. April 1<sup>st</sup>, 2008
    - iii. April 15, 2008 – Salina Watershed Conference
    - iv. May 27, 2008
    - v. June 24, 2008
    - vi. July 22, 2008
    - vii. August 26, 2008
    - viii. September 23, 2008
    - ix. October 28, 2008
    - x. November 25, 2008
    - xi. December 23, 2008

### Meeting Notes

1. Introductions

2. Previous meeting notes – Approved without comments.

3. Update on SFY 2009 KDHE & SCC WRAPS Funds/State Water Plan

- a. KDHE 09 WRAPS Funds – A rescission approps bill is still waiting Governor’s signature; reduces WRAPS funds by approx. \$240,000. Sub-Cabinet has approved funding gap allocations of \$232,171 and the process as been initiated to commit these funds. Remaining ’09 funds will be used for new applications.
- b. SCC 09 WRAPS Funds – Over \$1.1 million in requests received from current round of applications. Recession approps bill shows reduction of \$783,000 from NPS. SCC not taking new projects currently. Have \$425,000 to counties for NPS projects until April 1, after which funds will be canceled. If approps bill remains will have \$209,000 for WRAPS projects. Could be increased after April 1, depending on how much will be returned. Confident streambank projects will be funded.
  - i. If WRAPS applied for SCC projects should they also apply through KDHE? EQIP deadline not until 4/10 - SCC won’t know until mid-May whether or not applications will be funded. Putting priority projects in KDHE application would provide back-up. SCC & KDHE can sort out project funding.
- c. State Water Plan funds: Governor’s recommendation took SGF from SWP (\$6 million). Approps bill restores \$2 million from the Governor’s recs. Horsethief Reservoir, MOU’s w/Corps, weather modification, GIS dbase, Neosho and Wichita projects did not receive cuts.

4. Update on SFY 2010/FFY 2009 WRAPS Grant Application Process

Launched new KCW system a little behind schedule. Postponed application deadline for Service Providers to March 6<sup>th</sup>. WRAPS projects have also requested extension for WRAPS applications to March 6<sup>th</sup>.

1. Review final guidance on EPA Nine Elements for Watershed Plans

a. Still need EPA review of guidance document. Goal is to offer as much support to WRAPS projects as possible to update plans. Focus on minimum acceptable criteria for each element. Comments:

i. Element 2: Need existing inventory of BMPs implemented. How are those existing BMP's captured in assessment / modeling? Only way to capture is to do a land assessment; ground truthing. Cheney is an example – but only small portion of watershed done and this is expensive. Having NRCS and SCC BMPs needs to be done but can't be modeled. NRCS doesn't have information like that. SCC TMDL inventory set a benchmark - asked how many acres out there and how many needed to be treated; assumed other acres are being treated to some degree or functioning properly; also identified AFO's and rangeland needs and worked with sanitarians to identified OSW needs. KSU is doing field assessments in Little Ark and Cheney watersheds; know everything from 93 on - put in a dbase. TMDL development factors in conditions of watershed; need to identify what BMP needs are to achieve TMDL goal; what is existing on landscape is reflected to some extent in data used for TMDL. HUC 12 can do inventory to concentrate efforts; don't need to inventory an entire watershed. SCC TMDL Needs Inventory went to HUC 12 level and this info should be used; WRAPS projects should go to SCC for this data.

- Load reductions are going to be difficult for WRAPS projects; can do crude load reductions.
- Land treated at what level and at what scale?; NRCS looks at treating landowners property onsite for landowner – not for TMDLs or for the watershed; NRCS has different goal; treatment may not be adequate for TMDL; NRCS treated means treated for landowners purpose. Projects need to compare the load reduction goals to the TMDL.
- If inventory is done – it needs to be an on-the-ground inventory to lead to better end product. Upper Wakarusa WRAPS – identified ephemeral gullies to address sediment load.
- Edit “Conservation District TMDL Inventory ” to SCC Inventory.

ii. Element 4: Need both TA and FA for each action, as well as a total needs summary for an entire watershed.

iii. Element 6 & 7: Could list SCC (from 2004 on) as other resources. Want to capture everything done in a watershed – not just WRAPS. With present Farm Bill unsure what info can be obtained from NRCS; Conservation District employee's can obtain info with a signed affidavit. If folks do a field inventory they can observe what's done. Should be done by HUC 12 in terms of priority areas.

- i. Element 8: 5 – 10 years may not be realistic for water quality improvement. Don't want to set them up for "failure". But other measurable indicators could address progress. Element 7 discusses what actions are being done; Element 8 addresses what is happening in terms of the watershed responding. Perhaps just include in element 8 a statement like 'we recognize that in the short term water quality improvement may not be measurable'. Does modeling fit here? Add modeling as a resource to show substantial progress. Does KDHE count SCC data in load reduction estimates( should be counted)?
    - ii. Element 9: At a minimum is the state monitoring network acceptable? Doesn't really get at level WRAPS need to be at. The higher the priority the watershed, the greater the expectation for monitoring should be. For lower priority watersheds the state network could be sufficient. Need to ID KDHE network but still suggest/require more from HP watersheds.
  - b. What's next? Need EPA review to determine if this guidance is acceptable; then share guidance with SLT's. Plan to have KDHE project officers go through plans to identify deficiencies. Officers will share that info with WRAPS projects and offer guidance and assistance in addressing deficiencies. KDHE may offer guidance workshops in the future. Example plans would be helpful.
  - c. If this is to restore impaired waters, how many of the 44 WRAPS watersheds have an impairment? No structure for EPA to 'take credit' for protection projects. Allow 319 funds to be used for both protection and restoration. Will need reasonable load reductions to obtain protection. The 9 elements are required for impaired waters, but applicable to protection plans. Still need to know what load reductions will be achieved for protection projects.
2. Feedback on WRAPS support needs from Stakeholder Leadership Team Outreach Meetings - KDHE is compiling feedback from SLT outreach meetings. Will email needs list out to work group for discussion at future meeting.
3. KWO Update on Reservoir Sedimentation Activities (EQIP, Sediment Baseline Study, Vision 2020 legislative initiative)
  - a. Vision 2020 – new legislative committee headed by Rep. Tom Sloan to consider long term vision for federal reservoirs. Sediment is key issues, but also other issues. Next step is a reservoir 'road map' due March 2<sup>nd</sup> with an outline of plan to present next year detailing current conditions, highest priorities and an assessment of conditions contributing to sediment load by watershed. Letter will come from committee directing agencies to prepare plan.

- a. EQIP – Sedimentation above fed reservoirs now a separate funding category. Practices similar to water quality category but focused more on streambank stabilization and riparian improvement projects. Applications will be evaluated based upon priority reservoir map. Most rankings are in line with WRAPS priority rankings. Applications will be evaluated this spring.
- b. Sediment baseline assessment work plan – focus on a few watersheds and evaluate them in terms of sediment. Identify baseline conditions from ‘good’ watershed and compare differences with ‘bad’ watersheds. Researching seven characteristics (handout). KU is completing a helicopter survey and will give highest rating in terms of geomorphic assessment. Then TWI will conduct ground assessment and USGS will conduct hydrologic assessment and match the conditions. KSU is conducting a land use assessment. KBS is conducting bio assessments and KFS is conducting riparian assessment. Group will meet this Thursday afternoon. SWP will be used as match for KWRI. EPA will inquire about funding sources.
- c. Conservation Easement – USFS Forrest Legacy Program. KWO invited Land Trusts to meeting on how to obtain more conservation easement adoption for riparian protection. Ks and N. Dakota are the only two states that don’t participate in this program. KFS been appointed by Governor as lead agency. Program offers funds to target conservation easement areas in the State’s high priority areas. KFS is moving forward with assessment. One of the policies of the reservoir sustainability initiative.

## 2. Project and Subcommittee Updates

- a. Riparian subgroup meeting March 4<sup>th</sup>- Manhattan. Work is progressing slowly. Agreed on what needs to accomplish - ecological site descriptions (what vegetation should be there?). USFS, NRCS and BLM, all agree. Want site description for riparian areas. National team trying to answer same questions. Most descriptions are completed.
- b. Grand Lake Watershed Plan – has been completed. Meeting in January – GL Alliance Foundation invited 4 states to discuss the plan and identify what can be do to begin implementing the plan. Foundation plans to submit to both EPA regions.
- c. SCC / KAWs / Landowners going to pay for riparian projects and maintain for 3 years – funds are coming from mitigation project. Should be a model down the road to restore riparian zones.
- d. April 8<sup>th</sup> – WRAPS Capacity Building – assessment activities.
- e. April 7-10, COE workshop in Manhattan on streambank projects – Free.

## 3. Announcements

- a. Work Group Members
- b. Visitors
- c. Next meeting – Moved to April 2<sup>nd</sup>.

Kansas Watershed Restoration and Protection Strategy Work Group

April 2, 2009, Meeting Notes – 10:00 AM

Azure Conference Room, 4<sup>th</sup> Floor, Curtis State Office Bldg, 10<sup>th</sup> & Jackson St, Topeka, KS

Meeting Notes

1. Introductions
2. Previous meeting notes – No comments
3. Presentation by Linda Thurston, KSU - Building an Evaluation Framework for Assessing the Impact of Watershed Interventions and Programs in Kansas
  - a. Linda provided a powerpoint presentation on considerations and methods of evaluating the social impacts of watershed projects in Kansas.
4. Subcommittee/Other Reports
  - a. Riparian – Paul Ingle, Melvern WRAPS
    - i. Riparian Subcommittee – work continues to move along.
  - b. Vision 2020/Reservoir Roadmap –Susan Metzger, KWO
    - i. Vision 2020 – Sedimentation in federal reservoirs. Provided a resolution to encourage Kansas to continue working with COE projects. Reservoir roadmap was approved to come back next year. Plan to have a report to KWA in June. Want report to be very useful in terms of targeting how we address sedimentation.
  - c. ARRA Funding for Innovative Green Projects – Kerry Wedel, KDHE
    - i. ARRA final Call for Proposals now posted on the WMS website. Budget is \$7.2 million. Green Infrastructure projects to better manage storm water are a priority. Deadline is May 15<sup>th</sup> for submission. Can WRAPS groups apply? Sponsoring organization can apply for the loan and would be responsible for administering the funds. In-kind may be counted as match for non-traditional borrowers. The amount loaned must be for contracted work - can't be used to pay existing staff.
    - ii. Funds can't be used to purchase land or easements. If work group members have an interest in serving on and application review team contact Kerry.

- i. Funding will be a loan with principal forgiveness. Non-traditional borrowers can receive a loan for 80% of project costs with 100% principal forgiveness. Interest must be paid back. Question about whether monitoring can be included as part of a green project – TBD.

- b. KS NPS Pollution Management Plan Update – Kerry Wedel

- i. NPS Mgmt Plan Update: Limited work done on the update. Plan to convene sub-group later this month to review some of the data analysis and background information compiled to date. Discuss goals and objectives from other plans and begin discussing issues. Go to the BACs in July for input on NPS Mgmt Goals, Strategies and Issues.

## 2. Announcements

- a. Work Group Members

- i. WRAPS Conference September 28 and 29<sup>th</sup> in Great Bend. Committee meets May 6<sup>th</sup> – contact Sondra if you have ideas or suggestions. Same format as last year with tour the day before the conference.

- b. Visitors

- c. Next regular meeting date is April 28, 2009

## 3. Review of WRAPS Funding Applications (11am – 4pm\*)

General comments regarding the funding of WRAPS applications are provided below. KDHE provided initial recommendations on each application and comments were received from Work Group members on specific applications to be considered for funding. The remaining steps in the funding process were reviewed with the Work Group members including Work Group concurrence of final funding recommendations and approval by the Natural Resources Sub-Cabinet.

Comments on practices in applications: We want to make sure that those practices really tie to the goals of the watershed. As long as the practice achieves the goal it should be considered. Approx. one-half of SCC NPS dollars go to on-site wastewater system practices. Politically it is a popular practice, but may have limited water quality benefits. Around a lake owws might have an impact. Does SCC fund rebuilding of terraces? If local CCD approves that practice it can be eligible but most don't. Must meet certain criteria. There is a demand, but if they maintain them they should not need to be rebuilt. Terraces are a real need. It really depends on the county if they will pay. From a water quality perspective there is a real need for terrace rebuilds. Clearly these should be part of maintenance responsibilities but sometimes rebuilds needed to protect water quality. In rare cases these can be approved. Don't exclude them as a policy but must be very targeted and tied to a goal. Pumping of septic systems is an issue. Risers put in to make them more accessible. Low priority. Burden should be on applicant to prove and sell this. Ask for justification as part of PIP

- a. A number of groups started to ask for indirect costs. KDHE is of the opinion that we do not allow indirect costs unless there is a federally negotiated rate. Indirect costs must be approved by EPA. Need to clarify to projects what are allowable administration costs.
- b. Require that all projects have a 9 element plan by end of grant (or substantial progress) - Work Group concurred.

Kansas Watershed Restoration and Protection Strategy Work Group

June 23, 2009, Meeting Notes – 10:00 AM

Azure Conference Room, 4<sup>th</sup> Floor, Curtis State Office Bldg, 10<sup>th</sup> & Jackson St, Topeka, KS

Meeting Notes

- Introductions
- Previous meeting notes – No comments
- Updates
  - SFY 10 WRAPS Project and Service Provider Agreements
    - A copy of a memorandum to the Governor’s Natural Resources Subcabinet was distributed, which approved WRAPS project funding as recommended by the KS-WRAPS Work Group. Currently three contracts signed (KFS, Little Ark, Kanopolis). Comments on Project Implementation Plans (PIP) have been provided to remaining High Priority projects. PIP comments on remaining grants will be provided by mid-July.
  - Comments on WRAPS Work Group project review process
    - For short review timeframe show the total amount requested to see overall comparison with recommended allocations. This helps to avoid having to see the original grant application budgets.
    - Project summaries were appreciated and liked when the KDHE Project Officers expressed their opinions on the applications.
  - 9- element watershed plan revision process
    - Will the work group be informed once KDHE outlines an approach to work with projects on 9-element planning? KDHE has been using the Ks Guidance developed with the WRAPS WG.
    - How is the monitoring component going in your work with Hillsdale? They have some monitoring data funded by Hillsdale but there really hasn’t been much analysis. KDHE is encouraging projects to utilize USGS / KDHE monitoring data.
    - What is the interest of WG members in terms of reviewing & commenting on plans as they are submitted to KDHE? WG members would like to see a 9 element plan to know what it is and also to make sure sediment management plans (SMP) are in collaboration with 9 element watershed plans. KWO is writing SMP for federal reservoirs beginning with John Redmond – received funding from Corps of Engineers. Need to integrate these plans with WRAPS plans. KWO is working on reservoir roadmap for John Redmond as part of a legislative request – i.e. Cottonwood and Upper Neosho watersheds. The roadmap is due in January 2010 and SMP is due in two years. KFS is developing criteria for riparian forests as part of the Delaware watershed project.

- KWO is working on updating the Capital Development Plan for the Kansas Water Plan. Consider developing a list of all watershed related projects in need of future funding. Use WRAPS 9-element watershed plans as projects for KWP CDP.
- Share 9 element plan checklist with Work Group members. Meeting scheduled for tomorrow to review Hillsdale Plan, 1-4pm tomorrow in KDHE Cottonwood Conference Room.
- State water plan funding
  - KWA requested \$6 million demand transfer for 2010 but received about \$4 million last year. Revenue estimates are bleak. Preparing for cuts but KWO/KWA is looking to request full \$6m demand transfer again for 2011. KWA also request additional 10% of the Kansas Lottery fund. Increased fees for State Water Plan fund also being requested. Working with KS Rural Water Association, League of KS Municipalities and others to gain support for this initiative to increase funding for water projects. Expectation is that full amount will not be received. Agencies are being asked to look at where cuts could be made. KWO asking to consider keeping WRAPS funding whole if possible and look at other programmatic cuts if needed. WRAPS important for implementing all of basin plan initiatives and priorities.
- TMDLs
  - Currently working in NW Ks and 3 basins – stream phosphorus (P), sediment and e.coli. P and sediment for streams are new - working to determine what level is needed and how to achieve the TMDL. Attending BAC meetings. Looking to work with Kanopolis, Prairie Dog, Upper-Lower Smoky and Waconda WRAPS. Also interacting with Nebraska and their approach. Sediment issue on the Solomon and e.coli issues above Waconda. Goal is to complete process by beginning of fiscal year. How is Ks going to do phosphorous? Certain streams have long term records of median below 100 ppb. Use those as references and look at the range of reference and compare to impaired stream.
- ARRA Green Infrastructure Projects
  - Funded 15 projects. Had about 62 proposals. Five were tied directly to WRAPS efforts, specifically Delaware River & City of Holton (Delaware WRAPS), Neosho River (Neosho Headwaters WRAPS), City of Hays (Kanopolis WRAPS) and City of Wichita (Wichita & Environs WRAPS).

- NPS Management Plan –
  - Next step is to take draft revised goals, objectives and strategies to BAC's via internet conference - July 1<sup>st</sup> at 8:30am. Will send WG members the notice and how to participate. Hope to have updated plan by end of the calendar year.
  - KDHE Water quality monitoring data was analyzed for HUC 8 watersheds and preliminary maps were reviewed. It was suggested that some of the draft maps be presented to the BACs. Will flow data be obtained and used in conjunction with the analysis? Not sure how best to do this. Might be good to show graphically average flow concentrations by watershed for the same time frames. Could consider rainfall averages as well. Chris Gnau (KWO) is updating sediment yield maps.
  - Consider community certification program for addressing water plan issues (water quality, quantity, etc). Could be incorporated into NPS Mgmt Plan that if communities met certain standards they could receive higher priority for SRLF monies or CDBG grants, etc. Could work with the League of KS Municipalities, others on developing a program. Promote a comprehensive community approach to addressing water issues.
  - A handout with draft revised NPS Management Plan goals, objectives and strategies was distributed and discussed.
  
- Review of WRAPS Projects – MDC Basin (Postponed until August Meeting)
  
- Subcommittee reports
  
- Announcements
  - WG members
  - Visitors
  - Next meeting – August 25<sup>th</sup>, 2009

# Attachment 2

WRAPS Program Annual Report

# KANSAS

## Watershed Restoration and Protection Strategy



State Fiscal Year 2008  
WRAPS Program Status Report  
May 2009

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# Watershed Restoration & Protection Strategy Program

## WRAPS Program Overview

The Watershed Restoration & Protection Strategy (WRAPS) is a program partnership between many lead state and local natural resource agencies aimed at providing a framework for preserving and restoring Kansas Watersheds. Initiated in the *Kansas Nonpoint Source Pollution Management Plan – 2000 Update*, the Kansas Department of Health & Environment identified WRAPS as a planning process to identify all the water quality protection and restoration needs of a watershed. WRAPS was intended to integrate TMDL implementation, water quality restoration, water quality protection and source water protection. In 2004, the Kansas Water Planning Process adopted the WRAPS concept as a more comprehensive water resource planning and management process for Kansas. WRAPS was adopted through a [KS-WRAPS Memorandum of Agreement](#) among member agencies of the Governor's Natural Resources Sub-cabinet (State Conservation Commission, KS Dept. of Agriculture, KS Water Office, KS Dept. of Wildlife & Parks, KS Corporation Commission, KS Animal Health Dept., KS Dept. of Health & Environment). Each local WRAPS project provides a planning and management framework that engages stakeholders in a process to:

- ◆ Identify watershed restoration and protection needs.
- ◆ Establish watershed management goals.
- ◆ Create a cost-effective action plan to achieve goals.
- ◆ Implement the action plan.

## WRAPS Program Structure

Once the WRAPS program was adopted by the Governor's Natural Resources Sub-Cabinet, an interagency work group was established to develop a more comprehensive WRAPS concept. The WRAPS Work Group includes member agencies of the Kansas Natural Resources Sub-Cabinet and other state and federal agencies that are involved in watershed restoration and protection activities. The Work Group is designed to facilitate a collaborative relationship among state, federal, local government and private sector interests so that financial, programmatic and technical assistance resources are directed to the priority water resource needs of Kansas' citizens. The Kansas Watershed Restoration and Protection Strategy is an outcome of the Kansas Water Planning Process. The KS-WRAPS enables watershed stakeholder leaders to implement comprehensive water resource management practices and measures in individual watersheds. The WRAPS strategy is structured around three project types:

Development – a watershed stakeholder leadership team is established, with typical completion time ranging from 6 to 12 months, and a typical grant amount is \$30,000 to \$50,000. Deliverables may include the formation of a Watershed Stakeholder Leadership Team and an Assessment Phase Plan of Work.

Assessment and Planning - characterize watershed conditions and understand how the watershed responds to various management scenarios. Needs identified through watershed assessment are incorporated into a watershed restoration and protection action plan that includes goals and associated costs. Typical completion time is 9 to 24 months and the typical grant amount is \$75,000 to \$150,000. Deliverables may include a Watershed Inventory and Conditions Report, appropriate tools such as watershed / water quality models for testing and selecting watershed management scenarios, Planning Project Plan of Work, and a Watershed Restoration and Protection Plan.

Implementation – secure resources needed to implement the Watershed Restoration and Protection Plan, initiate implementation, evaluate progress and impacts, revise plan as needed. Completing implementation of a Watershed Restoration and Protection Plan may require as much as 20 years, and a typical annual Section 319 grant may be as much as \$100,000. Deliverables may include implementation of items set out in the Watershed Restoration and Protection Plan, annual evaluation of progress and impacts, application for next year funding, and may include a revised Watershed Restoration and Protection Plan.

### WRAPS Program Funding

Kansas WRAPS Fund refers to the combination of State Water Plan Funds and Section 319 Grant Funds committed to the support of the Kansas WRAPS initiative. The fund was established July 1, 2006 with an \$800,000 appropriation of Kansas Water Plan funds by the Kansas Legislature. KDHE committed \$1.2 million Section 319 grant funds to the fund. In succeeding state fiscal years, state-funding requests will be based on the work products of individual WRAPS projects. At this point the majority of Section 319 grant funds (base and incremental) are allocated to the KS – WRAPS process.

### WRAPS Work Group Members:

Natural Resources Sub-Cabinet agencies (State Conservation Commission, KS Dept. of Agriculture, KS Water Office, KS Dept. of Wildlife & Parks, KS Corporation Commission, KS Animal Health Dept., KS Dept. of Health & Environment), Environmental Protection Agency, Natural Resource Conservation Service, United States Geological Survey, KS Dept. of Transportation, KS Farm Service Agency, KS State University, KS Forest Service, KS Geological Survey, KS Biological Survey.

### Memorandum of Agreement

This agreement memorializes the commitment of the State of Kansas to implement a collaborative interagency strategy to address watershed restoration and protection issues as recommended in the *Kansas Water Plan*. The Kansas Watershed Restoration and Protection Strategy was adopted by the Sub-Cabinet in May 2004 and endorsed by the Kansas Water Authority in June 2004.

### Meetings

The WRAPS Work Group typically meets on the fourth Tuesday of every month. Meetings are usually from 9:30 – 12:00 and are held at the Curtis State Office Building, Azure Room. WRAPS Watershed Partners are invited to every meeting and made aware of the meeting minutes and miscellaneous correspondence.

### WRAPS Partners

The purpose of the Kansas WRAPS Partnership is to provide advice to the WRAPS Work Group and promote stakeholder participation in WRAPS projects. Any person or organization may apply to be a WRAPS Watershed Partner. Partners can include any public or private organization that applies for membership and accepts the Statement of Principles and the duties and obligations within the Partnership Agreement. A membership application form is available online at: <http://www.kswraps.org/partners/>. Current WRAPS Partners include: The Groundwater Foundation, The State Association of Kansas Watersheds, The Watershed Institute, Kansas Rural Center, No-Till on the Plains, Inc., Kansas Alliance for Wetlands and Streams, Kansas Association for Conservation and Environmental Education, Grassland Water Quality Stewardship Program, and the Kansas Rural Water Association.

## WRAPS Technology Transfer

The Kansas nonpoint source pollution control program assures efficient and expeditious achievement of nonpoint source pollution controls which support attainment of the Clean Water Act Goals in Kansas. One measurement of this goal includes giving Kansas stakeholders access to and making them knowledgeable of the goals, objectives, and status of the Kansas nonpoint source pollution control program and activities. Stakeholder awareness is raised through the KS WRAPS website, and the Annual KS WRAPS Conference.

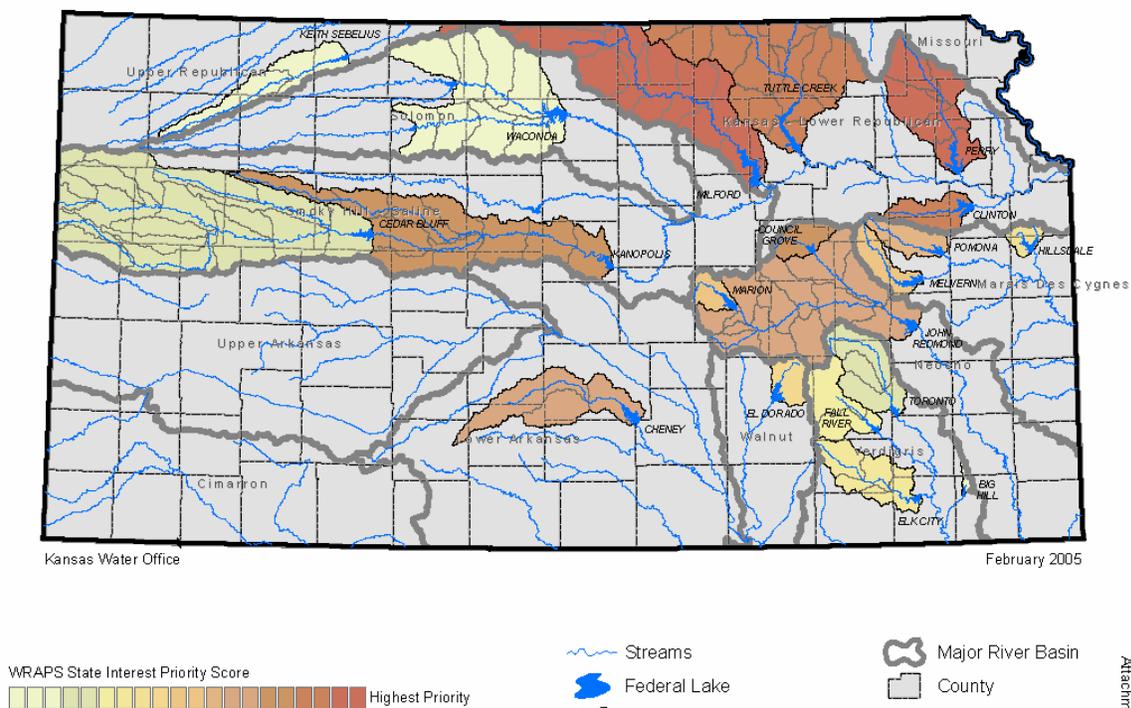
The WRAPS Website, [www.kswraps.org](http://www.kswraps.org), was launched in January of 2007. The website was developed in partnership with Sprout Software, and serves as a one stop shop for current and potential WRAPS leaders, service providers, stakeholders, administrators, and interested citizens to learn and share WRAPS-related resources. The website features searchable online directories for WRAPS Partners, Service Providers, and WRAPS projects statewide, as well as WRAPS conference information and registration. In addition, as the result of a 2008 KERP applied leadership team project a shared network was created call the Kansas Electronic Watershed Library. Users can download and upload educational materials including brochures, fact sheets, advertising examples, watershed maps and more.

In April 2008, the WRAPS Work Group hosted the fourth annual WRAPS Conference in Salina. Approximately 200 people attended this two-day conference, which included a pre-conference tour in the Smoky-Saline River Basin. The next WRAPS conference is scheduled to be held in Great Bend, KS on September 29, 2009. This upcoming conference will also include a pre-conference watershed tour on September 28, 2009.

## Watershed Priority

Watersheds above federal reservoirs that provide public water supply benefits are identified as areas of significant state interest for WRAPS development and implementation. As of June 30, 2008, WRAPS projects were underway or proposed for each of these 20 priority federal reservoir watersheds.

**Watersheds of Federal Reservoirs in Kansas Serving Public Water Supply Needs**



Attachment

# WRAPS Program Accomplishments

- ◆ Over 61% of Kansas is being served by an *active* WRAPS project (32,120,873 acres)
- ◆ All 20 of the Kansas Water Plan priority reservoirs are subject to watershed management activities. 19 are engaged in KS – WRAPS. El Dorado Lake is benefiting from watershed management activities initiated prior to the KS WRAPS program and is planning to initiate a WRAPS project.
- ◆ 44 Active WRAPS areas
- ◆ 61 Active WRAPS Projects Statewide, 18 new in this reporting period.
- ◆ Total Load Reductions: Active Projects implementing BMPs achieved significant nutrient load reductions during this reporting period:
  - ◆ Nitrogen was reduced by 107,785 lbs/yr
  - ◆ Phosphorus was reduced by 60,937 lbs/yr
  - ◆ Sediment was reduced by 26,768 tons/yr

Approximately 29% of active projects are in the Development phase, 28% in the Assessment and/or Planning phase, and 43% in the Implementation phase.

## Development Phase Projects

The goal of a Development Project is to create a community of watershed stakeholders and equip them to effectively lead the watershed through the process of developing a WRAPS. An established and operational watershed stakeholder leadership team is the focus of WRAPS Development Phase Projects.

### Development Accomplishments

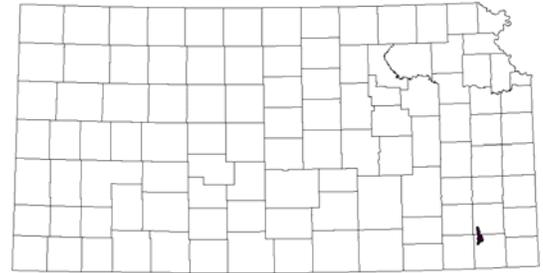
#### Big Hill Creek/Big Hill Lake WRAPS Development

**Funding Source:** KS WRAPS, SFY 2006 \$31,041

Community stakeholders gained through development phase: 8

Meetings held during reporting period: 2

This project will not be proceeding any further in the WRAPS process due to lack of stakeholder interest.



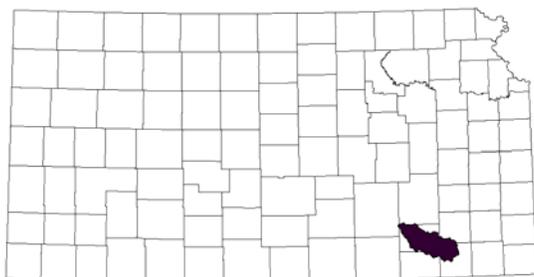
#### Elk City Lake WRAPS Development

**Funding Source:** KS WRAPS, SFY 2006 \$31,041

Community stakeholders gained through development phase: 5

Meetings held during reporting period: 1

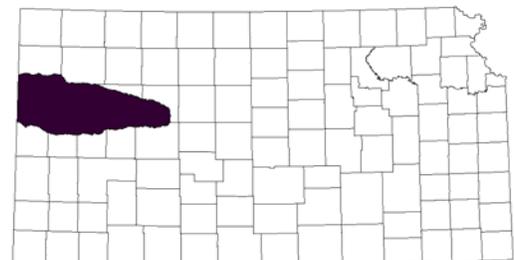
This project will not be proceeding any further in the WRAPS process due to lack of stakeholder interest.



#### KS WRAPS - Cedar Bluff WRAPS Development

**Funding Source:** KS WRAPS, SFY 2006 \$56,370

Community stakeholders gained through development phase: 13

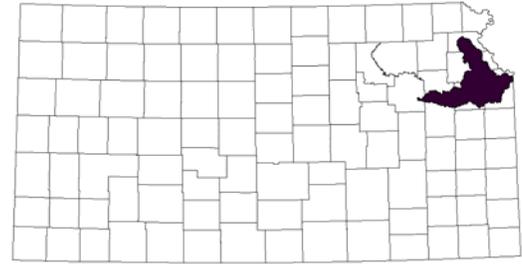


**KS WRAPS - Lower Kansas WRAPS Development**

**Funding Source:** Section 319, FFY 2006 \$60,000

Community stakeholders gained through development phase: 12

Meetings held during reporting period: 1



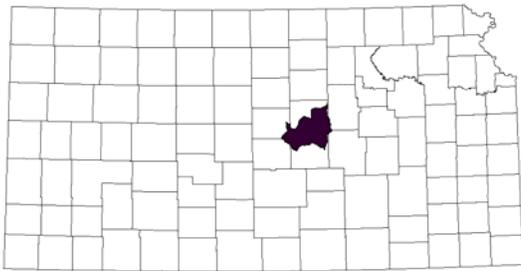
**KS WRAPS - Lower Smoky Hill from Kanopolis Dam to Solomon WRAPS Development**

**Funding Source:** Section 319, FFY 2006 \$50,000

This project is drafting a watershed plan to be finished in July 2009

Community stakeholders gained through development phase: 8

Meetings held during reporting period: 3

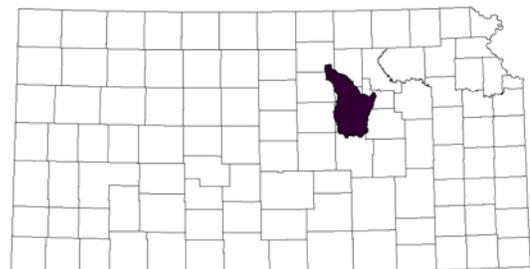


**KS WRAPS - Lower Smoky Hill from Solomon to Junction City WRAPS Development**

**Funding Source:** Section 319, FFY 2006 \$29,000

Community stakeholders gained through development phase: 8

Meetings held during reporting period: 3

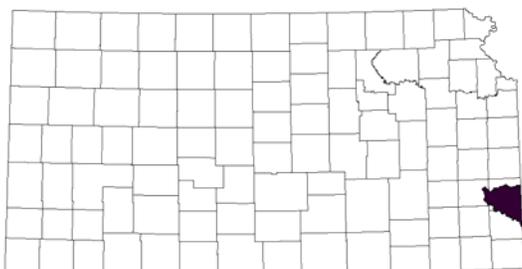


**KS WRAPS - Marmaton River Watershed Development**

**Funding Source:** Section 319, FFY 2006 \$60,000

Community stakeholders gained through development phase: 10

Meetings held during reporting period: 3

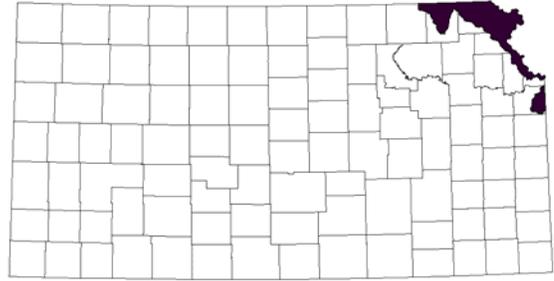


**KS WRAPS - Missouri River WRAPS Development**

Funding Source: Section 319, FFY 2006 \$19,000

Community stakeholders gained through development phase: 11

Meetings held during reporting period: 4

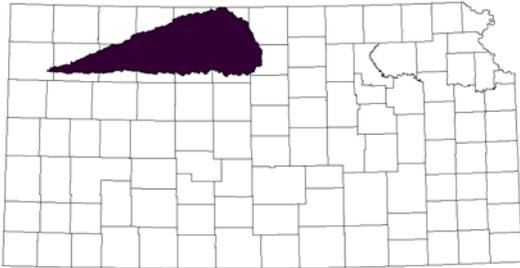


**KS WRAPS - Waconda Reservoir WRAPS Development**

Funding Source: KS WRAPS, SFY 2006 \$66,610

Community stakeholders gained through development phase: 16

Meetings held during reporting period: 1

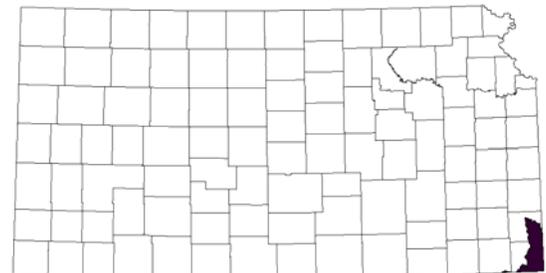


**KS WRAPS (06) - Spring River Watershed Development**

Funding Source: KS WRAPS, SFY 2006 \$64,000

Community stakeholders gained through development phase: 12

Meetings held during reporting period: 2

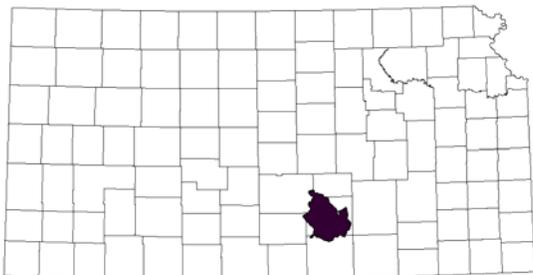


**Lower Arkansas River (Hutchinson to west boundary of Wichita, South Boundary of Wichita to and including Ninnescah below Cheney) WRAPS Development**

Funding Source: Section 319, FFY 2005 \$50,000

Community stakeholders gained through development phase: 7

Meetings held during reporting period: 2

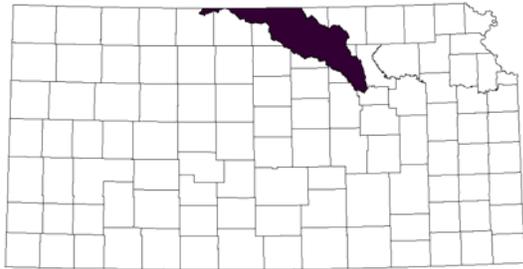
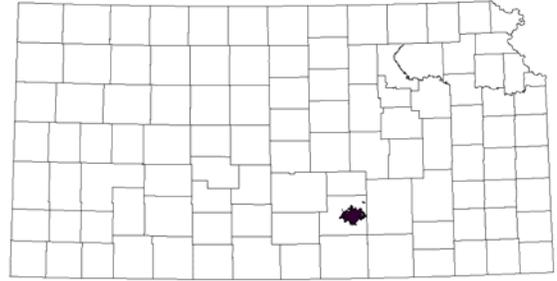


**Lower Arkansas River (Wichita Environs)  
WRAPS Development**

**Funding Source:** Section 319, FFY 2005 \$50,000

Community stakeholders gained through development phase: 7

Meetings held during reporting period: 1



**Milford Lake Watershed WRAPS Development**

**Funding Source:** Section 319, FFY 2004 \$42,600

Community stakeholders gained through development phase: 10

Meetings held during reporting period: 1

**Neosho Basin WRAPS Development**

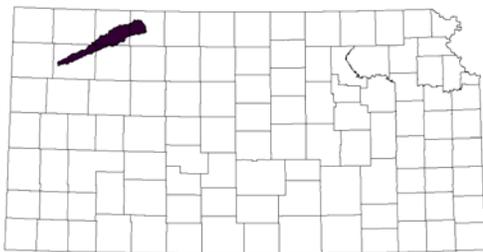
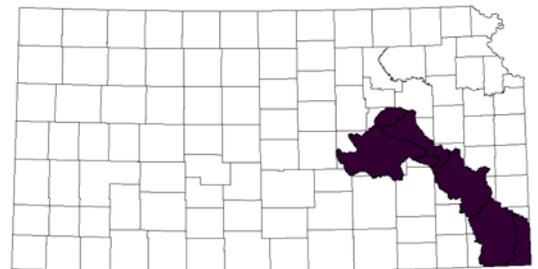
**Funding Source:** Section 319, FFY 2003 \$99,793

Community stakeholders gained through development phase: 15

Meetings held during reporting period: 1

Several watershed assessment activities were completed during this reporting period including:

- Modeling
- Ground truthing
- TMDL reports
- Economic assessment of area
- Potential pollutant loading based on geospatial databases



**Prairie Dog Creek Keith Sebelius Lake WRAPS Development**

**Funding Source:** KS WRAPS, SFY 2006 \$42,025

Community stakeholders gained through development phase: 6

Meetings held during reporting period: 3

### Tuttle Creek Lake Watershed WRAPS Development

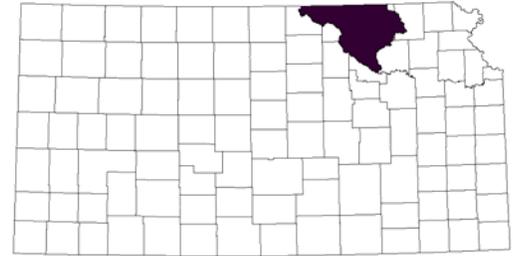
**Funding Source:** Section 319, FFY 2004 \$42,600

Community stakeholders gained through development phase: 15

Meetings held during reporting period: 4

Two watershed assessment activities were completed during this reporting period including:

- Watershed modeling
- Economic assessment of area



### Upper Arkansas Basin WRAPS Development

**Funding Source:** Section 319, FFY 2005 \$48,000

This project began drafting a watershed plan during this period.

Community stakeholders gained through development phase: 12

Meetings held during reporting period: 1

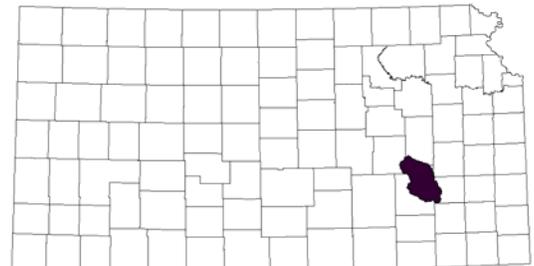


### Upper Verdigris / Toronto Lake WRAPS Development

**Funding Source:** KS WRAPS, SFY 2006 \$31,041

Community stakeholders gained through development phase: 12

Meetings held during reporting period: 2



## Assessment and Planning Phase Projects

The goal of a WRAPS Assessment Project is to characterize watershed conditions, identify needs and opportunities, and understand how the watershed responds to various management scenarios. The goal of a WRAPS Planning Project is to focus on the preparation of a document that identifies actions necessary to achieve stakeholder-established watershed goals.

### Assessment and Planning Accomplishments

#### KS WRAPS - Big Hill Creek/Big Hill Lake Watershed Assessment

**Funding Source:** KS WRAPS, SFY 2007 \$41,000; Section 319, FFY 2006 \$33,000

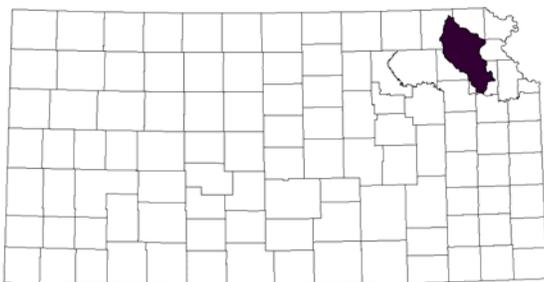
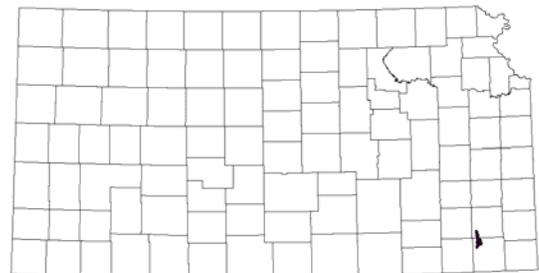
Number of community stakeholders on stakeholder leadership team: 8

Meetings held during reporting period: 1

Several watershed assessment activities were completed during this reporting period including:

- Soil and Water Assessment Tool (SWAT) model data collection
- Watershed Atlas
- Use of BMP Decision Making Tools

This project will not be proceeding any further in the WRAPS process due to lack of stakeholder interest.



#### KS WRAPS - Delaware River WRAPS Assessment and Planning

**Funding Source:** KS WRAPS, SFY 2007 \$19,796; Section 319, FFY 2007 \$10,000

This project completed a watershed plan in May 2007

Number of community stakeholders on stakeholder leadership team: 11

Meetings held during reporting period: 3

Several watershed assessment activities were completed during this reporting period including:

- TMDL Assessment
- AGNPS model
- Ground truthing and River Friendly Farm Program assessments
- KAWS Riparian Assessment
- Citizen Science water sampling
- The Watershed Institute Stream Bank Study

### KS WRAPS - Middle Kansas WRAPS Assessment and Planning

**Funding Source:** Section 319, FFY 2006 \$75,000

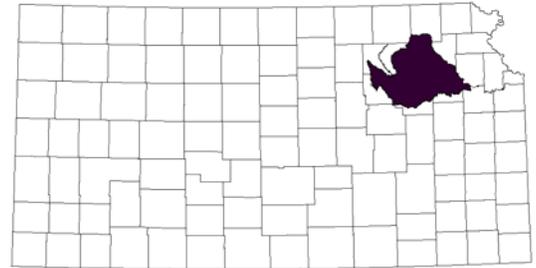
This project is drafting a watershed plan to be finished in July 2009

Number of community stakeholders on stakeholder leadership team: 8

Meetings held during reporting period: 2

Several watershed assessment activities were completed during this reporting period including:

- TMDL Assessment
- Gap Assessment
- Rapid Watershed Assessment Report



### KS WRAPS - Oologah Lake Watershed Stakeholder Leadership Team Development and Assessment Support

**Funding Source:** Section 319, FFY 2005 \$55,175

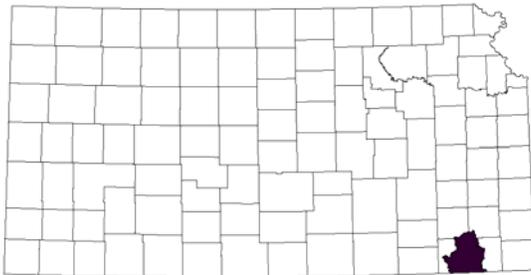
Community stakeholders gained through development phase: 8

Meetings held during reporting period: 2

Two watershed assessment activities were completed during this reporting period including:

- Watershed Atlas
- SWAT Model CORE Oklahoma

This project will not be proceeding any further in the WRAPS process due to lack of stakeholder interest.



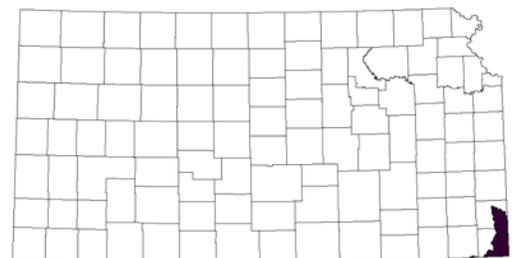
### KS WRAPS - Spring River Watershed Assessment

**Funding Source:** Section 319, FFY 2006 \$50,000

Number of community stakeholders on stakeholder leadership team: 15

One watershed assessment activity is planned for this project:

- GIS Gap Analysis



**KS WRAPS - Upper Arkansas River Basin  
Watershed Assessment**

**Funding Source:** Section 319, FFY 2006 \$78,000

Number of community stakeholders on stakeholder leadership team: 12

Two watershed assessment activities are planned for this project including:

- Obtaining a Watershed Assessment Report
- KGS Modeling Analysis



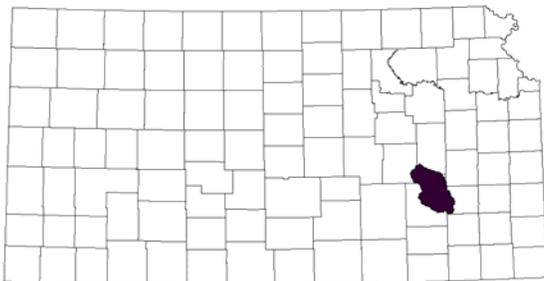
**KS WRAPS - Upper Verdigris/Toronto Lake Watershed  
Assessment**

**Funding Source:** KS WRAPS, SFY 2008 \$68,000

Number of community stakeholders on stakeholder leadership team: 12

Several watershed assessment activities were completed during this reporting period including:

- Use of BMP Decision Making Tools
- STEPL Model
- Watershed Atlas



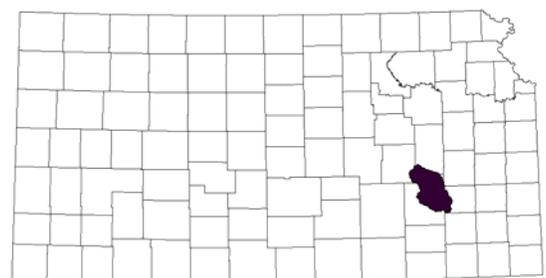
**KS WRAPS - Upper Verdigris/Toronto Lake WRAPS  
Planning**

**Funding Source:** KS WRAPS, SFY 2008 \$38,420; Section 319, FFY 2007 \$5,656

Number of community stakeholders on stakeholder leadership team: 12

Two watershed assessment activities are planned for this project including:

- Use of BMP Decision Making Tools
- A Watershed Action Plan



**KS WRAPS (06) – Oologah Lake / Lower Verdigris Channel & Riparian Area Assessment**

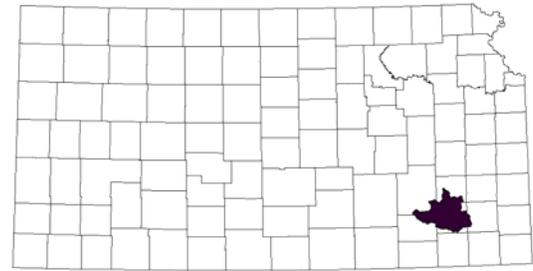
**Funding Source:** KS WRAPS, SFY 2006 \$36,112; Section 319, FFY 2005 \$21,388

Number of community stakeholders on stakeholder leadership team: 12

Meetings held during reporting period: 1

Several watershed assessment activities were completed during this reporting period including:

- Riverworks Rapid Assessment System
- Middle Verdigris Streambank Inventory Report
- Stream Visual Assessment Protocol



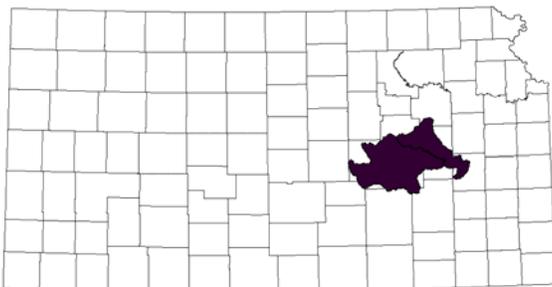
**KS WRAPS Cottonwood Development, Assessment & Planning / Neosho Headwaters Assessment and Planning**

**Funding Source:** KS WRAPS, SFY 2008 \$150,331; Section 319, FFY 2007 \$14,000

Number of community stakeholders on stakeholder leadership team: 7

Two watershed assessment activities were completed during this reporting period including:

- Watershed Atlas
- STEPL Model



**KS - WRAPS Elk City Lake Watershed Assessment Project**

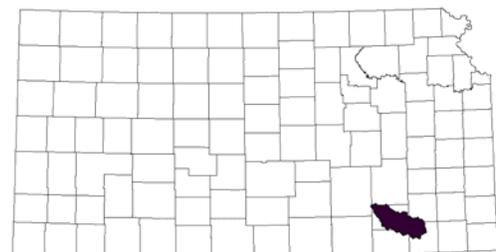
**Funding Source:** KS WRAPS, SFY 2008 \$68,000

Number of community stakeholders on stakeholder leadership team: not active yet

Several watershed assessment activities were completed during this reporting period including:

- Use of BMP Decision Making Tools
- Watershed Atlas
- STEPL Model

This project will not be proceeding any further in the WRAPS process due to lack of stakeholder interest.



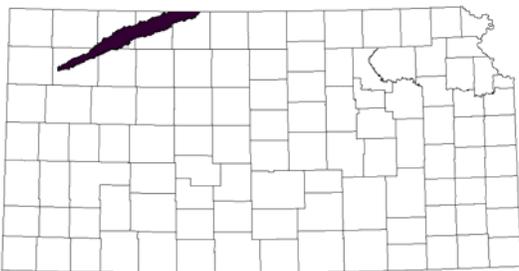
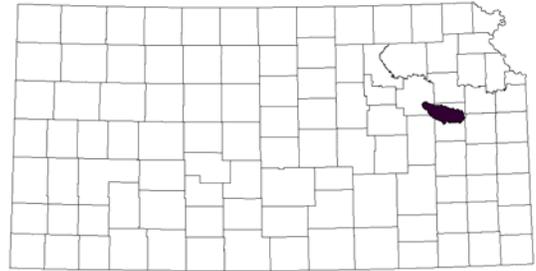
### KS WRAPS Pomona Reservoir Watershed Assessment

**Funding Source:** KS WRAPS, SFY 2006 \$85,000

Number of community stakeholders on stakeholder leadership team: 10

Two watershed assessment activities were completed during this reporting period including:

- USGS Gage Stations
- Water Quality Study



### KS WRAPS: Lower and Upper Prairie Dog Creek WRAPS

**Funding Source:** Section 319, FFY 2007 \$53,000

Community stakeholders gained through development phase: 6

One watershed assessment activity is planned for this project:

- Water Quality Assessment and Data Collection

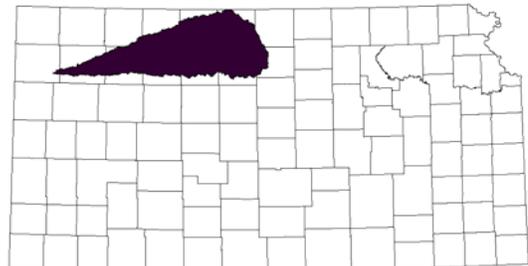
### KS WRAPS - Waconda Assessment

**Funding Source:** FFY 2006 \$60,000

Community stakeholders gained through development phase: 16

Two watershed assessment activities are planned for this project including:

- Rapid Watershed Assessment Report
- Watershed Action Plan



### Milford Lake Watershed WRAPS Assessment

**Funding Source:** Section 319, FFY 2004 \$162,300

Number of community stakeholders on stakeholder leadership team: 10

Several watershed assessment activities were completed during this reporting period including:

- Watershed atlas
- Economic assessment of area
- STEPL model
- TMDL reports
- Potential pollutant loading based on geospatial databases



### Neosho River Basin WRAPS Assessment

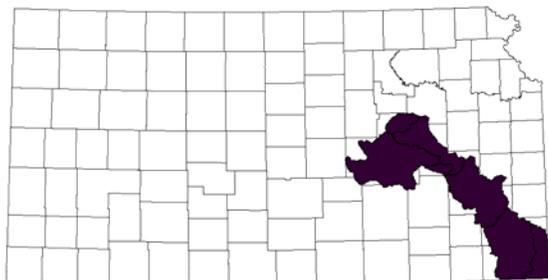
**Funding Source:** Section 319: FFY 2004 \$208,185

Number of community stakeholders on stakeholder leadership team: 15

Meetings held during reporting period: 1

Several watershed assessment activities were completed during this reporting period including:

- Modeling
- Ground truthing
- TMDL reports
- Economic assessment of area
- Potential pollutant loading based on geospatial databases
- Watershed assessment atlas



## Tuttle Creek Lake Watershed WRAPS Assessment

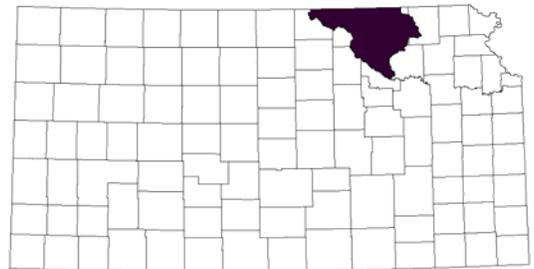
**Funding Source:** Section 319, FFY 2004 \$42,600

Number of community stakeholders on stakeholder leadership team: 15

Meetings held during reporting period: 2

Several watershed assessment activities were completed during this reporting period including:

- STEPL model
- Economic assessment of area
- Ground truthing
- TMDL reports
- Potential pollutant loading based on geospatial databases
- SWAT modeling
- Watershed Atlas



## Implementation Phase Projects

The goal of a WRAPS Implementation Project is to expeditiously implement the watershed action plan. Implementation of the watershed plan requires a WRAPS team to secure resources needed to implement the Watershed Restoration and Protection Plan, initiate implementation, evaluate progress and impacts, and revise plan as needed. Implementation typically includes information and education activities such as public meetings, fliers, handouts, website development, radio commercials, workshops, water festivals, newspaper articles, and newsletters. These activities are too numerous to list for individual projects. Best Management Practices (BMPs) are also a typical activity associated with implementation, and are generalized in the following project summaries.

### Implementation Project Accomplishments

#### Banner Creek WRAPS Implementation, Part 2

**Funding Source:** Section 319, FFY 2004 \$48,363

This project completed a watershed plan in March 2001.

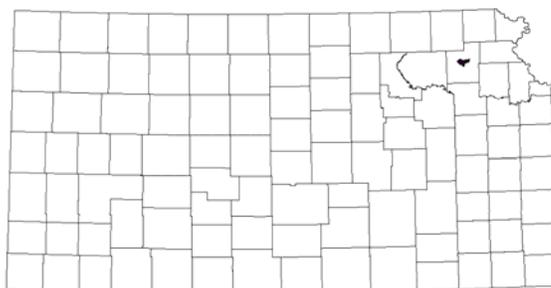
Number of community stakeholders on stakeholder leadership team: 9

Meetings held during reporting period: 3

BMPs implemented by this project include pond construction.

One watershed assessment activity was utilized during this reporting period:

- KDHE TMDL reports



#### Cheney KS-WRAPS Implementation

**Funding Source:** KS WRAPS, SFY 2006 \$80,000; Section 319, FFY 2005 \$78,950

This project completed a watershed plan in July 1994

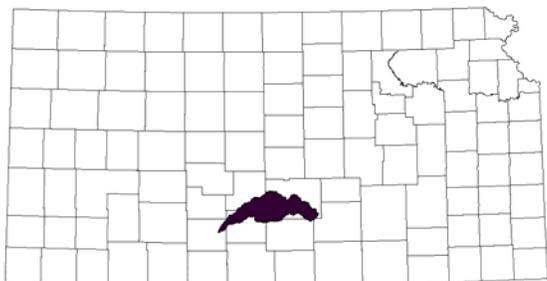
Number of community stakeholders on stakeholder leadership team: 10

Meetings held during reporting period: 2

BMPs implemented by this project include brush management, fencing, onsite wastewater system upgrades, heavy use area protection, range planting, grade stabilization structures, wetland restoration, terraces, pumping plants, and pasture/hay planting.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 14,099lbs/yr
- Phosphorus 3,498 lbs/yr
- Sediment 91 tons/yr



### Cowskin Creek Watershed WRAPS

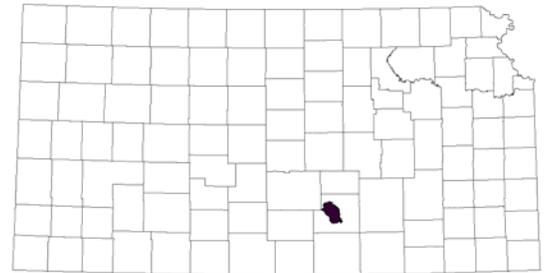
**Funding Source:** Section 319, FFY 2004 \$32,322

This project completed a watershed plan in January 2008

Number of community stakeholders on stakeholder leadership team: 8

Meetings held during reporting period: 1

This project plans to implement BMPs that will remediate BOD (Biochemical oxygen demand), FCB, nitrogen (ammonia and nitrate), phosphorus, and lake eutrophication. BMPs to protect water from heavy metals, pesticides, salts and minerals will also be implemented.



### Hillsdale WRAPS Implementation

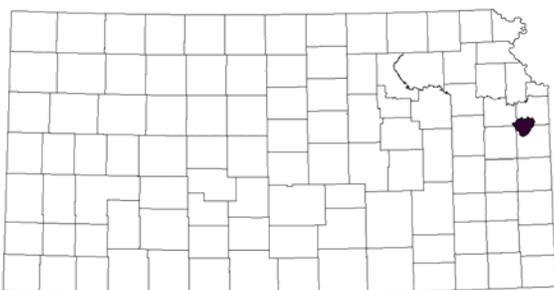
**Funding Source:** KS WRAPS, SFY 2006 \$30,000; Section 319, FFY 2005 \$30,000

This project completed a watershed plan in March 2000 and revised the plan in 2006

Number of community stakeholders on stakeholder leadership team: 11

Meetings held during reporting period: 3

This project plans to complete bio-assessments on 20 sites, and complete water quality sampling.



### John Redmond Lake – Neosho River WRAPS Development – Eagle Creek WRAPS Implementation

**Funding Source:** KS WRAPS, SFY 2006 \$40,000; Section 319, FFY 2005 \$40,000

This project completed a watershed plan in December 2005

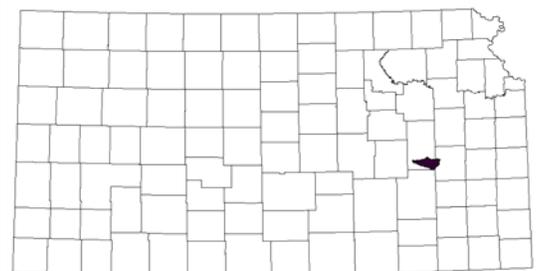
Number of community stakeholders on stakeholder leadership team: 11

Meetings held during reporting period: 3

BMPs implemented by this project include terraces, critical area plantings, and diversions.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 328 lbs/yr
- Phosphorus 164 lbs/yr
- Sediment 163 tons/yr



### KS WRAPS - Cheney WRAPS Implementation Part 2

**Funding Source:** KS WRAPS, SFY 2007 \$90,000;  
Section 319, FFY 2006 \$90,000

This project completed a watershed plan in July 1994

Number of community stakeholders on stakeholder leadership team: 15

Meetings held during reporting period: 2

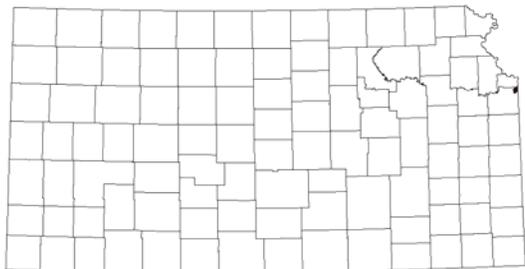
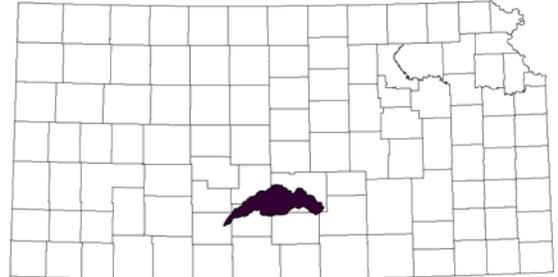
One watershed assessment activity was completed during this reporting period:

- AnnAGNPS watershed model

BMPs implemented by this project include brush management, fencing, onsite wastewater system upgrades, heavy use area protection, range planting, grade stabilization structures, wetland restoration, terraces, pumping plants, and pasture/hay planting.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 327lbs/yr
- Phosphorus 163 lbs/yr
- Sediment 137tons/yr



### KS WRAPS - City of Mission Hills/Brush Creek WRAPS Implementation - Peatwood Park Site

**Funding Source:** Section 319, FFY 2006 \$160,000

Number of community stakeholders on stakeholder leadership team: 12

Meetings held during reporting period: 4

This project plans to implement BMPs such as mitigation of channel property and stream bank stabilization projects.

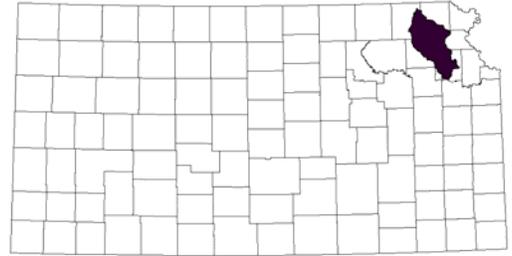
### KS WRAPS - Delaware WRAPS Implementation

**Funding Source:** KS WRAPS, SFY 2008 \$40,000, SFY 2009 \$5,600; Section 319, FFY 2007 \$25,000

This project completed a watershed plan in May 2007

Number of community stakeholders on stakeholder leadership team: 11

This project plans to implement BMPs including hard water crossings, alternative watering supplies, and watering site construction.



### KS WRAPS - Fall River Implementation

**Funding Source:** KS WRAPS, SFY 2007 \$40,000  
Section 319, FFY 2006 \$40,000

This project completed a watershed plan in November 2006

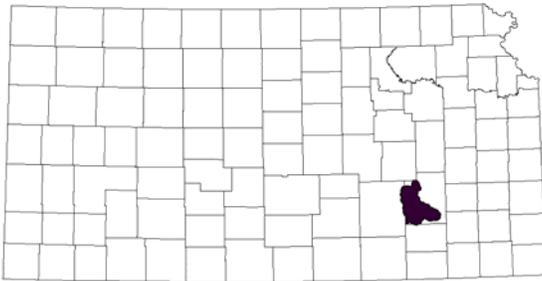
Number of community stakeholders on stakeholder leadership team: 10

Meetings held during reporting period: 2

BMPs implemented by this project include brush management, critical area planting, pasture and hayland management, brush management, abandoned well plugging, and prescribed grazing.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 193 lbs/yr
- Phosphorus 419 lbs/yr
- Sediment 77 tons/yr



### KS WRAPS - Hillsdale Reservoir WRAPS Implementation

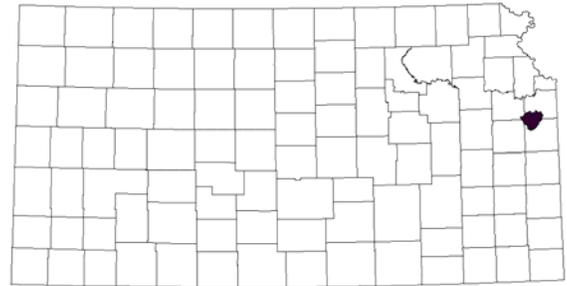
**Funding Source:** KS WRAPS, SFY 2007 \$48,000

This project completed a watershed plan in March 2000 and revised the plan in 2006

Number of community stakeholders on stakeholder leadership team: 10

Meetings held during reporting period: 5

This project plans to focus on Urban BMP development.



### KS WRAPS - Kanopolis WRAPS Implementation Part 2

**Funding Source:** KS WRAPS, SFY 2007 \$180,000; Section 319, FFY 2006 \$180,000

This project completed a watershed plan in 2004 and completed revisions in September 2008

Number of community stakeholders on stakeholder leadership team: 16

Meetings held during reporting period: 1

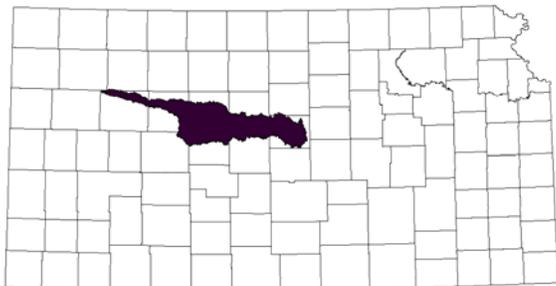
Two watershed assessment activities were completed during this reporting period:

- Water Sampling
- GIS/GPS Unit groundtruthing and upland assessments

BMPs implemented by this project include conservation tillage, conservation crop rotation, contour farming, critical area planting, crop residue use, fencing, grassed waterways, prescribed grazing, nutrient management, pest management, residue management, terraces, wildlife/upland management, brush management, cover crops, livestock exclusion, livestock waste storage facilities, sediment basins, pond sealing/lining, spring development, waste utilization, sediment basins, mulching, and habitat restoration.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 75,841 lbs/yr
- Phosphorus 37,456 lbs/yr
- Sediment 21,913 tons/yr



**KS WRAPS - Lower/Middle Kansas and Upper Wakarusa  
(SWP 08 / FFY 07)**

**Funding Source:** KS WRAPS, SFY 2008 \$51,867; Section 319, FFY 2007 \$127,933

**Lower Kansas**

Number of community stakeholders on stakeholder leadership team: 11

Two watershed assessment activities are planned for this project including:

- Riparian Assessment for 2 HUC 14s
- Watershed Condition Inventory

**Middle Kansas**

This project is drafting a watershed plan to be finished in July 2009

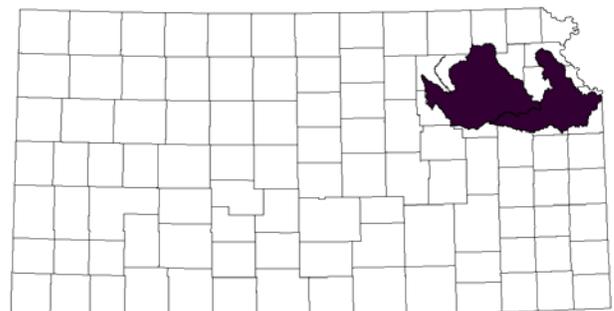
Number of community stakeholders on stakeholder leadership team: 8

**Upper Wakarusa**

This project completed a watershed plan in February 2003

Number of community stakeholders on stakeholder leadership team: 8

This project plans to implement BMPs such as livestock waste management practices, terraces, prescribed grazing, buffers, filter strips, riparian buffers, streambank stabilizations, and stormwater runoff practices in suburban areas.



**KS WRAPS - Marais des Cygnes Basin WRAPS  
Implementation: Riparian Forestry Part 4**

**Funding Source:** Section 319, FFY 2006 \$190,000

This project completed a watershed plan in July 2003

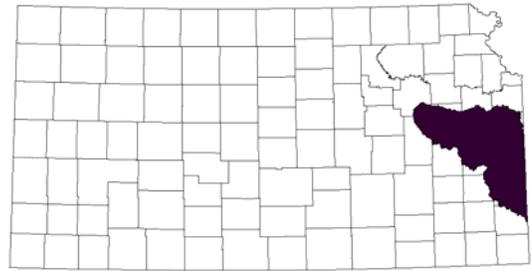
Number of community stakeholders on stakeholder leadership team: 10

Meetings held during reporting period: 3

BMPs implemented by this project include riparian forest buffers, forest stand improvement, wildlife wetland management, wildlife upland management, tree/shrub enhancement, and filter strips..

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 2,354 lbs/yr
- Phosphorus 1,480 lbs/yr
- Sediment 1,247 tons/yr



**KS WRAPS - Marion Reservoir WRAPS  
Implementation and Assessment**

**Funding Source:** KS WRAPS, SFY 2007 \$95,000; Section 319, FFY 2006 \$95,000

This project completed a watershed plan in November 2006

Number of community stakeholders on stakeholder leadership team: 14

Meetings held during reporting period: 2

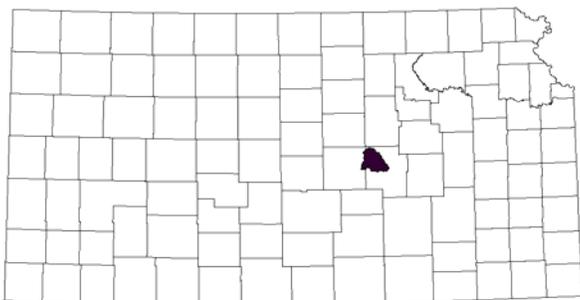
Several watershed assessment activities were completed during this reporting period:

- Streambank Stability Assessment
- Water Quality Monitoring
- Shoreline Assessment Study
- KDWP Rough Fish Study

BMPs implemented by this project include terraces, grassed waterways, land clearing and onsite wastewater system upgrades.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 407 lbs/yr
- Phosphorus 205 lbs/yr
- Sediment 170 tons/yr



**KS WRAPS - Marion, Melvern, Twin Lakes, Upper Fall River, Clarks Creek FFY 07**

**Funding Source:** KS WRAPS, SFY 2008 \$18,000; Section 319, FFY 2007 \$292,700

**Marion**

This project completed a watershed plan in November 2006

Number of community stakeholders on stakeholder leadership team: 24

**Melvorn**

This project completed a watershed plan in November 2001

Number of community stakeholders on stakeholder leadership team: 7

**Twin Lakes**

This project completed a watershed plan in September 2008

Number of community stakeholders on stakeholder leadership team: 7

**Upper Fall River**

This project completed a watershed plan in November 2006

Number of community stakeholders on stakeholder leadership team: 14

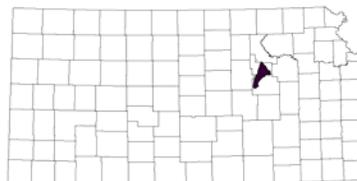
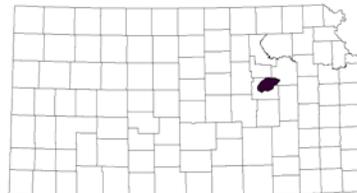
**Clarks Creek**

Number of community stakeholders on stakeholder leadership team: 12

BMPs implemented by this project include grassed waterways, filter strips, onsite wastewater system upgrades, and fencing.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 312 lbs/yr
- Phosphorus 207 lbs/yr
- Sediment 123 tons/yr



### KS WRAPS - Melvern WRAPS Implementation Part 7 (FFY 06)

**Funding Source:** KS WRAPS, SFY 2007 \$37,000; Section 319, FFY 2006 \$39,000

This project completed a watershed plan in November 2001

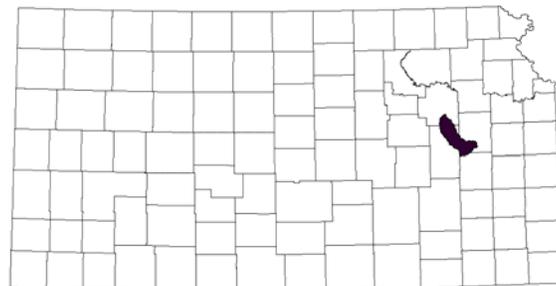
Number of community stakeholders on stakeholder leadership team: 6

Meetings held during reporting period: 3

BMPs implemented by this project include a watering facility, trash dump removal, diversions, sediment basins, fencing, and a livestock waste treatment lagoon.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 5,484 lbs/yr
- Phosphorus 1,833 lbs/yr
- Sediment 872 tons/yr



### KS WRAPS - Pomona Reservoir WRAPS Planning and Implementation

**Funding Source:** KS WRAPS, SFY 2007 \$39,000; Section 319, FFY 2006 \$11,000

Number of community stakeholders on stakeholder leadership team: 6

Meetings held during reporting period: 3

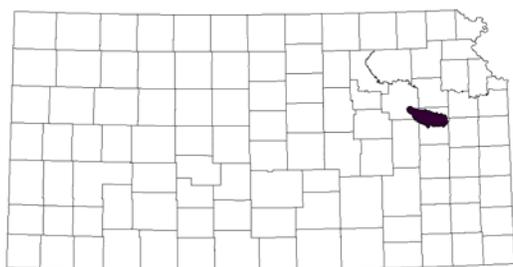
Two watershed assessment activities were completed during this reporting period including:

- BMP Auction development using the RUSLE Model
- Water Quality Monitoring

BMPs implemented by this project include field borders, filter strips, grassed waterways, land smoothing, onsite wastewater system upgrades, pasture and hayland management, pasture/hay planting, pipeline, ponds, terraces, underground outlets, water/sediment control basins, and a watering facility.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 1,824 lbs/yr
- Phosphorus 891 lbs/yr
- Sediment 586 tons/yr



**KS WRAPS - Twin Lakes (Council Grove)  
Implementation Part 4**

**Funding Source:** KS WRAPS, SFY 2007 \$34,000; Section 319, FFY 2006 \$34,000

This project completed a watershed plan in September 2008

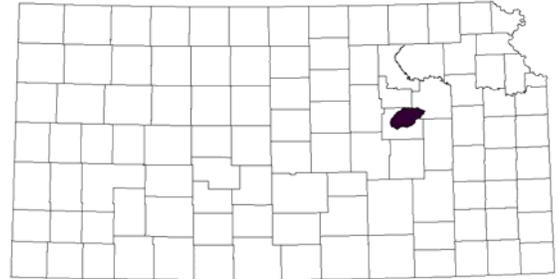
Number of community stakeholders on stakeholder leadership team: 7

Meetings held during reporting period: 1

BMPs implemented by this project include abandoned water well plugging, critical area planting, diversions, grassed waterways, onsite wastewater system upgrades, ponds, range planting, terraces, trash dump removal, and water well recommissioning.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 5,603 lbs/yr
- Phosphorus 1,666 lbs/yr
- Sediment 725 tons/yr



**KS WRAPS - Upper Wakarusa Implementation Part 3**

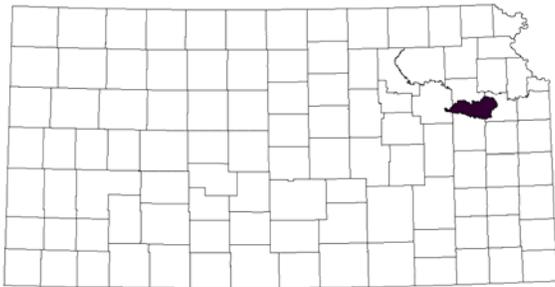
**Funding Source:** KS WRAPS, SFY 2007 \$40,000; Section 319, FFY 2006 \$110,000, FFY 2005 \$25,000

This project completed a watershed plan in February 2003

Number of community stakeholders on stakeholder leadership team: 10

Meetings held during reporting period: 2

This project plans to implement BMPs such as alternative watering, fencing, grassed waterways, and no-till farming.



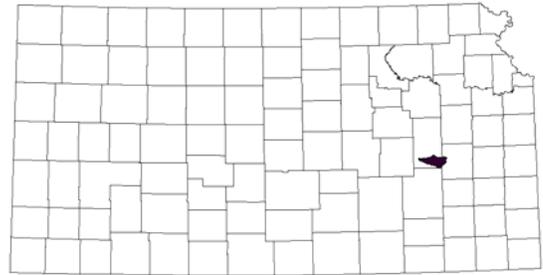
### KS WRAPS Eagle Creek WRAPS Implementation

**Funding Source:** Section 319, FFY 2007 \$2,500

This project completed a watershed plan in December 2005

Number of community stakeholders on stakeholder leadership team: 12

This project plans to implement BMPs such as filter strips and riparian buffers.



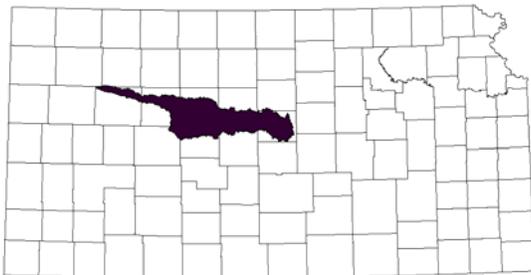
### KS WRAPS: Kanopolis Reservoir, Big Creek and Middle Smoky Hill River Watersheds

**Funding Source:** KS WRAPS, SFY 2008 \$10,000; Section 319 FFY 2007 \$5,000

This project completed a watershed plan in 2004 and revised the plan in 2008

Number of community stakeholders on stakeholder leadership team: 16

This project plans to implement BMPs such as vegetative buffer strips, animal feeding operation relocation, grassed waterways, terraces, and no-till farming.



### KS WRAPS Upper Wakarusa WRAPS Implementation (Six Mile and Lynn Creeks)

**Funding Source:** KS WRAPS, SFY 2006 \$30,000; Section 319, FFY 2005 \$30,000

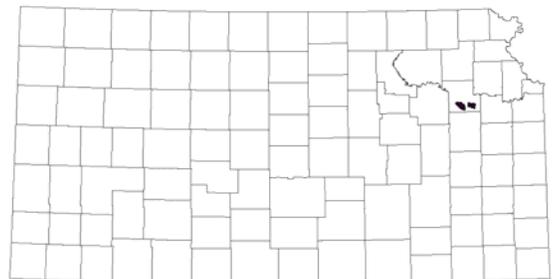
Number of community stakeholders on stakeholder leadership team: 7

Meetings held during reporting period: 4

BMPs implemented by this project include onsite wastewater system upgrades, underground outlets, water/sediment control basins, critical area planting, terraces, and water well recommissioning.

BMPs implemented achieved significant nutrient load reductions:

- Nitrogen 885 lbs/yr
- Phosphorus 587 lbs/yr
- Sediment 601 tons/yr



**KS-WRAPS: Little Arkansas River WRAPS Implementation**

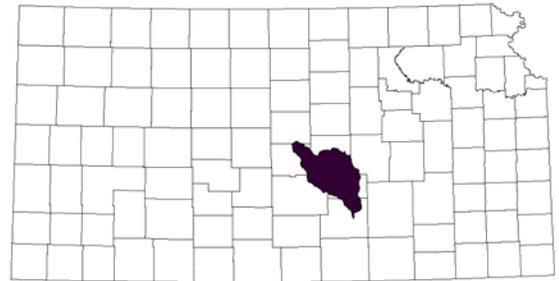
**Funding Source:** Section 319, FFY 2005 \$101,869

This project completed a watershed plan in October 2004

Number of community stakeholders on stakeholder leadership team: 15

Meetings held during reporting period: 3

This project plans to implement BMPs such as atrazine runoff reduction practices, buffers, and riparian restoration.



**Lake Olathe WRAPS Implementation**

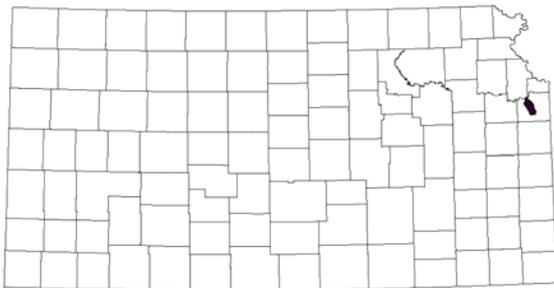
**Funding Source:** Section 319, FFY 2005 \$245,000

This project completed a watershed plan in July 2004

Number of community stakeholders on stakeholder leadership team: 5

Meetings held during reporting period: 1

This project plans to implement BMPs such as stormwater runoff reduction and urban development BMPs.



**Marias des Cygnes Basin WRAPS Implementation Livestock Projects**

**Funding Source:** Section 319, FFY 2005 \$200,000

This project completed a watershed plan in July 2003

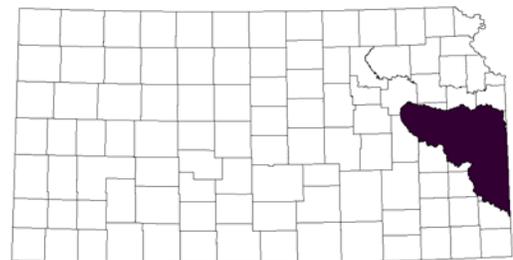
Number of community stakeholders on stakeholder leadership team: 17

Meetings held during reporting period: 4

BMPs implemented by this project include alternative watering, fence, pipeline, and heavy use area protection

BMPs implemented achieved significant nutrient load reductions:

- Phosphorus 12,286 lbs/yr



Marias des Cygnes Basin WRAPS Implementation I&E,  
Part 2

Funding Source: Section 319, FFY 2004 \$67,000

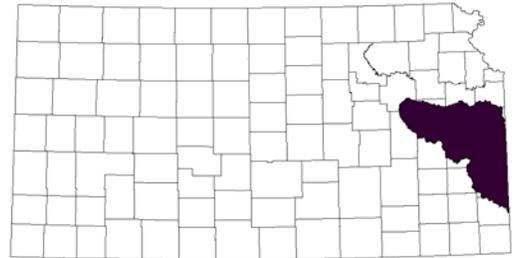
This project completed a watershed plan in July 2003

Number of community stakeholders on stakeholder leadership team: 18

One watershed assessment activity was completed during this reporting period:

- Bio-assessment backpacks

This project plans to focus on completing a post secondary stream asset inventory.



Appendix  
Work Group Meeting Minutes  
7/24/2007 through 6/24/2008

1. Introductions
2. Previous meeting notes - Announcements from the last meeting regarding EPA / Corp wetland guidance, is that related to the court decision last year? Yes. Should a technical team be formed to look into this subject? Might be helpful to do an overview now, and again in 6 months when some issues have been ironed out. Group would like to have an information presentation to the WG.
3. Watershed Partner Application – Flint Hills RC & D - Partner Application: Approved. Jeff mentioned Bruce should not be contact for NRCS. Jeff will follow up with all RC&D's providing council. Contact persons should be RC&D council member, not NRCS employee.
4. 2008 WRAPS Conference – Salina – Committee = Mary Lou Ponder, Dale Kirkham, Mary Fund, Stacie Minson, Paul Ingle, Deb Baker, Craig Smith, Wynona Williams, Amanda Reed, Jaime Gaggero.
5. Agency Sponsors - 5 ways to sponsor = 1. Want to sponsor but can't contribute financially, but commit to promote, 2. Offer financial sponsorship as underwriting grant, 3. Commit to have a number of employees attend 4. Sponsor clients to attend (consultants) 5. Exhibitor fee

Sponsors:

Watershed Institute – Option 1 (will put on website), 5  
Stream survey program - KDWP – exhibitor, and #1  
NRCS – 5, 3  
EPA – 5  
Ks Forrest Service – 5

Comments = Easier to fund if booth fee.

6. Topic Team Reports
  - a. Riparian Areas Management Team – Deb Goard – Thursday September 6<sup>th</sup>, 9:30 at the KFS state office in Manhattan. Met and discussed evaluation tools. Collected written tools that might be useful. Assessment Tool from Iowa. Watershed Institute uses something similar that takes photos as well at 2500 each. EPA is looking to provide a few for states to encourage them to utilize them.

- b. WRAPS Evaluation Guidance Team – Dale Lambley - Met and discussed evaluation tools. Collected written tools that might be useful. Assessment Tool from Iowa. Watershed Institute uses something similar that takes photos as well at 2500 each. EPA is looking to provide a few for states to encourage them to utilize them.

7. Smart Growth – Presentation Stacy Hutchinson

8. Announcements

a. Work Group Members

- i. SFY 2008 WRAPS Action Plans / Application – TA Workshops

- 1. August 1 – Hays
- 2. August 2 – Wichita
- 3. August 3 - Topeka

- ii. EPA Science Advisory Board Hypoxia Advisory Panel – Public meetings / teleconferences June 30 & August 1
- iii. KS Watershed Projects Coordination Database – Kerry Wedel <http://maps.kansasgis.org/watershed/>
- iv. WRAPS Web Site <http://kswraps.org/>

- 1. Work Group Members encouraged to enter “service provider” information.

- b. Visitors – July 26 and 27<sup>th</sup> is StreamLink stream assessment meeting.

KAWS third CPR conference is September 20<sup>th</sup> – 22<sup>nd</sup> at the Overland Park Sheraton

c. Events Calendar

d. WRAPS Work Group Meeting Schedule:

- i. August 28, 2007
- ii. September 25, 2007
- iii. October 23, 2007
- iv. November 20, 2007
- v. January 22, 2008

1. Introductions
2. Previous meeting notes – Ground Rules
3. Watershed Partner Applications – Jaime Gaggero
  - a. Watershed Land Trust Application – Accepted, Don will email everyone list of current partners.
4. SFY 2008 WRAPS - Status
  - a. Sub-cabinet Action – Map and map updates. Presented twice to sub-cabinet. First presentation requested concurrence from all WG members on recommended allocation. Second presentation did not include additional 319 funds, rather only 2 million wraps fund. Sub-cabinet concurred but expressed concern about total amount of funds to KSU and Playa Lake Joint Venture as well as a suggestion to consider future watershed conditions in our priority score system. SWP funds will be available mid-February.
  - b. Grant Agreements
  - c. Other Funding
  - d. SCC Implementation Funding – Don Jones
    - i. Handout – update of committed funds, funds in que and funds not earmarked. Remaining funds SCC will solicit new projects.
  - e. Flint Hills RC & D Comments on SFY 2008 Process
    - i. General Comments – Need committee to make recommendations for program improvements. Need to focus more on monitoring and evaluation. Need to make awards based on performance and need performance measures. Paul – How to integrate wraps into state natural resources holistically. Implementation money is hard to come by – we need to do a better job of using other agency implementation programs. Pieces of program seem out of balance, implementation, TT, TA, I and E, coordination, etc. Next application season, need clearer expectations. Cut back on number of projects and provide more funding to fewer. Need success for program, otherwise lose support from locals and funding agencies. Does NRCS do pre / post monitoring of BMP and would they refer such requests to wraps program? Would they be willing? WRAPS teams can influence NRCS specs and the farm bill, example streambank stabilization project. **WRAPS teams are not understanding how to utilize other agency's funds or resources to implement watershed action plans.** Don – important to fund as many SLT's as feasible. Not doing a good job of leveraging resources already out in the state. Gap – Edge of field modeling but what is the effect on watershed scale in terms of water quality improvement. NRCS SEEP analysis almost complete. Development phase and forming SLT's is lacking philosophy and success. Teams are limited in scope and too little time is expended educating them on the issues. Coordinators are not 'interviewing' local leaders. Could be asking wrong questions? Ask – What do we want from water, rather than what are your water concerns. Coordinators should

bridge gap between scientists and landowners. What are 'products' as a result of successful development phase, ex. Testimonials?

- ii. WG Needs to discuss how to integrate all natural resource areas.
  - iii. KDHE or KWO representative meet with all wraps projects in calendar year 2008 to clarify wraps philosophy. Need to begin working on SFY 09 application – focusing on deliverables and performance. Also consider monitoring and evaluation. Development phase assistance (SLT development). Leverage resources offered by other natural resource agencies.
  - iv. 1<sup>st</sup> committee – work on presentation / publications for wraps – Laura, Kerry, Don, Jaime. 2<sup>nd</sup> committee – administrative aspects of application process, performance based evaluation, expectation guidance, etc. – Jaime, Mary Fund, Paul (Flint Hills RC&D).
  - v. Share limitations of funding sources with WG and include this information in wraps 101 presentation.
5. SFY 2009 WRAPS Appropriations – Kerry Wedel
  6. Work Group Review of WRAPS Project Work Products – Jaime Gaggero
    - a. Want access to review if necessary. Evaluation tools so that teams can do so themselves. We need to provide guidance on 'at end of this phase this is what you should have accomplished'....suggested checklist. KDHE PO's simply validate that work was done. Phase 'best practices' worksheet to provide assistance to wraps groups.
    - b. Share quarterly reports for wraps on kswraps.org website??? Other work products??? Final Reports???
    - c. KDHE will post all products on wraps and coordination dbase website and notify work group members via email.
  7. Announcements
    - a. Work Group Members
      - i. Evaluation Team meet at 1:30 Meadowlark Conference Room – Tom Stiles
      - ii. Sediment Strategy Update – White papers almost ready for publication. Corps of Engineer meeting in Dallas. Regional conference on research of sedimentation – submitted grant application for conference funding with USDA. Kansas, Oklahoma, Texas, Arkansas – top 4 states that rely on federal reservoirs as PWS in the country.
      - iii. NW KS – SW NB Watershed Project Discussion 9/5/2007 Norton – Don met with RC&D discuss Ks, NB, CO project to protect Harland Lake. Lake is the accounting point for the Republic river compact. Suggest getting DWR field office (Stockton) involved in meetings.
      - iv. Marais des Cygnes KS/MO Targeted Watershed Grant – Have funding available, finalizing grant agreements.
      - v. World Water Monitoring Day

Kansas Watershed Restoration and Protection Strategy

WRAPS Work Group

January 29, 2008 Meeting Agenda – 9:30 AM KDHE Azure Conference

Room 4<sup>th</sup> Floor Curtis Office Building

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- vi. KS Watershed Projects Coordination Database – Kerry Wedel
  - 1. KWO going through basin planning process and hoping to update the dbase with information that supports such plans from other agencies.
- vii. <http://maps.kansasgis.org/watershed/>
- viii. WRAPS Web Site <http://kswraps.org/>
  - 1. Work Group Members encouraged to enter “service provider” information.
- b. Visitors – SAKW website reference to wraps encouraging them to become involved. Grass and Grain Ag Newspaper front page news KRC’s CWF’s project was featured. Inter agency task force for stream mitigation guidelines – proposed to used by Corp for 404 program. Guidelines are completed and will be sent to corp requesting to be adopted. The guidelines are anticipated to be available for public comment at some point in the near future. Presentation was given to SAKW and Damn Safety Conference. Water and Future of Kansas Conference – Topeka, March 25<sup>th</sup>.
- c. Events Calendar
- d. WRAPS Work Group Meeting Schedule:
  - i. February 26, 2008 – Afternoon WRAPS Sediment Management Team Meeting 1:30 KWO Conference Room
  - ii. April 1<sup>st</sup>, 2008
  - iii. April 15, 2008 – Salina Watershed Conference
  - iv. May 27, 2008
  - v. June 24, 2008
  - vi. July 22, 2008
  - vii. August 26, 2008
  - viii. September 23, 2008
  - ix. October 28, 2008
  - x. November 25, 2008
  - xi. December 23, 2008

1. Introductions

- a. Margaret Stockdale
- b. Steve Schaff
- c. Don Snethen
- d. Jaime Gaggero
- e. Don Jones
- f. Dale Lambley
- g. Margaret Townsend
- h. Paul Liechi
- i. Ray Aslin
- j. Bert Wilson
- k. Paul Ingle
- l. Kerry Wedel
- m. Jeff Gross
- n. Doug Blex
- o. Laura Downey
- p. Andy Ziegler

2. Previous meeting notes –

3. Watershed Partner Applications – Jaime Gaggero

- a. Levi Henry – City of Horton - Approved
- b. Cheney Watershed Project – Request Part 2 be completed
- c. Delaware Watershed Project - Approved
- d. KELP - Approved
- e. City of Wichita - Approved
- f. See-Kan RC&D – Request Part 2 be completed

4. Leveraging funds – Review of 07 applications discussions occurred regarding salaries / overhead vs demonstration projects and leveraging other sources of funding. Targeted watershed meeting discussed leveraging ratio – tracking system. Melvern project reported how much money was spent for BMP's and how much was from what funding source and gave a value for bmp's implemented. Personnel and fringe vs. bmps being installed through variety of funding sources. Cheney has also tracked all bmp dollars spent since mid 90's. BMP's are typically collaborative effort, how do you quantify who gets 'credit' for signing up landowner? Could be 'watershed credit' vs giving credit to just coordinator. Wouldn't necessarily include I and E efforts, but focus primarily on demonstrations. The ratio would help to keep focus of wraps project on demonstrations and not heavily weighted on I and E. Twin Lakes also did a good job of balancing I and E and demonstrations. NRCS uses NRI data to compare improvements and to take 'credit' for increases in BMP's. NRI completed every 4 years. How do you monitor progress in terms of implementing plans? How to capture the entire story of watershed? Concept of Annual Report on behalf of watershed. Need to report on what was accomplished with 319 funds, but also need to stress the collaboration with other agencies and funds as a result of 319 funds. How do you capture the

demonstration/bmp's that are being removed as a result of energy surge and urban sprawl? Have been counting aspect from all agencies, but then how do you measure the effectiveness of such bmp's? **Perhaps evaluation sub-committee should continue this discussion.** General agreement of WG to document actions that occur in watershed as a result of 319 funds / coordinator. (Purpose of report options – evaluate progress of wraps plan, report on coordinator justification, tell watershed story, evaluate water quality improvement).

5. Out Reach Committee Report – Laura Downey – KDHE / KWO should commit to visiting every watershed project within year (purpose – communicate expectations and offer guidance, listen to what SLT's have to say). Members of work group and partners help to spread WRAPS message. Model – 1 WG member/partner and 1 KDHE / KWO representative. KDHE / KWO representative attends to answer questions but not be primary presenter. At April 1st WG meeting walk through what has been developed.
6. SFY 2009 WRAPS
  - a. Appropriations – Kerry Wedel nothing new to report. SCC implementation funds are being discussed but nothing to report.
  - b. Fund Allocation Procedures – what are critical issues of wraps plan implementation? Measure of performance – how to consider this when reviewing applications? How do evaluate performance? Could provide funding for coordinator for more than one year? Sub-committee address this. Application season was when landowners were farming, so application season in summer. SLT's need plenty of notice of application time frame. Could we evaluate SIPS – HIPS – LIPS ahead of application season? So applicants can have idea of what is priority. Missouri funds few watersheds over so many years on rotation type basis. Can't fund 43 coordinators. 47 buffer coordinators and 30 or so NPS coordinators. Some wraps coordinators are also buffer coordinators which is good relationship. Part-time increases turnover. Need to leverage all funds for coordination. Flint Hills – organizationally moving to coordinate activities.
7. WRAPS Evaluation - SP 12 watersheds – Marmaton, Cheney, Vermillion, Mill Creek, Little Arkansas
8. Announcements
  - a. Work Group Members
    - i. Recreation Benefits of Reservoirs – John Leatherman, Craig Smith – Was visitation data accurate – question posed by Governor's Natural Resources Sub-Cabinet (KDWP).
    - ii. Cimmaron wraps project being encouraged stemming from BAC meeting concerning t and e species – Ark Shiner.
    - iii. Sediment Strategy – meeting at 1:30
    - iv. KS Watershed Projects Coordination Dbase
    - v. WRAPS Website
    - vi. Retirements

## Kansas Watershed Restoration and Protection Strategy

### WRAPS Work Group

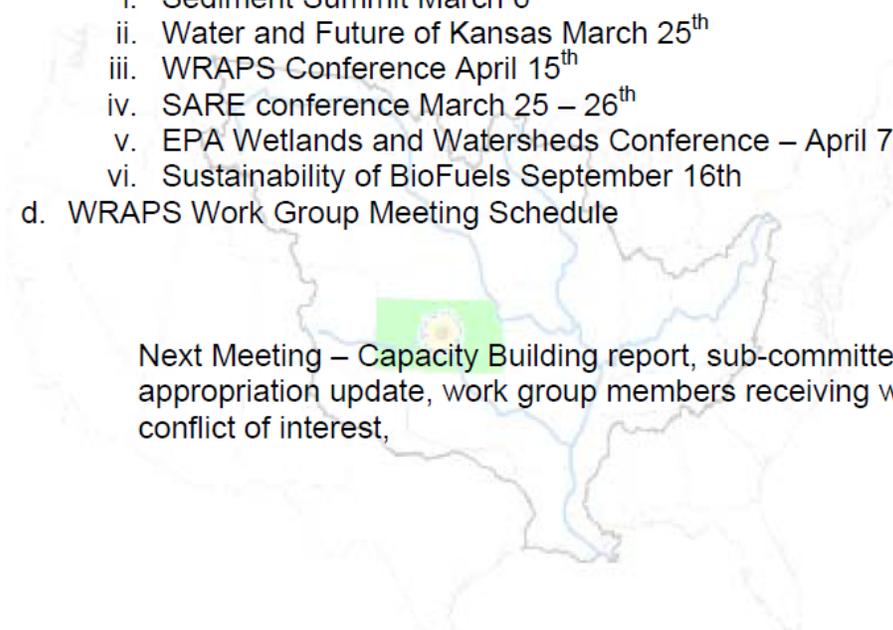
February 26, 2008 Meeting Agenda – 9:30 AM KDHE Azure Conference

Room 4<sup>th</sup> Floor Curtis Office Building

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- vii. Ray Aslin – 1<sup>st</sup> of July
  - viii. Dale Lambley – June
  - ix. Bert Wilson – March 7<sup>th</sup>
  - x. Don Snethen – March 10<sup>th</sup>
- b. Visitors
- i. Paul Ingle – Riparian Work Group – Paul will be acting chair and next meeting is May 8<sup>th</sup>. Re-write stream corridor guide. Meeting in Manhattan. Paul will keep Work Group updated.
  - ii. Jeff Gross – accepting applications for Innovation grants. Ks has \$200,000. Deadline is April 15<sup>th</sup>. Cap is \$50,000. On NRCS website.
- c. Events Calendar
- i. Sediment Summit March 6<sup>th</sup>
  - ii. Water and Future of Kansas March 25<sup>th</sup>
  - iii. WRAPS Conference April 15<sup>th</sup>
  - iv. SARE conference March 25 – 26<sup>th</sup>
  - v. EPA Wetlands and Watersheds Conference – April 7 - 11
  - vi. Sustainability of BioFuels September 16<sup>th</sup>
- d. WRAPS Work Group Meeting Schedule



Next Meeting – Capacity Building report, sub-committee reports, 09 appropriation update, work group members receiving wraps funds and conflict of interest,

## Kansas Watershed Restoration and Protection Strategy

### WRAPS Work Group

April 1, 2008 Meeting Agenda – 9:30 AM KDHE Azure Conference Room 4<sup>th</sup>  
Floor Curtis Office Building

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#### 1. Introductions

- a. Jaime Gaggero
- b. Kerry Wedel
- c. Matt Scherer
- d. Paul Liechti
- e. Bill Hargrove
- f. James Larson
- g. Don Jones
- h. Jeff Gross
- i. Steve Schaff
- j. Andy Ziegler
- k. Brian Lindley
- l. Jana Lindley
- m. Paul Ingle
- n. Mary Fund
- o. Laura Downey
- p. Doug Blex
- q. Karl Mueldener
- r. Dan Zerr
- s. Judy Willingham

#### 2. Previous meeting notes

#### 3. Sub-Committee Reports

- a. **Out Reach Committee Report – Laura Downey**  
- Committee has met several times. Rationale for committee discussed. Laura presented a document developed by the committee featuring summaries of outreach components including 1) Presentation, 2) Facilitated Stakeholder Reflection/Analysis/Dialogue and associated questions, and 3) Solicitation of Input/Ideas from SLTs. Process could involve more than one WRAPS project/SLT at a time. Judy W. pointed out a document available through KSU and the KELP program dealing with Working In Groups. Opening presentation should contain info on working with Service Providers, additional funding sources outside 319. Concerns voiced over this process taking too much time at SLT meeting, how all WRAPS would be covered and by whom.
- b. **Evaluation Committee Report – Tom Stiles**  
- Committed began meeting in January 2008. Discussed how modeling and monitoring fit WRAPS projects. What's out there now vs. what they need. Do we evaluate the social aspects of WRAPS as well as environmental? Do we evaluate at all phases? Jaime suggested some expectations and assessment criteria should be developed before a project can move to next phase. A different group could organize for this, and Tom's group should focus on water quality.
- c. **Sediment Committee – Kerry Wedel**

## Kansas Watershed Restoration and Protection Strategy

### WRAPS Work Group

April 1, 2008 Meeting Agenda – 9:30 AM KDHE Azure Conference Room 4<sup>th</sup>  
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- Discussed policy aspects of reservoir sediment issue. 1) Wetland and Riparian Assessment Program, and 2) Stream Channel Erosion problem areas. These two would point to priorities for the State Water Plan. Document on this issue available on KWO's website. Papers from recent KSU Sediment Workshop available on their website.
- d. SFY 09 Administrative Committee – Jaime Gaggero
  - Committee seeking feedback on the WRAPS application process. First meeting will be held on 4/30.
- 4. State Water Plan Sediment Management Policy – Kerry Wedel
- 5. WRAPS Capacity Building – Laura Downey
  - Laura briefed WG on WRAPS Capacity Building workshop held in Salina on 3/12.
- 6. Work Group Members and Funding Recipients
  - Jaime discussed comments heard in the field about some entities who receive WRAPS funding also sitting on the Work Group. Is this a conflict of interest, giving a competitive advantage to some fund recipients over others? Consensus of WG was that the WG doesn't really make the funding decisions, and merely okays the funding decision made by the granting agencies (KDHE and KWO). But was also agreed that as much transparency in the process as possible is needed. More info could be put in generic WRAPS Presentation being developed by Outreach Committee. Could make it more clear during next round of applications.
- 7. SFY 08 Administrative Update - Jaime
  - a. Pre-Award Meetings
    - Most all pre-award meetings have been held
  - b. Consolidation of projects
    - Some projects being consolidated where possible to save work for cooperators and KDHE admin.
  - c. PIP Due Dates and Remaining Procedure
    - i. FFY 07 Funds – PIPs in by April 1, PIPs hopefully approved by KDHE and EPA by May 15.
    - ii. FFY 08 Funds – Application will be turned in to EPA soon. Hope to have money available by July 1.
- 8. SFY 2009 WRAPS
  - a. SWP Appropriations Update – Kerry Wedel
    - \$800,000 is still in the state budget. Don J. said that governor and legislature still discussing SCC WRAPS implementation dollars, will likely be between \$400,000 and \$800,000.
  - b. FFY 09 Funds – Jaime
    - Funds hopefully available in Spring 2009, so projects may get funds by Summer 2009. Projects that are on a 12-month cycle may come up a couple months short and experience a funding gap. Handout showing those projects that may experience funding gap. Discussion of which ones may be eligible for SWP money to keep them afloat. 3 possible funding scenarios considered: 1) Use SWP money during gap, so have an

## Kansas Watershed Restoration and Protection Strategy

### WRAPS Work Group

April 1, 2008 Meeting Agenda – 9:30 AM KDHE Azure Conference Room 4<sup>th</sup>  
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application process for just that money, 2) Postpone 09 WRAPS application to design better process, 3) Proceed as in the past, knowing some projects may fall apart during gap. Was suggested that new application should have new and improved application process, and that old way of doing things should not continue. Lots of agreement on this.

#### 9. Announcements

##### a. Work Group Members

- i. Recreation Benefits of Reservoirs – John Leatherman, Craig Smith – Was visitation data accurate – question posed by Governor’s Natural Resources Sub-Cabinet (KDWP). Bill H. mentioned a 4/17 meeting coming up to present KSU’s reservoir recreation data to Sub-Cabinet.
- ii. Bill H. talked about a draft of an agreement document between WRAPS projects and service providers, that he and KSU worked up for KDHE review. Gave to Jaime.

##### iii. Retirements

1. Ray Aslin – 1<sup>st</sup> of July
2. Dale Lambley – June

##### b. Visitors

##### c. Events Calendar

- i. WRAPS Conference April 15<sup>th</sup>
- ii. SARE conference March 25 – 26<sup>th</sup>
- iii. EPA Wetlands and Watersheds Conference – April 7 - 11
- iv. Sustainability of BioFuels September 16<sup>th</sup>

##### d. WRAPS Work Group Meeting Schedule

- i. May 27, 2008 – was changed to May 20.**
- ii. June 24, 2008
- iii. July 22, 2008
- iv. August 26, 2008
- v. September 23, 2008
- vi. October 28, 2008
- vii. November 25, 2008
- viii. December 23, 2008

### Meeting Notes

1. Introductions
2. Previous meeting notes reviewed.
3. Sub-Committee Reports
  - a. Outreach - Status report presented. Draft Outreach Plan has been submitted to WRAPS coordinators for feedback. Comments received to date have been generally positive. Focus on presenting to individual SLT's expected for summer and early fall 2008.
  - b. Evaluation – Committee on hold until July b/c of heartland regional conference to discuss evaluation. Tom Stiles is also going to be participating in a national TMDL workshop from which some evaluation techniques may be learned. Hope to have a draft strawman developed in early July. Perhaps use existing sediment strategy. Coordinate with DWR to define role of wraps out west – with focus on water quantity. Flip side is to consider flood issues.
    - i. Effective conservation efforts - review for Cheney watershed.
    - ii. KGS has work to contribute.
  - c. Sediment Management – Deb Baker/Chris Gnau, KWO – policies have been released by KWA for public input. BAC meetings this week – wetland protection and streambank stabilization policies are getting positive feedback. Perpetual easements are being favored. Surface water mgmt – water assurance district policy are being shared for comment as well. Coordinated sediment research – sediment white papers are to be published this summer. The executive summary is being finalized. Papers are on KSU website – summary of breakout groups is being worked on.
  - d. SFY 09 Administrative – Sub-Committee met April 30th. Briefed members on purpose of committee. Primarily brainstormed the Committee's three primary objectives. Discussed SFY 08 Application process and indentified preliminary areas of improvement. Focused a great deal on the SLT / Service Provider relationship. Discussed the actual online application – many were confused about SCC implementation funds vs 319 demonstration funds. Many had comments on the current grant management system (KCW). Discussed project evaluation from the social aspect side. Identified some preliminary indicators of success.
    - i. Jeff Gross will share NRCS evaluation tool
  - e. Riparian Sub-Committee – has started meeting again following Deb Goard's departure. Paul Ingle currently serving as chair. Great Plains Riparian Summit being held in South Dakota.

4. EPA Wetland Development Grants - KWO submitting application – similar to the last two years. Committee – Harold Klaege, Scott Satterthwaite, Rob Reshke, Deb Baker and Jeff Neel. Gap for information on wetland and riparian area assessments – really feel these areas need to be mapped and functionality defined. Desk top evaluation using existing data; ground truthing; tweak software – utilize WRAPS groups (pilot UWW, Marmaton). Utilize wetland and aquatic resources group as technical advisory group for the project. Assessments would be adopted into WRAPS plans. Will use EPA's wetland mapping standards. Proposal - \$237,200. KWO will administer. Request Letter of Support from WRAPS Work Group. Purpose is to establish mapping process / protocol so that all WRAPS projects may implement projects more effectively.
5. Update on WRAPS Projects
  - a. Status of SFY 08 WRAPS Grant Agreements - FFY 07 and SFY 08 projects are coming along – 21 of 25 PIP's have been submitted, 3 approved by EPA / KDHE and 6 we have EPA comments pending. KDHE staff have reviewed all PIP's submitted to date. For FFY 08 funds – expect PIP's due July 1 with 6 week review process. Don Jones – update on SWP / SCC funds – 12 projects being initiated and technical service provider agreements being prepared.
  - b. Oologah/Verdigris Basin WRAPS – Tom Stiles, Dan Zerr, Jaime Gaggero, Deb Baker and Don Jones traveled to meet with corps and other state representatives along with See-Kan RC&D April 24th. See-Kan presented assessment work and WRAPS program. Many key Oklahoma players missing to get any tangible accomplishments. Set another meeting date to discuss more with Oklahoma agency staff.
  - c. Mitigation Projects Coordination - Update on mitigation and wraps collaboration. TWI has an in-lieu fee bank from Horseshoe Creek mitigation project. They are offering an RFP for projects from WRAPS Stakeholder Leadership Teams. Deadline June 15th. Don Jones – design standards for continuous flows below federal reservoirs. Deb Baker - Ks stream mitigation guidelines being considered by Corps; if approved will open up doors for new opportunities for mitigation credits.
6. SFY 2009 WRAPS Funding
  - a. SWP Appropriations Update - KDHE Received \$800,000 allocation. SCC was awarded \$821,000 for WRAPS implementation. Want to focus implementation funds for streambank stabilization / riparian area protection in priority reservoir watersheds. Working with Chris Gnau to prioritize watersheds for SFY 09 application. Want to begin soliciting for projects – letting WRAPS projects/conservation districts know funds available and get them working to initiate projects - time consuming process.
  - b. FFY 09 funds – KDHE will apply to EPA in the spring of 2009.

7. Kansas NPS Management Plan Update - KDHE plans to update state management plan. Would like Work Group to serve as advisory committee. Request to form a working sub-committee: Don Jones – SCC, Tom Stiles – TMDL, Dan Devlin – KSU , Steve Schaff– EPA , KWO, Jeff Gross – NRCS, Jaime Gaggero / Kerry Wedel - KDHE. Goal is to complete revisions by January 1, 2009.
8. Work Group Membership – Lindsey Douglas will replace Dale Lambley (KDA); Bob Atchison will replace Ray Aslin (KFS); KDOT and KWO Needing Replacement, KU – potential new agency member (Bruce McEnroe, Bryan Young in attendance)?
9. Announcements
  - a. Work Group Members
    - i. NRCS - State Conservationist – Eric Banks, Phoenix, Arizona starting June 8th
    - ii. USGS – Jennifer Graham – algal sampling for taste and odor. Drought Fact Sheet comparing 50's drought planning philosophy. Real-time stream flow now on website. USGS Seminar – Hydrology Matters, June 3<sup>rd</sup>, 10:30 at USGS in Lawrence.
    - iii. Larry Byles - new state forester from Georgia starting August 13th.
  - b. Visitors
    - i. KAWS – new website. June 3rd annual meeting Washington, KS.
    - ii. Paul Ingle – Stream Assessment class – July 31st and August 1st. Lyon County. Funding support requested.
  - c. Events Calendar
    - i. May 22 Watershed Seminar, Lawrence
  - d. WRAPS Work Group Meeting Schedule
    - i. June 24, 2008
    - ii. July 22, 2008
    - iii. August 26, 2008
    - iv. September 23, 2008
    - v. October 28, 2008
    - vi. **November 18, 2008 \*Note Change**
    - vii. **December 16, 2008 \*Note Change**

### Meeting Notes

1. Introductions
2. Previous meeting notes - approved
3. Sub-Committee Reports
  - a. SFY 09 Administrative – Jaime Gaggero, KDHE, reported the sub-committee's recommendations regarding the SFY 09 funding, and the new proposed funding guidelines. Recommendations were approved. Comments are as follows: Coordination vs. Technical Assistance for personnel (number of BMP's being reported as result of personnel – past performance). Like current scenario. Long term planning. Want caps to be flexible to watershed priority. Critical to fund all projects. Monitoring and Technical Assistance needs – good use of 319 funds / less emphasis on BMP's. WRAPS funds not intended as the primary implementation source for BMPs. Hope is that other programs are affected by wraps plans in terms of prioritizing their funding sources. What are bigger financial resources outside of wraps budget and how can we influence those (e.g. SCC, USDA assistance programs)?
  - b. WRAPS Outreach – Laura Downey, KACEE, reported on the outreach sub-committee. Recommend groups of 3 visit all wraps SLT's and give presentation and facilitate series of self reflection questions. Who would do facilitator training? Present funding situation / RFP planning process as part of presentation. Hope SLT's take ownership on how to influence state programs or funding resources. Emphasize implementation discussion in overview presentation – utilization of other resources. Change local priorities. Add SFY 09 application slide / funding scenario. Outreach plan approved. Ask about other funding sources being utilized and how can we get data on that? What is best strategy?
  - c. Sediment Management – Susan Metzger, KWO, discussed the surface water management policy issues and sediment management policy issue papers. Papers received general support from BAC's. Recommended to KWA to wait and reevaluate policies prior to public comment. BAC's discussed tax incentives for practices as well as possible regulation regarding riparian areas. Sediment technical support committee – would like to revive that committee to look at possible research needs. Bill Hargrove, KSU, reported that the Sediment white papers were at publisher – expect out 1st of July. Executive summary at printer as well. KSU received USDA grant to host conference on sediment in reservoirs. Going to be at the Westin in Crown Center – September 2009. Sediment research – straw man/draft developed.

4. Update on WRAPS Projects
  - a. Status of WRAPS Grant Agreements & Funding – progressing
  - b. Interstate Watershed Projects
    - i. Oologah Lake, OK – Verdigris Basin – KS agencies met with Oklahoma agencies, RC&D's, landowners, state and Corp. KSU and See-Kan RC&D working collaboratively to form a SLT in lower Verdigris basin in KS.
    - ii. Grand Lake, OK – Neosho Basin – Watershed Alliance Foundation recently organized. Working with Oklahoma agencies to assess and plan for protecting Grand Lake watershed. Recent meeting held with Missouri and Kansas agencies to discuss efforts/coordination.
    - iii. Marais des Cygnes Targeted Watershed Grant - Organization phase underway. Finalizing work plan with two bi-state RC&D's. BMP auction for livestock BMPs is part of work plan.
    - iv. Big Blue River TWG - Meeting in May. Project moving forward – Horseshoe creek watershed targeted for BMPs. CCD providing TA on KS side – focusing on no-till and riparian buffers. Project has coordinator on board. Most of funds focused in Nebraska. Phil Barnes, KSU, conducting water quality monitoring.
5. Work Group Membership - Steve Lesslie has been added as the KDOT representative. Bob Atchison is the KFS representative and Susan Metzger is the representative for the KWO.
6. Access to federal data - Issues regarding FSA data discussed. What specific data do entities need related to WRAPS? Specific data needs requested to be sent to Kerry Wedel – will work with KWO on options.
7. Watershed Projects Coordination Database - being marginally used by wraps projects. KWO marketing strategy for reservoir sustainability initiative. They will create a website that will house all KWO reservoir project data. Regarding Dbase – need to decide what to do with it – is it serving a need? Meeting July 9th – KWO.
8. NPS Management Plan Issues – suggestions for consideration: What is not covered by a wraps should be in NPS plan (what is below reservoirs – stream ecology, Middle Ks, Lower Ks, urban metro areas, Rivers). Coordinate wraps / SCC – all counties have 105 local county plans that similar to state plans. Mgmt plan is 5 year vision with various state programs. What is new vision? How can programs better coordinate? Raise profile in NPS plan on TSS – having fixed standard (TMDL using median value curve). TSS / Total phosphorous / total nitrogen – re-written next year. Wetlands/ playa's – not covered by TMDLs – does state want to protect them outside of rivers /streams / reservoirs. More emphasis on riparian management – should match with KS Water Plan.

9. Announcements

- a. Work Group Members
- b. Visitors - – KAWS has more information on website and they have riparian plan (1993) is on website. Wetland and Aquatic Resource Plan.
- c. Events Calendar
- d. WRAPS Work Group Meeting Schedule
  - i. July 22, 2008
  - ii. August 26, 2008
  - iii. September 23, 2008
  - iv. October 28, 2008
  - v. November 18, 2008
  - vi. December 16, 2008



Attachment 2:  
Local Environmental Protection Program  
SFY09 Annual Report



**Kansas Department of  
Health & Environment**

KDHE-BOW-Watershed Management Section  
1000 SW Jackson, Suite 420 Phone: 785-296-4195  
Topeka, KS 66612 Fax: 785-296-5509

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# Local Environmental Protection Program Annual Report

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State Fiscal Year 2009 Annual Report  
July 1, 2008 to June 30, 2009

Program Funding from the Kansas Water Plan Fund



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## Acronyms

BAC – Basin Advisory Committee  
EPA – Environmental Protection Agency  
FEMA – Federal Emergency Management Agency  
I & E – Information and Education  
K.A.R. – Kansas Administrative Regulations  
KCW – Kansas Clean Water  
KDHE – Kansas Department of Health & Environment  
KEHA – Kansas Environmental Health Association  
KSFA – Kansas Small Flows Association  
KSU – Kansas State University  
LEP – Local Environmental Protection  
LEPP – Local Environmental Protection Program  
NPS – Nonpoint Source  
OWWS – Onsite Wastewater Systems  
PWW – Private Water Well  
RC&D – Resource Conservation & Development  
SFY – State Fiscal Year  
SLT – Stakeholder Leadership Team  
TMDL – Total Maximum Daily Load  
TWG – Targeted Watershed Grant  
WFC – Watershed Field Coordinators  
WRAPS – Watershed Restoration and Protection Strategy



## Funding

Financial assistance from the Kansas Water Plan fund totaling 1.5 million dollars was allocated to the program during State Fiscal Year (SFY) 2009 for funding of base programs. Figure 2 displays the funding history since the program's inception.

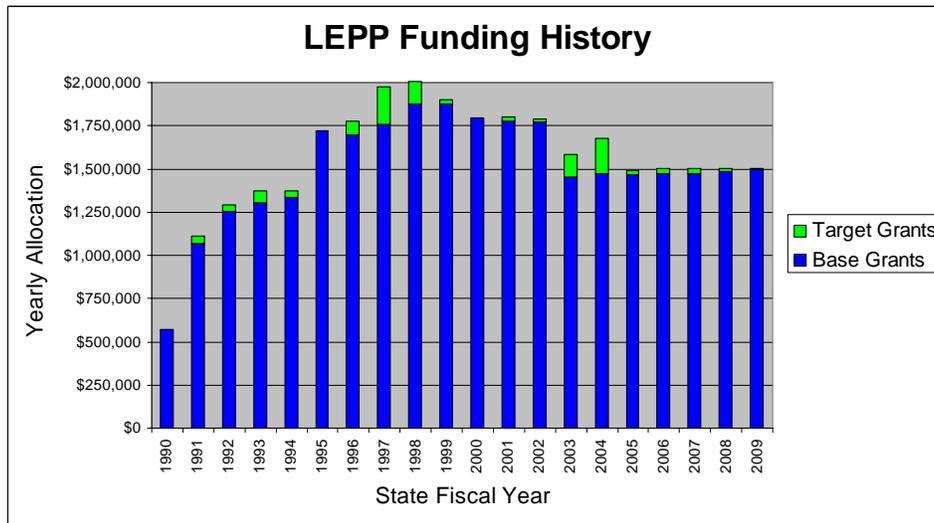


Figure 2 – LEPP funding history from the inception of the program.

Each eligible county receives a grant based on county population. Counties with populations less than 12,727 receive a \$7,000 grant. Counties with populations greater than 227,273 receive a \$125,000 grant. All other counties receive a grant in the amount of \$0.55 multiplied by the county population.

During SFY 2009, 104 counties received base grants; Comanche and Chautauqua Counties joined the program in SFY 2009. There were 48 single county programs and eight multi-county groups. The multi-county groups are identified on Figure 3 below. At this time only one county in the state, Chase, does not participate in the LEP Program.

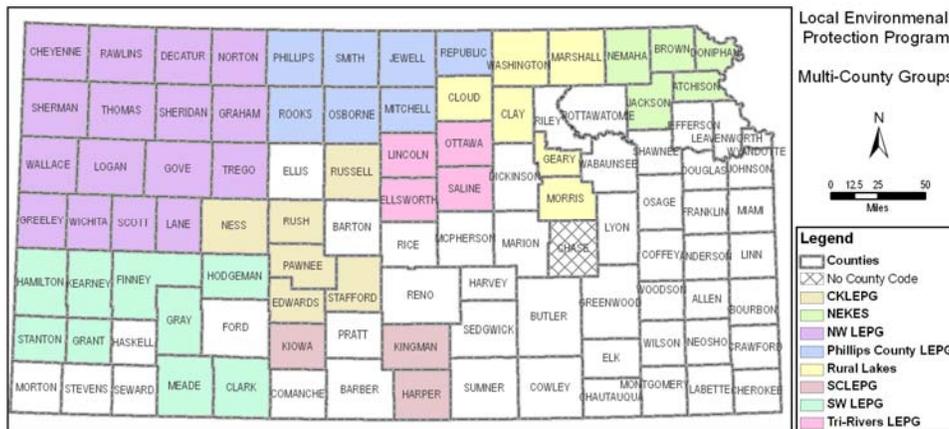


Figure 3 – Multi-County LEPP Groups

Funds remaining after awarding base grants are available as target grants and can be used to perform specific projects or to purchase equipment and supplies that cannot be acquired with base grant funds. Target grants totaling \$7,111 were made to ten LEPPs in SFY 2009. Appendix 1 summarizes the base and target grants for each program.

## Sanitary/Environmental Codes

Counties must adopt environmental codes to be eligible to participate in the LEPP program. Additionally, the codes are revised to comply with changes in State regulations or address changes in local conditions. Comanche County joined the LEPP in SFY 2009 and adopted a new environmental code in November 2008. Seward County, Douglas County, and Neosho County revised their environmental code and adopted the changes in July 2008, October 2008, and December 2008 respectively. Changes in the Seward County Code provided additional details for the private water well requirements, regulations for alternative treatment systems, and clarified the enforcement language. Douglas County codes were revised to remain consistent with the new county Subdivision Regulations and KDHE Regulations. The Neosho County Code was revised to update terms and definitions throughout the code, adopted Bulletin 4-2 by reference, and added requirements for holding tanks and Continuing Education Credits for installers. Labette and Saline Counties initiated code revisions in SFY 2009. The table in Appendix 2 shows the history of county code adoption and revisions.

To enhance technology transfer and technical assistance, KDHE has posted adopted county codes on the website at <http://www.kdheks.gov/nps/lepp/CountyCodes.html>.

### Regulatory Authority

LEPP regulations (K.A.R. 28-66-1(b)(2) and (3)) require each LEPP core program include the development, implementation, and enforcement of an environmental code approved by the secretary of KDHE which establishes standards for

1. the management of on-site wastewater systems for the treatment and disposal of domestic sewage only and
2. the management of water supply wells which do not meet the definition of a public water supply well pursuant to K.S.A. 65-162a (b);

## Program Highlights

The Kansas Clean Water (KCW) system is a web based grant administration system in its fifth year of operation. The KCW provides a web based platform for the LEPP application and quarterly reporting processes. All reporting must be done via the KCW and can be accessed at <http://kcw.kdhe.state.ks.us/>. Watershed Management Staff, with the assistance of the WFC, began revising the KCW program in SFY 2009. LEPP applicants will use this revised system for the SFY 2010 grant applications.

Many sanitarians are members of the Local Environmental Protection Committee and contribute to the development of county emergency response plans to ensure counties are eligible for disaster funds administered by FEMA. Sanitarians often serve on the Emergency Preparedness Committee for their county.

## Significant Program Events

KDHE was awarded an EPA Targeted Watershed Grant (TWG) in 2007. A major component of this grant is the identification and replacement of failing onsite wastewater system in the Marais des Cygnes Basin high priority target areas. Cost share funds in the amount of \$35,000 were obligated to replace 35 failing systems. LEPP representatives from Anderson, Coffey, Franklin, Johnson, Linn, Lyon, and Miami counties participated on the Onsite Wastewater Technical Team. This team identified landowners with failing systems meeting the requirements of the grant, reviewed the applications, and approved contracts for the systems that met the grant criteria. Onsite wastewater system upgrades were approved in all but Johnson County. Six projects were completed in SFY 2009; the remaining 29 are anticipated to be complete in SFY 2010. Additionally, the Anderson County sanitarian serves on the TWG Stakeholder Leadership Team (SLT) organized for the grant.

In the aftermath of the June 2008 tornado in Chapman, Dickinson County LEPP staff worked in cooperation with the City of Chapman, Flint Hills RC&D, Kansas State University Extension, and the Kansas Forestry Service to establish a tree board. This nonprofit organization was established to assist with the removal of tornado damaged trees, planned replacement of those trees, and provided education on proper maintenance over the life span of the trees. These trees will reduce the potential for nonpoint pollution by reducing erosion and utilizing nutrients.

A group of Sanitarians representing KEHA spoke to the Kansas Legislature Appropriation Committee on January 26, 2009, to present the effect of the proposed reduction in the SFY 2009 LEP Program budget and to explain the work done by program sanitarians. On April, 21, 2009, another group presented information, statistics, and examples to the Kansas Ag Appropriations Committee for the SFY 2010 budget on behalf of the LEP Program to raise awareness of the scope of activities and critical nature of the program for public health.

A tragic accident occurred during a sewer connection installation in Pottawatomie County. During a routine inspection in January 2009, the sanitarian found a young man that was killed in a trench collapse. The accident was preventable had trench stabilization practices been observed by the contractor. This became a teaching moment as other installers were informed of and became more diligent in the use of proper trenching techniques. Scott Schwinn, the Pottawatomie County sanitarian, also attended a trenching and excavation class to learn more about the topic and safety procedures involved to share with contractors in future training activities.

## State Water Plan Priorities

The Water Quality Policy Section of the SFY 2009 Water Plan recognizes the value of the Local Environmental Protection Program as a means of implementing the policies of the Plan. SFY 2009 LEP Plans are required to identify activities and tasks the LEP Program will execute to contribute towards attainment of these Kansas Water Plan's 2010 Objectives:

- *By 2010, reduce the average concentration of bacteria, biochemical oxygen demand, dissolved solids, metals, nutrients, pesticides and sediment that adversely affect the water quality of Kansas lakes and streams.*
- *By 2010, reduce the average concentration of dissolved solids, metals, nitrates, pesticides and volatile organic chemicals that adversely affect the water quality of Kansas groundwater.*
- *By 2010, ensure that water quality conditions are maintained at a level equal to or better than year 2000 conditions.*

The LEPP addressed a number of priority issues identified in the Basin Sections of the Kansas Water Plan. LEP Programs must be aware of the objectives and priority issues pertinent to their area and be available to provide assistance. These include:

- Protect and Restore Watersheds and Water Quality
- Conserve and Extend the Life of the Ogallala Aquifer
- Horse Thief Multi-purpose Reservoir
- High Priority Total Maximum Daily Loads

LEP Programs participate in a variety of activities that address Kansas Water Plan objectives and priorities. Approximately 68% of the LEP Programs actively participate in the Watershed Restoration and Protection Strategy (WRAPS) Programs by participating in WRAPS SLT meetings, providing inventories for onsite wastewater system and private water to determine those that lie within high priority areas, or assist with Nonpoint Source (NPS) pollution control planning. Representatives of eight programs serve on SLTs. Additionally, the representative from Cherokee County serves as the SLT Chairperson. Participation of the LEP Programs in the Kansas WRAPS projects is summarized in Appendix 3. Representatives of most programs attend BAC meetings and provide a summary of accomplishments. The LEPP representatives have an understanding of high priority TMDLs and the source water assessment zones within their county and provide information regarding proper operation and maintenance of onsite wastewater treatment systems (OWWS) to homeowners in these areas.

Southwest Kansas Local Environmental Protection Group assisted the Pawnee Watershed District and the Gray and Hodgeman County Conservation Districts with the preparation and implementation of a NPS Pollution Management Plan for the Horse Thief Reservoir. The County Conservation Districts, in conjunction with the Pawnee Watershed District, have designated a number of practices that meet the Plan criteria and be eligible for cost-share assistance. These practices include 1) replacement of failing septic systems, 2) plugging abandoned wells, 3) construction of grassed waterways and filter strips, 4) development of alternative livestock watering systems, and 5) construction of livestock waste management facilities.

## Program Activities

Tracking of program progress is essential to ensure implementation of county objectives and provision of local environmental protection services. County and Multi-County activities and accomplishments are tracked in KCW.

LEP Programs provide an accounting of staff hours by plan component as part of the quarterly reporting requirements in the KCW system. In SFY 2009 the majority of the grant funding and the associated local contribution was allocated to LEPP personnel costs and covered the equivalent of 49.3 full time employees representing a total of 102,513 local staff hours (Figure 4).

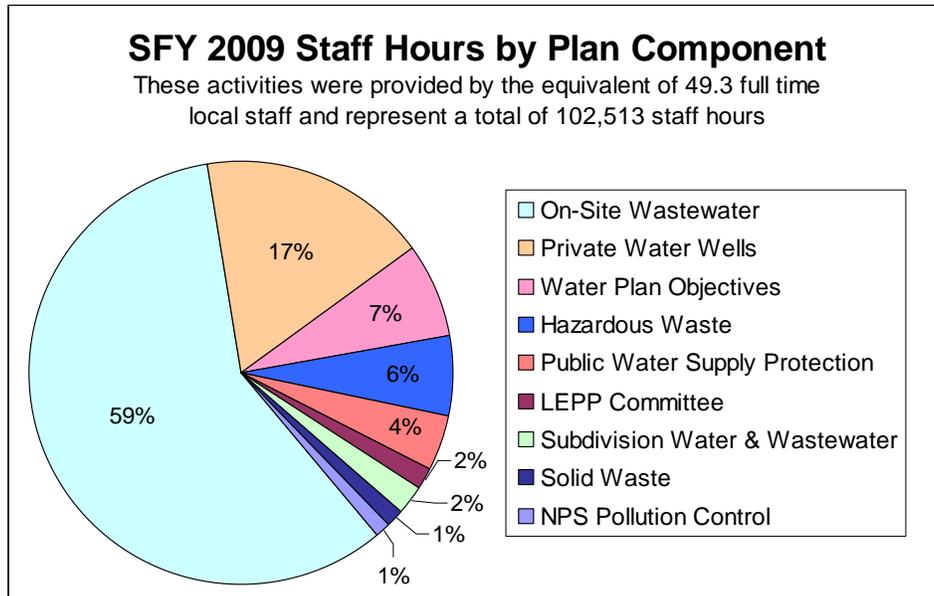


Figure 4 – LEPP staff hours by plan component

## Onsite Wastewater Activities

Approximately 59% of LEPP staff hours are dedicated to onsite wastewater activities (Figure 5). Almost half of these hours are dedicated to permitting and providing technical assistance with repair of existing systems and proper sizing and placement of new systems. The primary benefit of these services is the reduction of NPS pollution. A benefit of reduced NPS pollution is the protection of public health resulting from proper treatment of domestic sewage. Assuming an average household of four with an average water use of 75 gallons per person per day, the repair of 1,747 OWWS and the issuance of 1,820 new permits equates to the proper treatment of approximately 400 million gallons of domestic sewage.

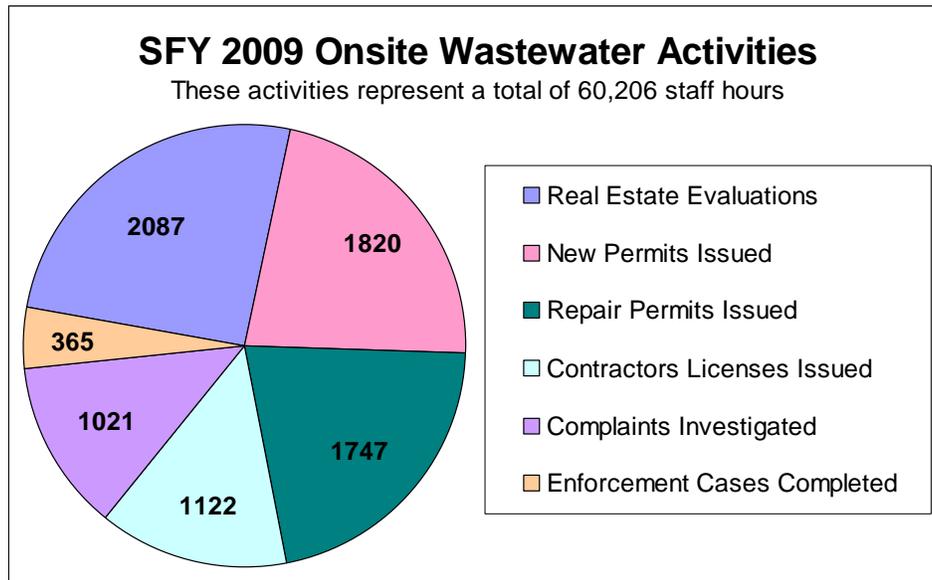


Figure 5 – LEPP onsite wastewater activities by category.

## Types of Onsite Wastewater Systems

OWWS are utilized where connection to public sewer systems are not available. Conventional systems include soil absorption systems utilizing septic tanks and lateral lines or wastewater stabilization ponds (lagoons). Soil characteristics at the site determine the most effective wastewater treatment system. New technologies are available which enhance wastewater treatment making onsite systems more suitable for sites with soil limitations.

During SFY2009, a total of 3,237 OWWS were permitted. Wastewater System Types used in this report are defined as follows:

1. Concrete/Chamber - Concrete Tank with a chamber lateral field
2. Concrete/Gravel – Concrete Tank with a gravel and pipe lateral field
3. Fiberglass/Chamber – Fiberglass or Plastic Tank with a chamber lateral field
4. Poly/Gravel – Fiberglass or Plastic Tank with a gravel and pipe lateral field
5. Aerated System – tank contains an aeration chamber, with either mechanical aerators, blowers, or air diffusers, and an area for final clarification
6. Mound System – the infiltration surface is elevated in imported fill material above the natural soil surface
7. Lagoons – A shallow pond where sunlight, bacterial action, and oxygen work to purify wastewater
8. Other – Includes enhanced OWWS not listed and minor repairs to all system types

Figure 6 illustrates the types of systems installed during SFY 2009, included are new system construction and repairs.

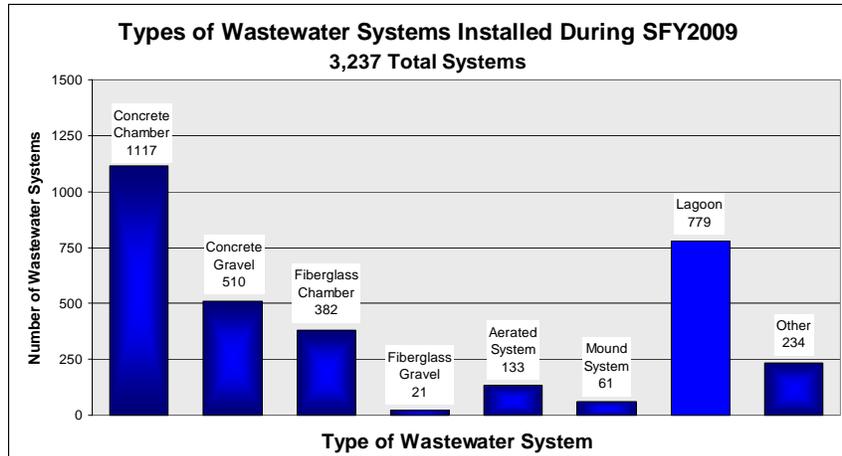


Figure 6 – Types of Onsite Wastewater Treatment Systems

### Private Water Well Activities

The primary service provided by the programs under the private water well (PWW) section of the LEPP plan is water quality testing. Most programs provide screening for nitrate and bacteria and all provide information for PWW testing by private certified labs. Some programs have the ability to test for other components such as pH, sulfate, and hardness. Many programs also require an evaluation of PWWs in the event of a real estate transaction and regular testing of PWWs that serve foster homes and day care centers. Two additional significant activities include the issuance of permits for PWW construction and evaluation of the condition of the well at the time of a real estate transaction. Figure 6 illustrates the major activities under the PWW section of the LEPP plan.

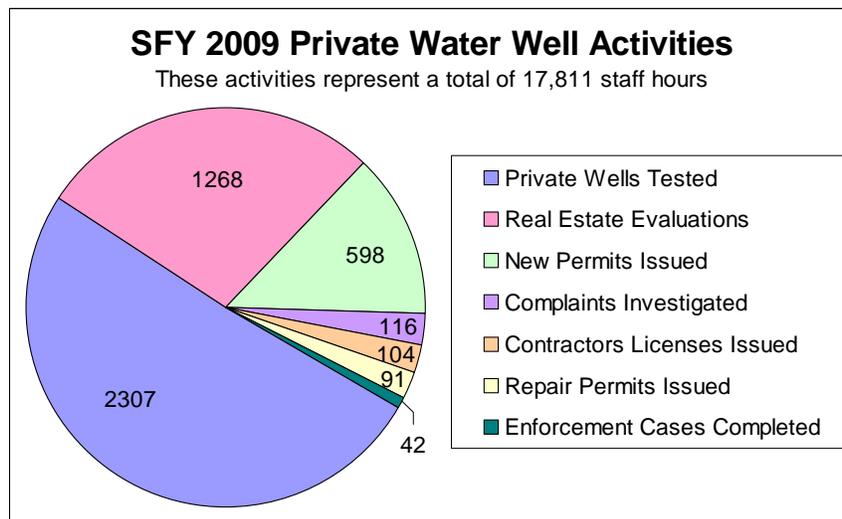


Figure 6 – LEPP private water well activities by category.

### Supplemental Program Components

LEPP staff work closely with local, state, and federal agencies to identify activities and define responsibilities for the supplemental portion of the plan. These activities and responsibilities vary widely depending on the component. Examples of how the programs provide services include, but are not limited to:

- exploring opportunities to minimize potential contamination impacts of solid waste management practices on public water supplies;
- assisting with clean up of unauthorized dump areas;
- being knowledgeable of state hazardous waste rules and regulations to enable competent response or referral of questions to the appropriate authority;

- encouraging citizens to use recycling centers;
- assisting with the implementation of pollution prevention programs to minimize volume of household hazardous waste;
- working with the county conservation district to review, and update as appropriate, the local nonpoint source pollution management plan;
- assisting with public water supply source water protection activities.

LEPP personnel are often the initial point of contact for complaints pertinent to specific sections of their environmental plan. Figure 7 illustrates the number of complaints received and investigated by plan component.

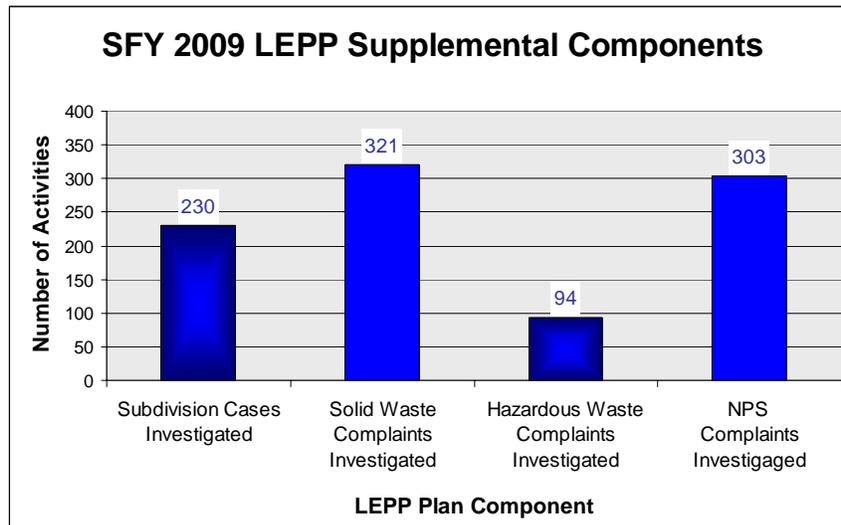


Figure 7 – Distribution of activities by supplemental plan component.

### Supplemental Program Regulatory Authority

Requirements for the LEPP Supplemental Program are defined in KAR 28-66-1(h)(1-5) and includes provisions for:

1. The development and implementation of a plan for subdivision water and wastewater pursuant to K.S.A. 1992 Supp. 12-747, K.S.A. 65-3311 and amendments thereto;
2. the development and implementation of a solid waste management plan pursuant to K.S.A. 65-3405 and amendments thereto;
3. the development and implementation of a hazardous waste management plan that is consistent with K.S.A. 65- 3430 and amendments thereto;
4. participation in the development and implementation of a nonpoint source pollution control plan which identifies the activities and responsibilities of the local environmental protection program in the management of nonpoint pollutant sources; and
5. the development and implementation of a public water supply protection plan.

### Information, Education and Training Activities

Information and education (I & E) activities are a vital component of the Program. Each LEPP develops an I & E plan focusing on the circumstances in their areas and, at a minimum, address onsite wastewater and private water well subjects. General information and education activities may include activities such as development and distribution of brochures, fact sheets, and flyers, exhibit booths at a public functions, mail or electronic newsletters, website design and maintenance, workshops, demonstration projects, or participation in a water festival.

Audiences and topics for information and education activities are widely varied. A LEPP representative may present the importance of recycling to a Girl Scout troop, lead a discussion on household hazardous waste to a homeowners association, or teach a college class on environmental health as a guest lecturer. These activities are illustrated by LEPP plan component in Figure 8.

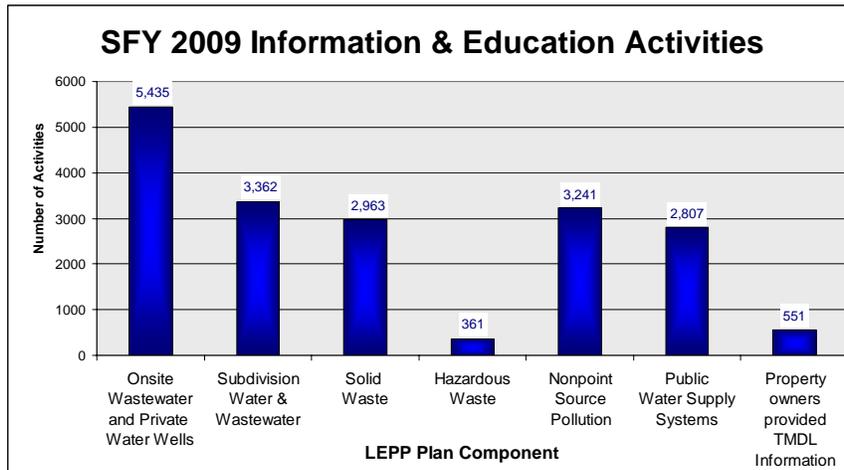


Figure 8 – Information and education activities completed statewide by plan component.

Training activities are provided to LEPP staff, homeowners, and contractors. The types of training activities provided are displayed by topic in Figure 9. Many LEPP personnel attend the Kansas Small Flows Association (KSFA) and Kansas Environmental Health Association (KEHA) conferences and, if funding allows, one or two LEPP personnel from the State will attend the National Small Flows and National Environmental Health Association conferences. These conferences provide training opportunities and exposure to new technologies. This information is shared with other LEP programs and staff members through local meetings.

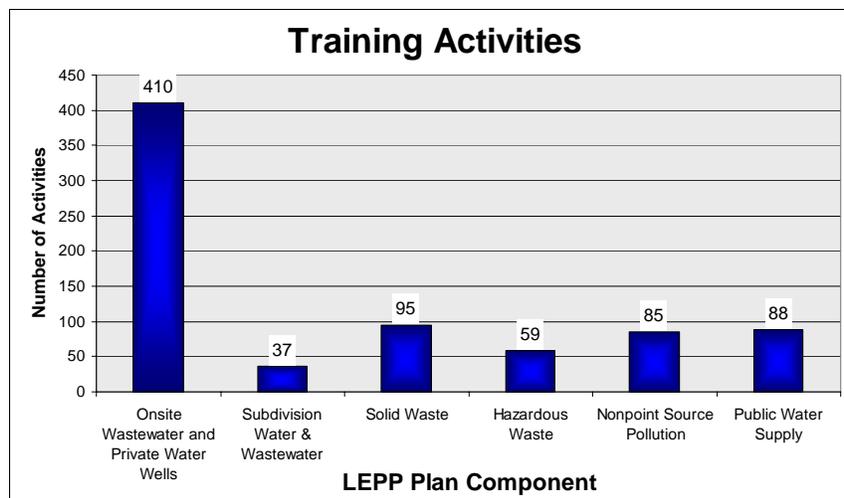


Figure 9 – Training Activities completed Statewide by plan component.

LEPP staff members also provide training to other LEP programs in the State. Montgomery County staff is providing technical assistance and training to Chautauqua County staff on inspections and permitting as Chautauqua County develops a LEPP Plan and environmental codes. Sedgwick County conducted a session on rejuvenating onsite wastewater systems at the western Kansas sanitarians meeting in Hays.

Many LEP Programs also provide training for homeowners and local contractors. Examples include onsite wastewater system maintenance for homeowners, contractor’s training seminars, and installer certification and licensing workshops.

The LEPP and WFC work closely with the KSFA and KEHA to develop training opportunities specific to the duties of the sanitarians. These organizations also provide technical assistance as needed.

KSFA conducted a one day lagoon workshop in Wichita on November 7, 2008. Presenters were Tom Fritts, Residential Sewage, Kansas City and DeAnn Presley, KSU Soil Scientist. The workshop covered lagoon design, layout and staking, cuts and fills, overflow and controlled irrigation, at grade and interceptor drains and constructed wetlands. This well attended workshop offered professional training to sanitarians and installers.

KSFA held a Soils Evaluation Workshop in Abilene on May 5, 2009. County Sanitarians and onsite wastewater system installers from around the state spent the morning in the classroom and the afternoon in the field at three different locations with excavated trenches. The class work provided basic information on characteristics of different soil types and why that information is critical for the proper design, sizing, and installation of any in-ground lateral style onsite system. Field work (Figure 10) provided an opportunity to experience hands-on training on evaluating a variety of soils in real life settings and judging their suitability for use in treating wastewater. Instructors included KSFA staff, DeAnn Presley, Environmental Soil Scientist at Kansas State, and Richard Basore, KDHE Staff.



Figure 10 – KSFA training for soil profiling.

The WFC also hold annual Sanitarians Meetings for the counties they supervise for the purpose of sharing information between LEPPs. Representatives from various State agencies commonly attend to present information applicable to the program. Recent examples include; KDHE-Geology Section staff attended the Hays District Sanitarians meeting to discuss Class V wells and KDHE-Livestock and Industrial Programs staff presented information regarding their programs at the KEHA spring meeting. Additionally, the KDHE-Livestock Section assisted the WFC develop a technical guidance document for kennels using onsite wastewater systems.

### **Regulatory Authority**

LEPP Regulations KAR 28-66-1(b)(4) require the development of an information, education, and technical assistance program as part of the LEPP plan.

## Appendices

Appendix 1 – Summary of Base and Target Grants for SFY 2009

Appendix 2 – History of County Code Adoption & Revisions

Appendix 3 – LEPP Participation in WRAPS

## Appendix 1 – Summary of Base and Target Grants for SFY 2009

LEPP Grant Recipient	Base	Target	Description - Use of Target Grant Funds
Allen County	\$7,912.00		
Anderson County	\$7,000.00		
Barber County	\$7,000.00		
Barton County	\$15,513.00		
Bourbon County	\$8,458.00	\$430.00	Assist with KSFA Lagoon Seminar travel fees and registration
Butler County	\$32,715.00		
Central KS LEPP	\$42,000.00		
Chautauqua County	\$7,000.00		
Cherokee County	\$12,433.00		
Cowley County	\$19,960.00		
Coffey County	\$7,000.00		
Comanche County	\$7,000.00		
Crawford County	\$21,033.00	\$815.00	Purchase new computer and printer
Dickinson County	\$10,639.00		
Elk County	\$7,000.00		
Ellis County	\$15,129.00		
Ford County	\$17,852.00		
Franklin County	\$13,631.00		
Greenwood County	\$7,000.00		
South Central LEPP	\$21,000.00		
Harvey County	\$18,078.00		
Haskell County	\$7,000.00		
Jefferson County	\$10,134.00		
Johnson County	\$125,000.00		
Labette County	\$12,559.00	\$1,332.00	Purchase new laptop computer
Douglas County	\$54,979.00		
Leavenworth County	\$37,780.00		
Linn County	\$7,000.00	\$215.00	Assist with KSFA Lagoon Seminar travel fees and registration
Flint Hills (Lyon County)	\$19,764.00	\$215.00	Assist with KSFA Lagoon Seminar travel fees and registration
		\$224.00	Purchase analog penetrometer
Marion County	\$7,349.00		
McPherson County	\$16,255.00		
Miami County	\$15,593.00	\$1,337.00	Purchase a Fieldscout soil compaction meter
Montgomery County	\$19,939.00		
Morton County	\$7,000.00	\$85.00	Spring KEHA conference registration fee
Neosho County	\$9,348.00		
Northeast Kansas LEPP	\$37,226.00		
Northwest Kansas LEPP	\$112,000.00		
Osage County	\$9,192.00		
Phillips County LEPP	\$49,000.00	\$85.00	Spring KEHA conference registration fee
Pottawatomie County	\$10,015.00	\$1,041.00	Purchase new computer
Pratt County	\$7,000.00		
Reno County	\$35,635.00		
Rice County	\$7,000.00		
Riley County	\$34,564.00		
Rural Lakes LEPP	\$50,371.00	\$1,332.00	Purchase a Fieldscout soil compaction meter
Tri-Rivers LEPP	\$50,478.00		
Sedgwick County	\$125,000.00		
Seward County	\$12,381.00		
Shawnee County	\$93,429.00		
Southwest Kansas LEPP	\$78,288.00		
Stevens Co	\$7,000.00		
Sumner County	\$14,270.00		
Wyandotte County	\$86,835.00		
Wabaunsee County	\$7,000.00		
Wilson County	\$7,000.00		
Woodson County	\$7,000.00		
<b>Total Awarded</b>	<b>\$1,495,737.00</b>	<b>\$7,111.00</b>	

## Appendix 2 – History of County Code Adoption & Revisions

County	Code	KDHE Approval	Year Approved	Adopted	Year Adopted	Revised/New Code Adopted
Allen	yes	04/02/98	1998	04/22/98	1998	
Anderson	yes	05/03/98	1998	06/07/99	1999	Revised November, 2000
Atchison	yes	08/18/98	1998	09/28/98	1998	
Barber	yes	10/07/87	1987	11/23/87	1987	
Barton	yes	08/03/93	1993	09/13/93	1993	Revised 2007
Bourbon	yes	02/25/98	1998	06/15/98	1998	Revised 2001
Brown	yes	02/09/99	1999	02/22/99	1999	
Butler	yes	07/06/99	1999	09/15/99	1987	Revised in 1999, 2002
Chase	no	08/22/94	1994	n/a	n/a	No Activity
Chautauqua	no	n/a	n/a	n/a	n/a	Developing Code
Cherokee	yes	05/11/98	1998	06/28/99	1999	
Cheyenne	yes	12/21/96	1996	03/28/97	1997	
Clark	yes	07/02/01	2001	10/31/01	2001	
Clay	yes	11/23/93	1993	11/23/92	1992	Revised 2002
Cloud	yes	08/28/96	1996	06/09/97	1997	Revised 2002, 2004
Coffey	yes	04/20/90	1990	05/15/90	1990	
Comanche	yes	08/27/08	2008	11/07/08	2008	
Cowley	yes	01/15/87	1987	06/15/87	1987	
Crawford	yes	12/14/93	1993	04/15/94	1994	Revised 1999, 2000
Decatur	yes	03/31/93	1993	03/31/93	1993	
Dickinson	yes	05/11/98	1987	06/30/98	1987	Revised 1998, 2006
Doniphan	yes	06/01/96	1996	11/15/96	1996	
Douglas	yes	09/08/93	1993	10/07/93	1993	Revised 1997, 2001, 2008
Edwards	yes	05/13/99	1999	07/19/99	1999	
Elk	yes	11/30/98	1998	02/08/99	1999	
Ellis	yes	09/16/92	1992	09/16/92	1992	
Ellsworth	yes	09/23/91	1991	12/31/91	1991	Revised 1997
Finney	yes	07/15/92	1992	12/14/92	1992	
Ford	yes	05/17/93	1993	05/17/93	1993	Revised 2004
Franklin	yes	05/01/89	1989	05/15/89	1989	Revised 1997, 2008
Geary	yes	09/06/96	1996	12/29/97	1997	Revised 2002
Gove	yes	07/15/92	1992	12/28/95	1995	
Graham	yes	03/31/93	1993	03/31/93	1993	
Grant	yes	10/05/92	1992	10/05/92	1992	
Gray	yes	06/30/93	1993	06/30/93	1993	Revised July 2006
Greeley	yes	12/31/92	1992	12/31/92	1992	
Greenwood	yes	8/18/98	1998	10/18/98	1998	
Hamilton	yes	05/08/97	1997	04/22/97	1997	
Harper	yes	10/07/87	1987	12/21/87	1987	
Harvey	yes	04/01/93	1993	04/15/93	1993	Revised 2001
Haskell	yes	09/14/07	2007	10/29/07	2007	
Hodgeman	yes	12/08/95	1995	12/08/95	1995	
Jackson	yes	06/01/94	1994	07/15/94	1994	Revised 2003
Jefferson	yes	04/01/93	1993	01/15/94	1994	Revised 2003
Jewell	yes	10/12/92	1992	10/12/92	1992	
Johnson	yes	03/01/94	1994	11/15/94	1994	Revised 2004
Kearny	yes	05/07/99	1999	05/12/99	1999	
Kingman	yes	10/07/87	1987	12/25/87	1987	
Kiowa	yes	10/07/87	1987	11/23/87	1987	
Labette	yes	10/01/94	1994	04/15/94	1994	Revision will be completed in 2010
Lane	yes	07/15/92	1992	12/21/92	1992	
Leavenworth	yes	02/01/90	1990	01/15/91	1991	Revised 6/28/99
Lincoln	yes	05/01/96	1996	01/05/98	1998	
Linn	yes	07/01/94	1994	08/01/94	1994	
Logan	yes	11/20/92	1992	11/20/92	1992	
Lyon	yes	01/15/70	1970	01/15/70	1970	Revised 2004

## Appendix 2 (continued) – History of County Code Adoption & Revisions

County	Code	KDHE Approval	Year Approved	Adopted	Year Adopted	Revised/New Code Adopted
Marion	yes	01/06/94	1994	03/14/94	1994	
Marshall	yes	01/11/93	1993	01/11/93	1993	Revised 2002
McPherson	yes	04/02/92	1992	04/02/92	1992	
Meade	yes	12/01/92	1992	12/01/92	1992	
Miami	yes	01/15/90	1990	03/15/90	1990	Revised 1998, 2004
Mitchell	yes	05/01/96	1996	07/01/96	1996	Revised 2004, 2005
Montgomery	yes	12/15/92	1992	07/15/93	1993	Revised 1999
Morris	yes	01/11/93	1993	09/30/94	1994	Revised 2002
Morton	yes	06/01/99	1999	07/12/99	1999	
Nemaha	yes	03/15/93	1993	12/15/93	1993	
Neosho	yes	02/16/97	1997	05/15/99	1999	Revised 1999, 2008
Ness	yes	05/13/99	1999	07/12/99	1999	
Norton	yes	12/31/92	1992	02/11/93	1993	
Osage	yes	06/15/92	1992	09/14/92	1992	
Osborne	yes	07/08/92	1992	09/14/92	1992	
Ottawa	yes	06/08/92	1992	01/03/97	1997	Revised 2001
Pawnee	yes	02/07/94	1994	03/28/94	1994	
Phillips	yes	11/02/92	1992	11/02/92	1992	
Pottawatomie	yes	06/15/81	1981	06/15/81	1981	Revised 1997
Pratt	yes	10/07/87	1987	11/30/87	1987	
Rawlins	yes	11/30/92	1992	11/30/92	1992	
Reno	yes	06/01/87	1987	06/01/87	1987	Revised 2003
Republic	yes	11/10/92	1992	11/30/92	1992	
Rice	yes	10/21/91	1991	11/25/91	1991	
Riley	yes	05/27/93	1993	01/18/94	1994	Revised 1999
Rooks	yes	01/14/92	1992	07/14/92	1992	
Rush	yes	12/15/92	1992	12/21/92	1992	
Russell	yes	09/14/92	1992	09/14/92	1992	
Saline	yes	05/29/91	1991	10/23/91	1991	Revised 2009
Scott	yes	09/12/96	1996	09/12/96	1996	
Sedgwick	yes	06/15/75	1975	06/15/75	1975	Revised 2002, 2007
Seward	yes	05/23/95	1995	07/17/95	1995	Revised 2008
Shawnee	yes	08/07/98	1998	01/23/98	1998	Revised 2004
Sheridan	yes	04/14/93	1993	04/14/93	1993	
Sherman	yes	01/29/93	1993	01/29/93	1993	
Smith	yes	01/20/95	1995	01/30/95	1995	
Stafford	yes	07/15/92	1992	09/30/92	1992	
Stanton	yes	07/06/93	1993	07/06/93	1993	
Stevens	yes	11/20/96	1996	03/17/97	1997	
Sumner	yes	07/15/92	1992	09/15/92	1992	
Thomas	yes	12/07/92	1992	12/07/92	1992	
Trego	yes	11/30/92	1992	11/30/92	1992	
Wabaunsee	yes	11/20/96	1996	01/27/97	1997	
Wallace	yes	02/09/99	1999	03/10/99	1999	
Washington	yes	08/01/95	1995	10/09/95	1995	Revised 2002
Wichita	yes	02/01/93	1993	02/01/93	1993	
Wilson	yes	05/01/95	1995	09/15/95	1995	
Woodson	yes	05/14/98	1998	06/16/98	1998	
Wyandotte	yes	06/01/92	1992	06/01/92	1992	

### Appendix 3 – LEPP Participation in WRAPS

WRAPS Project	LEPP Program
Banner Creek	NEKES
Cedar Bluff	Northwest LEPP
Cheney Reservoir	Reno, Sedgwick, South Central LEPP
Clark's Creek	Rural Lakes LEPP*
Delaware	Jefferson, NEKES
Lake Anthony	Couth Central LEPP
Little Arkansas	Harvey, McPherson
Lower Arkansas	Sedgwick, Sumner
Lower Fall River/Lower Upper Verdigris	Wilson, Woodson
Lower Kansas	Douglas, Leavenworth*, NEKES, Wyandotte
Lower Smoky Hill	Dickinson, Rural Lakes LEPP, Tri Rivers LEPP*
Marais des Cygnes	Anderson, Coffey, Douglas, Franklin
Marion Lake	Marion
Marmaton	Bourbon
Melvern	Lyon
Middle Kansas	Douglas, NEKES, Pottawatomie*, Shawnee
Milford Lake	Phillips County LEPP, Rural Lakes LEPP
Missouri River	Leavenworth*, NEKES
Neosho-Headwaters	Lyon, Crawford, Rural Lakes LEPP
Neosho-Middle	Neosho, Labette, Cherokee, Crawford
Neosho-Upper	Alan, Woodson, Coffey
Pomona	Osage
Prairie Dog Creek	Northwest LEPP
Spring River WRAPS	Cherokee** (sanitarian also participates in the Spring River Watershed Group with Missouri and the Grand Lake O' The Cherokees Watershed Alliance Foundation as ex-officio board member), Crawford
Tuttle Creek	Pottawatomie, Riley, Rural Lakes LEPP
Twin Lakes	Rural Lakes LEPP
Upper Arkansas	Central Kansas LEPP*, Ford, Southwest Kansas LEPP*
Upper Fall River	Greenwood
Upper Verdigris/Toronto Lake	Woodson
Upper Wakarusa	Douglas
Waconda	Phillips County LEPP

\* indicates SLT member

\*\*Indicates SLT Chair

Attachment 3:  
State Conservation Commission  
SFY09 Annual Report

# State Conservation Commission

## 2009 Annual Report



### INSIDE YOU WILL FIND:

Water Resources	2
Non-Point Pollution	3
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Watershed Dam Construction	11
Water Supply Restoration	12
Aid to Conservation Districts	13
Benefit Area	14
Watershed Planning	14
SCC Organization	15



*Dredge on site at Mission Lake—Owned by Dredge America, Inc.*

### Water Supply Restoration Program Pilot Project

The SCC selected Mission Lake as a pilot project for restoration under the Water Supply Restoration Program. The construction of the containment disposal facility and dredging began in the fall of 2009. Dredge completion date is slated for October 2010. Mission Lake was built in 1924 by damming Mission Creek, a tributary to the Delaware River. The main purpose of the lake is to provide water supply for the City of Horton, Brown County, Kansas. Sediment has accumulated and reduced the lake's water supply storage capacity. The lake is also heavily used as a recreation attraction for fishermen, boaters, campers and water skiers.



*Construction of Settling Basin*



*Mission Lake*

# WATER RESOURCES COST-SHARE PROGRAM

## Overview

The Water Resources Cost-Share Program (WRCSP) provides financial incentives to landowners for the establishment of conservation practices that reduce soil erosion, improve or protect water quality, and enhance water supplies. Major program objectives include: (1) reducing sedimentation, nutrient and pesticide runoff, and fecal coliform bacteria loading in targeted public water supply reservoirs, and (2) reducing soil erosion on cropland and grazing lands.



*Tree Planting*

The WRCSP was authorized by amending K.S.A 2-1915 in 1979 and was first funded in 1980. The conservation district in each county, managed by 525 locally elected supervisors, administers the program at the local level. The State Conservation Commission (SCC) develops regulations, policy, and procedures to guide program implementation. The SCC and conservation districts are assisted in implementation of the program by the United States Department of Agriculture, Natural Resources Conservation Service (NRCS). All structures or practices cost-shared by the SCC through the WRCSP are required to be built to NRCS standards and specifications.

## FY 2009 Achievements

The 2008 Legislature appropriated \$3,570,250 for the program. The majority of these funds were directly allocated to conservation districts for local and state priorities. Water quality protection through reduction of soil erosion was the major focus of the program. Practices receiving the majority of funds included terraces, waterways, ponds, grass plantings, and pasture and rangeland management. Funds were also allocated to high priority Total Maximum Daily Load (TMDL) watersheds to reduce the level of nutrients, pesticides, dissolved oxygen and bacteria.



*Grass Waterway*

## FY 2010 Activities

An amount of \$2,351,510 was available for allocation in FY 2010, which began on July 1, 2009. Carryover funds from FY 2009 were not included in the initial allocation. Appropriated funds are broken down into sub-categories and allocated to county conservation districts for program implementation. Sub-categories include:

- ⇒ District Needs Allocation - These funds generally address sedimentation; erosion; nutrient, pesticide, and bacteria loading; and water conservation within the county. The local conservation district determines eligibility and priorities.
- ⇒ Water Quality Allocation - Funds are directed to high priority watersheds for the restoration and protection of water quality. Only practices directly affecting water quality are eligible. Targeted watersheds include High Priority TMDL's in 11 of the 12 major river basins.

## FY 2011 Planned Activities

A total of \$3,060,216 has been requested for cost-share implementation in FY 2011. Into FY 2011, the demands of reducing sedimentation above water supply reservoirs and TMDL's will continue to drive program goals and outcomes. Conservation districts will be encouraged to implement local programs that focus on sedimentation, fecal coliform bacteria, pesticides, and nutrient runoff. Also in FY 2010, the SCC is evaluating how to address the decline in Natural Resource Conservation Service (NRCS) technical service personnel at local county district offices that support state cost-share programs. A workload analysis has been completed that will assist in determining how Kansas conservation partner organizations can fund technical staff in the 34 NRCS management units in the state. The SCC is authorized to expend up to 6% of the WRCSP appropriation on technical assistance needs.

# NON-POINT SOURCE POLLUTION CONTROL PROGRAM

## Overview

The Non-Point Source Pollution Control Program (NPSPCP) is a voluntary program providing technical and financial assistance to implement non-point source pollution control measures for the protection and restoration of surface and ground water quality. The program was authorized under K.S.A. 75-5657, K.S.A. 82a-903 and K.S.A. 82a-951 by the 1989 Legislature.

Conservation districts receive funding from the SCC in the form of grants and financial assistance provided to landowners on a cost-share basis to implement a locally developed Non-Point Source (NPS) Pollution Management Plan. All 105 conservation districts currently receive funding for financial assistance to landowners. In addition, counties receive funding for technical assistance and project coordination, and to support water quality information and education activities.



*On -Site Wastewater Lagoon*

## FY 2009 Achievements

NPS projects implemented by conservation districts and landowners in FY 2009 totaled \$3,134,168 in cost-share funds. Water quality protection through reduction in bacteria in streams was the major focus of the program. Practices receiving the majority of funds include upgrading failed onsite wastewater systems, livestock water supplies to address riparian area protection, pasture and rangeland management, and livestock waste management. An amount of \$312,117 was available for the implementation of Watershed Restoration and Protection Strategy (WRAPS) Plans. These funds were committed to 8 streambank protection projects above public water supply federal reservoirs and 12 riparian area protection and pasture and rangeland practices in WRAPS watersheds. Funds were also committed to high priority TMDL watersheds to reduce the level of nutrients, pesticides, dissolved oxygen and bacteria.

## FY 2010 Activities

A total of \$2,501,102 was available for allocation for program implementation activities in FY 2010. Funds were available in the following categories:

- ⇒ Funds for Best Management Practices to address bacteria loading, nutrients and low dissolved oxygen in streams and sedimentation above federal public water supply reservoirs.
- ⇒ Funds for technical assistance to conservation districts for program implementation.
- ⇒ Funds for information and education to conservation districts.



*No-till field day*

- Also funds were targeted to No-till education for No-till field days and registration costs for landowners that are first time attendees to the No-till on the Plains Conference.

## FY 2011 Planned Activities

An amount of \$3,254,907 has been requested for the NPSPCP in FY 2011. WRAPS implementation funds will be targeted to practices to reduce sediment above public water supply reservoirs and practices to reduce bacteria in streams. The SCC will continue developing and promoting an implementation strategy to contribute to the primary TMDL program objective of restoring and maintaining the beneficial uses of impaired water bodies.

# KANSAS WATER QUALITY BUFFER INITIATIVE

## Overview

The Kansas Water Quality Buffer Initiative, enacted by the 1998 Legislature by amending K.S.A. 2-1915, is an incentive program complementing the Federal Conservation Reserve Program. State incentives supplement federal incentives to encourage the establishment of riparian forest buffers and vegetative filter strips. The SCC will enter into 10-15 year contracts, subject to annual appropriation, to compensate landowners for acres enrolled in the initiative. Supplemental payments offered under the Initiative will match 30-50 percent of the federal payment, based on the type of vegetation planted. The Initiative also provides property tax incentives for landowners statewide that enroll buffers adjacent to streams in the Conservation Reserve Program. The state buffer eligible area now includes all high priority TMDL and federal drinking water reservoir watersheds in the state.



*Buffer Strip*

## FY 2009 Achievements

An amount of \$363,210 was appropriated for this program. The SCC entered into 119 contracts with landowners to install 656 acres of grass filter strips and riparian forest buffers. At the end of State Fiscal Year 2009, there were 1,861 contracts in place for a total of 11,917 acres of grass filter strips and riparian forest buffers. In addition, approximately \$350,000 was provided through a partnership with the Kansas Department of Wildlife and Parks (KDWP), the Kansas Department of Health and Environment (KDHE), and the State Conservation Commission (SCC) to 47 counties. This funding will allow districts to hire additional staff devoted to promoting buffers and applicable buffer programs.

## FY 2010 Activities

The State Fiscal Year 2010 Buffer Initiative appropriated amount was \$216,000. The current appropriation includes funds for continued rental payments for FY 1999 – FY 2009 contracts, and sufficient funding to enroll approximately 2,500 new acres. In State FY 2010, 39 counties are participating in the partnership with the KDWP, the KDHE and the SCC to promote buffers and applicable buffer programs.



*Buffer Strip*

## FY 2011 Planned Activities

In the FY 2011 budget request, the SCC has proposed a continuation of the Buffer Initiative. An amount of \$281,100 was requested to continue enrollment in the current target areas and provide technical assistance for the program. Additional program funding will be needed in the future to continue enrolling new contracts in this program. The need for the state to begin addressing nutrient TMDL's will most likely necessitate further expansion of the state buffer eligible area in future years. Due to the popularity and the high amount of environmental benefits provided by these buffers, continuation of this program will benefit our state's water, wildlife, and economy for years to come.

# RIPARIAN & WETLAND PROTECTION PROGRAM

## Overview

The Riparian and Wetland Protection Program (RWPP) was developed through the State Water Plan and authorized in 1989 by amending K.S.A 2-1915. The goal of the RWPP is to protect, enhance, and restore riparian areas, wetlands, and associated habitats by providing technical, educational, and financial assistance to landowners and the public in general. Major objectives of the program are the design and installation of projects which demonstrate the effectiveness of riparian and wetland protection in terms of stream functions, water quality and wildlife benefits, and to increase the knowledge and awareness of landowners, and the general public on the value and benefits of these natural areas.



*Riparian Forest Buffer*

## FY 2009 Achievements

The program appropriation was \$242,598. In FY 2009, the RWPP assisted landowners in providing supplemental funding for NRCS EQIP streambank stabilization projects and NRCS WHIP projects. Riparian and Wetland Program funds were also used to provide technical assistance on four EQIP streambank stabilization projects.



*Streambank Stabilization - Before*

## FY 2010 Activities

The program will continue to focus on providing information, training, and \$181,283 in financial assistance to better manage and protect riparian and wetland resources through FY 2009. Riparian area restoration, buffers, streambank stabilization and wetlands will play a significant role in addressing the TMDL's. The majority of the program funds will be targeted to these high priority areas. In FY 2010, the RWPP again plans to supplement EQIP streambank stabilization projects with program funds and will be used to supplement American Recovery and Reinvestment Act of 2009 stimulus funds in the Delaware Watershed.



*Streambank Stabilization - After*

## FY 2011 Planned Activities

In the FY 2011 budget request, the SCC has requested \$253,920 to continue partnering with the NRCS EQIP streambank stabilization projects. In FY 2011, the RWPP will continue to focus on state identified priority watershed restoration areas and will continue identifying, evaluating, and submitting potential stream restoration projects for EQIP funding.

# MINED LAND RECLAMATION PROGRAM

## Overview

The Surface Mining Land Conservation and Reclamation Act (K.S.A. 49-601-624) was established by the Kansas Legislature in 1994 to require reclamation and conservation of lands affected by surface mining. Since 1994, nearly 5,000 acres have been reclaimed and returned to productive property for cropland, recreation, hunting and fishing, housing development, wildlife habitat, and pasturelands. The Act requires producers who mine aggregate, industrial materials, and minerals, except coal, be licensed to operate a mine. The Act also requires producers to register mining sites, file a reclamation plan for each site, submit a reclamation bond, and reclaim mining sites upon completion of mining operations.

### FY 2009 Achievements

In FY 2009, 137 private producers and 59 counties and cities were licensed to conduct surface mining in the state. The operators have registered 479 private sites and 657 county sites for a total of 1,136 sites. Production of 35,863,184 tons of material was reported, 770 acres were affected, and 421 acres were reclaimed and released from bond in calendar year 2008. A total of 4,892 acres have been reclaimed since the program began in 1994.

Midwest Minerals, Inc., Pittsburg, was the recipient of the Governor's Mined Land Reclamation Award for reclaiming 60 acres at their Pittsburg Quarry located west of Pittsburg. A lake and wildlife habitat was created with a goal to form a post-mine area which would blend in with the surrounding land uses.



*Governor Sebelius making presentation*

This reclamation project received the 2009 National Non-Coal Reclamation Award presented by the National Association of State Land Reclamationists.

*Reclaimed site at the Midwest Minerals quarry west of Pittsburg*



### FY 2010 Activities

The Land Reclamation Program is fee funded by:

- ⇒ Issuing licenses to new producers and renewing active producer's licenses.
- ⇒ Collecting site registration fees for new and active sites: \$45 per affected acre and .003 cents per ton production.

Fees collected provide for two Full-Time Employees (FTE) positions and other operational expenditures to carry out the activities required in K.S.A. 49-601-614:

- ⇒ Provide guidance and assistance in the development and completion of reclamation plans.
- ⇒ Enhance Reclamation Plans through digital GPS imagery, site inspections, and digital photography.
- ⇒ Conduct site inspections to assist operators with reclamation requirements, licensing, and closure.
- ⇒ Disseminate updated information for licenses, reclamation bonds, reclamation standards, administrative regulations and other related information.

### FY 2011 Planned Activities

The Mined Land Reclamation Program staff will continue to assist producers with licensing, new site registration, reviewing reclamation plans, site expansion, reclamation process and requirements, reclamation bonds, final reclamation, and site closure. GPS calculations will provide maps, area determination, and survey information to the operators and county planners. Staff will assist local planners, zoning officials, and county commissioners with mining and reclamation concerns.

# MULTIPURPOSE SMALL LAKES PROGRAM

## Overview

The objectives of the Multipurpose Small Lakes Program (MPSLP) are (1) to develop, to its fullest potential a site that is planned for flood control and water supply and or recreation and (2) to renovate existing lakes that have potential to provide long-term flood control, water supply and recreation benefits. This program was enacted in 1985 as a result of recommendations in the State Water Plan.

The SCC has the responsibility to administer the Multipurpose Small Lakes Program Act (K.S.A. 82a-1601 et seq.), as authorized by K.S.A. 2-1915. The program budget is financed from the dedicated funding of the State Water Plan Fund.



*HorseThief Reservoir  
First Filling Oct, 2009*

## FY 2009 Achievements

The total state funding for the construction of HorseThief is \$4.5 million. This reservoir, located in and across Buckner Creek, is a tributary to the Pawnee River, in Hodgeman County. It will be used for flood control and recreation. The estimated total cost of the project exceeded \$15 million. HorseThief will control runoff from 123,520 acres and will store up to 12,868 acre-feet of floodwater. Once full, the reservoir will provide 450 surface acres for water based recreation. The program was appropriated \$1,123,176 in FY 2009 as the final payment from the state for this project. The lake was sponsored by the Pawnee Watershed Joint District #81 and HorseThief Benefit District.



*HorseThief Dam Tower*

## FY 2010 Activities

HorseThief construction was completed in October 2009. A ceremony celebrating the completion was held on October 17. No new multipurpose applications on file with the SCC office.

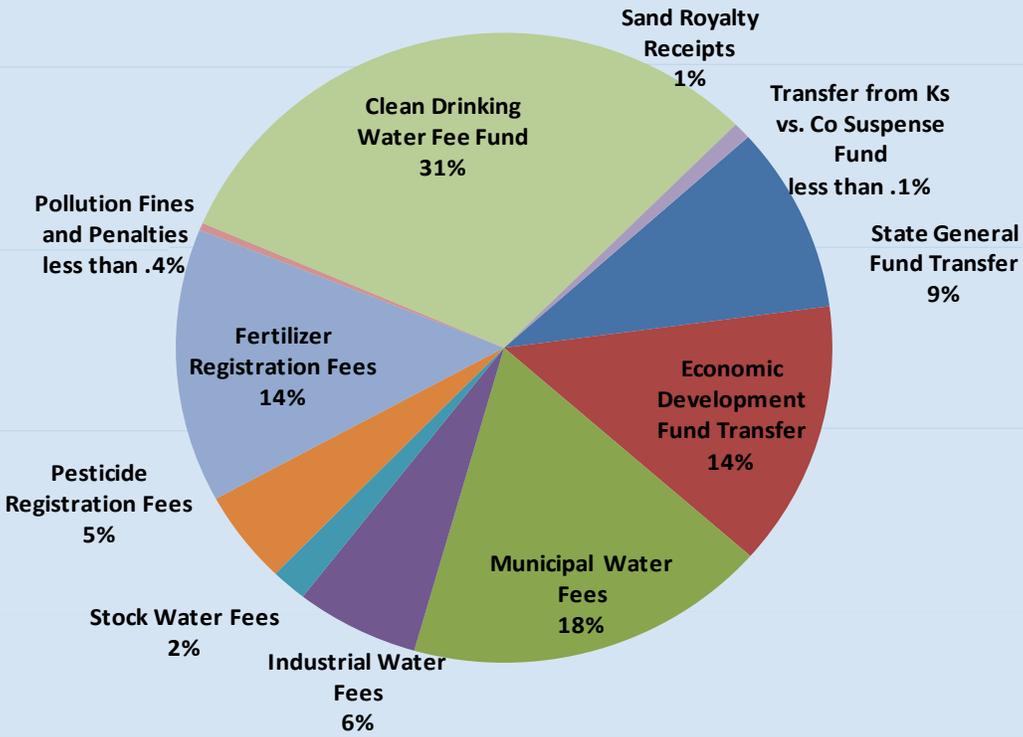


*HorseThief Principal Spillway*

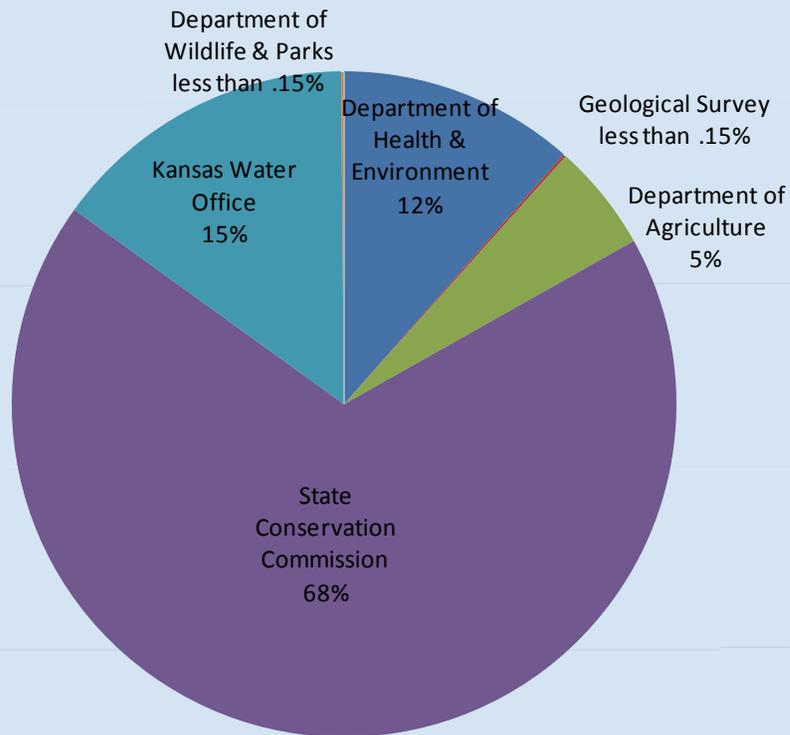
## FY 2011 Planned Activities

No activities planned for FY 2011 as the SCC has no applications for MPSLP cost-share assistance.

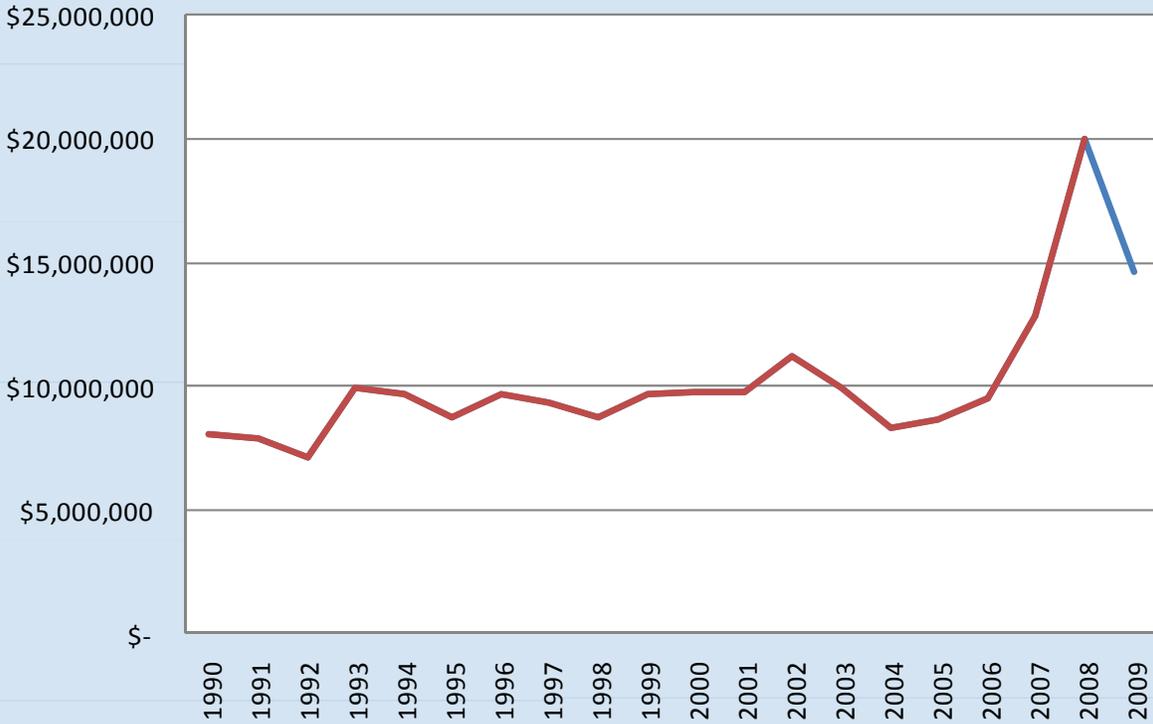
### FY 2009 State Water Plan Fund Sources



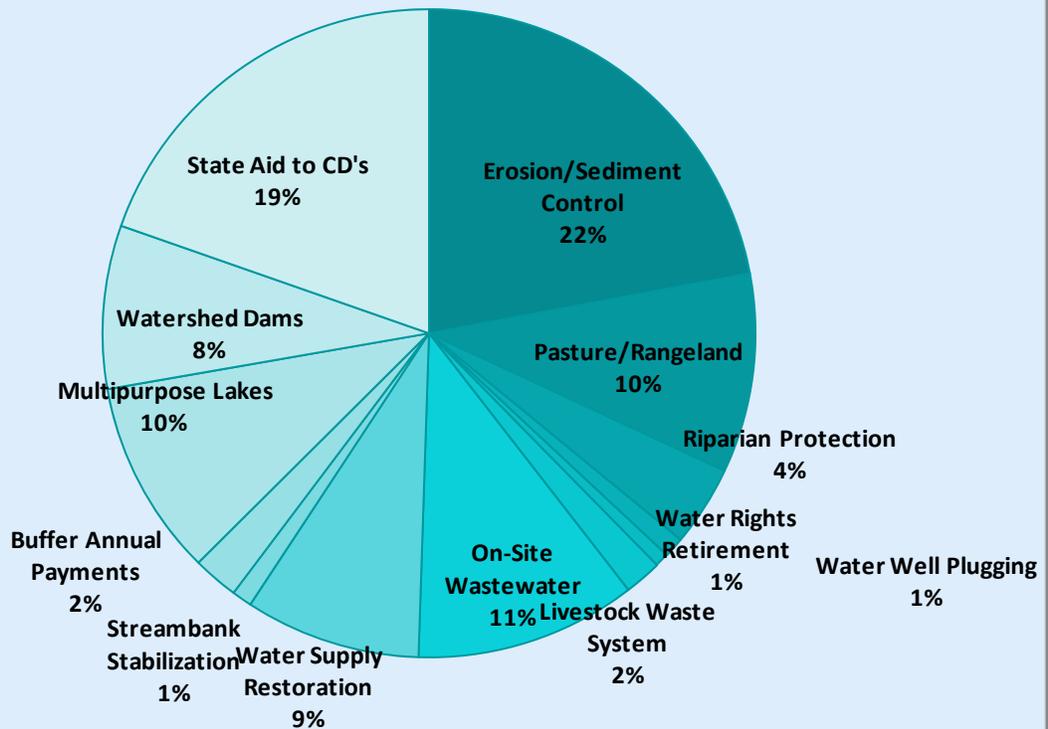
### FY 2009 State Water Plan Agency Distribution



### FY 2009 State Water Plan Funds to SCC



### FY 2009 SCC Implementation of State Water Plan Funds



# WATER CONSERVATION PROGRAMS

## Overview

The Water Right Transition Assistance Pilot Project Program (WTAP) and the Conservation Reserve Enhancement Program (CREP) are the main components of SCC efforts to address Kansas Water Plan management initiatives through the voluntary, incentive-based retirements of privately held water rights. Only those which can result in significant water conservation benefits to the State's rivers, streams, and aquifers are selected for these grants.

WTAP was authorized in 2006. Its purpose is to reduce the "Historic Consumptive Water Use" in targeted, high priority areas. Compensation is determined by an available fixed, flat rate established annually by the SCC and a competitive bid price submitted by the owner. In WTAP, dryland farming is permitted after water right retirement. There are currently three WTAP project areas – Rattlesnake Creek, Prairie Dog Creek, and six high priority areas in Groundwater Management District #4 (GMD).



In 2007, the use of KS vs CO lawsuit damage award monies was authorized to permanently retire water rights in the Upper Arkansas River CREP, a 10 county project area in western Kansas. In this specialized version of the extremely popular CRP program, the landowner agrees to permanently retire water rights and plant a permanent cover (i.e. native grass) on the contracted land. In return for a 14-15 year rental rate from Farm Service Agency (FSA) and a sign-up incentive payment from SCC. The landowner agrees to permanently retire water rights and plant a permanent cover (i.e. native grass) on the contracted land. The CREP project is currently limited to \$2 M on 20,000 acres with a chance to extend to 40,000 acres.

### FY 2009 Achievements

WTAP – Appropriation was \$2,221,274. During the program's second enrollment period of fall 2008, SCC received 41 applications – 37 more than the first year. Although WTAP was significantly impacted by FY2009 budget reductions, 14 applications were approved at a total expenditure of \$2,075,171. A permanent reduction of 1,569 acre feet of Historic Consumptive Water Use in the targeted areas was achieved. In the Rattlesnake Creek Subbasin, three water rights representing 802 acre feet of annual water appropriation were voluntarily dismissed. In the NW KS GMD#4 High Priority areas of the Upper Republican Basin, 11 water rights representing 3,098 acre feet of annual water appropriation were voluntarily dismissed. No WTAP applications were received from the Prairie Dog Creek Basin in FY 2009.

CREP – Appropriation was \$1,229,707. As of June 30, 2009, a total of 56 CREP contracts on 9,155 acres have been approved. This resulted in the permanent retirement of 18,579 acre feet of annual water appropriation from 81 wells. These 56 contracts represent a total of \$556,023 in state sign-up incentives matched by annual payments from FSA in a total amount of \$1,116,120 or approximately \$16.6 million over the 14 –15 year life of the CRP contracts. State cost-share has paid \$1,953 to complete well plugging on eight wells associated with these water rights.

### FY 2010 Activities

WTAP – Appropriation was \$81,010. The FY 2010 appropriation for WTAP is greatly reduced from prior years due to state revenue shortfalls. There are currently not enough funds to conduct an enrollment period during FY 2010. Additional planning and identification of future target areas will be assessed as additional funding becomes available.

CREP – No appropriation (carryover only). Enrollment continues at the current project size of 20,000 acres. One county is at the individual county cap of 5,000 acres total enrollment with more landowners wishing to participate. SCC is working with KWO and FSA to increase the irrigated rental rate for additional incentives and to especially increase participation in the eastern areas of the 10 county project area.

### FY 2011 Planned Activities

WTAP – Continue pilot program implementation to achieve the program goals in each adopted target area. The budget request for FY 2011 is \$858,548; SCC will request that any unexpended FY 2010 funds be carried over to FY 2011 for a third enrollment period. WTAP is a five year pilot project which will end on June 30, 2012.

CREP – Continue to implement the program to achieve the program goals in the project area. SCC will request that any unexpended FY 2010 funds be carried over to FY 2011, and if possible, that the current Memorandum of Understanding with USDA be increased within the current legislatively authorized limit of 40,000 acres.

# WATERSHED DAM CONSTRUCTION PROGRAM

## Overview

The Watershed Dam Construction Program (WDCP) provides financial assistance to organized watershed districts, drainage districts, or other special-purpose districts for the construction of detention dams and grade stabilization dams. Since inception in 1977, the Legislature has and continues to appropriate funds for cost-share assistance for the construction of new dams. In 2006, the Legislature recognized that time and weather take a toll on aging structures, and started a new chapter for cost-share assistance for the rehabilitation (including inundation mapping) of existing flood control dams.



*Grouse-Silver Creeks WJD 92*

The SCC has the responsibility to administer the Watershed District Act (K.S.A. 24-1201 *et seq.*), as authorized by K.S.A. 2-1915. The program budget is financed from the dedicated funding of the State Water Plan Fund.

Flood control dams are needed in flood-prone areas as well as in drought stricken areas, to enhance the land for further productivity, to protect our natural resources and our infrastructures (roads and bridges), to provide water for livestock, and in many cases provide hydrants for rural fire departments.

## FY 2009 Achievements

The 2008 Legislature appropriated \$938,493 for this program.

### Construction:

⇒ 6 new sites for \$581,694

### Rehabilitation:

⇒ 14 sites for \$270,517

### Inundation Mapping:

⇒ 23 sites \$86,282

## FY 2010 Activities

Appropriated funds are \$759,600 and are broken down into three sub-categories: construction, rehabilitation and inundation mapping.

⇒ There were five applications for state cost-share assistance approved in the amount of \$484,262 for new construction of flood control structures.



*Pipe Replacement—Pony Creek 78  
WJD Site 124*

⇒ SCC approved four requests or \$262,892 for rehabilitation.

⇒ Inundation mapping - SCC received 40 applications. 10 contracts are pending approval for \$68,466.

## FY 2011 Planned Activities

A total of \$988,535 has been requested for cost-share implementation in FY 2011. Into FY 2011, the demands of reducing sedimentation above federal reservoir with water supply component will continue to drive program goals and outcomes. The funding will cover the three sub-categories mentioned above. Watershed Districts are encouraged to apply for cost-share assistance for new construction or rehabilitation and inundation mapping of existing flood control structures. The SCC will target \$588,535 of the requested 2011 appropriation to new construction of flood control dams and \$400,000 for rehabilitation and inundation mapping of existing flood control structures statewide. The SCC will continue with more rehabilitation of existing flood abatement structures to bring them to safety and performance standards and to achieve and/or extend their intended purposes. The WDCP's strong emphasis is on operation and maintenance.

# WATER SUPPLY RESTORATION PROGRAM

## Overview

The 2007 Legislature amended K.S.A. 82a-2101 which authorizes the SCC to provide financial assistance funding for the Water Supply Restoration Program (WSRP). This program is a voluntary, incentive-based water program designed to assist eligible sponsors to protect and restore public water supply systems where appropriate watershed restoration and protection are planned or in place. The program budget is financed from the Clean Drinking Water Fee Fund through the State Water Plan Fund.



*Dredge at Mission Lake, City of Horton*

## FY 2009 Achievements

The FY 2009 appropriation was \$998,466. Several coordination meetings were held between state agencies (SCC, KWO, KDA, KDHE, KBS, KWDP, and KDOT) and City of Horton officials to steer the Mission Lake Restoration project. After review of the Preliminary Engineering Report, the City of Horton decided on a Design-Dredge Bid. Several milestones were achieved:

- ⇒ The City of Horton negotiated and obtained landowner easement, Design-Dredge Bid was placed and Dredge America was selected.
- ⇒ US Corps of Engineers jurisdiction determination permit and mitigation were all possible through the assistance of the KWO.
- ⇒ KBS conducted the bathymetric surveys to estimate the sediment deposited in the lake.

The Washington County Rural Water District No.1 and SCC retained the services of Schwab-Eaton P.A. to conduct the Preliminary Engineering Report (PER) for the renovation of the Big Blue River Low Head Dam.

## FY 2010 Activities

Program appropriation was \$718,896. Mission Lake coordination meetings continued to achieve several milestones:

- ⇒ DWR permit to construct and term permit for hydraulic dredge, KDHE NPDES permits and US Corps of Engineers individual permit were all obtained.
- ⇒ Dredge America and its subcontractors started the construction of the Confined Disposal Facility (CDF) in August 2009 and the dredge commenced in October 2009.

The scope of the work is to restore/dredge up to 1,000,000 cubic yards of water supply storage capacity.

The Preliminary Engineering Report (PER) – feasibility study – for the Washington County Rural Water District No.1 is being conducted by Schwab-Eaton, P.A. Assessment of different alternatives to ensure that the district has adequate water supply will be discussed by stakeholders.

SCC has several applications – Letters of Interest – on file requesting financial assistance in excess of \$33 million for water supply systems restoration.

## FY 2011 Planned Activities

The FY 2011 request is \$937,569. The SCC will continue to monitor the progress on Mission Lake, due to be complete by fall 2010. The SCC also plans to use the funding to supplement either the Washington County Rural Water District No.1 project or the Augusta Lake restoration project.

# AID TO CONSERVATION DISTRICTS PROGRAM

## Overview

State Aid to Conservation Districts, also known as Matching Funds, is a grant program providing financial assistance to Kansas Conservation Districts. The K.S.A. 2-1907c authorizes the state to match up to \$25,000 per district of the annual amount allocated to conservation districts by the board of county commissioners. This match provides an incentive for the county commission to double county funding up to the state maximum amount. These funds assist the 105 county conservation districts to effectively deliver local, state, and federal natural resource programs as prescribed under the Conservation District Law (K.S.A. 2-1901 et seq.). Financial assistance enables conservation districts to:

- ⇒ Hire administrative and technical staff.
- ⇒ Acquire office supplies and equipment.
- ⇒ Coordinate various conservation programs.
- ⇒ Implement state financial assistance programs at the local level.
- ⇒ Carry out information and education campaigns promoting conservation.
- ⇒ Provide clerical assistance to NRCS.



*Brown County Conservation District Board*

A local five-member board, known as district supervisors, governs each conservation district. District supervisors are elected public officials who serve without pay. The 525 district supervisors donate nearly 50,000 hours per year establishing local priorities, setting policy, and administering programs to conserve natural resources and protect water quality.

## FY 2009 Achievements

Funds appropriated to the 105 conservation districts totaled \$2,264,831. Fifty-nine conservation districts received the maximum grant of \$25,000. Districts received \$2,945,053 from counties. Grants are issued to conservation districts based upon receipt of a satisfactory audit of 2006 accounts, receipts, and disbursements as well as certification of actual county funds provided to districts.



*Range tour in Clay County sponsored by the conservation district*

## FY 2010 Activities

The program has been appropriated \$2,255,919 for FY 2010. This amount is one percent less than the qualifying amount due to state budget reductions. Based on conservation district input and budget information, districts receiving additional funds were able to purchase field equipment to rent, update office equipment, expand youth and adult educational programs, increase employee compensation/health benefits, and hire additional staff. Furthermore, several conservation districts are no longer co-located with the NRCS and must pay expenses previously provided by the NRCS. The increased funding has been vital for these conservation districts to maintain a presence in the county.

## FY 2011 Planned Activities

For FY 2011, \$2,113,796 is requested for the purpose of providing state financial assistance to conservation districts. Sixty-three conservation districts will receive the \$25,000 maximum amount from the state with county commissions contributing \$2,943,526. Grant assistance from this request will be distributed in July 2010 to each conservation district who has submitted to the SCC a certification of actual county funds provided to the district and a satisfactory audit of accounts, receipts, and disbursements.

# BENEFIT AREA PROGRAM

## Overview

The Benefit Area Program, authorized by K.S.A. 82a-1702 in 1963, was transferred from the Kansas Water Office (KWO) to the SCC by the 1986 Legislature. The program provides a method for public corporations, namely watershed districts, to be reimbursed for specific expenses when more than 20 percent of the benefits of a flood control structure are outside the taxing entities boundary.

The program was repealed by the 1995 Legislature but re-established by the 1996 Legislature. Only two known entities are eligible for the program: the Upper Black Vermillion Watershed District and the Wet Walnut Watershed District.

### FY 2008 Achievements

### FY 2009 Activities

In FY 2009, no funding for the program was appropriated.

In FY 2010, no funding for the program was appropriated.

### FY 2010 Planned Activities

In FY 2011, no activity is anticipated.

# WATERSHED PLANNING ASSISTANCE PROGRAM

## Overview

The 1958 Legislature amended K.S.A. 2-1904(d)(6) which authorizes the SCC to cooperate with watershed districts and other special purpose districts to secure federal funds for the P.L. 566 Small Watershed Program. Funds were appropriated from FY 1959 through 1980 to assist districts in the development of watershed protection plans which were a prerequisite to receiving federal watershed dam construction funding. Planning assistance funds were phased out by the 1980 Legislature in favor of state funds for watershed construction. The 1987 Legislature appropriated funds to reinstate the watershed planning program. Since 1990, the SCC's planning assistance efforts have been considered a sub-program of the Watershed Dam Construction Program.

In addition to providing planning assistance for the federal construction program, the SCC has also assisted districts in the study of watershed dam impacts on threatened and endangered species and the promotion of non-structural watershed protection practices. Most recently, watershed planning funds have been used to assist a newly formed watershed district in the development of its general plan.

### FY 2008 Achievements

### FY 2009 Activities

In FY 2009, no funding for the program was appropriated.

In FY 2010, no funding for the program was appropriated.

### FY 2010 Planned Activities

In FY 2011, no activity is anticipated.



## State Conservation Commission

109 SW 9th St., Suite 500

Topeka, KS 66612-1215

Website: [www.scc.ks.gov](http://www.scc.ks.gov)

Phone: 785-296-3600

Fax: 785-296-6172

E-mail: [scc@scc.ks.gov](mailto:scc@scc.ks.gov)

The State Conservation Commission (SCC) was established by the Kansas Legislature in 1937 to promote soil and water conservation. The SCC is governed by nine members consisting of an elected commissioner from each of the five conservation areas; two ex-officio members representing KSU Research and Extension; and two appointed members representing the Kansas Department of Agriculture (KDA) and the USDA, Natural Resources Conservation Service (NRCS). The agency is administered by an executive director appointed by the commissioners.

The SCC has the responsibility to administer the Conservation Districts Law (K.S.A. 2-1901 et seq), the Watershed District Act (K.S.A. 24-1201 et seq.), and other statutes authorizing various programs. The agency budget is financed from the dedicated funding of the State Water Plan Special Revenue Fund, State General Fund, and fee funds.

The agency is structured as a single program agency, but operates several subprograms that tie both to the mission of the SCC and many stated goals of the State Water Plan. One of the goals of the SCC is to administer efficiently those subprograms that enhance and protect the state's natural resources. The agency pursues this goal by working with the 105 conservation districts and 88 organized watershed districts, along with other local, state and federal entities.

## State Conservation Commission Members

### Elected Members

Rodney Vorhees, Area V, Fredonia, Chairperson

John Wunder, Area IV, Valley Falls, Vice-Chairperson

Ted Nighswonger, Area I, Edmond

Andrew Larson, Jr., Area II, Garden City

Brad Shogren, Area III, Lindsborg



Five Elected SCC Commissioners

### Ex-Officio Members

Dr. Daniel L. Devlin, KSU, Research and Extension

Dr. Phil Barnes, KSU, Biological & Agricultural Engineering

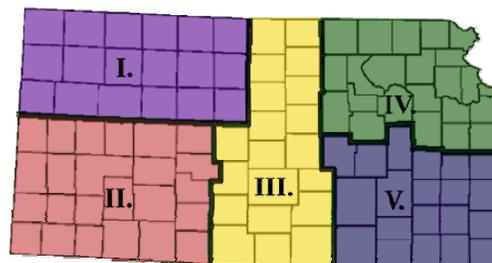
### Appointed Members

Dave Barfield, Kansas Department of Agriculture

Eric Banks, USDA, Natural Resources Conservation Service

### Executive Director

Greg A. Foley, State Conservation Commission



SCC Administrative Areas



*Grass buffer located adjacent to cropland*



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Attachment 4:  
Kansas Water Plan  
State Water Plan Funded Programs  
2010 Status Report

# **Kansas Water Plan**

## **State Water Plan Funded Programs**

### **2010 Status Report**

**FY2009 Accomplishments**  
**FY 2010 Ongoing Activities**  
**FY 2011 Proposed Activities**



HorseThief Reservoir, Fall 2009

**January 2010**

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## Introduction

The *Kansas Water Plan* 2010 Status Report provides an update of programs and projects that receive funding from the State Water Plan Fund (SWPF). The SWPF was established in 1989 to implement programs and projects that address issues identified in the *Kansas Water Plan*. The fund typically generates around \$20 to \$21 million dollars annually from a combination of sources including the State General Fund, Economic Development Initiative Fund, Clean Drinking Water Fee Fund and fees on water use, sale of fertilizer and pesticide registration, and pollution fines. The fiscal year 2010 SWPF, like most state budgets, had rescissions.

The report is organized by agency and program for State fiscal year 2009 accomplishments, 2010 ongoing activities and 2011 proposed activities.

It is important to note that this report includes only programs and projects funded through the SWPF. Many of the *Kansas Water Plan* issues addressed by these programs and projects are also addressed through efforts funded from other sources. In many instances, State Water Plan funds are used in combination with other funding sources to support program activities and projects. Multiple agencies and organizations at the federal, state and local levels are involved in addressing many of the issues identified in this report. Sources for additional information are contained within each program or project description.

For more information on the *Kansas Water Plan* and the state water planning process, go to [www.kwo.org](http://www.kwo.org), or contact the Kansas Water Office at 1-888-KAN-WATER (785-526-9283).

# Kansas Water Plan 2010 and 2015 Objectives

The Kansas Water Authority approved the following 2010 and 2015 objectives for the *Kansas Water Plan*. The 2010 objectives were developed in 1998, with 2015 added later. All objectives were assessed in 2006.

## **Public Water Supply Objectives:**

1. By 2010, ensure that sufficient surface water storage is available to meet projected year 2040 public water supply needs for areas of Kansas with current or potential access to surface water storage.
2. By 2010, less than five percent of public water suppliers will be drought vulnerable.
3. By 2010, ensure that all public water suppliers have the technical, financial and managerial (TFM) capability to meet their needs and Safe Drinking Water Act requirements.

## **Water Conservation Objectives:**

4. By 2010, reduce the number of public water suppliers with excessive unaccounted for water by first targeting those with 30 percent or more unaccounted for water.
5. By 2010, reduce the number of irrigation points of diversion for which the acre-feet per acre (AF/A) water use exceeds an amount considered reasonable for the area (amounts typically considered reasonable are 1.0 AF/A in eastern Kansas, 1.5 AF/A in central Kansas, 2.0 AF/A in western Kansas) and those that overpumped the amount authorized by their water rights.
6. By 2015, conservation plans will be required for water rights meeting the priority criteria under K.S.A. 82a-733 and it has been determined that such a plan would result in significant water management improvements.
7. By 2015, all non-domestic points of diversion meeting predetermined criteria will be metered, gaged or otherwise measured under the authority of K.S.A. 82a-706c and K.S.A. 82a-1028(I). Criteria will include a minimal use requirement and priority area targeting.

## **Water Management Objectives:**

8. By 2010, reduce water level decline rates within the Ogallala-High Plains aquifer and implement enhanced water management in targeted areas.
9. By 2015, achieve sustainable yield management of Kansas surface and ground water sources, outside of the Ogallala-High Plains aquifer and areas specifically exempt by regulation. Sustainable yield management would be a goal that sets water management criteria to ensure long term trends in water use will move as close as possible to stable ground water levels and maintenance of sufficient stream flows.
10. By 2015, meet Minimum Desirable Streamflow (MDS) at a frequency no less than the historical achievement for the individual sites at the time of enactment.

## **Water Quality Objectives:**

11. By 2010, reduce the average concentration of bacteria, biochemical oxygen demand, dissolved solids, metals, nutrients, pesticides and sediment that adversely affect the water quality of Kansas lakes and streams.
12. By 2010, ensure that water quality conditions are maintained at a level equal to or better than year 2000 conditions.
13. By 2010, reduce the average concentration of dissolved solids, metals, nitrates, pesticides and volatile organic chemicals that adversely affect the water quality of Kansas ground water.

## **Flood Management Objective:**

14. By 2010, reduce the vulnerability to damage from floods within identified priority communities and areas.

## **Wetland and Riparian Management Objectives**

15. By 2010, maintain, enhance or restore priority wetlands and riparian areas.

**Recreation Objective**

16. By 2010, increase public recreational opportunities at Kansas lakes and streams.

**Research and Data Collection Objective:**

17. By 2010, target data collection, research projects and data sharing activities to address specific water resource issues as identified in the Kansas water planning process and to support and guide state water resource program operations.

**Public Information and Education Objectives:**

18. By 2010, Kansas Water Office public information activities should be directed at ensuring the public is aware of the Kansas Water Plan and knows where and how to obtain current and reliable information on the status of water resources in Kansas.
19. By 2010, provide educational activities to ensure that Kansans increase their knowledge and understanding of the State's water resources to enable them to make better personal and public decisions on water conservation, development and management.

## KANSAS WATER PLAN ISSUES

Program	Water Management	Water Conservation	Public Water Supply	Water Quality	Flood Management	Wetland/Riparian Management	Water Recreation	Data and Research	Information and Education	No. of Basin Activity
<b>Kansas Department of Health and Environment</b>										
Contamination Remediation				X						All
Local Environmental Protection				X					X	All
TMDL Initiatives				X						All
NPS Technical Assistance				X		X			X	All
Watershed Restoration & Protection Strategies (WRAPS)		X	X	X		X			X	10
<b>Kansas Geological Survey - University of Kansas</b>										
Ogallala-High Plains Aquifer Assessment	X			X				X		6
<b>Kansas Corporation Commission</b>										
Abandoned Well Plugging and Site Remediation				X						9
<b>Kansas Department of Agriculture</b>										
Interstate Water Issues	X	X	X							4
Basin & Enhanced Water Resource Management	X	X								9
Water Use		X						X		All
Dam Safety Program					X					12
<b>State Conservation Commission</b>										
Water Resources Cost Share	X	X		X						All
Nonpoint Source Pollution Assistance				X						All
Nonpoint Source Pollution Assistance (WRAPS)				X						All
Aid to Conservation Districts		X	X	X					X	All
Watershed Dam Construction			X		X		X			6
Water Quality Buffer Initiative				X						11
Riparian and Wetland				X	X	X				2
Multipurpose Small Lakes			X		X		X			1
Water Right Transition Assistance	X	X								2
Conservation Reserve Enhancement	X	X		X						1
Water Supply Restoration			X							4
Streambank Stabilization			X	X		X				8
<b>Kansas Water Office</b>										
Assessment and Evaluation	X	X	X					X		9
GIS Database Development								X		All
MOU-Operations and Maintenance			X							5
Technical Assistance (TA) Municipal		X	X						X	All
Technical Assistance (TA) Irrigation		X							X	4
TA Public Water Supply Mapping			X					X		10
TA Dispute Resolution									X	open
Weather Stations	X	X	X		X					10
Water Resource Education		X							X	All
Weather Modification	X	X								2
Aquifer Storage and Recovery	X	X	X	X						1
Neosho River Basin Issues	X	X				X				1
Reservoir Beneficial Use/Storage Purchase			X							7
<b>Kansas Department of Wildlife and Parks</b>										
Stream (Biological Monitoring)				X						7
Webster Minimum Pool Agreement							X			1

## STATE WATER PLAN PROGRAM BUDGET

Agency/Program	FY 2009 Actual	FY 2010 SWPF Revised Request	FY 2011 SWPF KWA Rec.	FY2011 ELARF
Transfer to KCC--Well Plugging	\$ 320,000	\$ 288,000	\$ 374,865	\$ -
<b>Department of Health and Environment</b>				
Contamination Remediation	\$ 850,831	\$ 447,951	\$ 753,870	\$ -
TMDL Initiatives	\$ 217,412	\$ 194,959	\$ 238,316	\$ -
Local Environmental Protection Program	\$ 1,502,848	\$ 1,066,942	\$ 1,400,000	\$ -
Nonpoint Source Program	\$ 300,796	\$ 305,876	\$ 299,856	\$ -
Watershed Restoration and Protection Strategy	\$ 590,087	\$ 431,312	\$ 783,852	\$ -
<b>Total--Department of Health and Environment</b>	<b>\$ 3,461,974</b>	<b>\$ 2,447,040</b>	<b>\$ 3,475,894</b>	<b>\$ -</b>
<b>University of Kansas--Geological Survey</b>	<b>\$ 32,000</b>	<b>\$ 28,800</b>	<b>\$ 37,486</b>	<b>\$ -</b>
<b>Department of Agriculture</b>				
Interstate Water Issues	\$ 451,518	\$ 332,875	\$ 459,816	\$ -
Subbasin Water Resources Management	\$ 639,273	\$ 641,771	\$ 252,977	\$ -
Water Use	\$ 60,000	\$ 60,000	\$ 66,000	\$ -
Enhanced Water Management	\$ -	\$ -	\$ 445,607	\$ -
Dam Safety/Rehabilitation			\$ -	\$ 1,000,000
<b>Total--Department of Agriculture</b>	<b>\$ 1,150,791</b>	<b>\$ 1,034,646</b>	<b>\$ 1,224,400</b>	<b>\$ 1,000,000</b>
<b>State Conservation Commission</b>				
Water Resources Cost Share	\$ 3,435,957	\$ 2,485,805	\$ 3,060,216	\$ -
Nonpoint Source Pollution Asst.	\$ 3,082,483	\$ 2,512,787	\$ 3,254,907	\$ -
Aid to Conservation Districts	\$ 2,253,788	\$ 2,266,962	\$ 2,113,796	\$ -
Watershed Dam Construction	\$ 927,153	\$ 726,697	\$ 988,535	\$ -
Water Quality Buffer Initiative	\$ 267,047	\$ 312,163	\$ 281,100	\$ -
Riparian and Wetland Program	\$ 236,515	\$ 187,366	\$ 235,920	\$ -
Multipurpose Small Lakes	\$ 1,123,176	\$ -	\$ -	\$ -
Water Supply Restoration Program	\$ 998,466	\$ -	\$ 937,569	\$ -
Water Transition Assistance Program	\$ 2,161,479	\$ 100,000	\$ 858,548	\$ -
Conservation Reserve Enhance. (CREP)	\$ 116,123	\$ 1,113,584	\$ -	\$ -
Streambank Stabilization	\$ -	\$ -	\$ -	\$ 1,000,000
<b>Total--Conservation Commission</b>	<b>\$ 14,602,187</b>	<b>\$ 9,705,364</b>	<b>\$ 11,730,591</b>	<b>\$ 1,000,000</b>
<b>Kansas Water Office</b>				
Assessment and Evaluation	\$ 740,605	\$ 508,000	\$ 700,000	\$ -
GIS Data Base Development	\$ 250,000	\$ 177,500	\$ 250,000	\$ -
MOU - Storage Operations and Maintenance	\$ 296,841	\$ 274,500	\$ 355,000	\$ -
Technical Assistance to Water Users	\$ 490,760	\$ 585,850	\$ 624,919	\$ -
Weather Stations	\$ 80,000	\$ 50,000	\$ 70,000	\$ -
Water Resource Education	\$ 53,449	\$ 47,000	\$ 55,000	\$ -
Weather Modification	\$ 240,000	\$ 156,200	\$ 240,000	\$ -
Wichita Aquifer Recharge Project	\$ 1,000,000	\$ 300,000	\$ 805,044	\$ -
Neosho River Basin Issues	\$ 65,134	\$ 860,080	\$ -	\$ -
Reservoir Beneficial Use/Storage Purchases	\$ -	\$ -	\$ -	\$ 3,220,357
<b>Total--Kansas Water Office</b>	<b>\$ 3,216,789</b>	<b>\$ 2,959,130</b>	<b>\$ 3,099,963</b>	<b>\$ 3,220,357</b>
<b>Department of Wildlife and Parks</b>				
Stream (Biological) Monitoring	\$ 32,000	\$ 28,800	\$ 37,486	\$ -
Minimum Pool Agreement (Webster)	\$ -	\$ -	\$ -	\$ 250,000
<b>Total--Department of Wildlife and Parks</b>	<b>\$ 32,000</b>	<b>\$ 28,800</b>	<b>\$ 37,486</b>	<b>\$ 250,000</b>
<b>Total State Water Plan Expenditures</b>	<b>\$ 22,495,741</b>	<b>\$ 16,203,780</b>	<b>\$ 19,605,820</b>	<b>\$ 5,470,357</b>

## Contamination Remediation Program

The State Water Plan Contamination Remediation Program (SWPCRP) was developed to address sites where the responsible party is not known or is not viable and where there are no federal, state or other funding sources available to complete required investigation and cleanup activities. The program presently provides funding for evaluation, monitoring and remediation of 88 contaminated ground water or surface water sites. Soil cleanups remove contaminants from the subsurface, which can leach to and impact ground water and/or surface water. Ground water treatment systems installed on public water supplies provide safe drinking water for Kansas residents and remove contaminants from Kansas aquifers.

The program also supplies alternate water sources as an emergency response action to communities with contaminated drinking water sources. Historically, the SWPCRP has taken emergency response actions in the communities of Manhattan, Clearwater, Wichita, Yoder, Moscow, Hudson, Colby, Kirwin, Portis, Lyons and Hutchinson.

### Relevancy to the Kansas Water Plan:

The SWPCRP helps implement and fulfill the Kansas Water Plan 2010 [Water Quality Objectives #11 and #13](#).

The SWPCRP is a program identified in all twelve basin sections as a core program for meeting water quality objectives.

### For More Information:

Rick Bean, Chief, Remedial Section, (785) 296-1675; [rbean@kdheks.gov](mailto:rbean@kdheks.gov)

Doug Doubek, Unit Manager, State Response and Redevelopment Unit, (785) 291-3246; [ddoubek@kdheks.gov](mailto:ddoubek@kdheks.gov)  
<http://www.kdheks.gov/remedial/swp.html>

### FY 2009 Accomplishments

**FY 2009 Actual:        \$850,831**

#### Basin/Status Summary of FY09 Activities

Basin	Total Sites	Investigation	Remediation	Monitoring	Transferred / Resolved
Cimarron	2	0	1	1	0
Kansas-Lower Republican	9	1	2	6	0
Lower Arkansas	19	8	3	8	0
Marais des Cygnes	3	3	0	0	0
Missouri	3	1	0	2	0
Neosho	18	11	1	5	1
Smoky Hill-Saline	9	3	0	5	1
Solomon	4	1	0	3	0
Upper Arkansas	9	2	1	6	0
Upper Republican	2	1	0	1	0
Verdigris	5	4	0	0	1
Walnut	5	5	0	0	0

Accomplishments completed during FY 2009 are summarized by individual basin below.

#### Cimarron Basin

The remediation of a water treatment system to remove volatile organic compounds installed in 1998 contains contamination to a localized area around a water supply well. KDHE monitors the treatment system and monitoring network on an annual basis to ensure the system is working as designed and the contamination is being contained. The system was evaluated and monitored to confirm it is operating as designed.

### **Kansas- Lower Republican Basin**

A former disposal burn pit at a residence that was contaminated with poly-nuclear aromatic hydrocarbons and heavy metals was cleaned up (Stewart Property Site) to eliminate the resident's risk of exposure to the contaminants and prevent contamination of the aquifer.

Near Manhattan, a water treatment system is in operation to remove tetrachloroethylene (PCE) at levels above federal drinking water standards for the Konza Rural Water District supply well and three nearby private water supply wells. Impacted wells are sampled to confirm the effectiveness of the treatment systems. The public water supply well appears to be providing containment for the ground water contamination.

Six sites within this basin are in Long Term Monitoring (LTM) to track ground water contamination migration, evaluate contaminant concentration trends and monitor potential receptors.

### **Lower Arkansas Basin**

In 1997 and 2005, the SWPCRP installed five recovery wells to remove chloride and volatile organic compounds (VOCs) that impacted ground water from the aquifer and continues to protect the Lyons public water supply well field. Semi-annual monitoring at the site tracks plume migration and confirms the containment system is performing as designed. Approximately one billion gallons of chloride contaminated water have been recovered during the operation of the system.

The City of Clearwater continues to operate a SWPCRP installed treatment system on a public water supply well to remove VOCs, primarily tetrachloroethylene, from the water supply. The SWPCRP monitors the treatment system and surrounding private and ground water monitoring wells.

The HABIT site near Yoder has ground water contaminated with various VOCs extending over three miles in length, and is impacting numerous private wells and threatening a public water supply well. KDHE has provided either whole house treatment systems or connected citizens with impacted private wells to the local rural water supply. KDHE continues to monitor the migration of this contamination which is within a quarter of a mile from the rural water supply well. There are currently no treatment facilities installed due to the lack of financial resources in the SWPCRP.

There are seven other sites in various stages of investigation and eight sites currently in long term monitoring.

### **Marais des Cygnes Basin**

Three sites are in the investigation phase. They include two former refinery sites and one former manufactured gas plant.

### **Missouri Basin**

Long term monitoring was conducted at two sites and one site is currently in the investigation phase.

### **Neosho Basin**

Predominant sites are 12 former smelter sites. These sites generally consist of acres of land that are heavily contaminated with lead, cadmium, arsenic and zinc. Most have little or no vegetation growing on them which has allowed for erosion of highly contaminated material to migrate and contaminate local surface water environments. Smelters located in residential areas have impacted yards and are a primary threat to children under six years of age. In 2009, three smelter sites were investigated to determine extent and volume of impacted material. These sites are ready for remedial action when funding becomes available. During 2009, a bid for \$149,424 was accepted to clean up the Scammon Smelter site; however, wetland issues and landowner access difficulties prevented KDHE from cleaning up the site during the fiscal year. Five sites are in LTM and were all sampled in 2009.

### **Smoky Hill-Saline Basin**

KDHE identified a potentially responsible party for the Kanopolis abandoned salt pile site and transferred the site to the appropriate KDHE program. Chloride contamination has impacted the ground water and is migrating toward a public water supply well field. It now appears the identified potentially responsible party may only be partially or indirectly responsible for the contamination; therefore, the site may be transferred back to SWPCRP. Five sites are in long term monitoring and three are being investigated.

### **Solomon Basin**

SWPCRP collected water samples from three sites that are in long term monitoring. One site is under investigation.

### Upper Arkansas Basin

The Garden City VOC site investigation identified a source area of PCE in the soil, indicating a release had occurred in that area. KDHE is in the process of determining if a viable responsible party exists. Public water supply wells are potentially threatened by this ground water contamination. The public water supply system serves approximately 28,000 citizens.

The Ness Crude Oil #2 Site has been investigated and is ready for remediation when, and if, funding becomes available. Approximately 5,400 square feet to a vertical depth of 10 feet below ground surface of soil contaminated with various poly-nuclear aromatic hydrocarbons needs to be addressed. Six sites are in long term monitoring and one site is a candidate for remediation when funding is available.

### Upper Republican Basin

The Norton carbon tetrachloride site and the Selden carbon tetrachloride site are the only SWPCRP sites in the Upper Republican Basin. The Selden site was assigned this year as the responsible party declared Chapter 7 bankruptcy. Carbon tetrachloride is the primary contaminant at the Selden site and is currently threatening several public water supply wells that serve approximately 1,200 citizens. The Norton site is being investigated to determine the source of the contamination which appears to be the same bankrupt company.

### Verdigris Basin

A KDHE Potential Responsible Party search identified a viable responsible party to address smelter contamination at the Altoona Smelter site. The site was transferred to the appropriate KDHE program to have the Responsible Party address the contamination through a Consent Order.

Site investigations were conducted at three former refinery sites including the Kanotex Refinery (Caney), Sunflower Refinery (Niotaze) and Uncle Sam Refinery (Cherryvale) to determine the extent and nature of the contamination and identify potential receptors. Both the Sunflower Refinery and Kanotex Refinery are located next to residential properties and represent a threat to public health.

Refinery waste and sludge contaminated with various poly-nuclear aromatic hydrocarbons is present at the surface of the Sunflower Refinery site and within 100 feet of a residential home and a surface water tributary. Remediation will be required at these sites when funding becomes available.

### Walnut Basin

There are five former refinery sites within the Walnut basin. As of the end of FY 09, all five sites needed investigation to determine nature and extent of contamination.

### State Superfund Match:

The amount of \$184,864 from FY 2009 allocation (\$850,831) provided a mandatory ten percent state match to EPA for federal-lead at the Cherokee County Superfund Site (Operable Unit 3 and Operable Unit 6). This left a total of \$665,967 to implement activities on the 88 SWPCRP sites describe above in the basin summaries.

### FY 2010 Activities

**FY 2010 Revised:       \$447,951**

With the reduction in funding allocated to the SWPCRP for FY 2010, a major remediation project will not be implemented. Funding will concentrate on: 1) monitoring existing treatment systems to ensure systems are operating as designed; 2) monitoring ground water contamination and potential receptors to ensure that contamination at these sites are not spreading or impacting new receptors; 3) investigation of new sites or sites that have not previously been investigated; 4) identification of potentially responsible parties so that parties responsible for the contamination can address their problems; 5) emergency actions; and 6) state Superfund match.

There are twelve former smelter sites that are in the SWPCRP. At these sites, heavy metal laden smelter wastes and impacted soil cover the ground, wash into nearby streams, and is blown into the air. Four sites are ready for remediation which has been estimated to cost between \$150,000 up to \$400,000 for per sites.

In early 2010, site investigations have been completed at Kanotex Refinery (Caney) and Sunflower Refinery (Niotaze). Both of these sites are also ready for remediation efforts.

## Kansas Department of Health & Environment

Investigation of contaminated sites located in the communities of Selden, Norton, Caney, Bucklin, Wellington, Galva, Bendena, Bazine, Manhattan, Glasco, El Dorado (three sites) and Wichita are planned for FY 2010. In addition, KDHE will continue to research past site ownership and activities to determine if viable responsible parties exist to address sites in the program.

The national financial crisis of FY 2008/ FY 2009 has caused numerous companies across Kansas to declare bankruptcy. Many of these properties are contaminated and will likely become orphan sites if settlements are not reached or if the bankrupt company has no available resources. SWPCRP conducts time-critical investigations on these bankrupt properties to assist the state in the negotiation process by determining overall costs needed for cleanup.

Emergency response action by the SWPCRP is performed on an as needed basis, or when the emergency arises. Funding reductions to the program could limit the program capability to respond adequately to an emergency situation.

Efforts continue at various EPA-lead Superfund sites across Kansas which will require the mandatory ten percent state match. The amount of match for FY 2010 is currently unknown.

### Walnut Basin

Reliance Refinery and St. Louis Refinery investigations, all located in El Dorado, were conducted in early FY 2010.

### FY 2011 Proposed Activities

**FY 2011 Recommendation: \$753,870**

The SWPCRP is funded exclusively by the *State Water Plan*. Work planned for FY 2011 includes continued investigation, monitoring and/or cleanup of contaminated sites in which water resources are impacted or are threatened to become contaminated.

In FY 2011, based on the current budget projection of \$753,870, the possibility exists that only one to two sites may be cleaned up during FY 2011 depending on the amount of State Superfund match needed. There are approximately nine sites that are ready for cleanup when funding becomes available.

## Local Environmental Protection Program

The Local Environmental Protection Program (LEPP) provides for local development of an environmental protection plan to implement the environmental protection strategy of the *Kansas Water Plan*. Financial and technical assistance is provided to counties to prevent and abate environmental pollution to protect the environment and public health. This state/local matching grant program is funded in part by the State Water Plan Fund.

A county environmental protection plan covers onsite wastewater treatment, private drinking water supplies, subdivision water and wastewater, solid waste management, hazardous waste management, public water supply protection and nonpoint source pollution control. A county sanitary code is developed and administered to address onsite wastewater and private water supply wells, at a minimum.

### Relevancy to the Kansas Water Plan:

Current [Water Quality Objectives](#) in the *Kansas Water Plan* Objectives and Priority Issues addressed by the Local Environmental Protection Program are shown in [Table 1](#) below in the Nonpoint Source Technical Assistance Program section.

LEP Programs participate in a variety of activities that address these *Kansas Water Plan* objectives and priorities. Approximately 65% of the LEP Programs actively participate in the WRAPS Programs by providing onsite wastewater system and private water well inventories to determine those that lie within high priority areas or participate in the stakeholder leadership team meetings. WRAPS is a basin priority issue in eight of the twelve river basins in the state. Most programs attend BAC meetings and provide a summary of accomplishments.

## Kansas Department of Health & Environment

The LEP Program representatives have an understanding of high priority TMDLs and the source water assessment zones within their county and provide information regarding proper operation and maintenance of onsite wastewater treatment systems to homeowners in these areas.

**For More Information:**

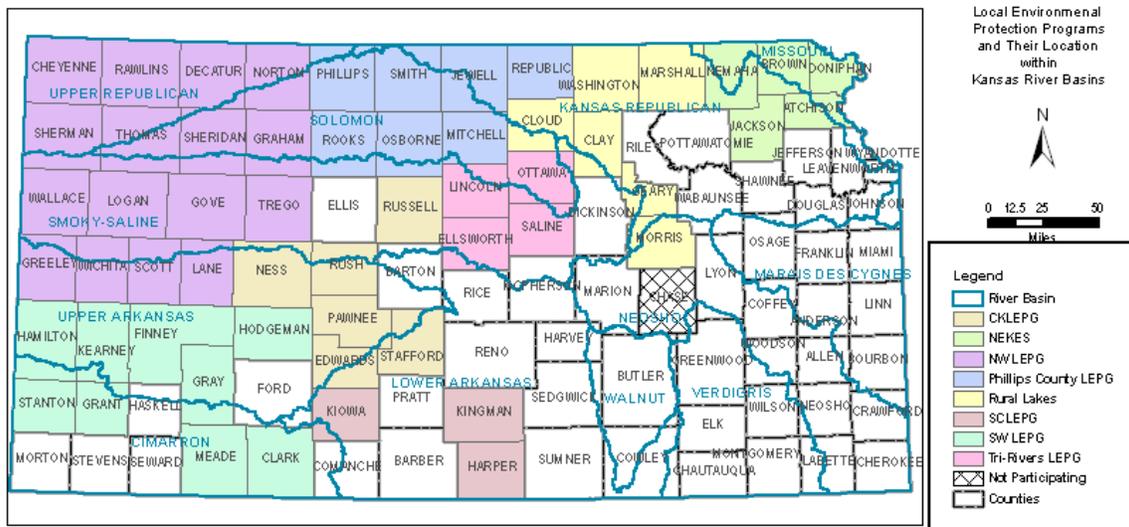
Kerry Wedel, Chief, Watershed Management Section; (785) 296-5567, [kwedel@kdheks.gov](mailto:kwedel@kdheks.gov)

### FY 2009 Accomplishments

**FY 2009 Actual:           \$1,502,848**

At the end of FY 2009, 104 of 105 counties in Kansas are participating in the LEP Program. There were 48 single county programs and eight multi-county programs (see map below). Comanche County completed county sanitary codes and joined the program at the beginning of the fiscal year and Chautauqua County joined in May 2009 and will draft county codes in the remainder of FY 2009 and FY 2010. In addition to Comanche County, sanitary codes were revised and approved for Douglas, Labette, Montgomery, and Saline counties.

### Local Environmental Protection Programs within Kansas River Basins



All programs identify failing onsite wastewater systems in their areas and provide information to homeowners on the proper procedure to repair or replace the system. Each program also maintains an active information and education program focusing on the importance of proper onsite wastewater system maintenance, proper abandonment procedures for abandoned water wells and protecting sources of private and public drinking water. Staff development and training has been provided by all programs and LEPP representatives attend meetings and conferences sponsored by Kansas Environmental Health Association, Kansas Small Flows Association, Kansas Water Environment Association, Kansas Rural Water Association, Kansas Section American Water Works Association, and Basin Advisory Committees.

The Cherokee County Health Department sanitarian is the Chairman of the Spring River WRAPS stakeholder leadership team, which is involved in coordination activities with Oklahoma and Missouri on interstate watershed issues. This program is also working on a pilot program to produce an enhanced Local Environmental Protection Plan encompassing LEPP, WRAPS, and county goals.

Jefferson County worked with their elected officials to stress the importance of the WRAPS program. This has resulted in a commissioner attending the WRAPS meetings for Delaware River WRAPS project.

The Leavenworth County Health Department actively participates in the Lower Kansas and Missouri River WRAPS projects. A member of the LEPP committee serves on the Stakeholder Leadership Team for the Lower Kansas Basin WRAPS and a LEPP staff member serves on the Stakeholder Leadership Team for the Missouri Basin WRAPS.

## Kansas Department of Health & Environment

Morton County has promoted water gardens in the Cimarron Basin to assist with protecting the Ogallala-High Plains aquifer.

Reno County Health Department is working on a nitrogen reduction policy for installation of enhanced treatment systems in their portion of the Lower Arkansas Basin.

Riley County-Manhattan Health Department acts as the liaison between the County Board of Health and the Tuttle Creek WRAPS project. The focus of their participation is on nutrient loading and sediment from target areas.

Southwest Kansas LEPP participated in the Upper Arkansas and Cimarron BACs and the Upper Arkansas WRAPS project and provided information on their activities in each basin. This program assisted the Pawnee Watershed District in the preparation and implementation of a Nonpoint Source Pollution Management Plan for HorseThief Reservoir in the Upper Arkansas basin.

Tri Rivers LEPP participated in the Smoky Hill and Middle Smoky Hill WRAPS meetings to determine priorities for the WRAPS program. Wilson County is an active participant in the Verdigris WRAPS project and has worked with Wholesale Water District 23 to coordinate efforts with emergency management to meet regional needs.

### FY 2010 Activities

**FY 2010 Revised:        \$1,066,942**

The LEP Program will continue to focus on implementation of local environmental protection plans and administration of county sanitary codes. Local LEPP staff will also continue to provide coordination and assistance with WRAPS projects by providing onsite wastewater and private water well inventories to these groups and assisting with activities identified by the stakeholder leadership teams. LEPP representatives will attend BAC meetings, provide assistance with priority issues, and encourage county elected officials to attend BAC meetings. LEPP representatives will continue to participate in training opportunities and staff development. Homeowners in high priority TMDL areas will be provided with information on their responsibility to assure adequate operation and maintenance of onsite wastewater treatment systems. Watershed Field Coordinators and the LEPP Program Manager are involved in preparing guidance documents on program issues affecting local LEP programs.

### FY 2011 Proposed Activities

**FY 2011 Recommendation:    \$1,400,000**

Funds requested are from the State Water Plan Fund. Program activities will continue as described for FY 2010.

## Total Maximum Daily Loads (TMDL) Initiatives

The TMDL Program is responsible for identifying surface waters that are impaired by poor water quality in their ability to support their designated uses, determining current and desired levels of pollutant loading into surface waters of the state, developing and recommending appropriate corrective actions to restore water quality of impaired waters and evaluate the effectiveness of implemented water quality management measures in removing impairments and restoring water quality.

Total Maximum Daily Loads (TMDLs) are quantitative objectives and strategies needed to achieve water quality standards. The water quality standards constitute the goals of water quality adequate to fully support designated uses of streams, lakes, and wetlands.

### Relevancy to the Kansas Water Plan:

The TMDL program works toward establishing strategies to restore water quality to levels supportive of the designated uses of surface (and ground, indirectly) water in Kansas. To this end, the [Water Quality Objectives](#) in the *Kansas Water Plan* (lowering the average concentrations of certain pollutants and maintaining water quality at least to year 2000 conditions) are being addressed by the TMDL program. Additionally, basin priority issues of watershed restoration and protection in eight of the 12 river basins specifically tie into high priority TMDLs as the watersheds and impairments that state water quality programs should address in their specific basin.

**For More Information:**

Tom Stiles, Chief, Watershed Planning Section, (785) 296-6170, [tstiles@kdheks.gov](mailto:tstiles@kdheks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$217,412**

TMDLs in the Neosho, Verdigris and Walnut basins were developed or revised for the federal reservoirs and certain water supply lakes in the three basins. Additionally, an analysis was done to assess the current levels of dissolved oxygen and E coli bacteria impairment seen on streams with existing TMDLs for those issues. The analysis resulted in the priority of certain streams shifting between high and medium status in order to re-direct state attention toward issues of concern in the three basins. Ongoing collection of use attainment, stream and lake chemistry and biological integrity was done statewide. Studies assessing water quality in Clinton Lake and the Little Arkansas Watershed were initiated. Analysis began on impairments of northwest Kansas streams.

**FY 2010 Activities**

**FY 2010 Revised:         \$194,959**

Current efforts are focused in northwest Kansas, specifically, stream impairments by excessive phosphorus, bacteria and total suspended solids (sediment) in the Smoky Hill-Saline, Solomon and Upper Republican basins. Up to 12 watershed oriented TMDLs are expected to be submitted to EPA by the end of CY09.

Analysis will begin on impaired streams and lakes in the Kansas Lower Republican basin as the program begins its third cycle of TMDL review, revision and development across the state. Interaction with existing and emerging WRAPS is underway to interpret TMDLs for use in the development of 9-Element Watershed Plans by each of those WRAPS groups.

An updated 303d list of impaired waters will be prepared and submitted to EPA by April 1, 2010.

Some reduced level of outsourced analysis is required by the current allocation of SWPF, but there is increased use of the funding to keep monitoring efforts underway in support of TMDL, WRAPS and other CWA and *Kansas Water Plan* programs.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$238,316**

Requested SWPF funds will be used to continue support of the TMDL program as it completes its development of third cycle TMDLs in the KLR basin and begins analysis on impaired waters in the Upper and Lower Arkansas and Cimarron basins.

Over half of the requested funds will go to support monitoring efforts by KDHE-BEFS. These data will be used in the 2012 evaluation of water quality improvement pursuant to EPA performance objectives as well as ongoing evaluation of the water quality objectives of the *Kansas Water Plan*.

**Nonpoint Source Technical Assistance Program**

The federal Clean Water Act establishes that “*programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner.*” Clean Water Act Section 319 provides States that develop and maintain a “state nonpoint source management program” financial assistance to implement the management program. Federal grants provided under Section 319 cover up to 60% of the total cost of the program; States are responsible for providing the remaining 40% of the program cost. About one-third of the annual Section 319 grant KDHE receives is used to support operations of the Watershed Management Section (WMS). The remaining two-thirds are used for sub-grants to support watershed projects and partnering service providers.

## Kansas Department of Health & Environment

Nonpoint Source Pollution Program - State Water Plan funds appropriated to KDHE are applied towards the non-federal match required for the WMS. The Water Plan appropriation is used to support 1.5 FTE – KDHE Watershed Field Coordinators assigned to KDHE District Offices. The Watershed Field Coordinators are responsible for providing in-the-field technical assistance to local environmental protection programs and watershed stakeholder leadership teams. A limited amount of time is available to investigate construction site stormwater pollution complaints. KDHE WMS is responsible for providing statewide leadership in abatement of water quality problems caused by nonpoint pollutant sources.

### Relevancy to the Kansas Water Plan:

*Kansas Water Plan* Objectives and Priority Issues addressed by the Nonpoint Source Technical Assistance Program are shown in [Table 1](#). Specifically, NPS funds are utilized to support the [Water Management Objective #10](#); [Water Quality Objectives #11, #12, #13](#); [Riparian and Wetland Management Objective #15](#); and [Research and Data Collection Objective #17](#) of the *Kansas Water Plan*. This is accomplished by:

- Promoting the widespread implementation of local water quality restoration and protection measures in urban and rural communities to address localized water quality impacts;
- Facilitating implementation of these measures through I&E, financial assistance, technical assistance, technology transfer and enforcement where mandatory water quality protection measures are established.

### Kansas Water Plan Objectives and Issues KDHE Watershed Management Section - State Water Plan Funded Programs

<a href="#">Kansas Water Plan</a> <a href="#">Applicable 2010/2015 Objectives</a>	NPS	WRAPS	LEPP
By 2010, reduce the average concentration of bacteria, biochemical oxygen demand, dissolved solids, metals, nutrients, pesticides and sediment that adversely affect the water quality of Kansas lakes and streams.	*	*	*
By 2010, ensure that water quality conditions are maintained at a level equal to or better than year 2000 conditions.	*	*	*
By 2010, reduce the average concentration of dissolved solids, metals, nitrates, pesticides and volatile organic chemicals that adversely affect the water quality of Kansas ground water.	*	*	*
By 2010, maintain, enhance or restore priority wetlands and riparian areas.	*	*	
By 2010, ensure that sufficient surface water storage is available to meet projected year 2040 public water supply needs for areas of Kansas with current or potential access to surface water storage.		*	
By 2010, reduce the vulnerability to damage from floods within identified priority communities and areas.		*	
By 2010, provide educational activities to ensure that Kansans increase their knowledge and understanding of the State's water resources to enable them to make better personal and public decisions on water conservation, development and management.	*	*	*
<i>Kansas Water Plan</i> Basin Priority Issues	NPS	WRAPS	LEPP
Watershed Restoration & Protection (KLR, LARK, MDC, MO, NEO, UARK, VER, WAL)	*	*	*
Comprehensive Flood Assessment/Management (MDC, VER, WAL)		*	
Interstate Cooperation to Address Water Quality (UARK)	*	*	*
Salt Cedar & Other Non-Native Phreatophyte Control (UARK)		*	
<i>Kansas Water Plan</i> Water Management Categories	NPS	WRAPS	LEPP
Water Quality	*	*	*
Wetland and Riparian Area Management	*	*	
Flood Management		*	

**For More Information:**

Kerry Wedel, Chief, Watershed Management Section; (785) 296-5567; [kwedel@kdheks.gov](mailto:kwedel@kdheks.gov);

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$300,796**

\$172,193 of the appropriation total was awarded to KDHE, Bureau of Water, WMS. Of the total resources allocated, 21% is expended on oversight of Section 319 program support (administration, financial assistance, information and education, project planning and evaluation, technical assistance and technology transfer); 16% is expended on WMS services to stakeholders, other agencies and organizations and 63% is expended directly on supporting KS-WRAPS activities.

\$143,287 was awarded to KDHE's Bureau of Environmental Field Services. Approximately 66% of the funding was used for three Watershed Field Coordinators (1/2 time = 1.5 FTE). The remaining funds were used for travel, motor vehicle, communications and supplies to support the three Watershed Field Coordinators.

**FY 2010 Activities**

**FY 2010 Revised:       \$305,876**

Approximately \$156,688 of the appropriation was awarded to KDHE, Bureau of Water, WMS. Approximately 88% of the appropriation is allocated for personnel in the Watershed Management Section. This funding is for approximately 3 FTE's. The Watershed Management Section administers over 325 active grants including the 319 Program and the Local Environmental Protection Program. Approximately 65% of these grants are associated with the 319 Program and WRAPS program. Highlights for the upcoming FY 2010 KS-WRAPS Work Program include:

- Execution of grant agreements and oversight of approximately 40 new grants
- Continued oversight of numerous WRAPS projects in various phases in addition to Service Provider projects
- Hosting of the fifth KS-WRAPS Conference held September 29<sup>th</sup> in Great Bend
- Continued work products from 4 active subcommittees (Evaluation, NPS Management Plan Update, Riparian, Sediment Management)
- Update the KS-WRAPS Website
- Implementation of the Nine Element Watershed Planning Guidance
- Solicit FY 2011 projects

Approximately \$134,553 was awarded to the Bureau of Environmental Field Services to continue supporting three Watershed Field Coordinators. See the Local Environmental Protection Program for description of program activities.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$299,856**

Approximately \$161,323 will be awarded to the Bureau of Environmental Field Services for tasks similar to FY 2010. Approximately \$138,533 will be awarded to the Bureau of Water, Watershed Management Section for tasks similar to FY 2010.

**Watershed Restoration and Protection Strategy**

A Watershed Restoration and Protection Strategy (WRAPS) is a planning and management framework intended to engage stakeholders in a process to identify watershed restoration and protection needs, establish management goals, create a cost effective action plan to achieve goals, and implement the action plan.

The four stages in the WRAPS process are development, assessment, planning and implementation. In the development stage, organizers recruit stakeholders, determine interest and document stakeholders' decisions. In the assessment phase, stakeholders review watershed conditions and trends, develop expectations of the watershed and management measures, identify restoration and protection needs and create a watershed model. The planning stage is aimed at using the knowledge gained from local stakeholders and the assessment phase to write a plan that meets funding requirements.

## Kansas Department of Health & Environment

In the implementation stage, the WRAPS group secures needed resources to execute the watershed plan, monitor and document progress and revise the plan as needed.

The Kansas WRAPS program is funded by Environmental Protection Agency 319 grants and the State Water Plan Fund. Additional information is available at [www.kswraps.org](http://www.kswraps.org). The program was established in 2004 through the Kansas Water Planning Process and an interagency Memorandum of Agreement to address multiple priority issues identified in the *Kansas Water Plan*. Kansas Water Plan funds were first appropriated for the program in FY 2006.

### Relevancy to the *Kansas Water Plan*:

*Kansas Water Plan* Objectives and Basin Priority Issues addressed by the Watershed Restoration and Protection Program support the [Wetland and Riparian Objective](#) and the [Water Quality Objectives](#) that are shown in [Table 1](#) in the Nonpoint Source Technical Assistance Program section. A major focus of the WRAPS projects is implementation of Total Maximum Daily Loads in high priority watersheds. This reduces pollutant loads through targeted water quality protection measures in critical sub-watersheds and reduction of sediment loading in federal reservoirs serving public water supplies.

### For More Information:

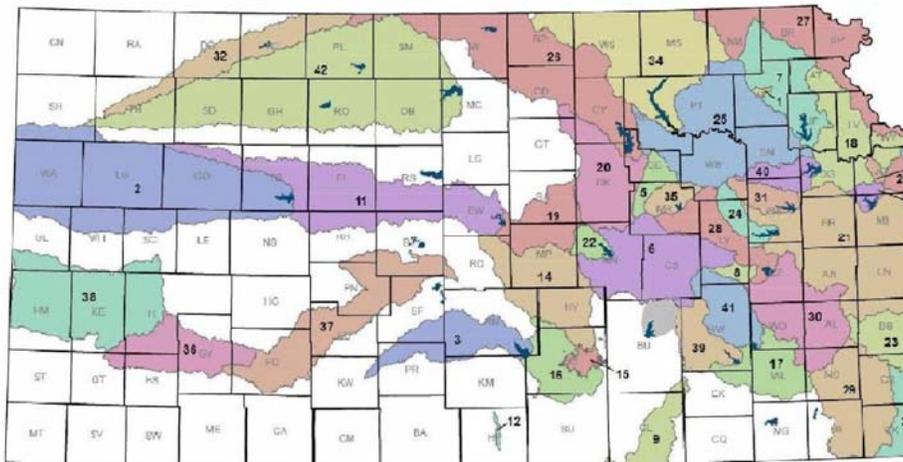
Kerry Wedel, Chief, Watershed Management Section; (785) 296-5567; [kwedel@kdheks.gov](mailto:kwedel@kdheks.gov); <http://www.kdheks.gov/>

### FY 2009 Accomplishments & 2010 Activities

**FY 2009 Actual:           \$590,087**  
**FY 2010 Revised:       \$431,312**

There are currently 43 active WRAPS groups in Kansas, covering approximately 60% of the state. Following is a map of current WRAPS watersheds and a summary of projects funded with FY 2009 and FY 2010 funding.

**Map of Current WRAPS Watersheds**



Basin	SFY 2009 & 2010 Supported WRAPS Projects	Funding Source
<b>Kansas-Lower Republican</b>	Upper Wakarusa WRAPS Implementation: The project goals for UWW are to coordinate WRAPS implementation efforts and facilitate stakeholder cooperation, track status of achieving WRAPS goals, and assess concerns in high priority areas, specifically Deer Creek and Burys Creek.	SWP 2009, 2010 & 319 Funds
	Clarks Creek WRAPS Implementation: The Clarks Creek WRAPS is primarily focusing on installation of buffer strips, promoting conversion of conventional tillage to no-till systems and promoting soil testing though an EPA grant.	SWP 2009 & 319 Funds

Basin	SFY 2009 & 2010 Supported WRAPS Projects	Funding Source
	Lower Kansas WRAPS Implementation: This implementation Phase project will form 3 focus groups to address the different geographical areas and differing BMP needs of this large watershed.	SWP 2009 & 319 Funds
	Middle Kansas WRAPS Implementation: This 2 year Implementation Phase project will continue utilizing 3 focus groups previously developed in order to better target BMPs within such a large project scope.	SWP 2009 & 319 Funds
	Delaware WRAPS Implementation: This 3 year Implementation Phase project will address 4 priority watershed impairments: sedimentation, nutrient loading, fecal coliform bacteria, and outreach through a variety of implementation practices.	SWP 2009 & 319 Funds
	Tuttle WRAPS Implementation: This 1-Year Implementation Phase project will address several priority watershed impairments: sedimentation and streambank erosion and fecal coliform bacteria.	SWP 2010
Lower Arkansas	Grouse Silver Creek WRAPS Implementation: The primary project goal is to implement practices to protect Grouse Creek (no TMDLs) and address Silver Creek's TMDLs. They will be working with KDHE on revising their WRAPS Plan to meet the 9 elements.	319 Funds
	Lower Arkansas WRAPS (Urban and Fringe) Development, Assessment, Planning: Project goals are to develop a solid Stakeholder Leadership Team, identify existing information and data gaps to develop an assessment protocol and write a 9 element watershed plan.	319 Funds
	Lower Ark WRAPS Development, Assessment and Planning (SG. County and outlying counties): Project goals are to develop a solid SLT, identify existing information and data gaps to develop an assessment protocol and write a 9 element watershed plan.	319 Funds
	Little Arkansas River WRAPS Implementation: They are successfully signing up farmers to implement Atrazine BMPs. They have been meeting with Wichita on stream bank stabilization issues and in regards to the proposal for returning water treatment system sediment byproduct to the river.	SWP 2009
	Cheney WRAPS Implementation: This implementation phase project is focusing on small livestock facilities, streambank stabilization and No-till for SFY 2010. Another emphasis has been to assist CRP land owners in converting to a grazing system with fencing and other needed attributes. In addition to the WRAPS activities, Cheney has been working closely with their Conservation Effects Assessment Project sponsored by USDA.	319 Funds
Missouri	Missouri WRAPS Implementation: Missouri WRAPS Project will begin implementation of a 9 Element watershed plan. Priority areas for BMP implementation will be focused in the Big Nemaha and Wolf River basins, and a streambank stabilization demonstration project will be developed in a priority area of the watershed.	319 Funds
Marais des Cygnes	Marmaton WRAPS Assessment and Planning: Marmaton WRAPS will continue to collect water quality monitoring data via KSU to assess water quality conditions within the watershed. These data will be utilized by the SLT to develop priority areas of implementation as well as for further calibration of AnnAGNPS modeling performed by KDHE.	319 Funds
	Hillsdale Reservoir WRAPS Implementation: Hillsdale Reservoir WRAPS Project will begin implementation of a 9 Element watershed plan. BMP implementation activities will be focused in the Big Bull Creek and Little Bull Creek HUC 12 watersheds.	319 Funds
	Melvern Reservoir WRAPS Implementation. Project goal: reduce nonpoint source pollution entering Melvern Lake and tributaries with major emphasis on stream TMDLs.	319 Funds
	Pomona Reservoir WRAPS Implementation: Pomona WRAPS will conduct a BMP auction in an effort to place cost-effective BMPs on the ground within the watershed.	SWP 2010 & 319 Funds
Neosho	John Redmond Lake/Neosho River WRAPS Development – Eagle Creek WRAPS Implementation: The project goal includes implementing management practices to address water quality impairments identified in TMDLs.	319 Funds

Basin	SFY 2009 & 2010 Supported WRAPS Projects	Funding Source
	Marion WRAPS Implementation: Marion WRAPS will continue to implement BMP's focusing on installing terraces, alternative water sources and conversion of cropland to permanent vegetation aimed at achieving the TMDL. Areas identified in the Marion's Rapid Watershed Assessment will be targeted for BMP installation.	SWP 2009 & 319 Funds
	Twin Lakes WRAPS Implementation: The Twin Lakes WRAPS will continue to implement BMP's including but not limited to winter feeding site restoration, riparian fencing, bale ring pad installation and buffer strips aimed at achieving the TMDLs.	319 Funds
	Spring River WRAPS Planning: The project goal is to develop a stakeholder leadership team to lead WRAPS effort; compile watershed information and educate the public on watershed concerns.	319 Funds
	Upper Fall River WRAPS Implementation: The Upper Fall River WRAPS will continue to implement BMP's focused on remediation of brine sites, erosion/gully control practices, buffers and waterways and terraces aimed at achieving TMDLs.	319 Funds
	Neosho Headwaters WRAPS Implementation: Neosho Headwaters WRAPS will begin implementing their 9 element watershed plan in early 2010. BMP's identified in this plan include streambank stabilization projects, riparian fencing, alternative waste water systems and livestock watering facilities.	319 Funds
	Middle Neosho WRAPS Implementation: The Middle Neosho WRAPS will start implementing BMP's with the conclusion of a watershed plan. Priority BMP's aimed at achieving the TMDL will include proper storage and application of poultry litter, nutrient management plans, workshops regarding benefits of woodland and grass buffers and no-till conversion.	319 Funds
Smoky Hill-Saline	Upper Lower Smoky WRAPS Implementation: Upper Lower Smoky Hill River Watershed WRAPS will continue streambank assessment through The Watershed Institute as well as work towards finalizing a 9 Element watershed plan.	319 Funds
	Kanopolis WRAPS Implementation: Kanopolis WRAPS will continue to assist with BMP implementation within the Big Creek and Middle Smoky Hill River watersheds.	319 Funds
Upper Arkansas	Upper Arkansas WRAPS Implementation: Implementation Phase goals include using other project field days to demonstrate and discuss proper manure management. The project will rely heavily on the local extension agents to keep the SLT engaged, growing and focused on implementing the watershed plan.	319 Funds
Upper Republican	Prairie Dog Creek WRAPS Assessment and Planning: Prairie Dog Creek WRAPS will work on developing a 9 Element watershed plan for the watershed as well as assist landowners within the watershed with BMP implementation utilizing funding sources such as EQIP, CRP, SCC, etc.	319 Funds
Verdigris	Toronto WRAPS Implementation: The Toronto WRAPS will start implementing BMP's upon the completion of the 9 element watershed plan. BMP's that are of high priority include pasture erosion controls, moving of winter and watering sites, brine site remediation and a streambank stabilization project.	319 Funds
Walnut	El Dorado Development, Assessment and Planning: This is the newest project supported by WRAPS financial resources. The project goals are to develop a Stakeholder Leadership Team, identify and confirm additional needs above and beyond the existing studies performed by the USCOE.	319 Funds

The Banner Creek Reservoir WRAPS in the Kansas-Lower Republican River Basin was submitted as an EPA Section 319 Success story, with removal of Banner Creek Reservoir from the Kansas 303(d) List of Impaired Waters.

#### FY 2011 Proposed Activities

**FY 2011 Recommendation: \$783,852**

Based on the FY 2010 Watershed Grant Applications, there is a KS-WRAPS needs backlog of nearly \$6 million. This figure includes applications submitted despite a newly required funding cap for projects. While KDHE intends to allocate \$1.2 million of FY 2010 Section 319 grant funds to establish a \$2 million KS-WRAPS fund for FY 2011, the anticipated FY 2011 KS-WRAPS appropriation will continue to primarily support current project activities. Currently all 20 federal reservoirs with public water supply functions are served by a WRAPS project. Given this and the funding constraints, KDHE anticipates limited opportunity to initiate new WRAPS development activities.

## Ogallala-High Plains Aquifer Assessment

The Ogallala-High Plains Aquifer Assessment provides data, research and technical support to Kansas on ground water resources in the Ogallala-High Plains aquifer to assist the Kansas Water Office (KWO), the Division of Water Resources (DWR) of the Kansas Department of Agriculture, and the three western groundwater management districts (GMDs) in the assessment, planning, and management of the ground water resources. The data and research are communicated to these agencies and the state through reports, presentations, and Internet web pages on the High Plains/Ogallala Aquifer Information page of the Kansas Geological Survey web site. Technical support is also provided to the state agencies and GMDs to assist them in such activities as the development of aquifer subunits and other approaches to water-resource planning and management.

### Relevancy to the Kansas Water Plan:

This program addresses objective #17 in the *Kansas Water Plan* 2010 objectives. The specific water resource issue is the declining storage in the Ogallala-High Plains aquifer, which is also addressed by the 2010 [Water Management Objective #8](#). Other objectives addressed include [Water Quality Objectives #11, #12 and #13](#) that address water quality; including salinity changes related to the interaction of the Ogallala-High Plains aquifer and the Arkansas and Cimarron rivers.

### For More Information:

Donald Whittemore, (785) 864-2182, [donwhitt@kgs.ku.edu](mailto:donwhitt@kgs.ku.edu), <http://www.kgs.ku.edu/HighPlains/index.shtml>

### FY 2009 Accomplishments

**FY 2009 Actual:        \$32,000**

- The Kansas Geological Survey (KGS) enhanced the Index/Calibration Well Project being conducted on the Ogallala-High Plains aquifer by analyzing the effect of atmospheric pressure variations on ground water levels.
- The KGS enhanced a GMD3 project for development of the PST+ data base of detailed lithologic information extracted from well logs for use in aquifer characterization and estimation of hydraulic parameters for application in ground water flow models.
- The KGS provided assistance to Groundwater Management Districts (GMDs) for their use in developing aquifer subunits or other approaches to water management.  
Southwest Kansas GMD3: Assessment of ground water quality in Morton County to determine distribution of salinity (high sulfate) in the Ogallala-High Plains aquifer.  
Northwest Kansas GMD4: Development of plan for monitoring water levels in selected wells in an example subunit area around an index/calibration well.  
West-Central Kansas GMD1 and GMD3: Presentations on aquifer water levels at annual board meetings.
- The KGS linked the bedrock surface coverage for the Ogallala-High Plains aquifer to the new bedrock surface map for GMD5 to produce a contiguous GIS coverage.
- The KGS maintained and updated the web pages containing information on the Ogallala-High Plains aquifer <http://www.kgs.ku.edu/HighPlains/index.shtml>.

Accomplishments completed during FY 2009 are summarized by individual basin as follows:

#### Cimarron Basin

The KGS enhanced development of the PST+ data base of detailed lithologic information extracted from well logs in Southwest Kansas for use in aquifer characterization and estimation of hydraulic parameters for application in the GMD3 ground water flow model. The KGS provided assistance to GMD3 for its use in developing aquifer subunits and other approaches to water management. This included assessment of ground water quality in Morton County to determine the distribution of salinity (high sulfate) in the Ogallala-High Plains aquifer. The KGS maintained and updated the web pages containing information on the Ogallala-High Plains aquifer <http://www.kgs.ku.edu/HighPlains/index.shtml>.

#### Smoky Hill-Saline Basin

The KGS enhanced the Index/Calibration Well Project by analyzing the effect of atmospheric pressure variations on ground water levels at the index well in southern Thomas County. The KGS provided assistance to Western Kansas GMD1 and Northwest Kansas GMD4 for their use in developing aquifer subunits and other approaches to water management.

For example, the KGS developed a plan for monitoring water levels in selected wells in an example subunit area in GMD4. The KGS maintained and updated the web pages containing information on the Ogallala-High Plains aquifer <http://www.kgs.ku.edu/HighPlains/index.shtml>.

#### **Solomon Basin**

The KGS provided assistance to Northwest GMD4 for its use in developing aquifer subunits and other approaches to water management. For example, the KGS developed a plan for monitoring water levels in selected wells in an example subunit area in GMD4. The KGS maintained and updated the web pages containing information on the Ogallala-High Plains aquifer <http://www.kgs.ku.edu/HighPlains/index.shtml>

#### **Upper Arkansas**

The Kansas Geological Survey (KGS) enhanced the development of the PST+ data base of detailed lithologic information extracted from well logs in Southwest Kansas GMD3 for use in aquifer characterization and estimation of hydraulic parameters for application in the GMD3 ground water flow model. The KGS enhanced the Index/Calibration Well Project being conducted on the Ogallala-High Plains aquifer by analyzing the effect of atmospheric pressure variations on ground water levels at the index wells in Scott and Haskell counties. The KGS provided assistance to GMD3 for its use in developing aquifer subunits and other approaches to water management. The KGS linked the bedrock surface coverage for the Ogallala-High Plains aquifer to the new bedrock surface map for GMD5 to produce a contiguous GIS coverage. The KGS maintained and updated the web pages containing information on the Ogallala-High Plains aquifer <http://www.kgs.ku.edu/HighPlains/index.shtml>

#### **Upper Republican**

The Kansas Geological Survey (KGS) provided assistance to Northwest GMD4 for its use in developing aquifer subunits and other approaches to water management, and maintained and updated the web pages containing information on the Ogallala-High Plains aquifer <http://www.kgs.ku.edu/HighPlains/index.shtml>.

### **FY 2010 Activities**

**FY 2010 Revised:       \$28,800**

- The KGS enhanced the PST+ project with GMD3, a database of detailed lithologic information extracted from well logs for use in aquifer characterization and estimation of hydraulic parameters. These data are being used to improve the GMD3 ground water flow model in progress and to examine correlations between water-level declines and lithology.
- The KGS is continuing to enhance the Index/Calibration Well Project being conducted on the Ogallala-High Plains aquifer in western Kansas by additional analysis of the effect of atmospheric pressure variations on ground water levels.
- The KGS is providing assistance to GMDs for their use in developing aquifer subunits or other approaches to water management.

Southwest Kansas GMD3: Determination of current water quality, including uranium concentration, in the aquifer in the Arkansas River corridor as a cooperative project (GMD3 collects water samples and the KGS analyses the samples and interprets the data).

Northwest Kansas GMD4: Monitoring of water levels using pressure transducers (from the DWR) in several wells in an example subunit area around an index/calibration well.

All GMDs: Other assistance as requested.

- The KGS prepared and presented information to the Cimarron BAC on the salinity (high sulfate) distribution in the aquifer in Morton County and water quality of the Cimarron River and its relationship to ground water in the aquifer.
- The KGS is maintaining and updating the web pages containing information on the Ogallala-High Plains aquifer <http://www.kgs.ku.edu/HighPlains/index.shtml>.

### **FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$37,486**

The KGS plans to provide assistance to the western GMDs, KWO, and DWR on water use, water levels, water rights, hydrogeologic characteristics, and ground water quality of the Ogallala-High Plains aquifer as appropriate for technical support for aquifer management, assessment, and planning, including the development of subunit areas. For example, monitoring and interpretation of water levels using pressure transducers will continue in wells in an example subunit area in GMD4. Additional enhancement of the Index/Calibration Well Project will involve analyses based on barometric pressure sensor data collected in these wells. Analyses of water-level and other data in the CREP area along the

Arkansas River corridor will be conducted for assisting the KWO and SCC in assessing effects of the program. The KGS plans to revise and update the web pages containing data and information on the Ogallala-High Plains aquifer as new data, analyses, and maps become available and are developed. This includes updating the online High Plains aquifer atlas and the public information circular on the High Plains aquifer.

## Abandoned Well Plugging/Site Remediation

The Kansas Corporation Commission, Oil and Gas Division has the responsibility to prevent the degradation of all land and water resources by providing regulatory environmental protection that considers the environmental risk, economic costs to the public and that state's energy requirements. Through aggressive enforcement actions, the division ensures operators correct oil field pollution incidents. Oil and gas operators are also responsible for proper well plugging as specified in K.S.A. 55-156 and K.S.A. 2000 Supp. 55-179. Operators receive preliminary plugging guidelines with respect to those wells that are dry and/or abandoned when the operator notifies the District Office regarding the setting of a surface pipe. The KCC field staff conducts spot checks of well plugging operations to ensure compliance with the plugging requirement to protect fresh and usable water.

K.S.A. 55-192 provides for the plugging of abandoned wells and the remediation of contamination sites related to pre-July 1, 1996 oil and gas activities that have no responsible parties. Despite the high levels of plugging during the last seven years, there are an excess of 6,500 abandoned wells requiring action, in part due to the fact that several hundred abandoned wells per year are still being found and added to the inventory. The sunset date for this program is June 30, 2016.

Until these wells are properly plugged, they can potentially form a conduit for saltwater and residual oil and gas to eventually enter and pollute the usable ground water, or discharge to the surface, polluting the land, streams and lakes. Each year, the KCC attempts to plug as many of those higher-ranked wells as possible, within the allocated budget for that year. The following table shows abandoned well plugging activity and costs by river basin since Program inception July 1, 1996.

RIVER BASIN	FY97-FY09 ABANDONED WELLS PLUGGED	FY97-FY09 ACTUAL COST TO DATE
Cimarron	2	\$8,285
Kansas-Lower Republican	35	\$178,495
Lower Arkansas	112	\$1,061,412
Marais Des Cygnes	1808	\$5,331,334
Missouri	7	\$25,397
Neosho	3290	\$7,819,620
Smokey Hill-Saline	260	\$1,941,492
Solomon	72	\$485,948
Upper Arkansas	55	\$305,190
Upper Republican	26	\$173,825
Verdigris	2134	\$6,399,398
Walnut	52	\$551,524
<b>TOTAL</b>	<b>7853</b>	<b>\$24,281,920</b>

### Relevancy to the Kansas Water Plan:

Well plugging and site remediation projects support Kansas Water Plan [Water Quality Objectives #11, #12, and #13](#) by reducing or eliminating point sources of dissolved solids (oilfield brines) and volatile organic chemicals (residual oil and gas) which adversely affect the water quality of Kansas lakes, streams, and ground water.

### For More Information:

Robert Jenkins, Coordinator, (316) 337-6210, [r.jenkins@kcc.ks.gov](mailto:r.jenkins@kcc.ks.gov)

### FY 2009 Accomplishments

**FY 2009 Actual:           \$320,000**

The following table shows abandoned well plugging activity and costs by river basin during FY 2009.

## Kansas Corporation Commission

River Basin	FY 2009 ABANDONED WELLS PLUGGED	FY 2009 ACTUAL COST TO DATE
Kansas-Lower Republican	7	\$45,823
Lower Arkansas	1	\$17,131
Marais Des Cygnes	27	\$79,697
Neosho	153	\$567,016
Smokey Hill-Saline	18	\$143,982
Solomon	1	-
Upper Arkansas	1	-
Verdigris	348	\$870,770
Walnut	5	\$30,358
<b>TOTAL</b>	<b>561</b>	<b>\$1,754,777</b>

In addition, the KCC currently oversees 60 environmental remediation oil and gas sites in Kansas with no responsible party. Of the 125 remediation sites inventoried by the KCC since July 1, 1996, 65 have been resolved. Total remediation expenditures since program inception in July 1996, are in excess of \$2,000,000. In FY 2009, the KCC spent approximately \$8,300 for general maintenance and annual ground water sampling at numerous remediation sites.

### FY 2010 Activities

**FY 2010 Revised:      \$288,000**

The estimated total amount for this activity for FY 2010 is \$1,388,000, which will provide for the plugging of about 300 wells and limited site remediation work. The statutory contribution from the State General Fund (SGF) was not appropriated. The State Water Plan (SWP) transfer should be \$400,000, but was reduced to \$288,000 for FY 2010. A transfer of \$400,000 will be made from the Conservation Fee Fund (CFF) assessment on oil and gas production. And one-half of the state's share of the Federal Mineral Leasing Program (FMLP) is estimated to be \$480,000 for FY 2010. Other program revenue sources include interest on the cash balance and the sale of salvaged equipment from leases plugged.



Abandoned well on bank of Verdigris River  
85-well plugging project, Allen Co., KS



Abandoned well in farm pond Montgomery Co., KS

### FY 2011 Proposed Activities

**FY 2011 Budget Request:      \$374,865**

The estimated total amount for this activity for FY 2011 is \$1,346,365, which will provide for the plugging of about 281 wells and limited site remediation work. The statutory contribution from the State General Fund (SGF) is requested, but not anticipated. The State Water Plan Fund (SWPF) transfer of \$400,000 was appropriated, but has been reduced to \$374,865 for FY 2011. A transfer of \$400,000 will be made from the Conservation Fee Fund (CFF) assessment on oil and gas production. And one-half of the state's share of the Federal Mineral Leasing Program (FMLP) is estimated to be \$504,000 for FY 2011. Other program revenue sources include interest on the cash balance and the sale of salvaged equipment from leases plugged.

## Interstate Water Issues

The Chief Engineer of the Kansas Department of Agriculture's Division of Water Resources represents Kansas on four interstate compacts relating to the apportionment of waters in rivers that flow through Kansas and one or more neighboring states (refer to the Kansas [Interstate River Compact](#) map below). These compacts are: Republican River Compact (Colorado, Kansas, Nebraska); Arkansas River Compact (Kansas, Colorado); Kansas-Oklahoma Arkansas River Compact; and the Big Blue River Compact (Kansas, Nebraska). Staff help the Chief Engineer collect, analyze and model highly technical data to determine whether Kansas and neighboring states are complying with compact terms and what actions are needed to secure water Kansas is entitled to.

Through the Chief Engineer, the Interstate Water Issues Program is responsible for representing Kansas' interests in administrative or legal actions to secure Kansas' share of water under the compacts. Interstate Water Issues staff also works to ensure Kansas meets its compact obligations and avoids other interstate disputes.

To that end, they also are involved in several related intrastate water resource management efforts including the Upper and Lower Solomon River models, the Groundwater Management District (GMD) 3 model, the GMD5 model, and the Ozark aquifer model. Compact compliance efforts result in more secure sources of surface water for municipalities and other water users in areas where Kansas is a downstream state—in the Upper Arkansas, Lower Republican and Big Blue River basins.

**State Water Plan funded work:** Work related to the Arkansas River and Republican River compacts is partially funded through the State Water Plan Fund. Therefore, this State Water Plan program status report focuses primarily on work associated with those compacts.

**Other interstate water issues work:** The Chief Engineer also serves as Kansas' representative on the Missouri River Recovery Implementation Committee; as an alternate Kansas representative to the Missouri River Association of States and Tribes; and lead Kansas member in the Western States Water Council. These functions, in addition to work on the Big Blue and Kansas-Oklahoma Arkansas River compacts, are supported by state general funds.

### Relevancy to the Kansas Water Plan:

Through the Interstate Water Issues efforts to protect and secure water resources, the Interstate Water Issues Program contributes to progress toward the following *Kansas Water Plan* 2010 and 2015 objectives. These objectives include [Public Water Supply Objectives #1 and #2](#); [Water Conservation Objectives #4](#); and [Water Management Objectives #9](#).

### Basin Priority Issues:

#### In the Upper Arkansas Basin

- Managing the Ogallala-High Plains aquifer—Surface water availability reduces ground water demand.
- Bioenergy and Water—Surface water availability reduces ground water demand.
- Salt Cedar and Other Non-native Phreatophyte Control—By way of the compact, Kansas and Colorado coordinate efforts and exchange information on phreatophyte control in the basin.
- Interstate Cooperation to Address Water Quality—By way of the compact, Kansas and Colorado coordinate efforts and exchange information on water quality issues in the basin.

#### In the Upper Republican River Basin

- Ogallala-High Plains Aquifer Declines—Interstate Water Issues staff were intimately involved in developing the Republican River Compact Administration's ground water model and later the Northwest Kansas GMD4 ground water model. These models are currently being used by state and local stakeholders to analyze water resource management practices and to support the informed development of state and local rules and regulations to address aquifer declines.
- Republican River System Management: Compact Compliance and Damages—Interstate Water Issues staff are responsible for evaluating and reporting on Kansas' compact compliance to the Republican River Compact Administration and for evaluating the other states' compliance. They evaluate interstate management strategies in the basin and advise the Chief Engineer on their impacts.

## Kansas Department of Agriculture

### In the Kansas Lower Republican Basin

- Water Supply Management and Conservation—Compact compliance efforts result in more reliable surface water availability, which strengthens and stabilizes the regional economy.

### For More Information:

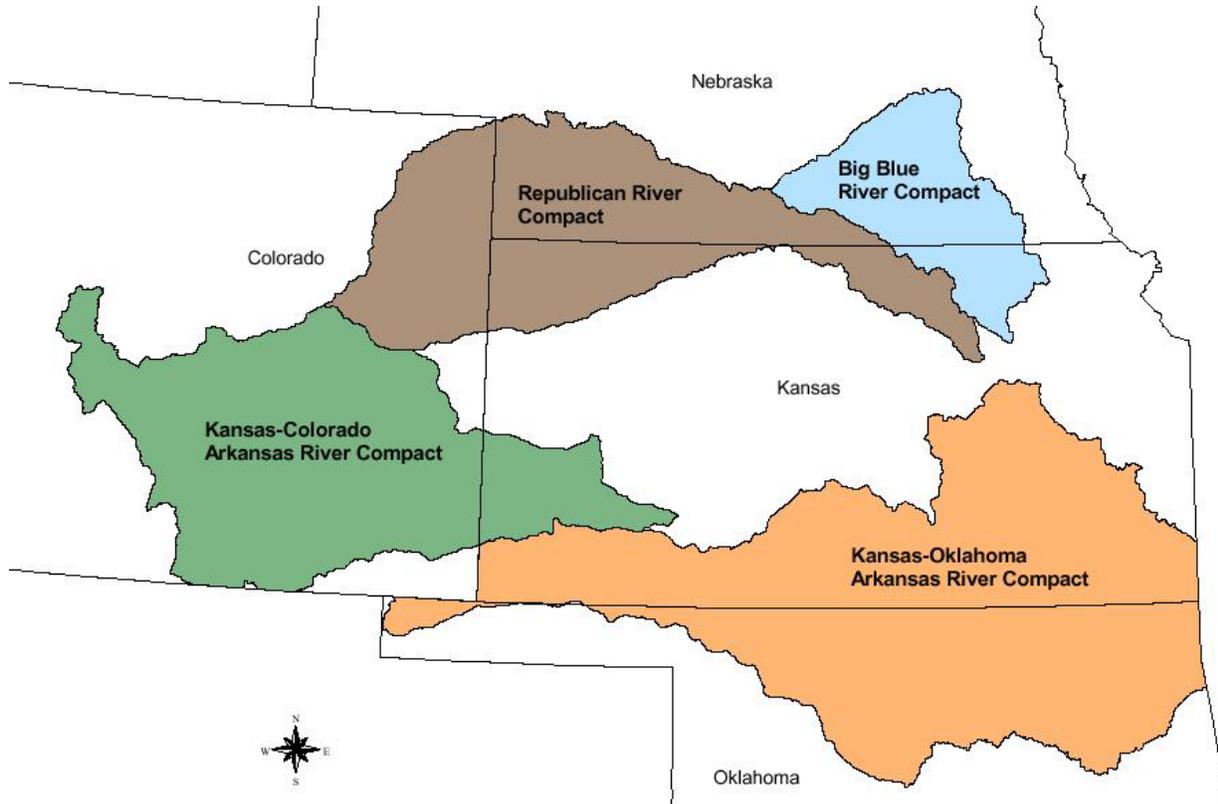
Chris Beightel, Program Manager, Water Management Services, (785) 296-3710, [chris.beightel@kda.ks.gov](mailto:chris.beightel@kda.ks.gov), [http://www.ksda.gov/interstate\\_water\\_issues/](http://www.ksda.gov/interstate_water_issues/)

### Accomplishments

As previously noted, the accomplishments and activities listed in the table below focus on the interstate water work funded in part by the State Water Plan Fund. Work on the Kansas-Oklahoma Arkansas River Compact, Big Blue River Compact, Missouri River issues, and western states issues are funded through the state general fund, so it is not covered here.

INTERSTATE WATER ISSUES PROGRAM BUDGETS AND TASKS			
Tasks	FY 2009 Actual	FY 2010 Revised	FY 2011 Rec.
	\$451,518	\$332,875	\$459,816
Negotiated and reached agreement on the sufficiency of Colorado's use rules to replace depletions to the river caused by high-capacity irrigation wells.	Ark	N/A	N/A
Negotiated and reached agreement on Colorado's proposed irrigation efficiency rules to replace depletions to the river caused by improved irrigation system efficiency.	N/A	Ark	N/A
Inspect and remotely monitor water use for compact compliance.	Ark & Republican	Ark & Republican	Ark & Republican
Prepare Kansas' compact compliance data, analyze Colorado and Nebraska's data, conduct model runs, resolve disputes over data.	Ark & Republican	Ark & Republican	Ark & Republican
Defend Kansas' interests in negotiations and subsequent nonbinding arbitration Colorado has initiated over its North Fork Republican River augmentation plan.	Republican	Republican	
Defend Kansas' interests in the nonbinding arbitration Nebraska initiated over its crediting issue.		Republican	
Monitor Colorado and Nebraska water laws, court cases and policies.	Ark & Republican	Ark & Republican	Ark & Republican
Attend stakeholder meetings throughout the basins and provide updates on river issues.	Ark & Republican	Ark & Republican	Ark & Republican
Represent Kansas at all compact meetings, prepare engineering committee and state reports, participate in meeting and work session, review and correct minutes, and follow up on committee assignments.	Ark & Republican	Ark & Republican	Ark & Republican
Pursue compact compliance enforcement action against Colorado and Nebraska for their overuse since 2002.	Republican	Republican	Republican

Kansas Interstate River Compacts



**Basin Management and Enhanced Water Management**

These complementary programs were previously combined in the Subbasin Water Resources Management Program. They are now separately administered under new names, but they are presented together here because their work is closely related.

- **Basin Management Team** staff (three positions based in Topeka) analyze aquifer and stream systems in areas identified by the *Kansas Water Plan* as having water resource declines or other problems. They also work with stakeholders to develop and evaluate strategies to protect water rights and improve water resource sustainability.
- **Enhanced Water Management** staff (one position in Parsons, one in Stockton, one in Garden City, and three in Stafford) collect data and perform compliance and enforcement activities to advance *Kansas Water Plan* objectives and priorities, including metering water use and reducing instances of over pumping.

**Relevancy to the Kansas Water Plan:**

Through their work to measure and quantitatively characterize hydrologic conditions in Kansas basins, to develop and analyze water resource management strategies, and to enforce the provisions of the Water Appropriation Act, these programs contribute to progress toward the Kansas Water Plan 2010 and 2015 [Water Quality Objectives #1 and #2](#); [Water Conservation Objectives #5, #6, #7](#); [Water Management Objectives #8, #9, #10](#); and [Riparian and Wetland Objective #15](#).

**Priority Issues:**

- Cimarron Basin—Management of the Ogallala-High Plains Aquifer
- Lower Arkansas Basin—Rattlesnake Creek Subbasin
- Neosho Basin—Management of the Ozark Plateau Aquifer and the Spring River

- Smoky Hill-Saline Basin—Ogallala-High Plains aquifer declines
- Solomon Basin—Ogallala-High Plains aquifer declines, subbasin water management, minimum water levels in Webster Lake
- Upper Arkansas Basin—Management of the Ogallala-High Plains aquifer, Middle Arkansas Subbasin
- Upper Republican Basin—Ogallala-High Plains aquifer declines
- Verdigris Basin—Water supply management and conservation, protecting and enhanced instream flows
- Walnut Basin—Water supply management and conservation

### For More Information:

#### Basin Management

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#### Enhanced Water Management

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#### Field Summaries\* (annual compilation of hydrologic data; published all years):

- Middle Arkansas River Subbasin
- Upper Arkansas River Subbasin
- Solomon River Subbasin (including individual reports for Upper North and South Forks, Lower North and South Forks, and Mainstem)
- Rattlesnake Creek Subbasin
- Pawnee-Buckner-Sawlog Subbasin
- Ozark Plateau aquifer
- Ogallala-High Plains aquifer

#### Other Documents:

- Rattlesnake Creek management program eight-year review (FY 2009)
- Quarterly progress reports (FY 2009)
- Annual report (all years)
- Newsletters: Upper Ark, Mid Ark, Solomon, Rattlesnake Creek (all years)\*
- Ozark Plateau hydrologic report (FY 2009)
- Fact sheets: all project basins (periodically; all years)\*
- Updates to website: maps, text (all years)\*
- Solomon model presentation (FY 2009-2010)
- Kansas High Plains Agricultural Water Enhancement Program (AWEP) proposal for USDA grant (FY 2009-2010)
- Instream flow study proposal for USFWS grant (FY2009)

\* These documents are available online at [www.kda.gov/subbasin](http://www.kda.gov/subbasin)

**Accomplishments:** See table below.

**Kansas Department of Agriculture**

**BASIN MANAGEMENT AND ENHANCED WATER MANAGEMENT PROGRAM BUDGETS AND TASKS**

	FY 2009 Actuals		FY 2010 Budgeted		FY 2011 Requested	
	BMT	EWM	BMT	EWM	BMT	EWM
	\$ 380,257	\$ 259,016	\$ 250,867	\$ 390,904	\$ 252,977	\$ 445,607
	<b>\$639,273</b>		<b>\$641,771</b>		<b>\$698,584</b>	
<b>Tasks</b>						
Collaboratively develop/refine hydrologic models (see fig. 1).	GMD 4, Solomon, GMD 5, GMD 3		Solomon, GMD 5, GMD 3, Lower Arkansas		Lower Republican, Lower Arkansas	
Review model results to determine water availability and develop management alternatives.	Solomon		GMD 4, Solomon, GMD 5, GMD 3, Ozark, Lower Ark		GMD 4, Solomon, GMD 5, GMD 3, Ozark, Lower Ark	
Collect ground water and surface water data in each project area (see fig. 2).		✓		✓		✓
Compile and analyze data, publish reports on the hydrologic condition of basins (field summaries and other documents as described below; see fig. 3).	✓		✓		✓	
Achieve water savings through compliance and enforcement activities in targeted areas.		✓		✓		✓
Complete water meter checks.		Hodgeman, Ness co's and Spring River basins		Verdigris, Fall and Elk River basins		TBD
Help with impairment investigations.		✓		✓		✓
Perform analyses and reporting for periodic review of existing intensive ground water use control areas (IGUCA).	N/A		McPherson, Burrton		TBD	
Streamflow availability analyses.	Grant proposal to USFWS		Contingent on funding		Contingent on funding	
Provide technical assistance to the State Conservation Commission for administering the Conservation Reserve Enhancement Program and Water Right Transition Assistance Program.	✓		✓		✓	

Map of Monitoring Wells and Streamgage Sites

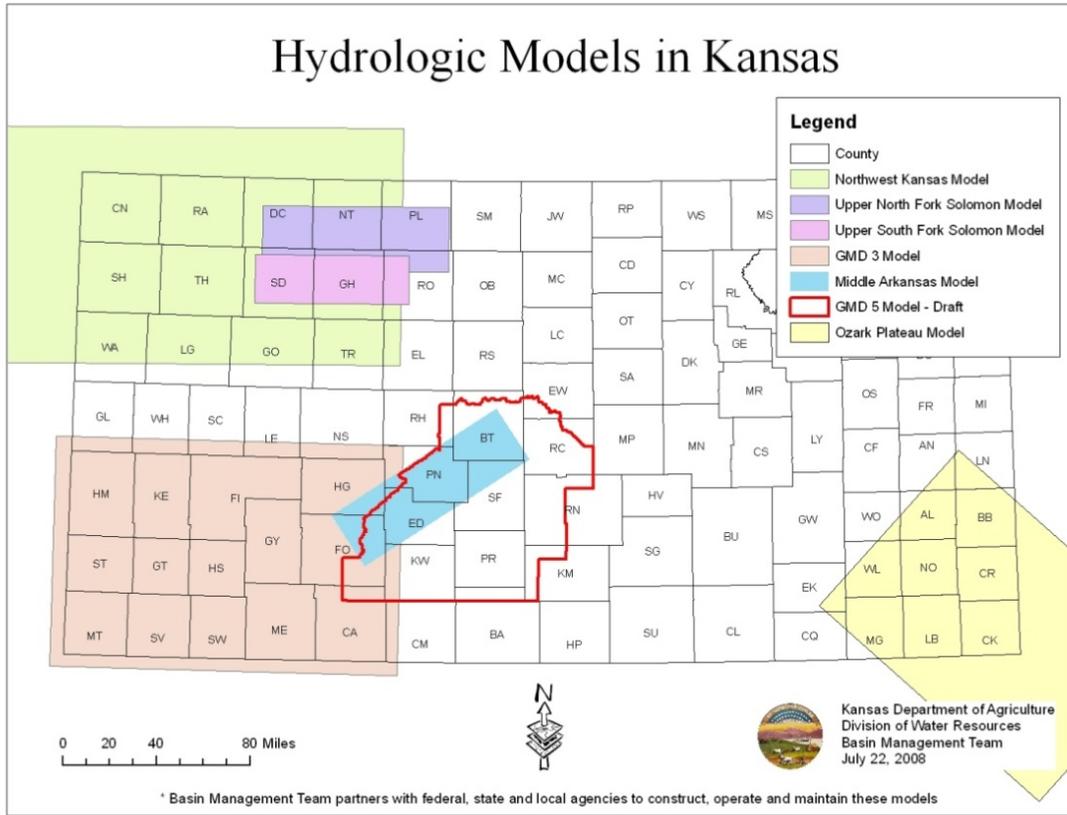


Figure 1

Map of Hydrologic Models

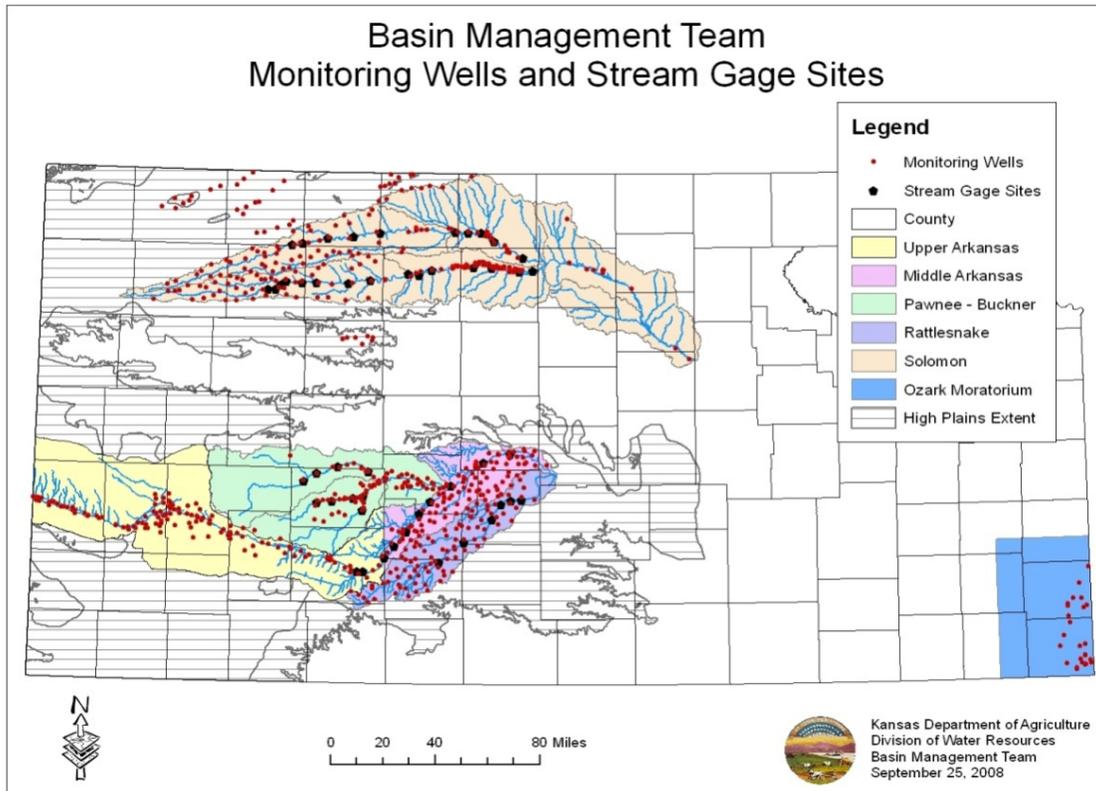


Figure 2

## Water Use

The Kansas Department of Agriculture's Division of Water Resources, under authority provided in K.S.A. 82a-732, mails and processes approximately 14,000 annual water use report forms for 32,500 active water rights in Kansas. Detailed data are collected on the amount of water diverted during the previous calendar year. Data also are collected related to the nonuse of a permit or water right. Water use reports are necessary for water right maintenance and for the state to manage its water resources wisely.

A portion of the water use data collection is funded by the State Water Plan, including a cooperative agreement with the U.S. Geological Survey to help with quality control and publishing the annual water use data. Numerous entities use this data from a single database, including KDA, USGS, the Kansas Water Office, Kansas Geological Survey, Kansas Department of Health and Environment, Kansas Rural Water Association, Kansas Department of Revenue, K-State Extension, groundwater management districts and others.

### Relevancy to the Kansas Water Plan:

This program implements the water use section of the *Kansas Water Plan*, Volume II, Data and Research Policy and Institutional Framework chapter, by providing quality-controlled annual water use data from all water rights for water management decisions. Comparing this data with annual water level measurements shows the cause and effect of annual pumping. Projections of future conditions can be made using this valuable data. Per capita water use and other information derived from the water use data are useful for system design and evaluation.

The program specifically contributes to progress on the *Kansas Water Plan* [Water Conservation Objective #4](#) and [Research and Data Collection Objective #17](#).

In addition, the water use data assembled by this program is necessary to assess the water protection fee pursuant to K.S.A. 82a-954, which generates about \$1.4 million a year for State Water Plan programs. The water use program assembles and transmits stockwatering and industrial water use data to the Kansas Department of Revenue for their annual water protection fee billings (municipalities self-report their water use to the Department of Revenue).

### For More Information:

Lane Letourneau, Program Manager, Water Appropriation, (785) 296-3717, [lane.letourneau@kda.ks.gov](mailto:lane.letourneau@kda.ks.gov),

### FY 2009 Accomplishments

**FY 2009 Actual:**           **\$60,000** (plus \$12,000 agency funding for \$60,000 cost-share)

Through a 50-50 cost-share cooperative agreement, two U.S. Geological Survey scientists spend part of their time working at the Division of Water Resources office. These scientists perform quality-control checks on water use reports from municipalities and other water users throughout the state. This involves resolving any apparent discrepancies in the data, as well as coding the water use reports for data entry. Division of Water Resources staff enters the water use data in the Water Rights Information System database. The data is compiled and provided to the Kansas Water Office, which publishes water use summaries and maps by basin in the *Kansas Water Plan* and in other reports (e.g., see the attached map). The U.S. Geological Survey annually publishes irrigation and municipal water use reports, and maintains a reference guide that lists public water suppliers, purchasers and sellers. The program also prepares a list of public water suppliers that have more than 30 percent "unaccounted for" water and provides the list to the Kansas Water Office and the Kansas Rural Water Association so they can help public water suppliers reduce their "unaccounted for" water.

### FY 2010 Activities

**FY 2010 Revised:**       **\$60,000** (plus \$10,300 SGF funding for \$60,000 cost-share)  
Same as FY 2009.

### FY 2011 Proposed Activities

**FY 2011 Recommendation:**   **\$66,000**  
Same as FY 2009.

A 10 percent budget increase is requested to maintain program integrity. Program funding has been constant for a number of years, and this adjustment is necessary to cover increased costs.

### 2006 Water Use By County

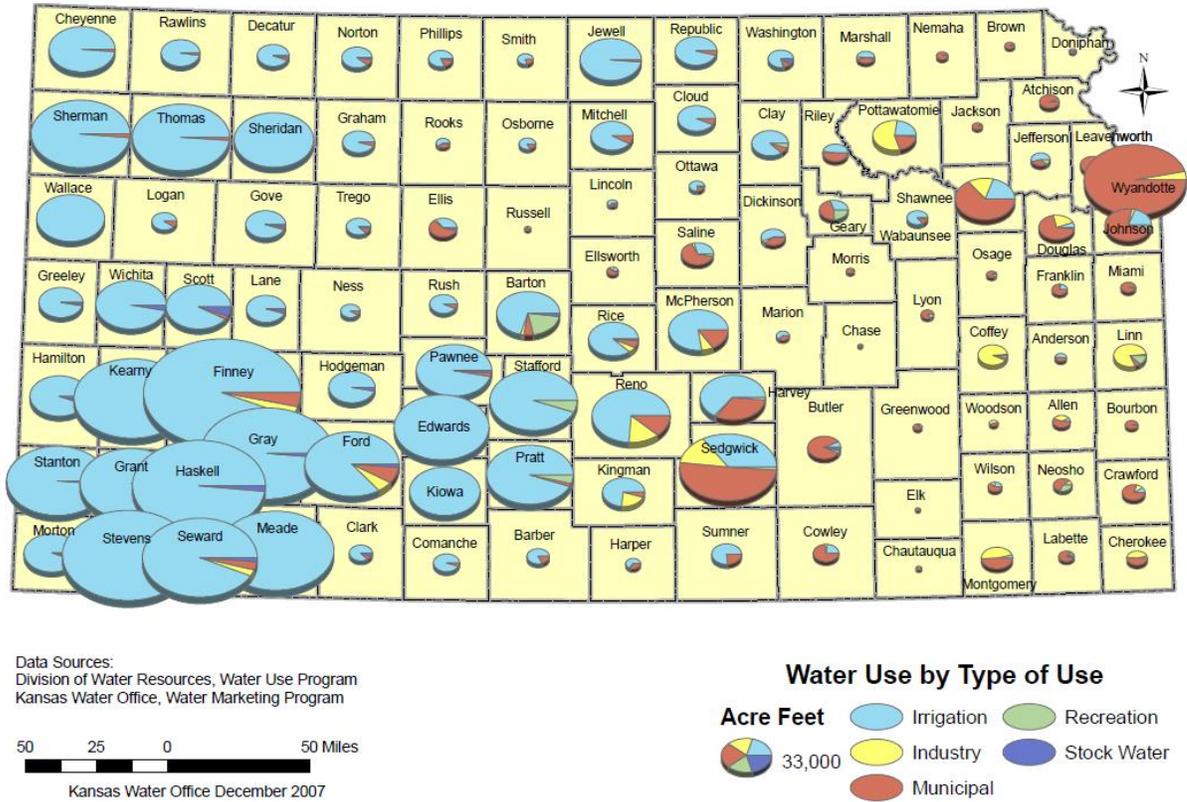


Figure 3

### Dam Safety Program

The Dam Safety Program is part of the *Stream Obstructions Program* within the Water Structures Program of the DWR. The *Stream Obstructions Act* gives the DWR Chief Engineer the exclusive authority to regulate the construction, operation and maintenance of dams in Kansas. Written consent or a permit from the Chief Engineer is required to construct a dam or make changes in an existing dam. The *Stream Obstructions Act* requires that the Chief Engineer adopt rules and regulations to establish standards for the administration and enforcement of the Act. Three dam hazard classifications, Classes A, B and C, have been established as described in K.A.R. 5-40-20.

The goal of the Dam Safety Program is to reduce risks to life and property from dam failure. This goal is addressed through review and approval of plans for constructing new dams and for modifying existing dams, ensuring quality control during construction, and overseeing or conducting routine safety inspections of dams that, if they failed, could cause loss of life, or interrupt public utilities or services.

To meet its obligation to protect people and property, the Kansas Department of Agriculture, Division of Water Resources regulates the construction, operation and maintenance of all dams or other water obstructions, with the exception of federal reservoirs. The DWR has received federal financial assistance for enhancement of the *Dam Safety Program*, but does not receive any funding from the SWPF.

**Relevancy to the *Kansas Water Plan*:**

The *Kansas Water Resources Planning Act* provides the statutory authority for addressing flood management in the *Kansas Water Plan*. With this act and the goals of the Dam Safety, this program supports the Kansas Water Plan 2010 [Flood Management Objective](#).

**For More Information:**

Matt Scherer, Manager, Water Structures Program, (785) 296-3083, [Matt.Scherer@kda.ks.gov](mailto:Matt.Scherer@kda.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$0**

The program received no State Water Plan funding in FY 2009. In FY 2009 69 new dams and modifications or repairs to existing dams were permitted; 50 construction inspections of new and modified dams and 82 safety inspections of high and significant dams and provide reports of those inspections to the owners were conducted. Five seminars about dam maintenance for owners and four workshops on preparing emergency action plans were also conducted, and a dam safety conference in Lawrence for engineers and dam owners from across the state was held.

**FY 2010 Activities**

**FY 2010 Revised:       \$0**

The program received no State Water Plan funding in FY 2010. There is anticipation of 50 new dams and modifications to existing dams to be permitted, and 40 construction inspections to be conducted. About six seminars for dam owners regarding the care and maintenance of dams and six workshops on emergency action plans which are required of all owners of high and significant dams are also anticipated to be conducted. Pursuing proper permitting for dams that have been constructed without a permit to insure that those dams meet minimum safety standards will continue. The 2010 dam safety conference is planned for Hutchinson.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$1,000,000 (ELARF)**

A new request for funding from the State Water Plan in FY 2011 is to implement a dam rehabilitation cost sharing program. This program would be administered through the Secretary of Agriculture's office rather than through the regulatory office in the Division of Water Resources. The purpose is to provide assistance to owners of dams who are unable to afford the costs of upgrading dams for which hazard classification has changed.

State General Fund expenditures are estimated to be \$595,000. The FEMA grant for federal FY 2009 (state FY 2010) was significantly increased to \$456,136 and we anticipate funding at that level in FY 2011. The use of the funds in this grant is restricted to enhancing the program and cannot be used to supplant state funding.

Similar to the expectations for FY 2010, there is an anticipation of permitting 45 new dams and modifications. There is also anticipation to conduct 50 construction inspections, 6 seminars for dam owners and six workshops on emergency action plan development. DWR also plans to hold a dam safety conference at a location not yet determined.

**Water Resources Cost-Share**

The Water Resources Cost-Share Program (WRCSP) provides financial incentives to landowners for the establishment of conservation practices that reduce soil erosion, improve or protect water quality, and enhance water supplies. Major program objectives include: 1) reducing sedimentation, nutrient and pesticide runoff, and fecal coliform bacteria loading in targeted public water supply reservoirs, 2) reducing soil erosion on crop and grazing lands.

The WRCSP was authorized by amending K.S.A 2-1915 in 1979 and was first funded in 1980. The conservation district in each county, managed by 525 locally elected supervisors, administers the program at the local level. The State Conservation Commission (SCC) develops regulations, policy, and procedures to guide program implementation. The SCC and conservation districts are assisted in implementation of the program by the United States Department of Agriculture, Natural Resources Conservation Service (NRCS). All structures or practices cost-shared by the SCC through the WRCSP are required to be built to NRCS standards and specifications. NRCS provides the design, layout, and certification of practice installation for all WRCSP contracts.

**Relevancy to the Kansas Water Plan:**

The program specifically contributes to progress on Kansas Water Plan [Water Management Objective #8 and #9](#); and [Water Quality Objective #11 and #12](#).

**Basin Priority:**

- Kansas River Degradation
- Watershed Restoration & Protection
- Long Term Public Water Supply
- Rattlesnake Creek Subbasin
- Ogallala-High Plains Aquifer Water Level Declines

**For More Information:**

Scott Carlson, Assistant Director, (785) 296-6803, [SCarlson@SCC.KS.GOV](mailto:SCarlson@SCC.KS.GOV)

**FY 2009 Accomplishments**

**FY 2009 Actual:        \$3,435,957**

Most funds were directly allocated to conservation districts for local and state priorities. Water quality protection through reduction of soil erosion was the major focus of the program. Practices receiving the majority of funds included terraces, waterways, ponds, grass plantings, and pasture and rangeland management. Funds were also allocated to high priority Total Maximum Daily Load (TMDL) watersheds to reduce the level of nutrients, pesticides, dissolved oxygen and bacteria.

COST-SHARE FUNDS AND PROJECTS BY MAJOR RIVER BASIN	FY 2009	
	Projects	Amounts
Kansas Lower Republican	377	\$524,367
Missouri	92	\$117,943
Marais des Cygnes	142	\$256,926
Neosho	195	\$263,072
Verdigris	111	\$211,259
Walnut	40	\$50,893
Upper Republican	76	\$159,381
Solomon	176	\$250,673
Smoky Hill/Saline	284	\$448,483
Lower Arkansas	291	\$583,135
Upper Arkansas	168	\$316,215
Cimarron	106	\$243,252
<b>TOTAL</b>	<b>2,058</b>	<b>\$3,274,915</b>

**FY 2010 Activities**

**FY 2010 Revised: \$2,485,805**

An amount of \$2,485,803 was available for allocation in FY 2010, which began on July 1, 2009. Carryover funds from FY 2009 were not included in the initial allocation. Appropriated funds are broken down into sub-categories and allocated to county conservation districts for program implementation. Sub-categories include:

- District Needs Allocation - These funds generally address sedimentation; erosion; nutrient, pesticide, and bacteria loading; and water conservation within the county. The local conservation district determines eligibility and priorities.
- Water Quality Allocation - Funds are directed to high priority watersheds for the restoration and protection of water quality. Only practices directly affecting water quality are eligible. Targeted watersheds include High Priority TMDL's in 11 of the 12 major river basins.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation: \$3,060,216**

A total of \$3,060,216 has been requested for cost-share implementation in FY 2011. Into FY 2011, the demands of reducing sedimentation above water supply reservoirs and TMDL's will continue to drive program goals and outcomes. Conservation districts will be encouraged to implement local programs that focus on sedimentation, fecal coliform bacteria, pesticides, and nutrient runoff. Also in FY 2010, the SCC is evaluating how to address the decline in Natural Resource Conservation Service (NRCS) technical service personnel at local county district offices that support state cost-share programs. A workload analysis has been completed that will assist in determining how Kansas conservation partner organizations can fund technical staff in the 34 NRCS management units in the state.

**Non-point Source Pollution Control – Base Program**

Authorized by the 1989 Legislature, the Non-Point Source Pollution Control Program (NPSPCP) is a voluntary program providing technical and financial assistance to implement non-point source pollution control measures for the protection and restoration of surface and ground water quality.

Conservation districts receive funding from the SCC in the form of grants and financial assistance provided to landowners on a cost-share basis to implement a locally developed Non-Point Source (NPS) Pollution Management Plan. The local plan addresses goals and strategies for implementation of Best Management Practices (BMPs) to protect and restore water quality and proper watershed function.

Local citizens define existing and potential NPS pollution problems, identify applicable pollution control practices, and develop implementation strategies, time lines and budgets through the planning process. Currently all 105 counties have approved management plans.

**Relevancy to the Kansas Water Plan:**

The Nonpoint Source Pollution Control Program funding addresses the *Kansas Water Plan* and Basin Priorities [Water Quality Objectives #11 and #12](#).

**Basin Priority:**

- Watershed Restoration and Protection
- Long Term Public Water Supply
- Kansas River Degradation (KLR)

**For More Information:**

Don Jones, Manager, Water Quality Program, (785) 296-1883, [don.jones@scc.ks.gov](mailto:don.jones@scc.ks.gov)

## State Conservation Commission

### FY 2009 Accomplishments

**FY 2009 Actual: \$3,082,483** (total includes portion that went towards NPS-WRAPs)

Cost-share and technical assistance/information and education funds were allocated to 105 conservation districts with a local Non-Point Source (NPS) Pollution Management Plan. Funds were allocated to high priority Total Maximum Daily Load (TMDL) watersheds to reduce the level of nutrients, pesticides, dissolved oxygen and bacteria. Following are the number of projects and cost-share expended:

Project Category	Projects	Funding
Abandoned Water Well Plugging	170	\$ 78,472
Livestock Waste Systems	28	\$ 213,645
On-site Wastewater Systems	597	\$ 1,257,732
Nutrient Management	108	\$ 61,979
Range and Pasture Management	222	\$ 500,582
Erosion and Sediment Control	14	\$ 31,589
Riparian/Wetland Management	55	\$ 393,700
Other	9	\$ 9,375
<b>Total</b>	<b>1203</b>	<b>\$ 2,547,074</b>

Technical Assistance/Information & Education funds expended to date: **\$460,567**

The following table shows the number of projects and cost share expended by basin:

Basin	Projects	Funding
Cimarron	42	\$ 59,523
Kansas-Lower Republican	327	\$ 573,668
Lower Arkansas	125	\$ 301,266
Marais des Cygnes	84	\$ 244,318
Missouri	70	\$ 150,659
Neosho	103	\$ 257,901
Smoky Hill-Saline	150	\$ 293,037
Solomon	67	\$ 158,015
Upper Arkansas	136	\$ 262,678
Upper Republican	42	\$ 104,993
Verdigris	36	\$ 80,335
Walnut	21	\$ 60,681
<b>Total</b>	<b>1203</b>	<b>\$ 2,547,074</b>

### FY 2010 Activities

**FY 2010 Revised: \$ 2,512,787** (Includes \$51,685 in FY 2009 carryover.)

Funding:	\$2,193,256 allocated to counties for cost-share
	\$ 530,485 Technical Assistance/Information & Education
	\$ 6,500 NPS Operations
	<u>\$ 447,823 Reserve Account</u>
<b>Total</b>	<b>\$3,178,064</b>

Cost-share and Technical Assistance/Information & Education funds were allocated to 105 counties for implementation of their local Non-Point Source (NPS) Pollution Management Plan. Funds were allocated to high priority Total Maximum Daily Load (TMDL) watersheds to reduce the level of nutrients, pesticides, dissolved oxygen and bacteria. The Reserve Account is being held for the FY2010 rescission. Also in FY 2010, the SCC is evaluating how to address the decline in Natural Resource Conservation Service (NRCS) technical service personnel at local county district offices that support state cost-share programs. A workload analysis has been completed that will assist in determining how Kansas conservation partner organizations can fund technical staff in the 34 NRCS management units in the state.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$3,254,907**

Funding:	\$2,366,081 for cost-share assistance
	\$ 534,000 for Technical Assistance/Information & Education
	\$ 218,000 for Technical Assistance for WRAPS Streambank Projects
	\$ 40,000 for CSIMS annual maintenance
	\$ 50,000 for No-till Education
	\$ 40,000 for NPS Operations
Total	\$3,248,081

Cost-share funds will be allocated to 105 counties for implementation of their local Non-Point Source (NPS) Pollution Management Plans. Information & Education funds may be transferred to Technical Assistance to fund Conservation Technician positions that were identified in the FY 2010 workload analysis.

**Non-point Source Pollution Control Program – WRAPS**

The Watershed Restoration and Protection Strategy (WRAPS) involves watershed stakeholders working together as a community to address priority water and related natural resource problems and opportunities on a watershed basis. Increased funding for implementation projects is needed as watershed action plans are completed and updated. Cost-share and technical assistance funds are provided for implementation of the local WRAPS plans. The primary focus for implementation is in the watersheds of the twenty federal reservoirs with public water supply storage along with other priority watersheds.

**Relevancy to the Kansas Water Plan:**

The Nonpoint Source Pollution Control Program WRAPS funding addresses the *Kansas Water Plan* and Basin Priorities [Water Quality Objectives #11 and #12](#).

**Basin Priority:**

- Watershed Restoration and Protection

**For More Information:**

Don Jones, Manager, Water Quality Program, (785) 296-1883, [don.jones@scc.ks.gov](mailto:don.jones@scc.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$312,117**

Twenty WRAPS projects were funded in FY 2009. Twelve were Riparian Area Protection projects and eight were Pasture and Rangeland Management projects. Seven of the 12 Riparian Area Protection projects involved Streambank Protection.

The following table shows the number of projects and cost share expended by basin:

Basin	Projects	Funding
Kansas-Lower Republican	14	\$ 105,973
Marais des Cygnes	1	\$ 61,054
Missouri	1	\$ 5,000
Neosho	2	\$ 74,848
Solomon	1	\$ 18,000
Upper Republican	1	\$ 7,242
<b>Total</b>	<b>20</b>	<b>\$ 312,117</b>

**FY 2010 Activities**

**FY 2010 Revised:       \$0**

Cost-share and technical assistance funds would be provided for the implementation of the local WRAPS watershed implementation plans. The primary focus for implementation would be in the watersheds of the twenty federal reservoirs with public water supply storage along with other priority watersheds. The amount of funds available for WRAPS implementation will not be determined until after the April 1, 2010 cancellation of cost-share funds.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$0**

Cost-share and technical assistance funds would be provided for the implementation of the local WRAPS watershed implementation plans. The primary focus for implementation would be in the watersheds of the twenty Federal Reservoirs with public water supply storage along with other priority watersheds. The amount of funds available for WRAPS implementation will not be determined until after the April 1, 2011 cancellation of cost-share funds.

**Aid to Conservation Districts**

State Aid to Conservation Districts, also known as Matching Funds, is a grant program providing financial assistance to Kansas Conservation Districts. The K.S.A. 2-1907c authorizes the state to match up to \$25,000 per district of the annual amount allocated to conservation districts by the board of county commissioners. This match provides an incentive for the county commission to double county funding up to the state maximum amount. These funds assist the 105 county conservation districts to effectively deliver local, state and federal natural resource programs as prescribed under the Conservation District Law (K.S.A. 2-1901 et seq.).

**Financial assistance enables conservation districts to:**

- Hire administrative and technical staff;
- Acquire office supplies and equipment;
- Coordinate various conservation programs;
- Implement state financial assistance programs at the local level;
- Carry out information and education campaigns promoting conservation;
- Provide clerical assistance to NRCS.

A local five-member board, known as district supervisors, governs each conservation district. District supervisors are elected public officials who serve without pay. The 525 district supervisors donate nearly 50,000 hours per year establishing local priorities, setting policy and administering programs to conserve natural resources and protect water quality.

**Relevancy to the Kansas Water Plan:**

Aid to Conservation Districts funding addresses the State Water Plan and Basin priorities [Water Management Objectives #8 and #9](#); and [Water Quality Objectives #11 and #12](#).

**Basin Priority Issues:**

- [Kansas River Degradation](#)
- [Watershed Restoration & Protection](#)
- [Long Term Public Water Supply](#)
- [Rattlesnake Creek Subbasin](#)
- [Ogallala-High Plains Aquifer Water Level Declines](#)

**For More Information:**

Scott Carlson, Assistant Director, (785) 296-6803, [SCarlson@SCC.KS.GOV](mailto:SCarlson@SCC.KS.GOV)

**FY 2009 Accomplishments**

**FY 2009 Actual: \$2,253,788**

Fifty-nine conservation districts received the maximum grant of \$25,000. Districts received \$2,945,053 from counties. Grants are issued to conservation districts based upon receipt of a satisfactory audit of 2006 accounts, receipts and disbursements as well as certification of actual county funds provided to districts.

**FY 2010 Activities**

**FY 2010 Revised: \$2,266,962**

The program has been appropriated \$2,266,905 for FY 2010. This amount is one percent less than the qualifying amount due to state budget reductions. Based on conservation district input and budget information, districts receiving additional funds were able to purchase field equipment to rent, update office equipment, expanded youth and adult educational programs, increased employee compensation/health benefits, and hire additional staff. Furthermore, several conservation districts are no longer co-located with the NRCS and must pay expenses previously provided by the NRCS. The increased funding has been vital for these conservation districts to maintain a presence in the county.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation: \$2,113,796**

For FY 2011, \$2,113,796 is requested for the purpose of providing state financial assistance to conservation districts. Sixty-three conservation districts are budgeted to receive the \$25,000 maximum amount from the state with county commissions contributing \$2,943,526. Grant assistance from this request will be distributed in July 2010 to each conservation district who has submitted to the SCC a certification of actual county funds provided to the district and a satisfactory audit of accounts, receipts, and disbursements.

**Watershed Dam Construction**

K.S.A. 2-1915, as amended by the 1976 Legislature, authorizes the appropriation of funds for a variety of enduring conservation practices, including dams. Since 1977, the Legislature has annually appropriated funds for cost-share assistance for the construction of flood control detention and grade stabilization dams for organized watershed and drainage districts. This funding was in addition to federal funds historically appropriated for the same purpose. Watershed districts, drainage districts or other special purpose districts are eligible for financial assistance. Applications for funding are prioritized by the Commission based upon flood control, erosion control and other water quality improvements and rural fire protection benefits. These benefits are compared to each project's total costs and environmental impacts in formulating the final ranking for funding.

**Relevancy to the Kansas Water Plan:**

The Watershed Dam Construction Program supports many of the [Kansas Water Plan 2010 and 2015 Objectives](#).

**For More Information:**

Hakim Saadi, P.E., Manager, Watershed Program, (785) 296.3600, [Hakim.Saadi@scc.ks.gov](mailto:Hakim.Saadi@scc.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual: \$927,153**

**State Conservation Commission**

**New Construction of Flood Control Dams: \$581,694**

<b>FY 2009 APPROVED FUNDING FOR NEW CONSTRUCTION</b>			
<b>Watershed District</b>	<b>Site</b>	<b>Basin</b>	<b>Cost-Share</b>
Diamond Creek WJD 61	109	NEO	\$88,600
Fall River WJD 21	F-13	VER	\$105,000
U Black Vermillion WJD 37	215	KLR	\$78,436
Allen Creek WD 89 (SUPP)	18	NEO	\$17,600
Horseshoe Cr WJD 110	25	KLR	\$52,000
Deer Creek WJD 55	128	NEO	\$69,178
Mill Creek WJD 85	48	KLR	\$120,000
Mill Creek WJD 85 (SUPP)	25	KLR	\$50,880

**Rehabilitation of Existing Flood Control Dams: \$270,517**

<b>FY 2009 APPROVED FUNDING FOR REHABILITATION</b>			
<b>Watershed District</b>	<b>Site</b>	<b>Basin</b>	<b>Cost-Share</b>
Allen Creek WD 89 (SUPP)	104	NEO	\$3,454
Allen Creek WD 89	105	NEO	\$18,000
Pottawatomie Cr WJD 90	H-26	MDC	\$96,000
Pottawatomie Cr WJD 90	H-9	MDC	\$24,000
Little Walnut-Hickory WJD 18	33	WAL	\$18,557
Little Walnut-Hickory WJD 18	34	WAL	\$20,096
Little Walnut-Hickory WJD 18	40	WAL	\$18,294
Grouse-Silver C WJD 92	101	WAL	\$5,600
Grouse-Silver C WJD 92	103	WAL	\$1,600
Grouse-Silver C WJD 92	104	WAL	\$6,400
Grouse-Silver C WJD 92	106	WAL	\$1,200
Grouse-Silver C WJD 92	108	WAL	\$8,000
Labette-Hackberry Cr WJD 96	B-23	NEO	\$20,000
Wakarusa WJD 35	203	KLR	\$ 29,316

**Inundation Zone Mapping for Existing Flood Control Dams: \$86,282**

<b>FY 2009 APPROVED FUNDING FOR INUNDATION MAPS</b>				
	<b>Watershed District</b>	<b>Site #</b>	<b>Basin</b>	<b>Amount</b>
1	Delaware WJD 10	16	KLR	\$56,000
2	Grouse-Silver WJD 96	6	WAL	\$21,700
3	Wet-Walnut WJD 58	1	UAR	\$8,582

**FY 2010 Activities**

**FY 2010 Revised: \$726,697**

**New Construction of Flood Control Dams, [Approved]: \$484,262**

We had 31 applications for cost-share assistance for the construction of new flood control structures, requesting a total of \$2,774,958. Only five (5) requests were approved for \$484,262.

**Rehabilitation of Existing Flood Control Dams, [Approved]: \$226,892**

We had 7 applications for cost-share assistance for the rehabilitation of existing flood control structures, requesting a total of \$307,021. Only four (4) requests were approved for \$262,892.

**Inundation Mapping for Existing Flood Control Dams, [Pending]: \$68,446**

We have 40 applications for cost-share assistance for Inundation Mapping for existing flood control structures, requesting a total of \$142,768. Approximately ten (10) requests may be approved with the remaining funding balance.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation: \$988,535**

**New Construction of Flood Control Dams: \$588,535**

A portion of this funding will be used for construction and or rehabilitation of dams located above federal reservoirs: Flood Control and Sediment Reduction Dams. The remaining balance will be for construction of flood control dams statewide.

**Rehabilitation and Inundation Mapping: \$400,000**

Rehabilitation and inundation mapping is for existing flood control structures, statewide.

**Water Quality Buffer Initiative**

The Kansas Water Quality Buffer Initiative, enacted by the 1998 Legislature by amending K.S.A. 2-1915, is an incentive program complementing the Federal Conservation Reserve Program. State incentives supplement federal incentives to encourage the establishment of riparian forest buffers and vegetative filter strips in high priority TMDL and federal reservoir drainage areas. The SCC will enter into 10-15 year contracts, subject to annual appropriation, to compensate landowners for acres enrolled in the initiative. Supplemental payments offered under the Initiative will match 30-50 percent of the federal payment, based on the type of vegetation planted. The Initiative also provides property tax incentives for landowners statewide that enroll buffers adjacent to streams in the Conservation Reserve Program. The incentive portion of the Initiative is currently eligible on lands located in the high priority TMDL areas of Kansas and the federal reservoir drainage areas.

**For More Information Contact:**

Rob Reschke, Riparian and Wetland Coordinator, (785) 296-5101, [robert.reschke@scc.ks.gov](mailto:robert.reschke@scc.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual: \$267,047**

In FY 2009 112 new contracts were written for an additional 621 acres of vegetative grass filter strips. Since the inception of the buffer initiative 1,742 contracts have been written for a total of 11,107 acres of vegetative grass filter strips. In FY 2009 seven new contracts were written for an additional 35 acres of riparian forest buffer. Since the inception of the buffer initiative 119 contracts have been written for a total of 810 acres of riparian forest buffer.

## State Conservation Commission

PRACTICE	RIVERBASIN	ACRES	NOOFCONTRACTS
FILTER STRIP	KANSAS LOWER REPUBLICAN	6901.67	1118
FILTER STRIP	LOWER ARKANSAS	306.4	48
FILTER STRIP	MARAIS DES CYGNE	1273.24	175
FILTER STRIP	MISSOURI	1086.22	165
FILTER STRIP	NEOSHO	568.76	115
FILTER STRIP	SMOKY HILL SALINE	293.5	47
FILTER STRIP	SOLOMON	249.2	37
FILTER STRIP	UPPER ARKANSAS	219.4	19
FILTER STRIP	UPPER REPUBLICAN	104.6	4
FILTER STRIP	VERDIGRIS	104.8	14
RIPARIAN FOREST BUFFER	KANSAS LOWER REPUBLICAN	547.81	96
RIPARIAN FOREST BUFFER	LOWER ARKANSAS	7.8	2
RIPARIAN FOREST BUFFER	MARAIS DES CYGNE	15.6	6
RIPARIAN FOREST BUFFER	MISSOURI	175.6	8
RIPARIAN FOREST BUFFER	NEOSHO	47.48	5
RIPARIAN FOREST BUFFER	UPPER ARKANSAS	13.8	1
RIPARIAN FOREST BUFFER	VERDIGRIS	2.2	1

### FY 2010 Activities

**FY 2010 Revised:       \$312,163**

In FY 2010 the Buffer Initiative will continue to promote the establishment of riparian area buffers.

### FY 2011 Proposed Activities

**FY 2011 Recommendation:   \$281,100**

For FY 2011 the agency will request funds to continue the annual contract payments on vegetative filter strips and riparian forest buffers.

## Riparian and Wetland Program

The goal of the Riparian and Wetland Protection Program (RWPP) is to protect, enhance, and restore riparian areas, wetlands, and associated habitats by providing technical, educational, and financial assistance to landowners and the public in general.

Major objectives of the program are the design and installation of projects which demonstrate the effectiveness of riparian and wetland protection in terms of stream functions, water quality and wildlife benefits, and to increase the knowledge and awareness of landowners and the general public on the value and benefits of these natural areas.

The program was developed through the *Kansas Water Plan* and authorized in 1989 by amending K.S.A 2-1915. A Riparian and Wetland Protection Program Coordinator works with conservation districts and landowners to implement projects and carry out information programs. Several other federal, state, and private entities cooperate in the implementation of the program.

### Relevancy to the Kansas Water Plan:

Watershed Restoration and Protection as part of the Water Quality Buffer Initiative supports the *Kansas Water Plan* 2010 and 2015 [Water Quality Objectives #11, #12 and #13](#); and [Flood Management Objective #15](#).

**Basin Priority Issues:**

- Watershed Restoration and Protection
- Long Term Public Water Supply

**For More Information Contact:**

Rob Reschke, Riparian and Wetland Coordinator, (785) 296-5101, [robert.reschke@scc.ks.gov](mailto:robert.reschke@scc.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$236,515**

In FY 2009 Riparian and Wetland state water plan funds were allocated to supplement NRCS, EQIP and WHIP contracts. These projects consist of both streambank restoration and wetland projects. Additional cost-share is provided in order to make these projects affordable to the landowners. Funds were also allocated in FY 2009 to aid in the survey, design, construction oversight, and checkout of 4 EQIP streambank stabilization projects in Geary, Riley, and Pottawatomie County. Funds were also allocated for one streambank stabilization project adjacent to an EQIP NRCS project in Marshall County.

**Kansas - Lower Republican**

Marshall County Streambank Project  
Riley, Pottawatomie and Geary County TA Contract (4 EQIP Projects)

**Lower Arkansas**

Reno County (4 contracts to supplement NRCS WHIP projects)

**FY 2010 Activities**

**FY 2010 Revised:       \$187,366**

FY 2010 Riparian and Wetland funds will be used to supplement American Recovery and Reinvestment Act of 2009 (stimulus) funds in the Delaware Watershed. The Glacial Hills RC and D is the project sponsor and these funds will be used for technical assistance work needed for the streambank stabilization projects on the Delaware River. Funds will also be used to supplement existing EQIP streambank stabilization projects and several tree plantings associated with these projects.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$253,920**

The funds requested are state water plan funds and will again be used for streambank stabilization projects as described above.

**Multipurpose Small Lakes**

The Multipurpose Small Lakes Program, funded by the State Water Plan Fund, provides for "add on" features to provide for additional benefits during the development of a proposed flood control structure. A planned flood control structure may become multipurpose by adding water supply storage and/or recreation.

The KWO has the responsibility to determine if water supply will be needed within the area within 20 years if there is no sponsor currently willing to pay for the water supply portion. If so, the state may elect to add storage at state expense to the lake. (Additional details can be found on the SCC web site under MPSP link).

Legislation passed during the 2001 session allows for renovation of existing water supply lakes if the proposed project contains either flood control or recreation features. Each project must include adequate land treatment of the drainage area to protect the site from pollution and siltation. The KWO determines if the cost of renovation is the most cost effective means of providing water supply. Processing of the applications is through the SCC.

**State Conservation Commission**

Projects funded by the Kansas Legislature will receive assistance in the form of a grant for flood control and, if included, recreation. Funds appropriated for the water supply component shall be on a loan to be paid back to the state.

**Relevancy to the Kansas Water Plan:**

The objective of the Multipurpose Small Lakes Program is to develop, to its fullest potential, a site that is being planned for flood control and water supply or recreation. The Multipurpose Small Lakes Program supports the Kansas Water Plan 2010 [Flood Management Objectives](#).

**For More Information:**

Hakim Saadi, P.E., Manager, Multipurpose Small Lakes Program, (785) 296-3600, [Hakim.Saadi@scc.ks.gov](mailto:Hakim.Saadi@scc.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual: \$1,123,176**

This is the final increment of state funding for the construction of HorseThief Reservoir. The total state funding is \$4.5 million. The project is located within the Pawnee Watershed Joint District No. 81, in Hodgeman County. It will provide flood control and recreation on Buckner Creek. The estimated total cost of the project is expected to exceed \$16 million. Construction started in spring 2008 and was completed in fall 2009.

HorseThief Reservoir will provide 452 acres of permanent water pool for recreation and have a floodwater storage capacity of 12,868 acre-feet.

**HorseThief Reservoir - September 16, 2009**



**FY 2010 Activities**

**FY 2010 Revised: \$0**

No new multipurpose applications on file with the SCC office.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation: \$0**

No new multipurpose applications on file with the SCC office.

## Water Right Transition Assistance Program (WTAP)

In 2006, the Legislature passed a 5-year pilot project program entitled “Water Right Transition Assistance Pilot Project Program”, or WTAP. The purpose of this voluntary, incentive based program is to provide for the permanent dismissal of irrigation water rights and the reduction of consumptive use of ground water in focused, heavily developed areas that are closed to new appropriations.

### Relevancy to the Kansas Water Plan:

Water Transition Assistance Program supports the *Kansas Water Plan* 2010 and 2015 [Water Management Objectives #8 and #9](#).

### Basin Priority Issues:

WTAP addresses basin priority issues regarding senior water right impairment, aquifer restoration and streamflow recovery identified in the Rattlesnake Creek Management Plan (Lower Arkansas Basin), and compliance with the Republican River Compact and reduction of Ogallala-High Plains aquifer declines (Upper Republican basin).

### For More Information:

Steve Frost, Manager, Water Conservation Program, (785) 296-8964, [Steve.Frost@scc.ks.gov](mailto:Steve.Frost@scc.ks.gov)

### FY 2009 Accomplishments

**FY 2009 Actual:       \$2,161,479**

A total of fourteen water rights were voluntarily retired at a total cost of \$2,075,171. A permanent reduction of 1,569 acre-feet of historic consumptive water use in the targeted areas was achieved.

In the Rattlesnake Creek subbasin, 3 water rights representing 802 acre-feet of annual water appropriation were voluntarily dismissed at a total cost of \$702,213 which resulted in a permanent reduction of 363 acre-feet of historic consumptive water use.

In the NW KS GMD #4 high priority areas of the Upper Republican Basin, 11 water rights representing 3,098 acre-feet of annual water appropriation were voluntarily dismissed at a total cost of \$1,372,958 which resulted in a permanent reduction of 1205 acre-feet of historic consumptive water use.

No WTAP applications were received from the Prairie Dog Creek Basin in FY 2009.

### FY 2010 Activities

**FY 2010 Revised:       \$100,000**

Due to budget reductions, no WTAP applications can be accepted or funded in FY 2010. Planning and future target areas will be assessed as funding becomes available.

### FY 2011 Proposed Activities

**FY 2011 Recommendation:   \$858,548**

Another WTAP enrollment period is planned for FY2011. WTAP is a five year pilot project which will end on June 30, 2012. Funds requested are allocated from the State Water Plan Fund.

## Upper Arkansas River Conservation Reserve Enhancement (CREP)

The Upper Arkansas River Conservation Reserve Enhancement Program (CREP) is a federal-state partnership for enrollment of irrigated acres into a multiyear contract for a conservation planting, and the permanent retirement of the associated water rights. This incentive-based conservation project to reduce the use of irrigation water and reduce non-point pollution in the Upper Arkansas River corridor is a partnership between the United States Department of Agriculture, Farms Service Agency (FSA) and the State of Kansas.

### Relevancy to the Kansas Water Plan:

The Conservation Reserve Enhancement Program supports the *Kansas Water Plan* 2010 and 2015 [Water Quality Objectives #8 and #9](#).

### Basin Priority Issues:

CREP addresses basin priority issues regarding aquifer restoration and streamflow recovery, minimizing the spread of saline waters into the aquifer, and restoration of stream and riparian health identified in the Middle Arkansas Subbasin (Upper Ark basin) and reducing irrigation to help slow the aquifer declines in the Ogallala–High Plains aquifer identified in the Upper Ark basin.

### For More Information:

Steve Frost, Manager, Water Conservation Program, (785) 296-8964, [Steve.Frost@scc.ks.gov](mailto:Steve.Frost@scc.ks.gov)

### FY 2009 Accomplishments

**FY 2009 Actual:           \$116,123**

A total of 56 CREP contracts on 9,155 acres have been approved during the FY2008 – 2009 period. In total this has resulted in the permanent retirement of 18,579 acre-feet of annual water appropriation from 81 wells. These 56 contracts represent a total of \$556,023 in state sign-up incentive payments which have been matched by annual payments from FSA in a total amount of \$1,116,120, or approximately \$16.6M over the 14 – 15 year life of the CRP contracts. One county is currently at the current cap of 5,000 acres total enrollment (25% of current total project cap of 20,000 acres).

Twelve new CREP contracts were approved in FY2009 for a total amount of \$116,122 which was paid to landowners as state sign-up incentive payments. These 12 contracts represent an additional 1,902 acres of land which were placed into 14-15 year Conservation Reserve Program contracts with FSA and resulted in the permanent retirement of an additional 3,225 acre-feet of annual water appropriation from 17 wells.

\$1,953 was also paid during FY2009 in state cost-sharing to complete well plugging on 8 wells associated with these water rights.

### FY 2010 Activities

**FY 2010 Revised:       \$1,113,584**

No additional appropriation: carry forward of remaining balance from original FY2008 appropriation of \$2,000,000.

Efforts are ongoing to achieve full enrollment at the current project enrollment cap of 20,000 acres in the 10 county project area. SCC is coordinating with KWO to request approval by FSA that the irrigated rental rates be increased for additional incentives and that the project size be increased to a total of approximately 28,500 acres in accordance with availability of the remaining allocated funds. This proposed modification would still operate within the current statutory requirements and authorities.

### FY 2011 Proposed Activities

**FY 2011 Recommendation:   \$0**

No additional appropriation: carry forward of any remaining balance from original FY2008 appropriation of \$2,000,000. Enrollment is continuous until project capacity is filled. Funds are only allocated from the State Water Plan Fund.

## Water Supply Restoration Program

The Water Supply Restoration Program was authorized by the 2005 Legislature as a result of recommendations in the *Kansas Water Plan*. This program provides financial assistance to renovate and protect lakes which are used directly as a source of water for such public water supply systems, so long as where appropriate, watershed restoration and protection practices are planned or in place. Eligible sponsors include any entity with taxing authority and right of eminent domain plus rural water districts and public wholesale water supply districts.

### Relevancy to the Kansas Water Plan:

The Watershed Supply Restoration Program (WSRP), established in 2007, provides statewide cost-share assistance to water supply sponsors for the restoration of structures. Often, the costs associated with restoration would create an undue financial burden on sponsors if public assistance was not provided. The Legislature authorized the reallocation of up to 85% of the Clean Drinking Water Fee to the State Water Plan Fund to be used to preserve and restore water supply systems, on and after July 1, 2007. The Water Supply Restoration Program supports the *Kansas Water Plan 2010* and 2015 [Public Water Supply Objectives](#).

### For More Information:

Hakim Saadi, P.E., Manager, Water Supply Restoration Program (785) 296.3600, [Hakim.Saadi@scc.ks.gov](mailto:Hakim.Saadi@scc.ks.gov)

### FY 2009 Accomplishments

**FY 2009 Actual:           \$998,466**

Fiscal Year 2008 started an era of direct deposit of Clean Drinking Water Fee Funds into the State Water Plan account. The SCC received program start up funding of \$2,483,603 in FY 2008 for the Pilot Project – Mission Lake, City of Horton, in Brown County, Kansas Lower Republican River Basin. With the FY 2009 funding the SCC completed the cost-share requested by the City of Horton to restore Mission Lake. \$882,069 was allocated for the restoration of the second water supply project - Big Blue River low head dam for the benefits of the Washington County Rural Water District No.1.

### FY 2010 Activities

**FY 2010 Revised:       \$0**

This funding is from the Clean Drinking Water Fee Fund through the State Water Plan.

SCC has several applications – Letters of Interest – on file requesting financial assistance for water supply systems restoration, as per listing:

Project Name	Sponsor	Basin	Scope of Services	Total Cost
WS CO RWD 1	RWD	KLR	Repair of low-head dam	\$3,750,000
Augusta Lake (*)	Augusta	WAL	Dam & Spillway repair	\$2,000,000
Augusta Lake	Augusta	WAL	Dredge (storage restoration)	\$4,200,000
Gardner Lake	Gardner	KLR	Dredge (storage restoration)	\$1,000,000
Cedar Lake	Olathe	KLR	Dredge (storage restoration)	\$7,711,408
Osage City Lake	Osage City	MDC	Repair of Spillway & Restore Storage	\$2,725,083
Santa Fe Lake	Augusta	WAL	Repair of Spillway & Restore Storage	\$8,743,600
Eureka City Lake	Eureka	VER	Repair of pipe	\$590,000

The Pilot Project, Mission Lake, City of Horton, is well underway. Construction of the Confined Disposal Facility (CDF) is almost complete and hydraulic dredging has begun. Completion target date is October 2010. The preliminary Engineering Report (PER), feasibility study, for the Washington County Rural Water District No.1 is complete. Assessment of different alternatives to ensure that the district has adequate water supply is under review.

FY 2011 Proposed Activities

FY 2011 Recommendation: \$937,569

This funding is from the Clean Drinking Water Fee Fund through the State Water Plan.

SCC plans to use the funding to supplement either the Washington County Rural Water District No.1 project or the Augusta Lake project.

Streambank Stabilization

Streambank stabilization is a practice that stabilizes eroding streambanks, reduces damage from sediment and runoff to downstream areas, and improves wildlife habitat. It is used on highly erodible or critically eroding streambanks. These areas usually cannot be stabilized by ordinary conservation treatment and management, and if left untreated can cause severe erosion or sediment damage.

Relevancy to the Kansas Water Plan:

The Streambank Stabilization Program supports the Kansas Water Plan 2010 and 2015 [Water Quality Objectives #11, #12 and #13](#); and [Wetland and Riparian Objective #15](#).

Basin Priority Issues:

- Watershed Restoration and Protection
- Long Term Public Water Supply

For More Information Contact:

Rob Reschke, Riparian and Wetland Coordinator, (785) 296-5101, [robert.reschke@scc.ks.gov](mailto:robert.reschke@scc.ks.gov)

FY 2009 Accomplishments

FY 2009 Actual: \$0

FY 2010 Activities

FY 2010 Revised: \$0

FY 2011 Proposed Activities

FY 2011 Recommendation: \$1,000,000 (ELARF)

A number of streambank stabilization projects have been implemented in recent years with state and federal assistance to address streambank and channel erosion concerns. To date, these projects have been implemented primarily on a site by site basis. However, multiple projects will be needed within a stream reach to achieve a significant reduction in the sediment load carried by the stream and ultimately deposited in a downstream reservoir. The additional funding from ELARF would assist the state in meeting this goal.

## Assessment and Evaluation

Assessment of selected *Kansas Water Plan* programs and projects is done through contract or by existing staff members. The Agency assesses water resource conditions statewide and for basin specific issues. The emphasis is on providing technical support and analysis of key policy and basin priority issues. The Kansas Water Office monitors changes in the condition of the resource, where possible, in order to quantify achievements in meeting the State Water Plan objectives.

### Relevancy to the Kansas Water Plan:

The Kansas Water Office has a mandate to collect and compile information pertaining to a wide range of water issues, including information obtainable from other agencies and political subdivisions of the state and the federal government (K.S.A. 74-2608). Research and assessment conducted through this program is used to quantify, where possible, achievements in meeting *Kansas Water Plan* [Research and Data Collection Objectives](#). All funding covered in the Assessment and Evaluation funding line are studies targeted to implement priority water projects either identified as basin priority issues or in support of policy developed within the *Kansas Water Plan* process. These expenditures include contracts for technical assessment of issues related to projects in the following table.

### For More Information:

Earl Lewis, Kansas Water Office, (785) 296-3185, [earl.lewis@kwo.ks.gov](mailto:earl.lewis@kwo.ks.gov)

#### FY 2009 Accomplishments

**FY 2009 Actual:           \$740,605**

#### FY 2010 Activities

**FY 2010 Revised:       \$508,000**

See table below.

#### FY 2011 Proposed Activities

**FY 2011 Recommendation:   \$700,000**

See table below.

STUDY	FY2009	FY2010	FY2011
<b>Non-Native Phreatophyte Demonstration Project</b>	<b>X</b>		
An assessment of the water savings and aquifer response at tamarisk control sites will be conducted in the Upper Arkansas and/or Cimarron basins. Control measures on a watershed approach have been implemented in these basins. Longitudinal studies are necessary to evaluate long term water savings, the effectiveness of various measures, and the aquifer responses to phreatophyte control.			
<b>High Plains Index Wells Monitoring and Interpretations</b>	<b>X</b>	<b>X</b>	<b>X</b>
Three wells have been installed (Haskell County, Scott County, and Thomas County) to monitor aquifer response throughout the year. The wells provide a calibration point for the aquifer-wide monitoring well network. Data loggers and transmitters provide detailed daily near real time records of aquifer responses. Three dimensional aquifer conditions are indicated in the water table and barometric fluctuations. Expansion of the aquifer monitoring of wells near Thomas County index well will indicate how representative index well is of regional conditions.			
<b>Master Well Inventory</b>	<b>X</b>	<b>X</b>	<b>X</b>
The multi-year project is creating a master ground water well inventory of records from the major agency ground water well databases in Kansas are coalesced and stored into a single accessible source. Currently, Kansas does not have a comprehensive, single-source inventory of fresh water wells in the state; individual agencies maintain and operate their own ground water well database which has led to single well locations being replicated multiple times across separate databases with little to no coordination. The master well inventory will be made available to the public as a web site and downloadable files. Once the inventory database is built and functional, the Kansas Geological Survey has committed to its upkeep and web accessibility.			
<b>High Plains Aquifer Practical Saturated Thickness (PST) and Rural PWS</b>	<b>X</b>	<b>X</b>	<b>X</b>
The Kansas Water Office has partnered with Emporia State University, City of Scott City and West Central GMD1 to evaluate the hydrologic properties of a public water supply well as part of long term rural public water supply needs.			

## Kansas Water Office

STUDY	FY2009	FY2010	FY2011
<b>Ogallala Ground Water Hydrologic and Economic Modeling</b>	<b>X</b>	<b>X</b>	<b>X</b>
The Kansas Geological Survey is constructing and calibrating a transient ground water model of the Ogallala – High Plains aquifer in southwest Kansas, including one township into Oklahoma and Colorado. The model will be used in the characterization of aquifer subunits, determination of the water budgets, and testing of aquifer response to potential management scenarios. The modeling is jointly funded by the U.S. Bureau of Reclamation, the GMD3, and KWO. A 2009 agreement allows for an economic impact study of the various potential management scenarios, aquifer responses, and likely irrigators' cropping decisions. The economic impact study jointly funded by KWO, Reclamation and GMD3.			
<b>Reservoir Bathymetric Surveys</b>	<b>X</b>	<b>X</b>	<b>X</b>
The Kansas Biological Survey is contracted to conduct bathymetric surveys of large federal reservoirs and smaller non-federal public water supply impoundments on an annual basis. This information is needed to improve estimates of sediment accumulation rates to water supply reservoirs and provide a more accurate estimate of the amount of water supply storage available to meet public water supply needs. This project was initiated in FY2007 and is expected to be funded on an annual cycle with reservoirs periodically surveyed on a rotating basis. Up to four federal and seven nonfederal reservoirs are expected to be surveyed in each fiscal year.			
<b>Reservoir Sedimentation Strategy Research</b>	<b>X</b>	<b>X</b>	<b>X</b>
Funding will be used for priority research projects that address sediment management issues affecting our federal public water supply reservoirs. Research projects will be coordinated with other state and federal agencies involved in sediment management activities. Funding will be used to leverage other funding sources when available.			
<b>Corps of Engineers Planning Studies</b>	<b>X</b>	<b>X</b>	<b>X</b>
The Corps of Engineers has a Planning Assistance to States Program which matches state or local funding with federal funding to study issues of interest to the local partner. In FY2010, plans are to jointly fund LIDAR mapping, and for the hydrologic modeling of the Lower Republican River from Harlan County reservoir to Milford Reservoir.			
<b>Kansas River Degradation Monitoring</b>		<b>X</b>	
In January 2005 the Kansas Water Authority approved a KWO study of river bed degradation on the Kansas River. The study includes the placement of cross section monuments along the river at 1.5 mile increments. The majority of the approximately 70 cross sections have been installed to provide baseline information on the condition of the Kansas River. These monuments will be re-surveyed every two years and the data analyzed for degradation changes in the river bed. FY2010 is the next regular survey of these established cross sections. These data will assist in identifying the factors influencing the Kansas River and in future planning and management recommendations for the River.			
<b>Sunflower H2O Public Water Supply Study</b>			<b>X</b>
Six counties in South Central Kansas and three counties in North Central Oklahoma have joined together to form the Sunflower H2O group. This group is looking for regional cooperative solutions to water supply shortages and increasing water treatment regulations. This study would be a partnership of the local stakeholder group, the State of Oklahoma, the KWO and the Corps of Engineers to evaluate options to the water supply problems.			
<b>Upper Republican Reconnaissance Study</b>		<b>X</b>	
As the State of Kansas receives either water/money or both from Colorado and Nebraska under the Republican River Compact, there is a need for a coordinated approach to projects. This study will assist the local stakeholders in the identification of possible uses of water from Colorado and funds from Colorado and Nebraska. It is jointly funded by the KWO, Bureau of Reclamation and Northwest GMD4.			
<b>Suspended Sediment Monitoring</b>		<b>X</b>	<b>X</b>
Through a Joint Funding Agreement with the U.S. Geological Survey, a stream monitoring network is being established throughout Kansas. The purpose of the network is to characterize suspended sediment transport and deposition in Kansas reservoirs.			

## GIS Database Development

Geographic Information Systems (GIS) is a collection of computer hardware, software, and geographic data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. Kansas has been involved with Geographic Information Systems (GIS) since the 1980's, and began formal coordination of its GIS programs with the formation of the GIS Policy Board, established by the Governor's Executive Order in 1989.

The objectives of the order were to coordinate the implementation and use of GIS technology by participating agencies; provide an opportunity for prompt access to GIS technology by all participating agencies and other potential users; promote compatibility and standards for geographic information; promote sharing of computerized, geographically referenced data; reduce the costs that would be involved if each agency developed its own GIS capabilities independently; and to enhance the information analysis and decision making process of participating agencies through the use of GIS technology.

With Water Authority approval, the Kansas Water Office has appropriated approximately \$250,000 of departmental budget funding every year since FY1991 for GIS data development; in general the GIS Policy Board sets priorities for how this money is spent.

**Relevancy to the Kansas Water Plan:**

GIS Database Development supports the *Kansas Water Plan* 2010 [Research and Data Collection Objective #17](#).

**For More Information:**

Ivan Weichert, Kansas GIS Director (785) 296-0257, [Ivan.Weichert@da.ks.gov](mailto:Ivan.Weichert@da.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$250,000**

Datasets approved by the GIS Policy Board:

- Statewide Land Use / Land Cover;
- Mapping Potential Inundation Extents for Emergency Planning and Response;
- LiDAR Elevation Data: Republic, Cloud and Clay counties;
- Breach Route Analysis and Inundation Mapping for Kansas Dams (Douglas County)

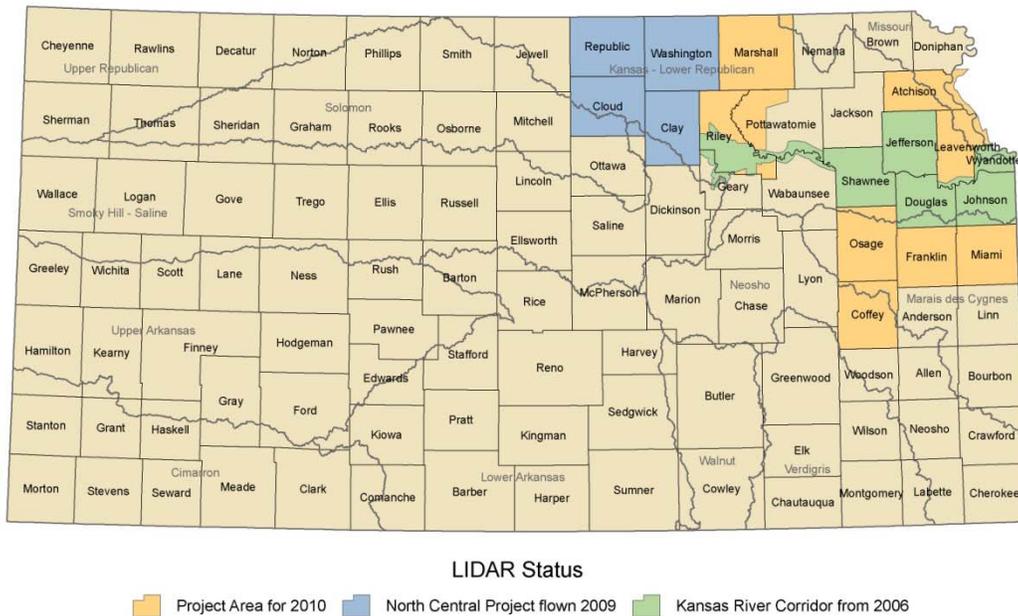
**FY 2010 Activities**

**FY 2010 Revised:       \$177,500**

The GIS Policy Board approved the development of LiDAR (Light Detecting and Ranging) Elevation Data for six full counties (Atchison, Coffey, Franklin, Marshall, Miami and Osage); and portions of Leavenworth, Pottawatomie and Riley counties. Detailed surface elevation data are invaluable for use in developing flood plain maps, assessing flood pool storage, and providing a baseline for the evaluation of stream bank erosion over time. In 2010, the State of Kansas will begin its third project to acquire high resolution elevation data using the remote sensing technology LiDAR. Using an airborne laser scanner, LiDAR measures the distance to an object using light in the form of laser pulses. Like the similar radar technology, which uses radio waves, LiDAR determines the range to an object by measuring the time delay between transmission of a pulse and detection of the reflected signal. Digital Elevation Models will be generated from the LiDAR data at a 1-meter resolution.

Partners in 2010 are the U.S. Army Corps of Engineers – Kansas City District; U.S. Geological Survey; Kansas Department of Agriculture; Natural Resources Conservation Service; and the Kansas Water Office on behalf of the GIS Policy Board. Federal contributions for the project include American Recovery and Reinvestment Act (ARRA) funds. The GIS Policy Board's source of funding is the Kansas Water Plan Fund, which accounts for 15% of the total funding for the project.

Status of Kansas LIDAR Development  
August 2009



**FY 2011 Proposed Activities**

**FY 2011 Recommendation:    \$250,000**

The GIS Policy Board will review and approve requests for funding in July 2010.

**MOU Operation and Maintenance**

*State Water Plan* funds pay the Corps of Engineers for operation and maintenance (O&M) costs for a portion of water supply storage space purchased by the state of Kansas under a 1985 Memorandum of Understanding. Although the state has paid the federal government all of the capital costs associated with this storage, annual operation and maintenance costs are an on-going financial obligation to the state. The Kansas Water Authority established the policy of paying the O & M costs on this storage with *State Water Plan* funds, as long as the storage was not committed to either the Marketing or Assurance programs. The lakes in which portions of O & M are paid with water plan funds are shown in the table below. Also included in this program is the Kansas Water Office obligation for operation and maintenance associated with the Artificial Recharge Pool at Cedar Bluff Reservoir.

**Relevancy to the Kansas Water Plan:**

The Kansas Water Authority has adopted a Reservoir Sustainability Initiative which is focused on securing, protecting and restoring reservoirs and associated water supply storage space. This program is a component of the O&M water supply storage space needed for future use and growth. Operation and Maintenance costs support Kansas Water Plan 2010 [Public Water Supply Objectives #1 and #2](#).

**For More Information:**

Cheryl Buttenhoff, Public Water Supply Program Operations, (785) 296-3185, [cheryl.butenhoff@kwo.ks.gov](mailto:cheryl.butenhoff@kwo.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:            \$ 296,841**

**FY 2010 Activities**

**FY 2010 Revised:        \$274,500**

**FY 2011 Proposed Activities**

**FY 2011 Recommendation: \$355,000**

Reservoir	Basin	Storage (AF)	FY2009	FY2010	FY2011
Cedar Bluff	Smoky Hill-Saline	2,700	\$4,577	\$13,257	\$6,444
Council Grove	Neosho	8,000	\$47,502	\$44,305	\$48,293
Elk City	Verdigris	10,000	\$11,715	\$13,615	\$15,321
John Redmond	Neosho	6,500	\$9,160	\$11,384	\$21,635
Marion	Neosho	12,500	\$51,853	\$54,149	\$75,641
Melvorn	Marais des Cygnes	22,550	\$64,671	\$56,367	\$60,581
Pomona	Marais des Cygnes	19,400	\$105,325	\$106,767	\$120,752
Tuttle Creek	Kansas-Lower Republican	8,650	\$6,616	\$5,156	\$6,333
<b>Total</b>		<b>82,998</b>	<b>\$ 301,418</b>	<b>\$305,000</b>	<b>\$355,000</b>

**Technical Assistance to Water Users - Irrigation**

This program provides on-site technical assistance to irrigation system owners and operators through the Kansas State University's Mobile Irrigation Lab (MIL). Assistance includes irrigation efficiency and water conservation education, on-site and hands-on irrigation system training, and maintenance of the MIL website and irrigation decision support software. Much of this program is focused in the High Plains - Ogallala aquifer in an effort to maximize productive use of water in the water short region. KanSched is an Evaporation/Transpiration based irrigation scheduling program. The Crop Water Allocator is a software program for irrigators wanting to evaluate the best mix of crops for a limited water supply.

The Kansas Water Office contracts with Kansas State University (KSU) to provide irrigation system owner/operators, primarily center pivot systems, education and technical assistance on how to more efficiently manage their system and conserve water through the Mobil Irrigation Laboratory (MIL) and associated activities and software. Under the contract the focus areas included individuals and sites located in critical watershed basins and critical ground water areas.

**Relevancy to the Kansas Water Plan:**

Technical assistance for irrigators is a Kansas Water Office program identified in the *Kansas Water Plan*, Volume II, Water Conservation Policy and Institution Framework, and Management Policy and Institution Framework. Technical assistance of irrigators supports the Kansas Water Plan 2010 [Water Conservation Objectives](#).

**For More Information:**

Diane Coe, Kansas Water Office, (785) 296-3185, [Diane.Coe@kwo.ks.gov](mailto:Diane.Coe@kwo.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual: \$75,000**

Technical assistance priority was targeted to the CREP area, but also to the WaterTAP, high priority subunits of the Ogallala-High Plains Aquifer areas and quick response areas (QRAS) for EQIP areas.

The FY2009 activities included two center pivot evaluations in Finney County, various pressure regulator evaluations in Finney, Gray and Seward counties, and establishing cotton plots on center pivot and SDI fields. These plots are part of a related project associated with the Ogallala Aquifer Program. Water budgets for five potential oil seed crops were prepared using KanSched. The FuelCost Program was used extensively to assist with energy audits in support of an FSA energy conservation program. The MIL website continues to serve as an effective method to distribute software and information.

**Table 1: Visitors to the website by calendar year**

	2009 Jan-Jun	2008	2007	2006	2005	2004	2003
<b>Visitors</b>	1,220	6,847	5,128	4,703	4,638	4,469	3,084
<b>Page Views</b>	5,587	13,379	15,655	23,331	31,547	37,570	26,240

Distribution of KanSched 2, Crop Water Allocator, and FuelCost software packages are continuing via the web and at meetings by CD. KanSched and other irrigation systems and management questions were handled by MIL staff. Data analysis and summary from field demonstration plots were used in presentations. MIL personnel provided pumping plant energy audit analyses for 15 individuals and over 30 pumping plant stations to support the USDA Rural Development conservation program. MIL staff estimates presentations of Kansched, Crop Water Allocator, Center Pivot Evaluations and general MIL information reached 786 attendees at 14 events. It is estimated as many as 425 contacts were made at six events with potential to reach CREP area operators. The majority of activities occurred in the Upper Arkansas basin, with some activities in the Lower Arkansas, Cimarron and Upper Republican basins.

### FY 2010 Activities

**FY 2010 Revised: \$45,000**

Focus areas including CREP as first priority, but will include those individuals and sites located in critical watershed basins and critical ground water areas as identified by the Kansas Water Office, and WaterTAP, Ogallala-High Plains aquifer high priority subunits, QRAs for EQIP.

KSU will conduct on-site and/or small group, hands-on educational training for system operators, crop consultants and others on topics related to irrigation system management, irrigation scheduling using current weather data, cropping systems, and water conservation. They will also coordinate activities and training with county agents, NRCS and others and maintain and update the MIL website <http://www.oznet.ksu.edu/mil/>. Software tools KanSched and FuelCost and other related software tools will be updated, maintained and posted to the website in a downloadable format. The website will also include presentations and publications related to irrigation systems and irrigation water management.

### FY 2011 Proposed Activities

**FY 2011 Recommendation: \$50,000**

Educational and technical assistance activities will include irrigation management, system evaluation, resource conservation, and cropping system strategy. Efforts will focus on high priority subunits of the Ogallala-High Plains aquifer and specific subbasins as determined by the Kansas Water Office.

## Technical Assistance to Water Users – Municipal

This program provides on-site technical assistance to rural water districts and small municipal water systems, addressing the full spectrum of water problems encountered in system operation. Assistance includes water supply development and protection; water conservation and drought planning; water rate structuring; energy and costs reduction; and water loss detection.

### Relevancy to the Kansas Water Plan:

Technical assistance for public water suppliers is a Kansas Water Office program identified in the *Kansas Water Plan*, Volume II, Policy and Institution Framework sections for Public Water Supply and Water Conservation.

Technical assistance to municipal water users program support *Kansas Water Plan* [Public Water Supply Objective #3](#) and [Water Conservation Objectives #4 and #6](#).

### For More Information:

Tina Rajala, GIS and Water Conservation, 785-296-3185, [Tina.Rajala@kwo.ks.gov](mailto:Tina.Rajala@kwo.ks.gov)

### FY 2009 Accomplishments

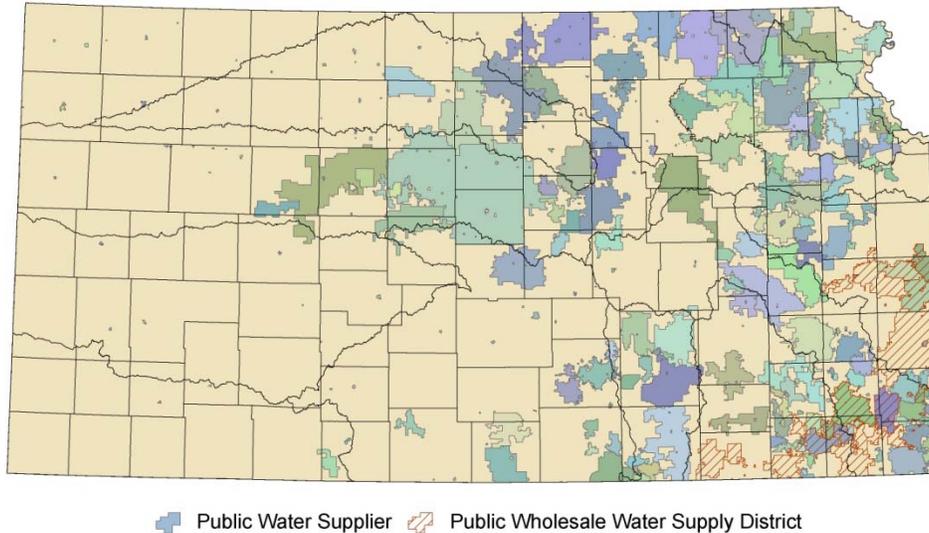
**FY 2009 Actual: \$329,919**

The Kansas Water Office contracted with the Kansas Rural Water Association to provide on-site technical assistance to public water suppliers. Activities included reviewing bookkeeping records; testing of raw water and customer water meters; leak detection; and water conservation plan development.

Other activities included technical assistance for Geographic Information System (GIS) and Global Positioning System (GPS) mapping for systems that have developed distribution maps. Detailed information on the technical assistance provided, both statewide and by basin, can be found at [www.krwa.net](http://www.krwa.net) under Technical Assistance, Focus on Water Loss.

- On-site assistance was provided to 431 public water supply systems (the map below shows the service areas of the systems that received assistance).
- 3,345 hours of on-site assistance was provided.
- 89 water loss surveys were conducted (some systems had multiple surveys), locating 530 million gallons of loss on an annual basis. The cost of this production or purchase of water on an annual basis is \$1,497,121.
- 62 water conservation plans were approved; 32 plans that were drafted in FY 2009 are still under development.

Technical Assistance to Public Water Suppliers  
FY 2009



**FY 2010 Activities**

**FY 2010 Revised:        \$300,000**

The same activities as FY 2009 are provided under contract with the Kansas Rural Water Association; in addition, activities related to coordination and outreach for regional public water supply activities are also provided in FY 2010.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:    \$355,000**

The same activities as FY 2010 will be provided under contract with the Kansas Rural Water Association.

**Technical Assistance: Public Water Supply System GIS Mapping Assistance Program**

The Public Water Supply System GIS Mapping Assistance Program is designed to promote modern mapping of public water supply systems in the State of Kansas. The program will provide a grant of up to \$4,000.00 or 50% of the cost of mapping the water supply infrastructure, whichever is less, to small public water supply systems in Kansas serving 1,000 meters (customers) or less. Applicants must also have a current water conservation plan approved January 1, 2000 or later.



## Technical Assistance: Dispute Resolution

The Dispute Resolution Program provides a resource for state agencies, cities, water districts, counties, townships, other entities and private citizens to resolve problems and differences in natural resource programs, projects and goals through mediation, arbitration, or meeting facilitation. Anyone may refer a dispute to the service; most referrals have come through state agencies and the Kansas Rural Water Association. Disputes are screened to insure that they have a nexus with natural resources issues. Dispute Resolution services are provided without charge, however, those participating are asked to share the expenses (travel, etc) of the Dispute Resolution provider.

**Relevancy to the Kansas Water Plan:** Dispute Resolution services allow the goals and objectives of the Kansas Water Plan to be met through greater cooperation and resolving issues between entities working toward those goals.

### For More Information:

Kim Christiansen, General Counsel, 785-296-3185, [kim.christiansen@kwo.ks.gov](mailto:kim.christiansen@kwo.ks.gov)

### FY 2009 Accomplishments

**FY 2009 Actual:           \$10,841**

A basic training program was held, providing information on the use of Dispute Resolution and what to expect, for 17 participants. We were fortunate to have three of the preeminent DR practitioners/trainer in Kansas volunteer to be a part of this well received training. Training will be provided, if possible, every two (2) years for those interested.

There were 21 intakes for possible DR. Not all referrals actually lead to the parties agreeing to DR. A contract provider provided one mediation; the Kansas Water Office staff performed the rest of the services provided.

### FY 2010 Activities

**FY 2010 Revised:       \$25,000**

Dispute Resolution services will continue, limited to situations where KWO staff can provide services.

### FY 2011 Proposed Activities

**FY 2011 Recommendation:   \$20,000**

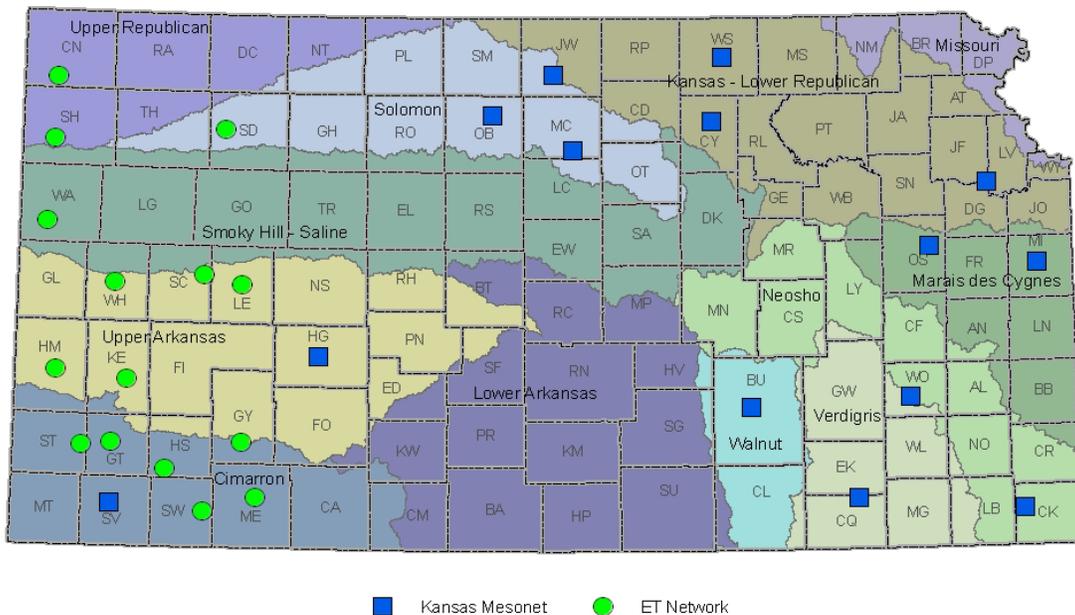
Dispute Resolution services will continue, limited to situations where KWO staff can provide services. Training may be scheduled.

## Automated Weather Stations

Data from automated weather stations is an important tool for the management of water resources. Several automated weather station networks exist across the state, each designed to meet specific purposes. In the mid-1990s support from the State Water Plan Fund (SWPF) was provided for the purchase of automated weather stations by several groundwater management districts in western and south central Kansas. Data from these stations (ET Network) is primarily used to improve irrigation water management. More recently, additional SWPF support has been provided to renovate several stations, add stations in northwest Kansas and support routine maintenance and operation of these stations. This is accomplished through an annual contract between the Kansas Water Office and Kansas State University. Currently, 15 ET Network stations are supported by the SWPF.

In a January 2007 report to the Kansas Legislature (*Automated Weather Stations in Kansas – Current Status, Comparison with Peer States and Recommendations*) the Kansas Water Authority recommended development of a comprehensive plan for expanded coverage of automated weather stations in Kansas and for supporting a broader range of applications. The initial 14 stations of this broader network, called the Kansas Mesonet, were installed in late 2008 and 2009. Although not yet fully functional, data from these mesonet stations will be posted to a clearinghouse hosted on the Kansas State University Weather Data Library website. Mesonet and ET Network station locations are shown on the map below.

## Automated Weather Stations Supported by the State Water Plan Fund



No new Mesonet stations are planned at this time. Existing ET Network stations may be upgraded to Mesonet standards if repairs or relocation of the station are needed. All data needed for ET calculations continues to be available from such stations.

### Relevancy to the Kansas Water Plan:

Near real-time or achieved data from automated weather stations is useful as input for monitoring, modeling, planning and operations activities associated with many *Kansas Water Plan* objectives. Among these are [Public Water Supply Objectives #2](#); [Water Management Objectives #8 and #10](#); and [Flood Management Objective #14](#).

### Basin Priority Issue:

Weather data will also be of use in addressing Kansas Water Plan Basin Priority Issues, many of which are related to the Kansas Water plan objectives. Included here are:

- Management of the Ogallala-High Plains Aquifer (Cimarron and Upper Arkansas basins).
- Ogallala-High Plains Aquifer Declines (Smoky Hill-Saline, Solomon and Upper Republican basins).
- Lower Smoky Hill River Water Management (Smoky Hill-Saline Basin).
- Minimum Water Levels in Webster Lake (Solomon Basin).
- Management of the Ozark Plateau Aquifer & the Spring River (Neosho Basin)
- Protecting and Enhancing Instream Flows (Verdigris Basin).

### For More Information:

Susan Stover, Kansas Water Office, (785) 296-3185, [susan.stover@kwo.ks.gov](mailto:susan.stover@kwo.ks.gov).  
 Dr. Scott Staggenborg, Kansas State University, (785) 532-7214, [sstaggen@ksu.edu](mailto:sstaggen@ksu.edu)

### FY 2009 Accomplishments

**FY 2009 Actual:        \$80,000**

Funding was focused on operation and maintenance of the 29 existing ET Network or Kansas Mesonet automated weather stations. Included were communications costs and sensor replacement or recalibration.

### FY 2010 Activities

**FY 2010 Revised:      \$50,000**

This funding is focused on continued maintenance and operation support for the 29 existing automated weather stations supported by the SWPF and on upgrading communications and data dissemination capabilities at Kansas State University. No new stations are planned for FY 2010.

#### FY 2011 Proposed Activities

**FY 2011 Recommendation:** \$70,000

The requested funding would be used to contract with Kansas State University to provide for the continued operation and maintenance of existing ET Network and Kansas Mesonet stations and to enhance data management capabilities at KSU.

## Water Resource Education

Kansas' water resource education program is designed to build a citizenry knowledgeable about the state's water resources. Water resource education initiatives funded totally, or in part, by the State Water Plan Fund include: Project WET (Water Education for Teachers), the Kansas Environmental Leadership Program (KELP), water issues education for Basin Advisory Committee members, and outreach to the state's water resource stakeholders.

**Project WET** provides high quality, science-based, unbiased water training to classroom teachers and lay educators (i.e., Conservation District personnel and youth group leaders), who, in-turn, use the nationally developed curriculum correlated to the State of Kansas' standards to teach pre-Kindergarten through 12<sup>th</sup> grade students. The program is administered by the Kansas Association of Conservation and Environmental Education (KACEE).

**The Kansas Environmental Leadership Program (KELP)** provides environmental and leadership training to adults. The five-session (three days per session) program, conducted over the course of a year at locations across the state, provides participants with an in-depth look at region-specific water resource issues. Leadership training enables KELP participants to recognize and enhance the skills they have to involve and motivate others to become involved in environmental issues. They serve in the Kansas Legislature, on basin advisory committees, conservation district boards and as professionals or leaders with statewide agencies and organizations.

**Water Issues Forums** are conducted to expand Basin Advisory Committee members understanding of current water resource issues. Broader community participation is encouraged. The theme of the third annual forums scheduled for February 2010 in Hays and Wichita will be "Climate and Water: Planning for Change."

**Outreach to Water Resource Stakeholders:** Complementing these informational and educational endeavors is outreach to stakeholder groups at their annual conventions or topical meetings with timely and pertinent water resource displays, presentations and information.

#### Relevancy to the Kansas Water Plan:

Water resource education supports the 2010 [Public Information and Education Objective](#) of the *Kansas Water Plan* that calls for providing educational activities to ensure that Kansans increase their knowledge and understanding of water resources of the state to enable them to make better personal and public decisions on water conservation, development, and management.

#### For More Information:

##### **Kansas Association of Conservation and Environmental Education:**

Laura Downey, Executive Director, (785) 532-3322, <http://www.kacee.org/project-wet>

##### **Kansas Environmental Leadership Program**

Judy Willingham, Kansas State University, (785) 532-5813, <http://www.ksre.ksu.edu/kelp/>

##### **Water Resource Issue Forum**

Susan Stover, Kansas Water Office, (785) 296-3185, [susan.stover@kwo.ks.gov](mailto:susan.stover@kwo.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$53,499**

**Project WET**

Project WET staff trained 257 educators and pre-service teachers to use the Project WET curriculum. Workshop agendas are geared to regional water issues identified in the State Water Plan (aquifer/water conservation issues in western Kansas; sedimentation, water quality issues in eastern Kansas). Some workshops are conducted in coordination with local Watershed Restoration and Protection Strategy (WRAPS) groups to promote education as a part of the WRAPS process.

Project WET lessons were also used at Water Festivals in Topeka and other areas of the state as well as being integrated into water education in the Kansas Green School Network. In addition, KACEE staff members worked collaboratively with other environmental education groups in the state to help carry out the comprehensive environmental education plan for Kansas that KACEE helped develop.

**Kansas Environmental Leadership Program**

FY 2009 is a transition year for the program initiated as a pilot project in 1999. Instead of conducting a class in 2009, the Kansas Environmental Leadership Program underwent a thorough review of its curriculum and delivery methods to insure an even stronger program in the future. Professional educators and water resource professionals were recruited to evaluate the existing program, refresh the curriculum with emphasis on current issues, streamline the delivery methods and make recommendations for the program's enhancement.

**Kansas Water Issues Forum**

In 2006 the state's 12 river basin advisory committees requested continuing education on vital water resource issues. The result of their request is the annual Kansas Water Issues Forums. The first two years were devoted to water and energy, with approximately 269 (2007) and 288 (2008) attending. The forums were co-hosted by the basin advisory committees, the Kansas Center for Agricultural Resources and the Environment (K-CARE) at Kansas State University, and the Kansas Water Office.

**FY 2010 Activities**

**FY 2010 Revised:       \$47,000**

**Project WET**

KACEE will continue to deliver Project WET curriculum as outlined above with emphasis on the Green Schools and Water Festivals that allow hands-on participation by K-12 students. Given the demands on classroom teachers, it will be even more important than ever to stress the value of environmental education's adaptability to educate students in the core curriculum subject to a school's Annual Yearly Progress. KACEE will work with WRAPS groups and explore the possibility of providing hands-on, education on stream resources in specific WRAPS watersheds.

**Kansas Environmental Leadership Program (KELP)**

A revitalized KELP curriculum and delivery mechanism will afford adult environmental education and leadership training to up to 22 Kansans. The State Water Plan Fund will provide funding to help pay for the Applied Leadership Projects which allow the students to put into practice the skills gained and newfound water resource knowledge attained.

**Kansas Water Issues Forums**

The 2009 edition offers information on climate and water and preparation for changes that might bear on the state's water resources. The topic is timely given the work in Kansas on carbon sequestration and policy considerations in the United States and worldwide.

- The program, entitled "Climate and Water: Planning for Change," are re-scheduled for February 3<sup>rd</sup>, 2010 in Wichita and February 4<sup>th</sup>, 2010 in Hays.
- The objective is to raise the awareness of the possible effects a changing climate might have on water resources and the related economic impacts on cities, industry, and agriculture.

The Water Issues Forum partners will meet in the spring to determine the December 2010 forums' focus, potential speakers, dates and locations.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation: \$55,000**

Project WET will continue to emphasize involvement with the Kansas Department of Health and Environment Green Schools program. Evaluations will be conducted to assure the connection between curriculum offered, use by educators, and increased ability of students to think critically based on science-based, unbiased environmental education. Pilot a stream team-type education program in the WRAPS watersheds that engages students in hands-on stream learning.

KELP graduates have and will continue to assume active roles in water resource arenas. The KELP curriculum will continue to prepare Kansans for those important roles.

Kansas Water Issues Forums will continue water issues education based on the needs in FY 2011.

**Weather Modification Program**

The State has been involved in weather modification activities since the early 1970's and in 1974 the Kansas Legislature passed the *Kansas Weather Modification Act* to promote research related to protect the health and economic welfare of Kansas citizens. The Act was modified in 1995 to include the issuance of a permit for an "operational" weather modification program.

The Western Kansas Weather Modification Program, a cloud seeding program has been in operation since 1975. The program operates under the permit and license authority of the Kansas Water Authority and the Director of KWO. The program activities are conducted within participating counties on an annual basis to mitigate crop-hail damage and enhance precipitation. The Western Kansas Weather Modification Program target area covers approximately 8,000 sq. miles (program year 2008) and includes portions of three major river basins which are: the Smoky Hill-Saline, Upper Arkansas, and Cimarron with the greatest portion in the Upper Arkansas Basin.

Hail suppression helps conserve and prevent waste of water which has been used to raise a standing crop. If a crop is damaged or destroyed, its value disappears and the water used to raise the crop has been wasted. The best demonstrated benefit of the weather modification program in Kansas has been the reduction of crop-hail damage, although work continues to augment precipitation. At the request of the Kansas Water Office, the Risk Management Agency (RMA) of USDA provided hail loss data for counties in Kansas in which the FCIC multi-peril insurance was available from 1989-2006. KWO analyzed the federal data and determined that there is statistical support that the Kansas weather modification program has a positive impact on reducing hail damage. A previous analysis of private insurance company data also showed a positive correlation on hail damage reduction.

**Relevancy to the Kansas Water Plan:**

An overall objective of the *Kansas Water Plan* includes the prevention of waste of water, with specific [Water Conservation Objective #5](#) and [Water Management Objective #8](#), being relevant to efficient use of Ogallala-High Plains aquifer water.

**For More Information:**

David Brenn, (620) 872-5563, [wkgmd1@wbsnet.org](mailto:wkgmd1@wbsnet.org)  
Diane Coe, Kansas Water Office, (785) 296-3185, [diane.coe@kwo.ks.gov](mailto:diane.coe@kwo.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual: \$240,000**

A portion of these funds were used to supplement the local funds from participating counties (10) and Groundwater Management Districts No. 1 and 3 for operation of the program. The balance of the funds were used to address deferred maintenance on aircraft and equipment which included overhaul of two aircraft engines and the purchase of two portable avionics units. There were 35 operational days of cloud seeding for hail suppression and rainfall augmentation in the 2008 program year. Seeding occurred in portions of all three river basins.

**FY 2010 Activities**

**FY 2010 Revised: \$156,200**

The funds are used to supplement operational funds for the aerial seeding of clouds in the participating counties (9) in Western Kansas. Approximately \$36,000 of these funds are planned to be used toward the continued repair and overhaul of the equipment not completed in FY 2008 and FY 2009. Aircraft maintenance was deferred when funding was cut or insufficient. Routine maintenance and the deferred overhaul of aircraft engines require funding to maintain safety and the number of operational planes. There were 37 operational days of seeding for hail suppression and rainfall augmentation in the 2009 program year. Seeding occurred in all three river basins.

**FY2011 Proposed Activities**

**FY 2011 Recommendation: \$240,000**

The planned purpose for a portion of these funds is to continue to supplement the operational funds for the program. In addition the continued overhaul of aircraft engines upgrade of the onboard plane avionics and radio systems is needed. The update of the outdated radar to a Titan or similar system is also planned if funding is available. These technological upgrades will allow for more effective monitoring and archiving of the effects of the program activities.

**Aquifer Storage and Recovery Project**

In 1995, the Equus Beds Groundwater Recharge Demonstration Project in Wichita was initiated to evaluate recharge techniques and their impact on water quality of the Equus Beds aquifer. The recharge effort was begun in 1990 with the realization that water demand in the Wichita metropolitan area would exceed available supply within the next 10 years. The project is now called the Aquifer Storage and Recovery Project (ASR). In 2007, over 350 million gallons were recharged into the aquifer through the ASR project Phase 1 from the Little Arkansas River during periods of excess flow and heavy rainfall. In the first six months of 2008, approximately 600 million gallons were recharged.

Phase I of the project injected large quantities of water, 10 million gallons per day (MGD), into the aquifer for the purposes of storage and later recovery and to form a hydraulic barrier to a brine plume in the area, with a total cost of \$27 million. Phase II, currently in progress with an estimated cost of \$229 million, includes elements that will capture and recharge up to 30 MGD and will utilize a treatment plant to treat the water adequately to inject directly into recharge wells.

**Relevancy to the Kansas Water Plan:**

This program assists in meeting the *Kansas Water Plan* 2010 [Public Water Supply Objectives #1 and #2](#).

The aquifer recharge project is contained within the “Long Term Public Water Supply” sub-section of the Lower Arkansas Section of the *Kansas Water Plan*.

**For More Information:**

Earl Lewis, Kansas Water Office, 785-296-3185, [earl.lewis@kwo.ks.gov](mailto:earl.lewis@kwo.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual: \$1,000,000**

This funding was placed under a grant agreement with the City of Wichita to assist with construction activities of Phase II of the Aquifer Storage and Recovery Project. Construction of Phase II is underway as of August 25, 2009.

**FY 2010 Activities**

**FY 2010 Revised: \$300,000**

This funding was placed under a grant agreement with the City of Wichita to assist with construction activities of Phase II of the Aquifer Storage and Recovery Project. Construction of Phase II is underway as of August 25, 2009.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation: \$805,044**

**Lower Arkansas Basin**

This funding will be placed under a grant agreement with the City of Wichita to assist with construction activities of Phase II of the Aquifer Storage and Recovery Project. Construction of Phase II is underway as of August 25, 2009.



**Neosho River Basin Issues**

A number of related sedimentation and water quality issues have emerged within the Neosho River Basin watershed over the last few years. Algae blooms at Marion Reservoir have led to water quality problems and closure of water supply and recreational facilities. Sedimentation in John Redmond Reservoir has reduced the available storage capacity leading to a reallocation study to switch storage from flood control to conservation storage with required replacement measures.

The reallocation of 2 feet of the flood pool to the water supply pool at John Redmond will return some of the water supply storage lost to sediment deposition. The John Redmond Reservoir pool raise mitigation required by Corps of Engineers for a 2 feet permanent pool elevation increase includes certain requirements. The agency anticipates that these efforts will cover multiple years of appropriations and will accompany federal funding in the replacement of facilities and land features that will be impacted by the pool elevation increase.

In 2009, the Kansas Water Office (KWO) received funding through the American Recovery and Reinvestment Act (ARRA) for streambank stabilization and riparian restoration on an 8.3-mile reach of the Neosho River above John Redmond. Restoration of this reach has the potential for reducing more than 49,000 tons of sediment each year. Availability of ARRA funds allowed the KWO to leverage state and federal dollars and programs to increase the project length and include a monitoring component.

**Relevancy to the Kansas Water Plan:**

- Wetland and Riparian Management
- Watershed Restoration and Protection
- Water Supply Management and Conservation

**For More Information:**

Susan Metzger, Kansas Water Office Watershed Unit, (785) 296-3185, [Susan.Metzger@kwo.ks.gov](mailto:Susan.Metzger@kwo.ks.gov)

**FY 2009 Accomplishments**

**FY 2009 Actual:           \$65,134**

KWO used funds to cover a portion of the costs associated with increasing the conservation pool elevation at John Redmond Reservoir. Changes in the pool elevation will require the replacement of facilities and wetlands that will become inundated by the permanent pool raise. KWO requested multiple years of funding from the State Water Plan Fund (SWPF) for Kansas' share of these costs. A portion of the resources from the SWPF have been utilized for bulkhead replacement costs to control the flow water stored in the reservoir at the increased elevation; replacement of a boat ramp and associated parking in the Strawn recreational area; replacement of riparian woodlands (166 acres); wetlands replacement (243 acres) of Strawn Flats and Goose Bend #4 along with pumping facilities and control structures to properly maintain the design habitat.

**FY 2010 Activities**

**FY 2010 Revised:       \$860,080**

KWO completed the mitigation requirements specified in the reallocation study. Should efforts to accelerate the implementation of the reallocation study fail, the Kansas Water Office proposes to re-direct the funding to contract for the survey, design, construction, and projected maintenance of streambank restoration projects above John Redmond Reservoir. Streambank restoration of these areas of the Neosho River has the potential to significantly reduce future sediment contributions to John Redmond Reservoir. Some funding was committed to the Neosho River streambank stabilization project, funded in part through the American Recovery and Reinvestment Act (ARRA) after the FY2010 rescissions swept the funds from the Reservoir Beneficial Use storage purchase.

In the spring of 2009, the U.S. Army Corps of Engineers notified the Kansas Water Office that a preliminary evaluation of the Hartford levee identified potential deficiencies. These deficiencies will require additional Corps of Engineers analysis and repairs prior to implementing a pool raise at John Redmond. For this reason, the reallocation study and pool raise mitigation has temporarily been placed on hold. Initial projections by the Corps suggest the project could be delayed ten years. Efforts through the Kansas Congressional Delegation and the Corps to accelerate the assessment and repair of the levee are underway. However, if final implementation of the pool increase is ultimately subject to a lengthy delay as suggested by the Corps, the Water Office is requesting the funding appropriated in FY2010 for the mitigation costs be directed to streambank stabilization in the watershed area above the federal reservoirs in the Neosho River Basin.

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$0**

No State Water Plan Funds are requested in FY2011, pending an Issue Evaluation Study (IES) by the U.S. Army Corps of Engineers of the Hartford Levee and to implement the repairs in the IES.

## Reservoir Beneficial Use/Storage Purchase

The U.S. Army Corps of Engineers (Corps) included provisions in several of the contracts with the State of Kansas to allow purchase of the usable storage space in the reservoirs but pay for only that portion of the storage space needed for present water supply demands. The remaining storage space is for anticipated future use, which can be called into service in varying increments. The state is not required to make payments on the future use portion of the storage space until it is called into service.

Kansas has contracts with the U.S. Army Corps of Engineers for purchase of 918,150 acre-feet of water supply storage in thirteen (13) reservoirs of which 421,050 acre-feet have not been called into service. Of the 421,050 acre-feet not called into service, a schedule has been established in the Water Marketing Capital Development and Storage Maintenance Plan approved by the KWA in June 2009 to call 81,200 acre-feet into service. The remaining 339,850 acre-feet of storage is in Big Hill, Milford and Perry, of which 323,350 acre-feet is in Milford and Perry. The State is not paying the Corps capital or operation and maintenance costs of the storage and has not committed the water to a user of the water marketing or water assurance programs.

### Relevancy to the Kansas Water Plan:

The Kansas Water Authority recommended in its 2004 Report to the Governor and Legislature that a long-term financial strategy be put in place to avoid end-of-contract balloon payments for reservoir storage, based on recommendations in a *Kansas Water Plan* policy section, **Long-Term Financial Solvency of the Kansas Water Marketing Program**, approved that same year. This enhancement proposal addresses this need and allows the State of Kansas to take control of the storage and supports the Kansas Water Plan 2010 [Public Water Supply Objectives](#).

### For More Information:

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### FY 2009 Accomplishments

**FY 2009 Actual:           \$0**

With the creation of the Reservoir Beneficial Use Account by the 2008 Legislature, \$534,000 was provided in FY2009 funds for the purchase of future use reservoir storage from the U.S. Army Corps of Engineers. The amount appropriated was originally intended to serve as an installment towards the purchase of the remaining storage in Perry and Milford Reservoirs. However, the appropriation was insufficient in terms of making a financial commitment purchase on behalf of the State of Kansas for the entire future use storage. In 2009, the Kansas Legislature expanded the use of the Reservoir Beneficial Use Account to include the installation of practices for watershed work to reduce the contribution of sediment to the federal reservoirs.

### FY 2010 Activities

**FY 2010 Revised:       \$0**

In 2009, the Kansas Water Office (KWO) received funding through the American Recovery and Reinvestment Act (ARRA) for streambank stabilization and riparian restoration on an 8.3-mile reach of the Neosho River above John Redmond. Restoration of this reach has the potential for reducing more than 49,000 tons of sediment each year. Reservoir Beneficial Use Funds were used to leverage these federal funds. However, the FY2010 budget rescission swept this account. Commitments on the restoration project were shifted to the Neosho River Basin Issues funding line of SWPF.

### FY 2011 Proposed Activities

**FY 2011 Recommendation:   \$3,220,357 (ELARF)**

### Kansas-Lower Republican Basin

This expenditure will be used to begin to begin a 12 year payoff on the reservoir storage at Perry and Milford. The request includes the costs for Milford Reservoir principal (\$1,501,016) and for Perry Reservoir principal (\$1,588,269); interest and operation and maintenance costs would not be due until FY 2012.

## **Stream (Biological) Monitoring**

The Kansas Department of Wildlife and Parks (KDWP) began surveying streams in the 1970s. The information obtained has been used for a variety of purposes, including surveys of fish species present in the state's streams, permitting of stream activities through the U.S. Army Corps of Engineers, endangered species assessment, evaluation of the impacts of projects proposed or initiated by watershed districts, the Kansas Department of Transportation, and the Kansas Department of Wildlife and Parks.

### **Relevance to the Kansas Water Plan:**

The condition of the state's aquatic life is a direct reflection on the [Water Quality Objectives](#) of streams, a key element of the *Kansas Water Plan* 2010 objectives. Stream monitoring helps assure that planned actions will not adversely affect water and accidental surface water contamination has been effectively addressed.

### **For More Information:**

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 Mark VanScoyoc, Stream Program Coordinator, (620) 672-5911

### **FY 2009 Accomplishments**

**FY 2009 Actual:           \$32,000**

Ninety-one sites in seven of the 12 river basins in the state surveyed from the end of May to mid-August for Calendar year 2009. This year represented the first year of surveys in the Verdigris River Basin. Primary use of the data included:

- U.S. Army Corps of Engineers – 404 construction permits
- U.S. Fish and Wildlife Service – Survey Mill Creek Watershed to assess status of Federally Endangered Topeka shiner as part of an ongoing conservation agreement between KDWP, the United States Fish & Wildlife Service, and the Mill Creek Watershed Joint District No. 85 to monitor the status of the species in this watershed.
- Kansas Department of Health and Environment – Aquatic Life Attainability Use Analysis
- Watershed Districts – Evaluation of construction projects
- Natural Resources Damage Assessment – Monitor Smoots Creek sites in Kingman County (year 5 of 5-year monitoring project in response to an Anhydrous Ammonia spill that occurred in the winter of 2004).
- Kansas Department of Transportation – Monitor South Fork Ninnescah weir projects constructed near Byron Walker WA
- Kansas Department of Wildlife and Parks – Evaluation of project impacts on state threatened and endangered species and evaluation of petitions submitted as part of 5-year KDWP threatened and endangered species status review.

Please see table at the end of this narrative for a complete listing of streams monitored in FY 2009 and in FY 2010 as of Oct. 1, 2009.

### **FY 2010 Activities**

**FY 2010 Revised:       \$28,800**

- Survey approximately 100 stream sites to document fish and macroinvertebrate occurrence and diversity.
- Develop protocols for conducting consecutive surveys on a statewide basis with emphasis in the Verdigris basin. This approach will improve the ability to use stream survey data to identify temporal changes.
- Explore use of connectivity models in collaboration with Kansas State University to assess watersheds statewide for the purpose of, but not limited to:
  - Determining optimal areas for possible dam removal when applicable
  - Evaluate impacts of future watershed structures
- Analysis of existing stream survey data in combination with other data (e.g., USGS gauging stations) to begin determining environmental flows best suited for the aquatic community within the HUC area of interest.
- Determine aquatic systems of greatest need within Kansas. Prioritize Kansas watersheds at the HUC10 or another appropriate level. Such an endeavor will enable efficient use of fiscal resources while targeting aquatic communities exhibiting the greatest need.

**Department of Wildlife and Parks**

**FY 2011 Proposed Activities**

**FY 2011 Recommendation:   \$37,486**

- Survey approximately 100 stream sites to document fish and macroinvertebrate occurrence and diversity.
- Implement protocols for conducting consecutive surveys on a statewide basis with emphasis in the Verdigris basin. This approach will improve the ability to use stream survey data to identify temporal changes
- Determine aquatic systems of greatest need within Kansas. Prioritize Kansas watersheds at the HUC10 or another appropriate level. Such an endeavor will enable efficient use of fiscal resources while targeting those aquatic communities exhibiting the greatest need.
- Assist in the culture and restoration of native fish species.

**KDWP Stream Survey, Assessment, and Monitoring Program Sites  
Surveyed FY 2009 & 2010**

Stream	County	Basin
Mill Creek	Johnson	Kansas
Turkey Creek	Wyandotte	Kansas
Munci Creek	Wyandotte	Kansas
Mill Creek	Wyandotte	Kansas
Vermillion Creek	Pottawatomie	Kansas-Lower Republican
Kuenzli Creek	Wabaunsee	Kansas-Lower Republican
Illinois Creek	Wabaunsee	Kansas-Lower Republican
South Branch Mill Creek	Wabaunsee	Kansas-Lower Republican
Snokomo Creek	Wabaunsee	Kansas-Lower Republican
Dry Creek	Wabaunsee	Kansas-Lower Republican
Illinois Creek	Wabaunsee	Kansas-Lower Republican
Snokomo Creek	Wabaunsee	Kansas-Lower Republican
Kuenzli Creek	Wabaunsee	Kansas-Lower Republican
Kuenzli Creek	Wabaunsee	Kansas-Lower Republican
Dry Creek	Wabaunsee	Kansas-Lower Republican
North Trib. Arkansas River	Cowley	Lower Arkansas
Middle Emma Creek	Harvey	Lower Arkansas
Middle Emma Creek	Harvey	Lower Arkansas
Middle Emma Creek	Harvey	Lower Arkansas
Middle Emma Creek	Harvey	Lower Arkansas
Smoots Creek	Kingman	Lower Arkansas
Smoots Creek	Kingman	Lower Arkansas
Smoots Creek	Kingman	Lower Arkansas
Smoots Creek	Kingman	Lower Arkansas
Smoots Creek	Kingman	Lower Arkansas
South Fork Ninescah River	Kingman	Lower Arkansas
South Fork Ninescah River	Kingman	Lower Arkansas
South Fork Ninescah River	Kingman	Lower Arkansas
South Fork Ninescah River	Kingman	Lower Arkansas
South Fork Ninescah River	Kingman	Lower Arkansas
South Fork Ninescah River	Kingman	Lower Arkansas
South Fork Ninescah River	Kingman	Lower Arkansas
Running Turkey Creek	McPherson	Lower Arkansas
Turkey Creek	McPherson	Lower Arkansas
Squaw Creek	Doniphan	Missouri
Mosquito Creek	Doniphan	Missouri
Trib. Missouri River	Doniphan	Missouri
Dutch Creek	Pottawatomie	Missouri
South Trib. Shoal Creek	Cherokee	Neosho

<b>Stream</b>	<b>County</b>	<b>Basin</b>
East Trib. Spring River	Cherokee	Neosho
South Trib. Shoal Creek	Cherokee	Neosho
West Holland Creek	Dickinson	Smoky Hill Saline
Hobbs Creek	Dickinson	Smoky Hill-Saline
East Holland Creek	Dickinson	Smoky Hill-Saline
Hobbs Creek	Marion	Smoky Hill-Saline
Willow Creek	Wallace	Smoky Hill-Saline
Willow Creek	Wallace	Smoky Hill-Saline
Willow Creek	Wallace	Smoky Hill-Saline
Arkansas River	Barton	Upper Arkansas
Arkansas River	Edwards	Upper Arkansas
Arkansas River	Hamilton	Upper Arkansas
Rock Creek	Chautauqua	Verdigris
Caney River	Chautauqua	Verdigris
Little Cedar Creek	Chautauqua	Verdigris
Middle Caney Creek	Chautauqua	Verdigris
Spring Creek	Chautauqua	Verdigris
Middle Caney Creek	Chautauqua	Verdigris
North Caney Creek	Chautauqua	Verdigris
Caney River	Chautauqua	Verdigris
Union Creek	Chautauqua	Verdigris
Otter Creek	Cowley	Verdigris
Caney River	Elk	Verdigris
Wildcat Creek	Elk	Verdigris
Elk River	Elk	Verdigris
Elk River	Elk	Verdigris
Elk River	Elk	Verdigris
Hitchen Creek	Elk	Verdigris
Indian Creek	Elk	Verdigris
Salt Creek	Greenwood	Verdigris
Otter Creek	Greenwood	Verdigris
South Branch Otter Creek	Greenwood	Verdigris
Fall River	Greenwood	Verdigris
South Branch Verdigris River	Greenwood	Verdigris
Fall River	Greenwood	Verdigris
Spring Creek	Greenwood	Verdigris
Ivanpah Creek	Greenwood	Verdigris
Pumpkin Creek	Labette	Verdigris
Wildcat Creek	Labette	Verdigris
Big Hill Creek	Labette	Verdigris
Bee Creek	Montgomery	Verdigris
Duck Creek	Montgomery	Verdigris
Racket Creek	Montgomery	Verdigris
Big Hill Creek	Montgomery	Verdigris
Drum Creek	Montgomery	Verdigris
Onion Creek	Montgomery	Verdigris
Mouse Creek	Montgomery	Verdigris
Elk River	Montgomery	Verdigris
Clear Creek	Wilson	Verdigris
Crooked Creek	Wilson	Verdigris
East Rainbow Creek	Wilson	Verdigris
Fall River	Wilson	Verdigris

## Minimum Pool Agreement at Webster Reservoir

The Kansas Department of Wildlife and Parks Hays Regional Office has had preliminary discussions with the staff of the Webster Irrigation District about altering water use at Webster Reservoir via a minimum pool or buyout of the district's water rights. The objective is to reach a mutually beneficial arrangement for irrigators and wildlife, fishery and recreational interests.

### Relevance to the Kansas Water Plan:

Increasing recreational opportunities at the lakes, rivers and streams of Kansas is an objective of the *Kansas Water Plan* (KWP). The 2003 KWP contained a brief management section on water-based recreation emphasizing increased access. A policy section of the KWP on *Economic Development Opportunities at Federal Reservoirs in Kansas* was approved in 2006.

### For More Information:

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### FY 2009 Accomplishments

**FY 2009 Actual:        \$0**

- Preliminary discussions about the possibility of obtaining a minimum pool level agreement with the Webster Irrigation District were held.
- With the abundant rainfall in FY 2009, the Webster Reservoir had sufficient water within the flood pool to meet the irrigation needs of the district's members.
- Neither the Webster Irrigation District nor the Kansas Department of Wildlife and Parks, acting on behalf of the State of Kansas, has developed a draft proposal for consideration.

### FY 2010 Activities

**FY 2010:            \$0**

The Kansas Department of Wildlife and Parks will continue to keep in contact with the Webster Irrigation District to determine interest in a minimum water level in Webster Reservoir.

### FY 2011 Proposed Activities

**FY 2011 Recommendations:        \$250,000 (ELARF)**

Pending interest by the Webster Irrigation District, the Kansas Department of Wildlife and Parks will work with them to develop a mutually beneficial arrangement on a minimum water level agreement in Webster Lake. A total of \$250,000 in Expanded Lottery Act Revenues Fund money has been budgeted for 2011 by the Kansas Department of Wildlife and Parks.

Attachment 5:  
Natural Resources Conservation Service  
FFY08 Annual Statement

<b>Kansas FY 2009 Performance Measure Report (October 1, 2009)</b>			
<b>Meas. Num</b>	<b>Performance Measure</b>	<b>Program</b>	<b>FY09 Progress</b>
0.10	Conservation plans written (Ac.)	CTA	966,361
0.20	Watershed or area-wide conservation plans developed (No.)	RCD	14
1.02	Soil surveys mapped or updated (Ac.)	SOILS	623,465
<b>1.10</b>	<b>Cropland with conservation applied to improve soil quality (Ac.)</b>	CTA	383,964
		EQIP	252,265
2.10	Land with conservation applied to improve water quality (Ac.)	CRP	74,183
		CTA	558,192
		EQIP	506,151
		WRP	543
2.11	CNMP written (No.)	CTA	26
		EQIP	27
<b>2.12</b>	<b>CNMP applied (No.)</b>	CTA	10
		EQIP	34
2.20	Land with conservaton applied to improve irrigation efficiency (Ac.)	CTA	8,266
		EQIP	5,693
		GSWC	3,054
3.01	Plant materials technical documents prepared and transferred to customers (No.)	PMC	10
<b>3.10</b>	<b>Grazing and forest land with conservation applied to protect and improve the resource base (Ac.)</b>	CTA	265,174
		EQIP	308,442
3.20	Non-federal land with conservation applied to improve fish and wildlife habitat quality (Ac.)	CRP	64,352
		CTA	82,035
		EQIP	11,365
		WHIP	3,626
		WRP	571
<b>3.30</b>	<b>Wetlands created, restored or enhanced (Ac.)</b>	CRP	406
		CTA	125
		WRP	334
6.10	Farmland, forest land, and wetlands protected by conservation easements (Ac.)	FRPP	5,846
		GRP	0
		WRP	245
6.11	Prime, unique, or important farmland protected by conservation easements from conversion to non-	FRPP	5,846
6.12	Land and water resources benefitted by RC&D projects (Ac.)	RCD	61,263
6.13	Local businesses created or retained in rural communities (No.)	RCD	76



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