

Nonpoint Source Pollution Load Reduction

Program accomplishments reported in this section are a result of collaborative efforts between the Kansas Department of Health and Environment (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. The best management practice codes throughout this section were developed by the Natural Resource Conservation Service to define and describe the management practice. These codes were adopted by KDHE.

Stream/Shoreline Protection

YStream/Shoreline Protection (580) is defined as treatment used to stabilize and protect banks of streams or constructed channels, and shorelines of lakes, reservoirs, or estuaries.

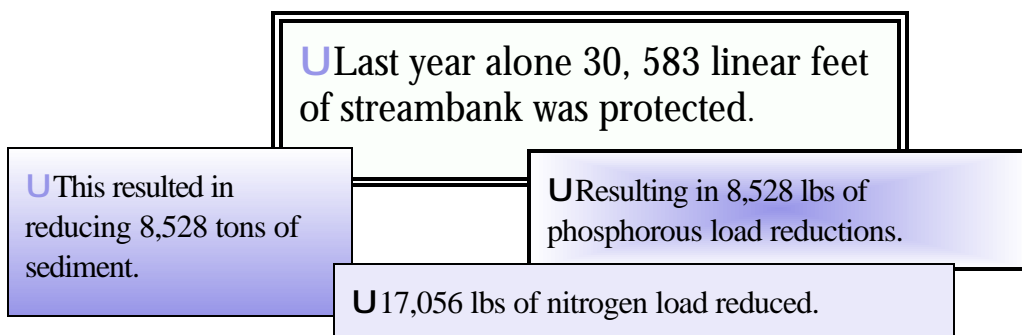
Protection Purpose

=To prevent the loss of land or damage to land uses, or other facilities adjacent to the banks

=To maintain the flow or storage capacity of the water body or to reduce the offsite or downstream effects of sediment resulting from bank erosion

=To improve or enhance the stream corridor for fish and wildlife habitat, aesthetics, recreation

Achievements



319 Projects contributing to figures:

Hillsdale Water Quality Restoration & Protection Implementation

Melvorn Water Quality Project, Part 4

Local Wetland and Riparian Areas Alliances, Part 4

Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation

(WQFARE)

Water Quality Protection Model Demonstration Project for Public Educational Entities
Kansas Organics Used to Protect Water Quality

Photo: Rush County Water Quality Project- Livestock Waste Management

Filter Strips

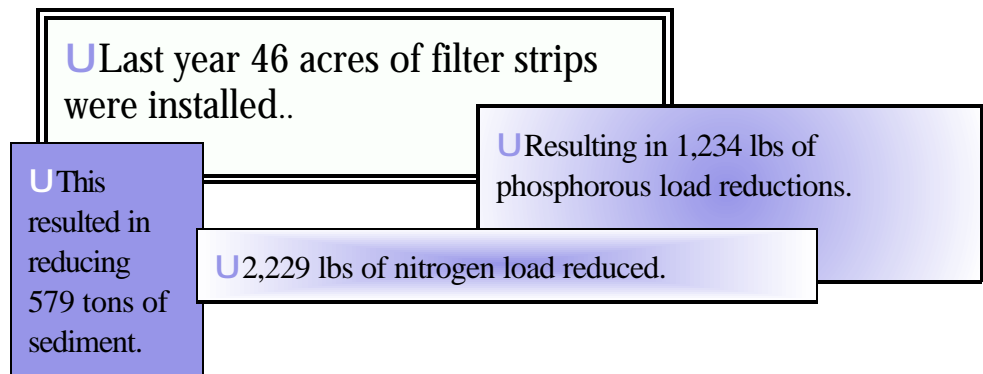
Filter Strips (393) are defined as a strip or area of herbaceous vegetation situated between cropland, grazing land, or disturbed land (including forest land) and environmentally sensitive areas.



PROTECTION PURPOSE

- =To reduce sediment, particulate organics, and sediment adsorbed contaminant loadings in runoff
- =To reduce dissolved contaminant loadings in runoff
- =To serve as Zone 3 of a Riparian Forest Buffer, Practice Standard 391
- =To reduce sediment, particulate organics, and sediment adsorbed contaminant loadings in surface irrigation tailwater
- =To restore, create or enhance herbaceous habitat for wildlife and beneficial insects.
- =To maintain or enhance watershed functions and values
- =To provide channel stability and prevent streambank erosion.

Achievements



319 Projects Contributing to figures:

Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation (WQFARE)

Water Quality Protection Model Demonstration Project for Public Educational Entities

Conservation District Demonstration & Education Projects

Melvorn Water Quality Protection Project-- Part 3

Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3

Golf Course Water Quality Protection Implementation Demonstration & Technical Assistance

Photo: Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3

Fencing

YFencing (382) is defined as a constructed barrier to livestock, wildlife, or people.

PROTECTION PURPOSE

=This practice may be applied as part of a conservation management system to facilitate the application of conservation practices that treat the soil, water, air, plant, animal and human resource concerns.



This practice may be applied on any area where livestock and/or wildlife control is needed, or where public access is to be managed.

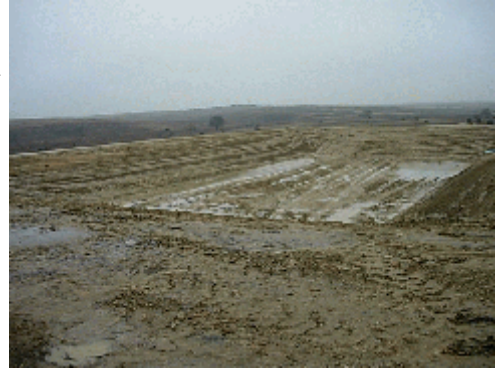
Achievements

U There were 43,940 linear feet of fence installed as a result of KDHE funded projects such as: Clean Water Farms Whole Farm Planning: A Priority Watershed Focus, Cheney Lake Watershed Water Quality Protection, Part 7, Melvern Water Quality Project, Part 4, Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation (WQFARE), Water Quality Protection Model Demonstration Project for Public Educational Entities, Melvern Water Quality Protection Project--Part 3, Coffey County Regional Watershed Restoration & Protection and Rush County Water Quality Project-Livestock Waste Management.

Photo: Kanopolis Lake- Smoky Hill River WRAPS

Waste Storage Structure

A Waste Storage Structure (313) is defined as a waste storage impoundment made by constructing embankment and/or excavating a pit or dugout, or by fabricating a structure.



PROTECTION PURPOSE

=To temporarily store wastes such as manure, wastewater, and contaminated runoff as a storage function component of an agricultural waste management system.

Achievements

U There were 9 waste storage structures constructed or renovated last SFY year.

319 Projects Contributing to figures:

Cheney Lake Watershed Water Quality Protection, Part 7

Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation (WQFARE)

Water Quality Protection Model Demonstration Project for Public Educational Entities

Newhouse Dairy Pollution Control Demonstration

Rush County Water Quality Project- Livestock Waste Management

Wetland Restoration

Wetland Restoration (657) is defined as rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable.

PROTECTION PURPOSE

To restore hydric soil conditions, hydrologic conditions, hydrophytic plant communities, and wetland functions that occurred on the disturbed wetland site prior to modification to the extent practicable.

Achievement

U There were 237.5 acres of restored wetlands. .5acres were achieved by the Cheney Lake Watershed Water Quality Protection, Part 7 project and 237 acres achieved by the Local Wetland and Riparian Areas Alliances, Part 4 project.

Photo: Rush County Water Quality Project- Livestock Waste Management

Critical Area Planting

A Critical Area Planting (342) is defined as establishing permanent vegetation on sites that have or are expected to have high erosion rates, and on sites that have physical, chemical, or biological conditions that prevent the establishment of vegetation with normal practices.



PROTECTION PURPOSE

- = Stabilize areas with existing or expected high rates of soil erosion by water.
- = Stabilize areas with existing or expected high rates of soil erosion by wind.
- = Restore degraded sites that cannot be stabilized through normal methods.

Achievements

U Planted 62.5 acres of vegetation in critical areas

KDHE 319 Projects contributing to figure:

Cheney Lake Watershed Water Quality Protection, Part 7

Water Quality Protection Model Demonstration Project for Public Educational Entities
Golf Course Water Quality Protection Implementation Demonstration & Technical Assistance

Restoration of Land Damaged by Oil and Gas Production

Rush County Water Quality Project- Livestock Waste Management

Riparian Forest Buffer

Riparian Forest Buffers (391) are defined as an area of predominantly trees and/or shrubs located adjacent to and up- gradient from watercourses or water bodies.

Protection Purpose

- = Create shade to lower water temperatures and improve habitat for aquatic organisms.
- = Provide a source of detritus and large woody debris for aquatic and terrestrial organisms.
- = Create wildlife habitat and establish wildlife corridors.
- = Reduce excess amounts of sediment, organic material, nutrients, and pesticides in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow.
- = Provide a harvestable crop of timber, fiber, forage, fruit, or other crops consistent with other intended purposes.
- = Provide protection against scour erosion within the floodplain.
- = Restore natural riparian plant communities.
- = Moderate winter temperatures to reduce freezing of aquatic over- wintering habitats.
- = To increase carbon storage.

Achievements

No project addressed Riparian Forest Buffers this State Fiscal Year

Conservation Cover

YConservation Cover (327) is defined as establishing and maintaining permanent vegetative cover to protect soil and water resources.

Protection Purpose

- = Reduce soil erosion and sedimentation.
- = Improve water quality.
- = Enhance wildlife habitat.

Achievements

319 Projects totaled 154,490 acres of retired farmland for conservation. Projects include:
Water Quality Protection Model Demonstration Project for Public Educational Entities
Kansas Organics Used to Protect Water Quality
Conservation District Demonstration & Education Projects
Melvern Water Quality Protection Project--Part 3
Locally Led Core Conservation Watershed Project, Part 2

Well Decommissioning

YWell Decommissioning (351) is defined as the sealing and permanent closure of a water well no longer in use.

Protection Purpose

- = Prevent entry of vermin, debris, or other foreign substances into the well or well bore hole.
- = Eliminate the physical hazard of an open hole to people, animals, and farm machinery.
- = Prevent entry of contaminated surface water into well and migration of contaminants into unsaturated (vadose) zone or saturated zone.
- = Prevent the commingling of chemically or physically different ground waters between separate water bearing zones.



Achievements

KDHE sponsored 9 well pluggings this last fiscal year.

KDHE 319 Projects contributing to figure:
Melvern Water Quality Project, Part 4
Conservation District Demonstration & Education Projects
Kanopolis Lake- Smoky Hill River WRAPS

Photo: Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3

Watering Facility

Watering Facility (614) is defined as a device (tank, trough, or other watertight container) used for providing animal access to water.

Protection Purpose:

To provide watering facilities for livestock and/or wildlife at selected locations in order to:

- = protect and enhance vegetative cover through proper distribution of grazing;
- = provide erosion control through better grassland management; or
- = protect streams, ponds and water supplies from contamination by providing alternative access to water.



Achievements

KDHE sponsored 7 projects that installed 12 alternative watering supplies for livestock.

KDHE projects contributing to figures:
Cheney Lake Watershed Water Quality Protection, Part 7
Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation (WQFARE)

Conservation District Demonstration & Education Projects

Marion Reservoir Water Quality Protection Project - Phase 2 - Part 2

Melvern Water Quality Protection Project- - Part 3

Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3

Coffey County Regional Watershed Restoration & Protection

Cover Crop

YCover Crop (340) is defined as grasses, legumes, forbs, or other herbaceous plants established for seasonal cover and conservation purposes.

Protection Purpose:

- = Reduce erosion from wind and water
- = Increase soil organic matter
- = Manage excess nutrients in the soil profile
- = Promote biological nitrogen fixation
- = Increase bio- diversity
- = Weed suppression
- = Provide supplemental forage
- = Soil moisture management

Achievements

The Lake Anthony Watershed Restoration & Protection Strategy Project and the Water Quality Protection Model Demonstration Project for Public Educational Entities contributed 130 acres of cover crop planting. It is estimated that by covering these acres with cover crops rather than leaving the soil bare reduces sediment erosion by approximately 6,141 tons per year, reduces phosphorous load by 7,559 lbs per year, and reduces nitrogen loading approximately 15,108 lbs per year.

Photo: Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3

Terraces

Terraces (600) are defined as an earth embankment, or a combination ridge and channel, constructed across the field slope.

Protection Purpose:

This practice may accomplish one or both of the following:

- = Reduce soil erosion
- = Retain runoff for moisture conservation



Achievements

KDHE projects contributed to 58,230 feet of terraces installed. These projects included:
Cheney Lake Watershed Water Quality Protection, Part 7
Lake Anthony Watershed Restoration & Protection Strategy
Water Quality Protection Model Demonstration Project for Public Educational Entities
Marion Reservoir Water Quality Protection Project - Phase 2 - Part 2
Melvern Water Quality Protection Project--Part 3

Photo: Water Quality Protection Model Demonstration Project for Public Educational Entities

Nutrient Management

Nutrient Management (590) is defined as establishing native or introduced forage species.

Protection Purpose:

Managing the amount, source, placement, form, and timing of the application of nutrients and soil amendments.



- = Reduce soil erosion by wind and/or water.
- = To properly utilize manure or organic by products as a plant nutrient source.
- = To minimize agricultural nonpoint source pollution of surface and ground water resources.
- = Provide emergency forage production.
- = Establish adapted and compatible species, varieties, or cultivars
- = To maintain or improve the physical, chemical and biological condition of soil.

Achievements

KDHE supported projects that implemented a nutrient management program or developed a management plan on over 17,264 acres. 319 Projects contributing to this figure are:
Cheney Lake Watershed Water Quality Protection, Part 7
Melvern Water Quality Project, Part 4
Water Quality Protection Model Demonstration Project for Public Educational Entities
Conservation District Demonstration & Education Projects

Onsite Wastewater Treatment System Projects

Y Onsite wastewater treatment system (OWWTS) projects are defined as projects that assess the condition of a current system, construct a new OWWTS in a needed area, repair a failing system or upgrade an under sized system.

Protection Purpose:

- = Reduce the amount of untreated waste entering a surface water body or groundwater table.
- = Insure proper treatment of waste.
- = Educate landowners that these systems need annual maintenance.
- = Provide information on the systems waste handling capabilities.
- = Reduce loading of nitrogen, phosphorous, pathogens, total suspended solids and organics to the environment.



Achievements

KDHE sponsored 6 projects that addressed Onsite Wastewater Treatment System issues. 90 septic systems were installed or repaired by these projects. The participating projects are the Cheney Lake Watershed Water Quality Protection, Part 7, Conservation District Demonstration & Education Projects, TMDL On-site Wastewater Education Project, Year 2 & 3, Twin Lakes Watershed Restoration & Protection Strategy, Marshall County Farmstead Pollution Project and the Kanopolis Lake-Smoky Hill River WRAPS project.

Water Quality Protection Plan

A Water Quality Protection Plan documents activities required to protect water quality associated with any given water body, land use, or activity.

Protection Purpose:

A Water Quality Protection Plan includes Livestock Pollution Control Plans, Wellhead Protection Plans, and Commercial/Industrial, Farmstead Water Quality Protection Plans, and Nutrient and Pesticide Management Plans.

- = Provide documentation of all activities that will lead to water quality protection.
- = Ensure proper project methods and direction to adequately achieve water quality protection.

Achievements

Completed Nutrient Management Plans on over 2,703 acres

Completed Livestock Pollution Control Plans for over 7,027 Head

Completed a Pesticide Management Plans on 2 acres.

Completed 4 Farmstead Water Quality Protection Plans.

Complete 6 Commercial/Industrial Water Quality Protection Plans

319 projects contributing to above figures:

Cheney Lake Watershed Water Quality Protection, Part 7

Water Quality Protection Model Demonstration Project for Public Educational Entities
BMP's to Avoid Groundwater Pollution from Application of Livestock Manure to
Cropland, Part 3

Deep Placement Fertilizer Demonstration

Golf Course Water Quality Protection Implementation Demonstration & Technical
Assistance

No- Till Farming to Protect Ground and Surface Water

Rush County Water Quality Project- Livestock Waste Management

Stewart Creek Riparian Stabilization

Assisting Small Diversified Family Farms Implement TMDLs Through Forage Use
Efficiency

Performance Evaluation of Wetlands in NE Kansas, Part 3

Melvorn Water Quality Protection Project- - Part 3

Conservation District Demonstration & Education Projects

Marshall County Farmstead Pollution Project

Twin Lakes Watershed Restoration & Protection Strategy

Stranger Creek Plan Implementation and Wolf Creek Watershed Plan Development

Mission Lake Restoration

Lake Olathe Watershed Protection Plan, Part 3

Developing a WRAPS for the Upper Wakarusa Watershed

Information & Education Projects

Water Festivals, Information & Education Events, Information & Education
Publications, Storm Drain Stenciling Projects, and Household Hazardous Waste
Collections.

One key component of a successful Non point source program is education and information. Awareness of water quality and natural resource issues and concerns is essential if we are to change attitudes and behavior. When we provide educational and informational materials to students and adults about these topics, the individual becomes empowered to make the decision to change their behavior, actions or activities to help protect our natural resources.

Information & Education Event

An Information & Education Event is defined as a scheduled meeting or assembly designed to inform the audience about non point source water quality issues.

Purpose:

This type of event may be, but is not limited to, water quality tours, workshops, educational presentations, or conferences.

Photo: Kanopolis Lake WRAPS project



- = Provide information to the audience on the designated topic.
- = Answer questions
- = Inform the audience of additional resources

Achievements

The Watershed Management Section has sponsored several projects hosting or attending Information & Education Events. It is estimated that participating projects informed over 47,043 individuals on various non-point source pollution related topics.

319 projects contributing to figures:

Cheney Lake Watershed Water Quality Protection, Part 7

Cowskin Creek Water Quality Awareness

Lake Anthony Watershed Restoration & Protection Strategy

Hillsdale Water Quality Restoration & Protection Implementation

Local Wetland and Riparian Areas Alliances, Part 4

Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation (WQFARE)

Water Quality Protection Model Demonstration Project for Public Educational Entities

Kansas Organics Used to Protect Water Quality

Conservation District Demonstration & Education Projects

Developing a WRAPS for the Upper Wakarusa Watershed

Marion Reservoir Water Quality Protection Project - Phase 2 - Part 2

Marais Des Cygnes Watershed Riparian Initiative Program
Melvern Water Quality Protection Project- - Part 3
Metropolitan Kansas City Water Quality Initiative (Part 1 & 2)
Stranger Creek Plan Implementation and Wolf Creek Watershed Plan Development
Twin Lakes Watershed Restoration & Protection Strategy
Statewide Kansas Water Celebrations
Kanopolis Lake- Smoky Hill River WRAPS
Agricultural Industry Water Quality Awareness, Part 2 (was K2- 066)
Assisting Small Diversified Family Farms Implement TMDLs Through Forage Use Efficiency
BMP's to Avoid Groundwater Pollution from Application of Livestock Manure to Cropland, Part 3
Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3
Coffey County Regional Watershed Restoration & Protection
Deep Placement Fertilizer Demonstration
El Dorado Lake Water Quality Protection, Phase 3
Golf Course Water Quality Protection Implementation Demonstration & Technical Assistance
Locally Led Core Conservation Watershed Project, Part 2
No- Till Farming to Protect Ground and Surface Water
Rush County Water Quality Project- Livestock Waste Management
Subsurface Drip Irrigation to Protect Shallow Groundwater Quality
Healthy Ecosystems- Healthy Communities: Building Community Water Quality Leadership

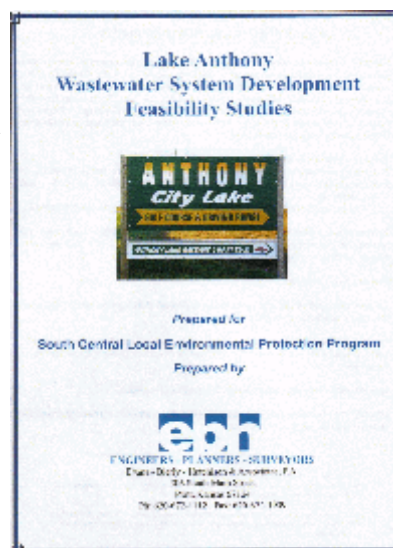
Information & Education Publication

Y Information & Education Publications are defined as products produced by a given organization/agency with the intention of educating the reader about non- point source pollution issues.

Purpose

These publications may include informational brochures, pamphlets, reports, children stories, coloring books, newsletters, news articles and press releases.

- = Provide information to the audience on the designated topic.
- = Serve as a reference tool on non point source information.



Achievements

Supported projects produced 33 Information & Education Publications and web pages reaching over 34,653 citizens statewide.

319 projects contributing to figures:

Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation
Kansas Organics Used to Protect Water Quality
Locally Led Core Conservation Watershed Project, Part 2
Deep Placement Fertilizer Demonstration
Assisting Small Diversified Family Farms Implement TMDLs Through Forage Use Efficiency
Rush County Water Quality Project- Livestock Waste Management
Fecal Coliform Abatement in Southwest Kansas
Cheney Lake Watershed Water Quality Protection, Part 7
BMP's to Avoid Groundwater Pollution from Application of Livestock Manure to Cropland, Part 3
Coffey County Regional Watershed Restoration & Protection
El Dorado Lake Water Quality Protection, Phase 3
Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3
Water Quality Protection Model Demonstration Project for Public Educational Entities
Hillsdale Water Quality Restoration & Protection Implementation
Marion Reservoir Water Quality Protection Project - Phase 2 - Part 2
Conservation District Demonstration & Education Projects
Developing a WRAPS for the Upper Wakarusa Watershed
Twin Lakes Watershed Restoration & Protection Strategy
Mission Lake Restoration
Marais Des Cygnes Watershed Riparian Initiative Program
Volunteer Soil & Water Testing to Meet TMDL Goals
Statewide Kansas Water Celebrations
Kansas StreamLink Watershed Stewards
Lake Anthony Watershed Restoration & Protection Strategy
Metropolitan Kansas City Water Quality Initiative (Part 1 & 2)
Kanopolis Lake- Smoky Hill River WRAPS
2003 McPherson County Children's Water Festival
River Ambassador's Information & Education Survey Project
Kansas Clean Water Celebrations, Part 2

Earth Awareness Researchers for Tomorrow's Habitat (E.A.R.T.H.)- - Part 3
KSWIM Network/Streamlink Watershed Education
Water Quality Education 2003

Photo: Cheney Lake Watershed Water Quality Protection, Part 7

Water Festival

A Water Festival is defined as an educational activity that is packaged in a fun atmosphere.

Purpose

The idea behind a water festival is to educate students about natural resources and the need to protect them.

- = Provides students the opportunity to learn and gain hands on experience.
- = Encourages participation in activities such as classroom sessions, hands on exhibits, skits, water quiz bowl, or other activities dealing with natural resources.



Achievements

Watershed Management Section supported projects either hosting or participating in over 38 Water Festivals statewide, reaching over 22,058 students.

319 Projects sponsoring water festivals:

Developing a WRAPS for the Upper Wakarusa Watershed
Coffey County Regional Watershed Restoration & Protection
Marais Des Cygnes Watershed Riparian Initiative Program
2003 McPherson County Children's Water Festival
Conservation District Demonstration & Education Projects
Metropolitan Kansas City Water Quality Initiative (Part 1 & 2)
El Dorado Lake Water Quality Protection, Phase 3
Melvern Water Quality Project, Part 4
Twin Lakes Watershed Restoration & Protection Strategy
Earth Awareness Researchers for Tomorrow's Habitat (E.A.R.T.H.)- - Part 3

Cheney Lake Watershed Water Quality Protection, Part 7
Water Quality Education 2003
Local Wetland and Riparian Areas Alliances, Part 4
Melvern Water Quality Protection Project- - Part 3
Marion Reservoir Water Quality Protection Project - Phase 2 - Part 2

Storm Drain Stenciling

A Storm Drain Stenciling project is defined as a coordinated event where city storm water drains are marked with a warning label to discourage waste dumping.



Purpose

To inform and educate the public that storm drains are connected directly to surface waters within their community and to prevent them from putting anything down the outlets.

- = Provides students an opportunity to educate their community
- = Prevents storm drain dumping
- = Warns the public that these drains are directly connected to surrounding waters.

Achievements

The Water Quality Education 2003 Project, Melvern Water Quality Protection Project--Part 3 and Part 4, Lake Olathe Watershed Protection Plan, Part 3 and Conservation District Demonstration & Education Projects sponsored Storm Drain Stenciling Events that marked over 2,201 storm drains.

NPS Information and Education Program Highlights

This year the Information and Education program has continued previous responsibilities including the Clean Water Neighbor Pledge, the Clean Water Neighbor mini-grant program, quarterly NPS Seminars, continuing the Kansas Environmental Leadership Program participation in World Water Monitoring Day, and the Water Celebrations 319 project. Updates on the mini-grants, NPS Seminars and World Water Monitoring Day are below.



Clean Water Neighbor Grant Program

Small grants (up to \$5,000) are awarded for projects designed to increase awareness of water quality problems caused by nonpoint pollutant sources and to increase awareness of effective solutions to these problems. Individuals and organizations can sponsor a Clean Water Neighbor project. Each project concludes with a Clean Water Neighbor workshop. Project sponsors are required to contribute 40 percent of the total cost of the project. A grant of \$5,000 would require a contribution of \$3,333. Projects that have previously been funded include: stream monitoring and clean-up projects, acquiring water quality reference materials for schools, construction of small detention dams to protect a public drinking water supply lake, livestock pollution control demonstrations, wetland education centers, etc.

New mini-grant projects include:

Addressing Water Quality Concerns on Clay County Farmsteads
Marshall County Farmstead Pollution Project

Williams Background Facility- Stream Steward Project
Suburban Site Planning for Quality Stormwater Management
Benefits and Design of Kansas Riparian Forest Buffers
Coffey County Regional Watershed Restoration & Protection
Developing a WRAPS for the Upper Wakarusa Watershed
Nonpoint Source Education for 4th Level "Wild World of Water" School Year 2003
Preventing Pollution in Our Stormwater Drains
Rollin Down the River Festival 2003
Wichita River Festival "River Ambassadors"
2003 McPherson County Children's Water Festival
Restoration of Land Damaged by Oil and Gas Production
Water Quality Education 2003
River Ambassador's Information & Education Survey Project
Stewart Creek Riparian Stabilization

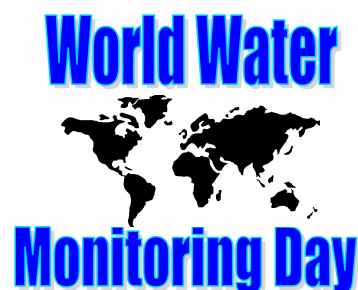
Quarterly Seminar

Every three months the Watershed Management Section hosts the "Nonpoint Source Pollution Seminar" which is now being called 'Kansas Nonpoint Source Advisory Committee Forum'. The forum is designed to inform and educate attendees on 319 projects in their area as well as give an opportunity for discussing local water quality issues. The seminars were held in Salina, Lawrence, Wichita and Ft. Scott. Presenters were generally 319 grant recipients, although in November of 2004 KSU co-hosted an all day forum.



World Water Monitoring Day

Kansas participated this year in the World Water Monitoring Day program, which is aimed at encouraging volunteer monitoring programs, water quality agencies, students, and the general public to test waters in their area. Staff focused on educating the public and organizations on the program and encouraging participation as well as submitting agency water quality data online. The Watershed Management Section donated 50 water quality test kits to various volunteers willing to participate. Kansas reported an increase from 144 registered sites in 2003 to over 256 registered sites in 2004. Kansas was 2nd in the nation behind Arkansas with most registered sites.



Kansas's 2004 Nonpoint Source Control Program Annual Report

Current 319 Projects
July 1, 2003 - June 30, 2004

Project	Cooperator
2003 McPherson County Children's Water Festival	McPherson Co. Extension
Abatement of Fecal Coliform Bacteria, Part 1	KSU
Abatement of Fecal Coliform Bacteria, Part 3	KSU
Abatement of Fecal Coliform Bacteria, Part 4	KSU
Addressing Water Quality Concerns on Clay County Farmsteads	Clay County Conservation District
Agricultural Industry Water Quality Awareness, Part 2 (was K2-066)	KFRM Radio
Assisting Small Diversified Family Farms Implement TMDLs Through Forage Use Efficiency	Kansas Rural Center
Benefits and Design of Kansas Riparian Forest Buffers	KSU
BMP's to Avoid Groundwater Pollution from Application of Livestock Manure to Cropland, Part 3	KSU
Cheney Lake Water Quality Protection, Part 6	Reno Co. Conservation Dist.
Cheney Lake Watershed Water Quality Protection, Part 7	Reno Co. Conservation Dist.
Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 2	Kansas Rural Center
Clean Water Farms Whole Farm Planning: A Priority Watershed Focus - Year 3	Kansas Rural Center
Coffey County Regional Watershed Restoration & Protection	Coffey County Conservation District
Conservation District Demonstration & Education Projects	State Conservation Commission
Cowskin Creek Water Quality Awareness	Andale Chamber of Commerce, Inc.
Crop Rotations to Protect Water Quality in Priority Watersheds	KSU
Dairy Nutrient Management Technical Assistance	KSU
Deep Placement Fertilizer Demonstration	Bourbon Co. Conserv. Dist.
Developing a WRAPS for the Upper Wakarusa Watershed	Kaw Valley Heritage Alliance
Earth Awareness Researchers for Tomorrow's Habitat (E.A.R.T.H.)--Part 3	KSU
El Dorado Lake Water Quality Protection, Phase 3	Butler Co. Conservation Dist.
Env. Assessment & Critical Areas Identification & TA - Part 2	Kansas Biological Survey
Env. Assessment & Critical Areas Identification & TA - Part 3	Kansas Biological Survey
Environmental Health Handbook Revision	KSU
Fecal Coliform Abatement in Southwest Kansas	KSU
Golf Course Water Quality Protection Implementation Demonstration &	Wichita State University

Kansas's 2004 Nonpoint Source Control Program Annual Report

Technical Assistance	
Healthy Ecosystems-Healthy Communities: Building Community Water Quality Leadership	KSU
Hillsdale Water Quality Restoration & Protection Implementation	Hillsdale Water Quality Project, Inc.
Implementing BMP's in the Smoky Hill-Kanopolis Lake Watershed	KSU
Implementing TMDL's Using Water Quality Financial Analysis & Resource Evaluation (WQFARE)	KSU
Kanopolis Lake-Smoky Hill River WRAPS	Post Rock Rural Water Dist
Kanopolis Watershed Assessment, Part 1	KSU
Kanopolis Watershed Assessment, Part 2	KSU
Kansas Buffer Partnership for Clean Water	State Conservation Commission
Kansas Clean Water Celebrations, Part 2	KACEE
Kansas Environmental Leadership Program (KELP), Class 1 & 2	KSU
Kansas Environmental Leadership Program (KELP), Class 3	KSU
Kansas Environmental Leadership Program (KELP), Class 4	KSU
Kansas Organics Used to Protect Water Quality	Wood Recycle & Composting Center
Kansas StreamLink Watershed Stewards	Kaw Valley Heritage Alliance
Kansas Urban Water Quality Restoration and Protection Initiative (Planning Process Tech. Assistance, Education & Out Reach) Part 2	KSU
Kansas Urban Water Quality Restoration & Protection Planning Process, Part 3	KSU
KSWIM Network/Streamlink Watershed Education	Kaw Valley Heritage Alliance
Lake Anthony Watershed Restoration & Protection Strategy	Sunflower RC&D
Lake Olathe Watershed Protection Plan, Part 3	City of Olathe
Little Blue River Streambank Stabilization & Riparian Area Restoration	State Conservation Commission
Little Blue River Streambank Stabilization & Riparian Area Restoration, Part 2	Kansas State Conservation Commission
Livestock Pollution Control Web Site (was K3-037)	KSU
Local Wetland and Riparian Areas Alliances, Part 3	Pheasants Forever
Local Wetland and Riparian Areas Alliances, Part 4	Pheasants Forever
Locally Led Core Conservation Watershed Project	No-Till on the Plains, Inc.
Locally Led Core Conservation Watershed Project, Part 2	No-Till on the Plains, Inc.
Marion Co. Reservoir Water Quality Protection Project- Phase 2	Marion Co. Conservation Dist.
Marion Reservoir Water Quality Protection Project - Phase 2 - Part 2	Marion Co. Conservation Dist.
Marais Des Cygnes River Basin Watershed Restoration and Protection Strategy Project	Lake Region RC &D
Marais Des Cygnes Watershed Riparian Initiative Program	Lake Region RC&D
Marshall County Farmstead Pollution Project	Marshall County Conservation District

Kansas's 2004 Nonpoint Source Control Program Annual Report

Melvorn Water Quality Protection Project--Part 3	Flint Hills RC&D
Melvorn Water Quality Project, Part 4	Flint Hills RC&D
Metropolitan Kansas City Water Quality Initiative (Part 1 & 2)	Mid-America Regional Council
Mission Lake Restoration	City of Horton
Newhouse Dairy Pollution Control Demonstration	Franklin County Conservation District
Nonpoint Source Education for 4th Level "Wild World of Water" School Year 2003-04	Topeka USD 501 Public Schools
No-Till Farming to Protect Ground and Surface Water	KSU
Nutrient and TSS Reduction in Surface Waters in North Central Kansas	Clay Co. Conservation Dist.
Odin Community Water Quality Restoration & Protection Strategy	Central Prairie Resource Conservation
Performance Evaluation of Wetlands in NE Kansas, Part 3	KSU
Performance Evaluation of Wetlands in NE Kansas, Part 4	KSU
Preventing Pollution in Our Stormwater Drains	City of Lawrence
Reducing Atrazine Runoff (Blue & Delaware), Part 3	KSU
Remediation Water Quality Survey of Reclaimed Abandoned Mine Land	Pittsburg State University
Restoration of Land Damaged by Oil and Gas Production	Flint Hills RC&D
River Ambassador's Information & Education Survey Project	City of Wichita
Rollin Down the River Festival 2003	Kaw Valley Heritage Alliance
Rooks County Water Quality Awareness Program	Rooks County Conservation District
Rush County Water Quality Project-Livestock Waste Management	Rush County Conservation District
St. Pauls Stream Restoration	St. Pauls United Methodist Church
Sand Springs Water Quality Protection Project	City of Abilene/Dickinson Co. Water Improvement
Spring Creek-Lake Anthony/Smoots Creek TMDL Implementation	Harper County Health Department (SCLEPP)
Statewide Kansas Water Celebrations	KACEE
Stewart Creek Riparian Stabilization	Sunflower Land Trust
Stranger Creek Plan Implementation and Wolf Creek Watershed Plan Development	Leavenworth County
Suburban Site Planning for Quality Stormwater Management	KSU
Subsurface Drip Irrigation to Protect Shallow Groundwater Quality	KSU
TMDL On-site Wastewater Education Project, Year 2 & 3	NE Kansas Env. Services
Twin Lakes Watershed Restoration & Protection Strategy	Flint Hills Resource Conservation & Development Council
Volunteer Soil & Water Testing to Meet TMDL Goals	KSU

Kansas's 2004 Nonpoint Source Control Program Annual Report

Washington County Water Quality Improvement-- Phase 1	Washington Co. Conservation Dist.
Washington County Water Quality Improvement--Phase 2	Washington Co. Conservation Dist.
Waste Management Water Quality Protection Learning Center	KSU
Waste Management Water Quality Protection Learning Center, Part 2	KSU
Water Quality Education 2003	City of Lenexa
Water Quality Improvements of Vegetated Riparian Areas & Buffers, Part 2	KSU
Water Quality Improvement of Vegetated Riparian Areas & Buffers, Part 3	KSU
Water Quality Profit Optimization, Part 3	KSU
Water Quality Protection Model Demonstration Project for Public Educational Entities	Fort Scott Community College
Watershed Dairy Environmental Cooperative, Part 2	KSU
Wichita River Festival "River Ambassadors"	City of Wichita
Williams Background Facility-Stream Steward Project	Lyon Co. Conservation Dist.