



# Kentucky Green River Conservation Reserve Enhancement Program

Annual Program Accomplishment Report  
(CEP-68R)

FFY 2007

## I. Executive Summary

The Green River is the most biologically diverse and rich branch of the Ohio River system. The greatest aquatic diversity occurs in a 100-mile section of unhindered river that flows from the Green River Reservoir Dam through Mammoth Cave National Park (the world's longest and most diverse cave system) in south central Kentucky. This section of the Green River Watershed includes 917,197 acres in the counties of Adair, Barren, Edmonson, Green, Hart, Metcalfe, Russell, and Taylor. Data indicates that agricultural runoff contributes high levels of sediment, nutrients, pesticides, and pathogens to the Green River and Mammoth Cave Systems. There are currently seven species listed as endangered by the U.S. Fish and Wildlife Service in the Green River System. In addition, the project area also includes several ecosystems recognized as Endangered Ecosystems of the United States, including native prairies, hardwood savannahs, canebrakes, and old-growth deciduous forest.

On August 29, 2001, the U.S. Department of Agriculture (USDA) and the Commonwealth of Kentucky agreed to implement a Conservation Reserve Enhancement Program (CREP) on the section of the Green River referenced above to restore up to 100,000 acres. The Kentucky Chapter of the Nature Conservancy is one contributor, offering permanent easements to landowners in addition to CREP contracts, and offering public relations and BMP implementation assistance. The Kentucky Department of Fish and Wildlife Resources (KDFWR) is a contributor, offering wildlife biologists and cost-shared positions with NRCS to assist landowners and promote the program to enhance participation in CREP. The Kentucky Division of Conservation was designated as the state administrative contact agency for Green River CREP, and distributes state cost share and incentive payments to landowners. Western Kentucky University plans and implements the water quality and biological monitoring for the program. Mammoth Cave National Park is also involved in the monitoring of the Green River and groundwater in the karst areas of the Green River CREP.

In late 2006, a proposal for an amendment to the Green River CREP was submitted to USDA. This proposal sought to expand the CREP region down river on the Green approximately 30 river miles to include environmentally significant watersheds downstream of the original project area, and to utilize the community-based approach of this program to more effectively protect locally unique resources and provide better service to the local landowners.



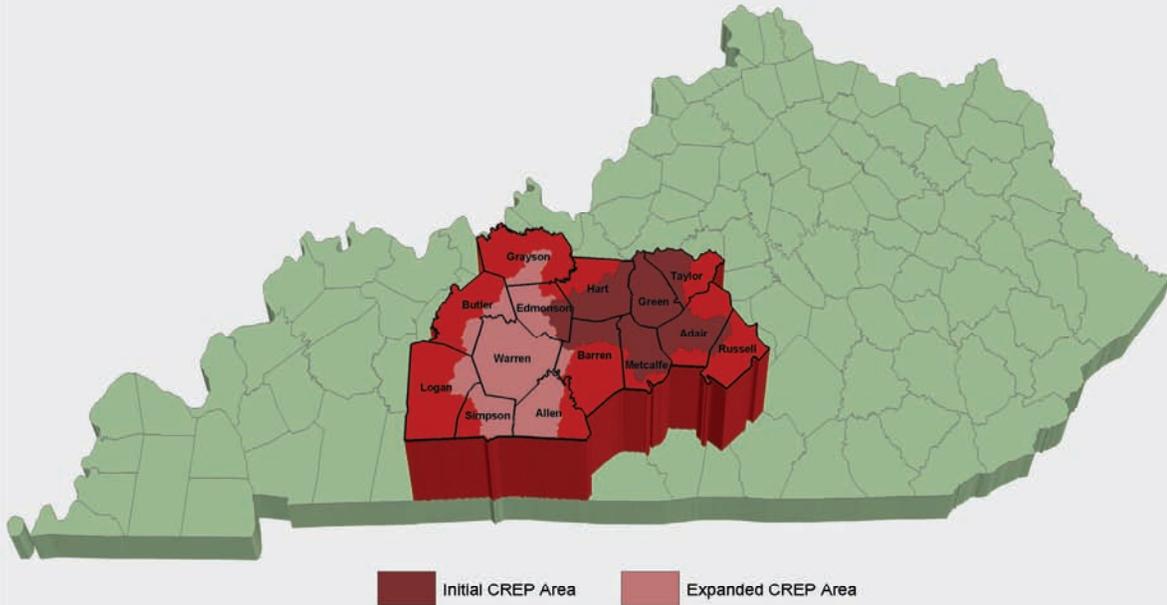
*View of Green River. Photo courtesy of TNC.*

The proposed additional area included all or parts of Allen, Barren, Butler, Edmonson, Grayson, Logan, Simpson, and Warren Counties (See map on the following page). This area contains a total of 946,101 acres, and includes counties that rank among the Commonwealth's top producers in several agricultural categories. In addition to the geographic expansion, practical changes to the program to more effectively service our local population and to protect our unique natural resources were proposed. These proposals included the addition of the CP29-Marginal Pastureland Wildlife Habitat Buffer to effectively buffer sinkholes in our predominantly pastured sinkhole plane. In addition, expanded buffer widths on this practice, and on CP22-Riparian Buffers on 3<sup>rd</sup> order and larger streams helped to more effectively meet local landscape needs.

After some discussion among USDA and partner agencies, this proposal was accepted. An amendment to our Memorandum of Agreement was drafted, and the amendment became effective on February 6, 2007.

FFY 2007 was one of change and transition. Interest early in the fiscal year continued to be consistent as it had been the previous year. As noted in last year's report, however, there were many landowners in the region anticipating the proposed changes and waiting before enrolling their land. In addition, upon learning of the impending approval of the amendment, much of our public relations activity was suspended for a short period so that any new interest in the program would have the benefits of the amended practices and work limits.

## Kentucky Green River CREP



*Aerial view of Green River Valley.*

When the amendment was approved and effective, much work went into planning of the roll-out of this expansion; including the development of timelines, development and implementation of renewed public relations efforts, planning for and conducting

training for all CREP staff both in the original and expanded area, and an actual start date to begin taking inquiries. Of course, this took some time to accomplish, and no inquiries were taken or public meetings held until our staff was ready to begin with the workload. Upon initiation of the public relations efforts, it became clear immediately that the interest generated from our changes was going to accomplish our goals. Within a couple of months of the initiation of our public relations, which included articles, radio ads, and public meetings, some county offices were receiving literally hundreds of inquiries. Of course, much of this interest was in those added counties which had not had this opportunity prior to this amendment, but many were also interested in our original counties with the programmatic changes made to better suit our land use and resources.

Staff soon began to address this tremendous workload generated by our improvements and public relations. Soon after, site visits started and contracts began to be written, FSA received information that soil rental rates would be reviewed nationally, and indications were that it was *possible* that some rates would increase. Staff continued work on our inquiries, but many landowners chose to wait for final contract approval until the new soil rental rates were incorporated. These rates were adopted around the first week of August, 2007. So the acreage enrolled in our program definitely increased during FFY 2007, however, because it took a bit of preparation time and the waiting for the rental rate increase, workload amounts dictated that most of our pending applications would not be finalized until after September 30, 2007. Our statistics for this FFY may not give an entirely clear picture of just how much interest there has been and work that has been done by our staff members.



*Brush Spring flowing into the Green River. Photo courtesy of TNC.*

The following photos are from our Green River CREP Field Day held on August 23, 2007, to kick-off our program amendments. It was estimated that over 400 people were in attendance at the Barren County farm to view enrolled acres on a CREP site, field demonstrations, and listen to guest speakers ranging from local landowners to CREP field staff to U.S. Senator Mitch McConnell.





As can be seen in the photos, this event was a tremendous success thanks to many CREP personnel that worked on the organization, public relations, and site preparation. This is indicative of the response that we have gotten on our project amendments that have greatly enhanced our program and service to our landowners.

During FFY 2007, the Green River CREP had 168 contracts approved, totaling 3,512.8 acres. Hart County did very well during the fiscal year, with more than 1,700 acres enrolled. Green and Taylor Counties also did well with regards to acreage enrolled. The Riparian Buffer (CP-22) continues to be the dominant practice for the entire program, and had a modest gain in acreage during this fiscal year. The newly added practice through our amendment, the Marginal Pastureland Wildlife Habitat Buffer (CP-29), really was dominant in acreage enrolled this past fiscal year. This is an indication of things to come as literally thousands of acres are being enrolled in this practice as this report is being written. This practice allows landowners to place much needed buffers around sinkholes in our highly karst areas. More detailed information on the program statistics are documented in the charts, graphs, and maps on the following pages.

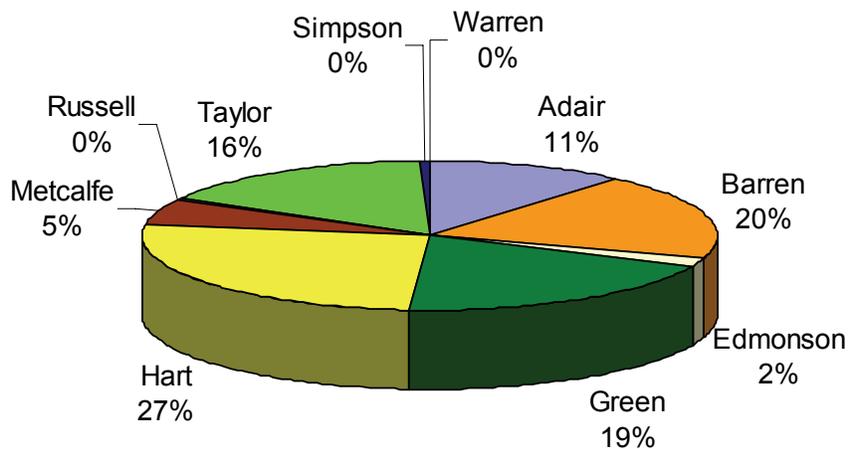


*Areas such as the sinkhole plain will greatly benefit from the newly added CP-29 practice.*

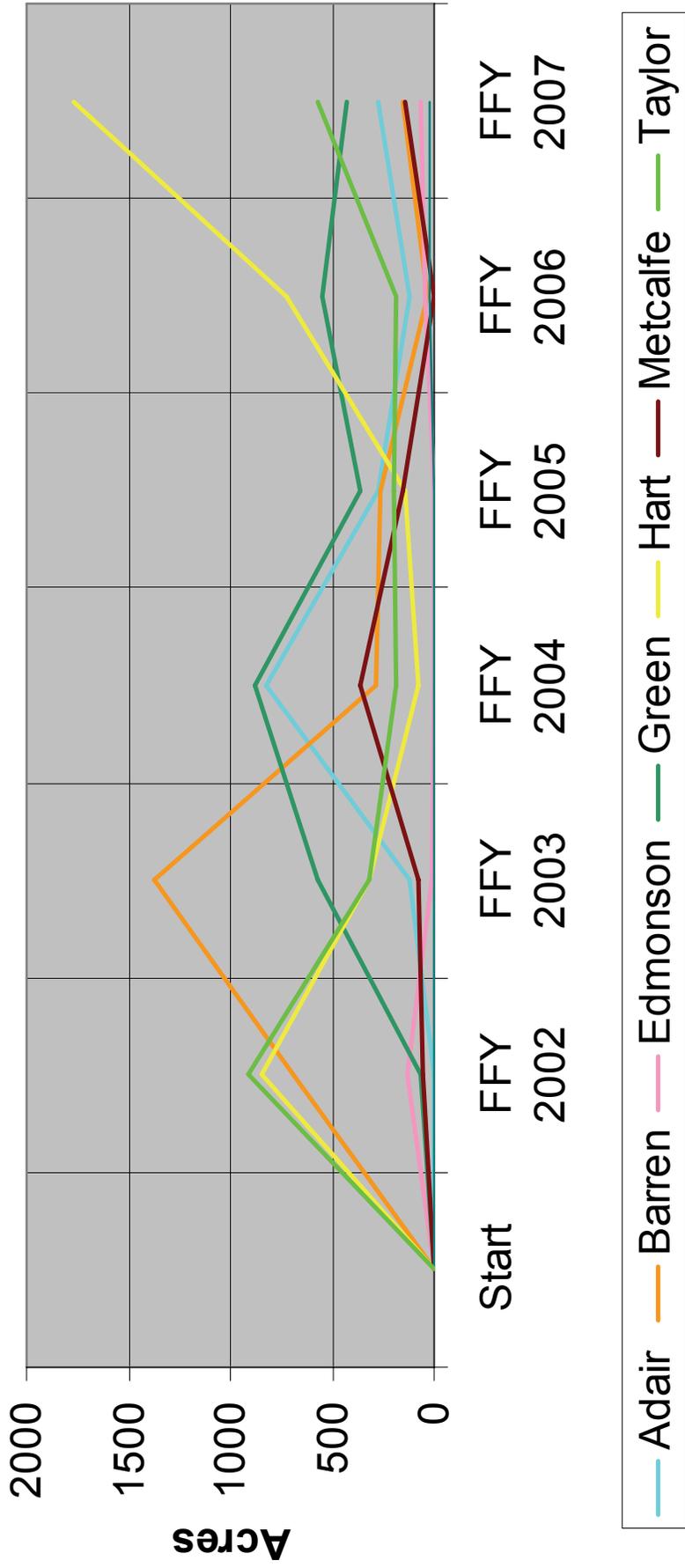
### Total Acreage per County per FFY

County	Total Acreage by FFY						Cumulative Total
	FFY 2002	FFY 2003	FFY 2004	FFY 2005	FFY 2006	FFY 2007	
<b>Original Area</b>							
Adair	4	124.6	827.6	270.1	121	271.9	1,619.20
Barren	695.3	1,375.10	282.9	267.3	32.7	150.6	2,803.90
Edmonson	129.8	16	0	0	45.3	71	262.1
Green	66.1	571.5	881.7	367.1	554.6	427	2,868.00
Hart	850.9	323.9	75.2	139.4	722.2	1,771.50	3,883.10
Metcalfe	59.9	75.5	359.6	153.6	0	145.1	793.7
Russell	0	0	0	0	22.7	25.1	47.8
Taylor	915.6	319.5	189.7	200.2	185.2	574.6	2,385
<b>Expansion Area</b>							
Allen	Program Not Available					0	0
Butler						0	0
Grayson						0	0
Logan						0	0
Simpson						73.4	73.4
Warren						2.6	2.6
<b>Total</b>						<b>2,721.60</b>	<b>2,806.10</b>

### Percentage of Approved Acreage by County

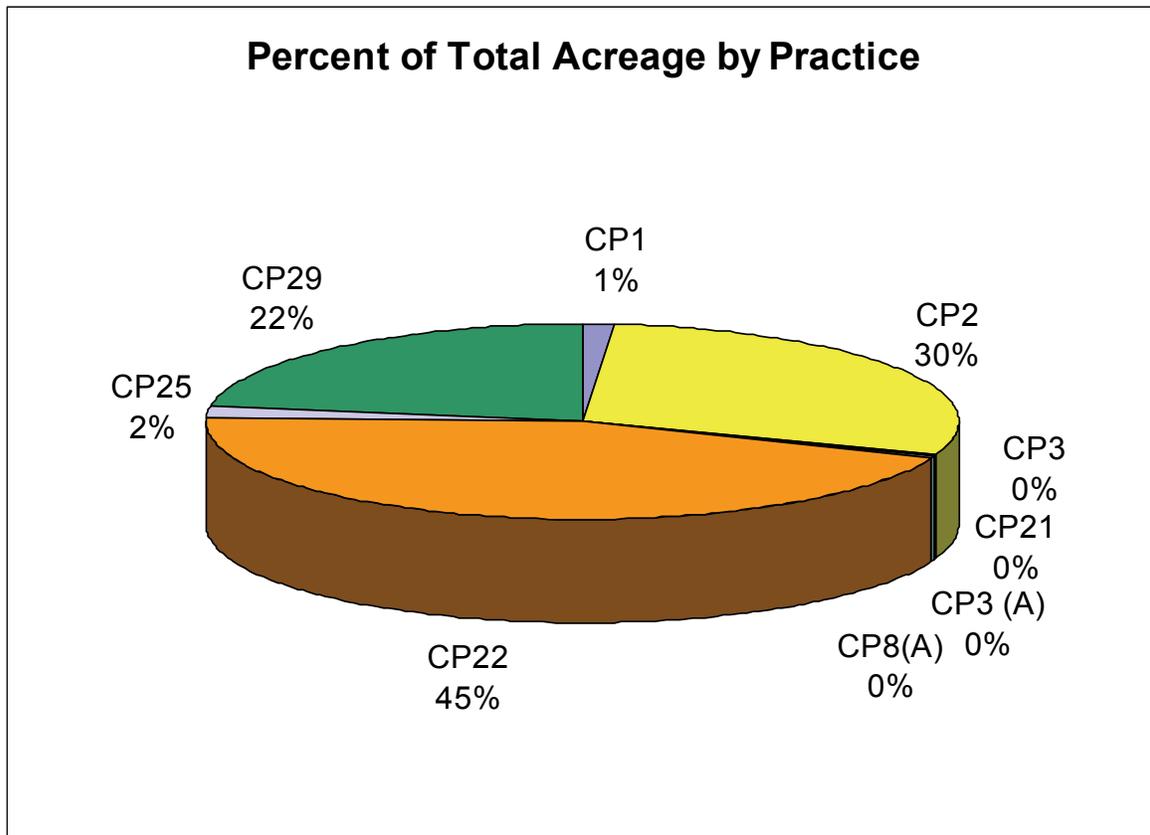


# County Trends in Acreage Approved



### Cumulative Total Acreage by Practice

Practice Code	Approved Contracts	
	Practice	Acres
CP1	Introduced Grasses/Legumes	217.9
CP2	Native Warm Season Grasses	4,305.50
CP3	Tree Planting	15.5
CP3(A)	Hardwood Tree Planting	61.1
CP8(A)	Grassed Waterway	2.6
CP21	Filter Strip	1
CP22	Riparian Buffer	6,549.90
CP25	Rare and Declining Habitat	273.3
CP29	M.P. Wildlife Habitat Buffer	3,311.80
<b>Totals</b>	<b>All</b>	<b>14738.6</b>



Approx. 319 miles of streams/rivers have been buffered in the program.

### Program Cumulative Payment Summary

County	Average Acres/Contract	Avg. Rental Rate/Acre	Incentive Paid Per Acre	Total Estimated Cost-Share	Avg. Cost-Share \$/Acre
Adair	10	\$106	\$50	\$583,274	\$360
Barren	27	\$118	\$51	\$477,286	\$170
Edmonson	32	\$104	\$41	\$28,147	\$108
Green	21	\$129	\$61	\$652,694	\$228
Hart	31	\$141	\$65	\$587,672	\$151
Metcalfe	17	\$111	\$50	\$108,823	\$137
Russell	2	\$98	\$47	\$11,447	\$239
Taylor	14	\$124	\$58	\$436,686	\$183
<b>Region</b>	<b>19</b>	<b>\$118</b>	<b>\$53</b>	<b>\$2,886,029</b>	<b>\$197</b>

### FY 2007 Payment Summary

County	Average Acres/Contract	Avg. Rental Rate/Acre	Incentive Paid Per Acre	Total Estimated Cost-Share	Avg. Cost-Share \$/Acre
Adair	10	\$130	\$62	\$99,618	\$366
Barren	17	\$146	\$70	\$35,304	\$234
Edmonson	NA	NA	NA	NA	NA
Green	31	\$156	\$76	\$110,931	\$260
Hart	34	\$187	\$91	\$322,015	\$182
Metcalfe	11	\$125	\$60	\$21,036	\$145
Russell	2	\$97	\$46	\$8,381	\$326
Taylor	18	\$136	\$67	\$115,489	\$201
<b>Region</b>	<b>17</b>	<b>\$115</b>	<b>\$52</b>	<b>\$712,774</b>	<b>\$213</b>



## II. *State and Local Partners' Financial Contribution*



### The Kentucky Chapter of The Nature Conservancy (TNC)

Richie Kessler, the Green River Director, TNC, submitted the following written summary and financial contribution chart of TNC's activity during FFY 2007:

#### **The Nature Conservancy Green River CREP Activity Report**

TNC continues to be an active partner in the Green River CREP program. We continue to offer assistance to local USDA offices and are constantly promoting the program locally in addition to offering permanent conservation easements on riparian buffers.

#### **CREP Promotion and Landowner Assistance**

TNC has conducted dozens of landowner visits to promote the program and assist landowners in enrollment. We hired on contract Mr. Terry Partin, who recently retired as FSA CED for Adair County. Terry has conducted numerous landowner visits in FY 07. CREP Public Service Announcement's continue to run on local radio stations within the CREP area. One station alone has 28,000 listeners in the CREP area. TNC staff continue to assist in general program promotion and in the field.

#### **CREP Easements**

Near the end of FFY 07 the CREP easement value was adjusted from \$650 to \$825 per acre. As a result interest has been high. Nevertheless, CREP easements were recorded on 14 properties covering nearly 300 acres and permanently protecting over one mile of river frontage. CREP easements include riparian buffers and associated CP-29 acreage on the same farm. Cumulative totals for acreage protected by the CREP easement are 818 acres and 16 linear miles of stream bank permanently protected.

## Financial Summary

For FFY October 1, 2006 – September 30, 2007:

- Administrative Costs (including salaries/benefits, travel, contracts, and indirect costs): \$48,660.11
- Easement Acquisitions: \$160,027.50
- Grand Total Expenditures for Period: \$208,687.61

### *Cumulative Grand Totals through Sept. 30, 2007:*

- Administrative (including salaries/benefits, travel, contracts, and indirect costs):  
○ \$293,432.11
- Easement Acquisitions Cumulative Through Sept. 30, 2006: \$447,514.75
- Estimated Grand Total Cumulative Expenditures through Sept. 30, 2006: \$740,946.86

## Kentucky CREP - TNC Match Commitment

TNC Center 1170133800

Financial Update **October 1, 2006 - September 30, 2007**

<b>Budget Categories</b>	<b>Budget 7/1/06-6/30/08</b>	<b>Grand Total Federal FY07</b>
Salaries/Benefits	50,000	24,387.87
Travel	7,800	4,119.26
Supplies	800	0.00
Equipment	0	0.00
Contracts	40,000	10,073.22
Other	2,369	875.60
<b>Subtotal</b>	<b>100,969</b>	<b>39,455.95</b>
Indirect Costs @ 23.8%	<b>24,031</b>	<b>7,783.39</b>
Indirect Costs @ 23%		<b>1,420.77</b>
<b>Total</b>	<b>125,000</b>	<b>48,660.11</b>
In-kind donations	0	0.00
Land acq. (ease'ts)*	375,000	159,547.50
Land acq. - Other	0	480.00
<b>Grand Total</b>	<b>500,000</b>	<b>208,687.61</b>

<u>*Easements:</u>	<u>Center:</u>	<u>Amount:</u>	<u>Other:</u>	
Rainwater	2170139038-0031	13,325.00		
Parrish Moss	2170139038-0049	12,090.00		
Foley	2170139038-0050	15,990.00		
Partin	2170139038-0051	3,575.00		
Wisdom	2170139038-0052	4,225.00		
R Wilson	2170139038-0053	1,560.00		
Landis	2170139038-0054	7,475.00		
Lattin	2170139038-0055	5,915.00		
Dale Kessler	2170139038-0056	4,095.00	160.00	EA
Sullivan & Wilkerson	2170139038-0062	7,345.00	160.00	EA
Sullivan Larry	2170139038-0063	16,575.00	160.00	EA
Tommy Hines	2170139038-0069	29,510.00		
Joe Herron	2170139038-0070	32,505.00		
Stepheh Hale	2170139038-0071	5,362.50		

Note: Indirect costs 7/1/06 - 6/30/07 = 23.8%  
 Indirect costs 7/1/07 - 9/30/07 = 23%

Prepared  
 10/25/07



*Dr. Richie Kessler, TNC, speaks at CREP Expansion Kick-Off Event*

## Kentucky Department of Fish and Wildlife Resources (KDFWR)



The Kentucky Department of Fish and Wildlife Resources has been a key partner in field implementation of the Green River CREP. KDFWR has contributed man-hours from several field positions, including KDFWR/NRCS Liaisons, private lands biologists, and three CREP Biologists. KDFWR personnel adopted many duties working both directly with landowners and with NRCS District Conservationists. These biologists also helped with the physical establishment procedures, such as on site guidance and delivery of seed drills, spray equipment, etc. These biologists also initiated landowner contacts, and coordinated and/or assisted with field days and informational meetings. A rough estimate of more than 817 man- hours were worked on CREP by the Private Lands Biologist and NRCS Liaison positions alone. The four CREP Biologists (two of which were vacant for much of the year), which CREP is their primary job function, worked more than 3,218 man-hours.

The above referenced CREP Biologists, which are supervised by KDFWR in partnership with NRCS (and some funding from USFWS), has greatly aided in the following tasks for this program: assisting with program promotion, planning, contract writing and modifications, on-site measurements and practice layout; site visits during practice installation; practice evaluation, final and annual status reviews; providing technical guidance on vegetation plantings which includes site preparation, planting, and post-planting management to ensure successful stand establishment; and assisting District Conservationists with writing and/or modifying participants' contracts.

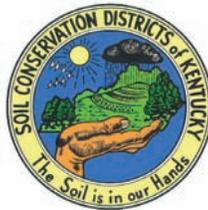
Additional costs to KDFWR not covered by the above referenced activities are as follows: cost shared portion of funding for CREP Coordinator position - \$17,500; cost share provided to landowners for implementation/management of CREP practices - \$42,961. These funds were distributed within the region as follows:

PRACTICE	COST SHARE	COUNTY	COST SHARE
Cool Season Grasses	\$145.50	Adair	\$12,252.81
Fencing	\$5,129.90	Barren	\$999.00
Fescue Eradication	\$219.00	Green	\$20,046.95
Legumes	\$965.31	Metcalfe	\$1,954.50
Mineral Licks	\$999.00	Russell	\$1,071.00
Mowing	\$15,492.00	Taylor	\$6,597.36

Native Warm Season Grasses	\$10,010.18
Other	\$3,508.25
Prescribed Burning	\$427.50
Shallow Water Wetlands	\$2,948.00
Soil Amendments	\$52.00
Shrubs & Trees	\$2,074.98
Streamside Management	\$950.00
<b>TOTAL</b>	<b>\$42,921.62</b>



*KDFWR Biologist on native warm-season grass seed drill*



Kentucky Division of Conservation  
(KDOC)

The Kentucky Division of Conservation is the state contact agency for the Green River CREP. The Division administers the financial portion of CREP (state cost share and incentive payments), and works closely with local conservation districts and partner agencies in the promotion and administration of the program. In addition, the Green River CREP Coordinator works through, and is primarily funded by, the KDOC. The following is payment information on state contributions to CREP contracts:

## Green River CREP

### State Expenditures on Program Cost Share & Incentive Payments

COUNTY	FY2003	FY2004	FY2005	FY2006	FY2007	Total
Adair	\$ 0.00	\$ 48,696	\$ 28,939	\$ 58,710	\$ 145,093	\$ 281,438
Barren	\$ 209,177	\$ 99,662	\$ 18,799	\$12,561	\$ 9,859	\$ 350,058
Edmonson	\$ 10,688	\$ 0.00	\$ 0.00	\$0.00	\$ 4,669	\$ 15,357
Green	\$ 3,758	\$ 48,788	\$ 108,997	\$ 98,124	\$ 134,420	\$ 394,086
Hart	\$ 79,947	\$ 57,508	\$ 21,433	\$ 3,829	\$ 36,220	\$ 198,937
Metcalfe	\$ 5,541	\$ 26,670	\$ 14,335	\$ 52,931	\$ 11,492	\$ 110,969
Russell	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 3,255	\$ 3,255
Taylor	\$ 94,176	\$ 88,634	\$ 55,743	\$ 50,091	\$ 18,079	\$ 306,723
<b>Total</b>	<b>\$ 403,287</b>	<b>\$ 369,958</b>	<b>\$ 248,246</b>	<b>\$ 276,246</b>	<b>\$ 363,087</b>	<b>\$ 1,660,824</b>



*CREP Native Warm-Season Grass Field*



## Kentucky Division of Forestry (KDOF)

The Kentucky Division of Forestry has been primary in providing technical assistance and guidance with tree planting practices within the Green River CREP. In addition to the tree planting specific practices (CP-3A), all riparian buffers (CP-22) are required to have a minimum of 50 feet or 100 feet of trees planted (depending on stream order) adjacent to the water body. In addition to technical guidance and assistance, KDOF personnel have also assisted landowners with tree seedling orders, most of which are through our State nursery.

# Federal Green River CREP Matrix

Federal CREP									
Practice Code	Practice Description	Land Eligibility	Crop History	Base C/S	PIP	SIP Acres X Full Years (not=10yrs) X \$0	SRR Incentive (ac/yr) % x SRR	Maintenance Payment ac/yr	Maintenance w/fence //and water ac/yr
CP1	Introduced Grasses and Legumes	HEL	Yes	50%			50%	\$4	
CP2	Native Grasses	HEL	Yes	50%			75%	\$4	
CP3	Tree Planting	HEL	Yes	50%			100%	\$4	
CP3A	Hardwood Tree Planting	HEL	Yes	50%			100%	\$4	
CP4B	Permanent Wildlife Habitat Corridors	HEL	Yes	50%			75%	\$4	
CP4D	Permanent Wildlife Habitat	HEL	Yes	50%			75%	\$4	
CP8A	Permanent Grass Waterways	NA	Yes	50%	40%	X	75%	\$4	
CP9	Shallow Water Areas for Wildlife	NA	Yes	50%	40%		75%	\$4	
CP10	Grass Cover-already established	HEL	Yes	0			50%	\$4	
CP11	Tree Cover –already established	HEL	Yes	0			50%	\$4	
CP12	Wildlife Food Plots	HEL	Yes	0			50%	N	
CP15A	Contour Grass Strips	NA	Yes	50%	40%		50%	\$4	
CP21	Filter Strips	NA	Yes	50%	40%	X	75%	\$4	\$8/\$9
CP22	Riparian Buffers	NA	Yes or MP	50%	40%	X	100%	\$6	\$8/\$9
CP23	Wetland Restoration	Wetland	Yes	50%	**	**	100%	\$4	
CP23A	Wetland Restoration Non-Floodplain	NHE	Yes	50%	**	**	100%	\$4	
CP25	Rare and Declining Habitat	HEL	Yes	50%			100%	\$4	
CP29	Marginal Pastureland Wildlife Habitat Buffer	NA	MP	50%	40%	X	100%	\$4	\$8/\$9

## Green River CREP

### State CREP Cost Share/Incentive Matrix

State Practice Code	Federal Practice Code or Practice Description	State Cost Share Rate	State Incentive Rate	State Incentive Rate w/ Easement Option
KREP1	CP1	25%	25%	75% *
	CP2	25%	25%	75% *
	CP3	25%	25%	75% *
	CP3A	25%	25%	75% *
KCREP2	CP8A	25%	25%	75% *
	CP15A	25%	25%	75% *
	CP21	25%	25%	75% *
	CP22	25%	25%	75% *
	CP29	25%	25%	75% *
KCREP3	Livestock Water System	25%	25%	75% *
KCREP4	Fence	25%	25%	75% *
KCREP5	Stream Crossing	25%	25%	75% *

\* Incentive available if permanent easement is offered on noted practice, and in watershed of federal contract.

- Cost share and incentive payments combined cannot exceed \$7,500 per practice per state fiscal year.
- Each applicant or operation is limited to \$20,000 total per state fiscal year, not to exceed \$40,000 in any two consecutive program years.

### III. Monitoring and Evaluation

Western Kentucky University is responsible for the organization and implementation of a comprehensive monitoring and evaluation plan to determine the success of program goals. This effort is funded through various grant sources, and is being implemented within the watershed. Upon the drafting of this report, and after several requests, WKU has failed to submit required information on this topic.

### IV. Recommendation

Partner Listing:

USDA Farm Service Agency  
USDA Natural Resources Conservation Service  
The Office of the Governor  
The Kentucky General Assembly  
The Kentucky State Nature Preserves Commission  
The Kentucky Soil and Water Conservation Commission  
Kentucky Division of Conservation  
Kentucky Division of Forestry  
Kentucky Division of Water  
The Kentucky Department of Fish and Wildlife Resources  
The Nature Conservancy  
Mammoth Cave National Park  
Kentucky's Soil and Water Conservation Districts  
Western Kentucky University

Thanks to the partner agencies and organizations for their commitment to this project and to the landowners and natural resources of this unique area. Also, thanks to those partner agency personnel that supplied information for the completion of this report.

This has been a year of transition within the Green River CREP. The amendment that has been in the development stages for some time was submitted and approved. This amendment brought changes that were sorely needed for the program to truly be effective and utilized within our local area with its unique natural resources. Although FFY 2007 has been our most successful with regards to official acreage enrolled, the actual number from this year seems low to those of us that have worked this program. This is the case because of reasons described earlier in this document. As this report is being completed, the cumulative acreage enrolled is up to more than 30,000, with numerous inquiries still

not serviced. It is estimated that when all current inquiries are completed, we may have more than 70,000 acres enrolled into the program. Despite not having high acreage officially enrolled in FFY 2007, the expansion counties have done much quality work, and are currently very successful in enrolling numerous acres. As was indicated in our proposal for the amendment, the combination of our unique karst landscape, along with our land use characteristics, have made the incorporation of the CP-29 crucial for program success.

With this drastically increased interest and work load, partner agencies have reacted positively with USDA (FSA and NRCS) creating CREP teams made up of field personnel from all partner agencies, to be assigned to areas with extraordinarily heavy workloads. In addition, one very evident positive for the geographic expansion was that partner agency staff had experience with the program; thus, when the program was brought into a new area, we were much better prepared and organized with regards to planning and public relations efforts. The difference in the quality and organization of outreach from initial program roll-out to this expansion were substantial. It is widely thought that the Green River CREP is well on its way to achieving program acreage goals, possibly within the next 1-2 years.

In addition to our accomplishments already documented in this report, the Kentucky Green River CREP Partnership has received the prestigious 2007 Two Chiefs' Partnership Award. This award, which is given by the U.S. Forest Service and USDA Natural Resource Conservation Service, recognizes outstanding partnerships in forest conservation work among USDA agencies of NRCS and FSA, US Forest Service, the state agencies of forestry, conservation, fish and wildlife and water, along with the private sector which includes The Nature Conservancy, and the 14 local conservation districts.