

Annual Report – Calendar Year 2012
Kentucky Wetland and Stream Fee-In-Lieu-Of Mitigation Program

In Accordance with
“Modification Number One of the Agreement Concerning In-Lieu Mitigation Fees
between the U.S. Army Corps of Engineers and
the Kentucky Department of Fish and Wildlife Resources”
LRL-2010-325

February 2013

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Introduction

This report provides information on the Kentucky Wetland and Stream Mitigation “Fee In-Lieu of” (FILO) Program administered out of the Kentucky Department of Fish and Wildlife Resources (KDFWR) for the calendar year 2012. This is the first annual report under the modified agreement (Instrument) between the U.S. Army Corps of Engineers (USACE) and KDFWR (USACE, 2011). The report includes program, credit, financial and project status, staffing, and activities performed during 2012 to fulfill the reporting requirements of the Instrument. Throughout this report, the point (January 2012) at which the FILO program began operating under the Instrument is referred to as the “Transition.”

In July 2000, the Kentucky Legislature passed KRS 150.255, which established The Kentucky Wetland and Stream Mitigation Fund. The KDFWR Wetland and Stream Mitigation Program manages this fund to provide a consistent and successful approach to fulfill compensatory mitigation requirements associated with Clean Water Act Section 404 and Section 401, which are administered respectively by the USACE and the Kentucky Division of Water (KDOW). A Section 404 permit from the USACE and a Section 401 Water Quality Certification from KDOW are required for activities resulting in the permanent loss of streams or wetlands that require mitigation. The intent of the mitigation is to compensate for the permanent loss of aquatic functions within a defined watershed or regional area.

One option for 404 permit applicants is to pay a fee to an entity that is approved by the USACE to conduct the mitigation in-lieu of performing the mitigation themselves. This method of mitigation is termed “in-lieu fee mitigation.” The Kentucky Wetland and Stream Mitigation Fund sponsors an in-lieu fee mitigation program that is supported by sales of mitigation credits to Section 404 permit applicants to satisfy regulatory requirements. The monies generated are used to implement projects that improve degraded streams and wetlands throughout the Commonwealth. The majority of restoration and enhancement projects are implemented on private lands; therefore, the success of the program is largely dependent on cooperation and development of partnerships with private landowners. The program also has the alternative of preserving high quality aquatic resources.

The USACE has agreements with two in-lieu fee programs (or sponsors) in Kentucky: Northern Kentucky University (NKU), servicing the northern Kentucky region, and KDFWR for the remainder of the Commonwealth (Figure 1). The agreements between the sponsors and the USACE ensure that mitigation is completed, is sufficient to compensate for losses, and adheres to applicable regulations and guidelines. By accepting in-lieu fee payments, the sponsor is assuming responsibility to provide compensatory mitigation pursuant to the terms of the agreement established with the USACE.

The Instrument defines the roles of an Interagency Review Team (IRT) of resource and regulatory agencies composed of the USACE, KDOW, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (USEPA), and KDFWR. The function of the IRT is to review and comment on potential projects, monitoring reports, remedial management measures, credit releases, and instrument modification. The USACE is the chair of the IRT and is responsible for consulting with its members to provide oversight of mitigation programs.

Although there are four USACE districts in Kentucky (Memphis, Nashville, Huntington, and Louisville), the Louisville District is the Lead District for communicating with the sponsor and coordinating with the IRT on issues related to the Instrument, while the individual districts are responsible for specific issues with projects under their jurisdiction. KDFWR participates in the IRT for programmatic activities at a project level for the NKU agreement.

The Instrument requires that all KFDWR in-lieu fee projects be permanently protected through conservation easements, the purchase of lands with deed restrictions, or long-term management plans on public properties such as U.S. Forest Service National Forest lands. For private lands, this involves identifying landowners willing to cooperate with the sponsor to donate or sell a Conservation Easement or sell the property fee-simple. Conservation easement boundaries are typically at least 50 feet on each bank, although older projects were often of less width. Recent projects also have tended to be of greater length, usually several thousand feet, in order to achieve an economy of scale with construction costs and to lower costs per credit.

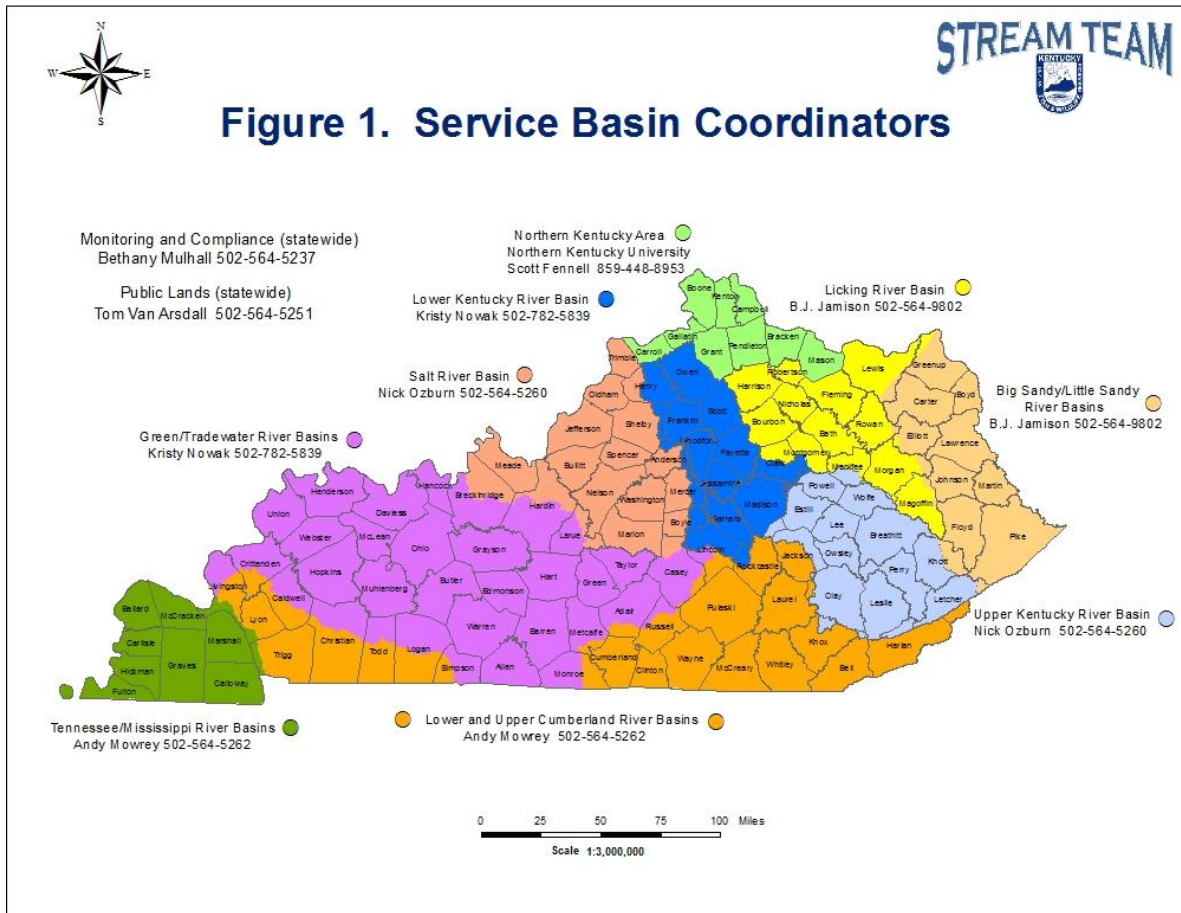
Updated Agreement

The Instrument went into effect on January 13, 2012 by Public Notice from the USACE. Its purpose is to comply with the 2008 Final Mitigation Rule (USACE, 2008). The Instrument: 1) delineates service areas into ten units by dividing upper and lower reaches of three major river basins (Licking, Kentucky, and Cumberland) based on mitigation credit units; Eastern Kentucky Stream Assessment Protocol (EKSAP) and Ecological Integrity Units (EIUs) are used in the Eastern Kentucky Coalfield physiographic region and Kentucky Assessment Protocol (KAP) and Adjusted Mitigation Units (AMUs) are used in the remaining areas of the Commonwealth; 2) revises the service area boundary between the two in-lieu fee programs in northern Kentucky; 3) sets forth frameworks in each of ten service areas for prioritizing projects; 4) updates the requirements for mitigation plans, which must be submitted with each project; 5) transitions all funds collected under the previous agreement to a credit-based fee schedule; 6) establishes a 3-year time frame from the time fees are received for beginning construction; and 7) establishes an accounting framework for compliance based on advance credits and released credits.

The FILO program has already been in compliance with many of the 2008 Final Mitigation Rule, including: 1) description of service areas; 2) accounting procedures; 3) statement of legal responsibility of in-lieu fee program; 4) implementing permanent protection; and 5) development of mitigation plans for each project.

FILO Staff and Basin Assignments

Another biologist, Kristy Nowak, was hired in May 2012 to improve the program's ability to find and oversee projects. The Internal Policy Analyst position was vacated in September 2012 (but was filled in January 2013). Thus, at the end of 2012, the FILO staff comprised seven individuals: Rob Lewis, P.E. and biologists Nick Ozburn, Andy Mowrey, B.J. Jamison, Bethany Mulhall, Tom Van Arsdall, and Kristy Nowak. Staff are assigned service areas comprised of major watersheds or public lands (Figure 1). (For outreach purposes, FILO staff was named "The Stream Team.")



Landowner Contacts and Potential Project Site Visits

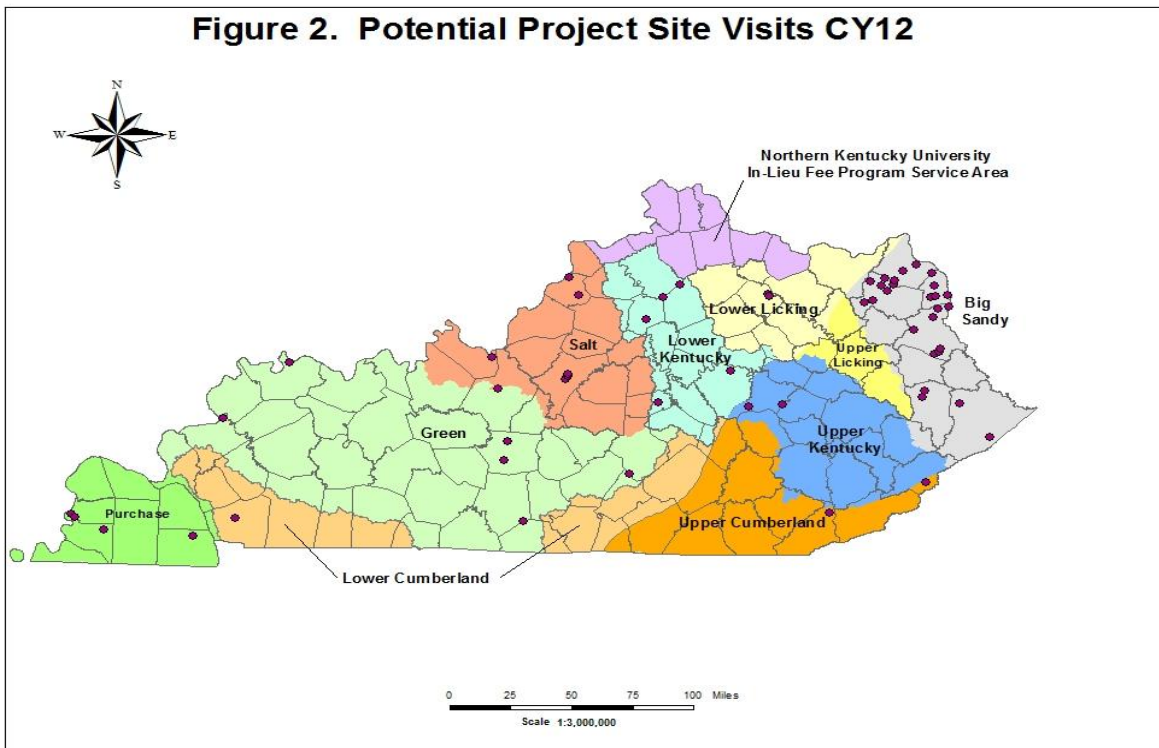
Because of the large amount of available funds, a major effort during the year was to follow up with the outreach in the Big Sandy Service Area with field visits to sites culled from landowner contacts resulting from a mass mailing, newspaper articles, and radio spots described in the previous annual report (KDFWR, 2012). The outreach elicited a large response from interested landowners, with approximately 200 phone calls and 50 emails received by KDFWR Stream and Wetland Mitigation Program staff. These initial contacts were ranked on factors such as amount of available stream length for mitigation, mineral right ownership, and landowner willingness to accept the conservation easement. Based on these and other factors, numerous landowners were selected for site visits that were conducted in early 2012. The outreach resulted in three new projects in the Big Sandy Service Area.

FILO staff also assessed a large tract in Elliott County that holds promise if mineral rights issues can be resolved, and follow-up was conducted on several potential projects initially identified in previous reporting periods. The most significant of these were Goose Creek in the upper Green River Service Area, Blue Spring Creek in the Lower Cumberland River Service Area, and Farmers Creek in the lower Green River Service Area.

Potential project site visits are listed in Table 1 and shown on Figure 2.

Table 1. Potential Project Site Visits CY12		
<u>Stream</u>	<u>County</u>	<u>Service Area</u>
Poor Fork Cumberland River	Letcher	Upper Cumberland
Abott Creek	Floyd	Big Sandy
Pawley Creek	Hardin	Salt River
Clarks Run	Boyle	Lower Kentucky
Green River	Hart	Green River
East Fork Otter Creek	Madison	Lower Kentucky
Skaggs Creek	Barren	Green River
Wetland	Henderson	Green River
Eagles Creek and Rays Fork	Scott	Lower Kentucky
Red Lick Creek	Madison	Lower Kentucky
Little Cypress Creek and Bugg Creek	Hickman	Jackson Purchase
Otter Creek	Meade	Salt River
Caney Fork and Cranesnest Branch	Pike	Big Sandy
Muddy Branch Tributary	Greenup	Big Sandy
Whites Creek	Boyd	Big Sandy
Minors Creek	Owen	Lower Kentucky
East Fork Little Sandy River	Boyd	Big Sandy
Marsh Run	Boyd	Big Sandy
Bear Creek	Boyd	Big Sandy
Brushy Fork and Tributaries	Lawrence	Big Sandy
Bloomer Branch	Boyd	Big Sandy
Little Cat Fork	Lawrence	Big Sandy
Abb Creek	Lawrence	Big Sandy
Steward Branch and Tribs	Lawrence	Big Sandy
Carl Stevens Property	Carter	Big Sandy
Tygarts Creek	Carter	Big Sandy
Georges Creek (Bayes)	Lawrence	Big Sandy
Georges Creek (Castle)	Lawrence	Big Sandy
Georges Creek (Hayes)	Lawrence	Big Sandy
UT Raccoon Creek	Greenup	Big Sandy
Carla Abrams Property	Greenup	Big Sandy
wetland	Carlisle	Jackson Purchase
Charles Ray Property	Carlisle	Jackson Purchase
Caney Branch	Crittenden	Green River
Buffalo Creek	Carter	Big Sandy
Beech Fork	Nelson	Salt River
Town Branch and tributaries	Nelson	Salt River

<u>Stream</u>	<u>County</u>	<u>Service Area</u>
Ross Creek	Lee	Upper Kentucky
South Fork Curry	Oldham	Salt River
Eighteenmile Creek	Oldham	Salt River
E Fk Little Sandy River	Lawrence	Big Sandy
Barbara King Property	Carter	Big Sandy
Doug Martin Property	Carter	Big Sandy
Lost Creek	Carter	Big Sandy
Kermit Lambert Property	Carter	Big Sandy
Brushy Creek	Carter	Big Sandy
Goose Creek	Casey	Green River
Blue Spring Creek	Trigg	Lower Cumberland
Meyers St Farm (Licking R and	Nicholas	Lower Licking
Letcher Smoot properties	Nicholas	Lower Licking
Left Fork Middle Creek	Floyd	Big Sandy
Cane Creek	Pike	Big Sandy
Bacon Creek	Hart	Green River
Jonathan Creek	Calloway	Jackson Purchase
Stoney Fork	Bell	Upper Cumberland



Credit Costs and Status

Transition funds were converted to credits at the rate applicable at that time, which was \$610 in the EIU region and \$215 in the AMU region (Table 2). This resulted in 27,315.0 EIUs, 36,549.0 stream AMUs, and 33.8 wetland AMUs that were considered as previously sold at the beginning of CY12. The Instrument established 240,000 advance stream credits in each service area to accommodate potential geographic changes in mitigation demand, primarily associated with highway projects. Also, 100 wetland AMU credits were established in each service area other than the Green and Purchase service areas, where 200 wetland AMU credits were provided. The transitioned credits were subtracted from the advance credits to arrive at the number of advance credits available at the beginning of CY12.

During the year, the cost per EIU in the Big Sandy Service Area was increased to \$650 and the cost per stream AMU was increased to \$240 on March 1st and 15th, respectively. Another 8,746.4 EIUs, 32,774.8 stream AMUs and 15.4 wetland AMUs were sold by FILO in CY12. No credits were released during the year. Advance credit balances for streams and wetlands are shown for each service area in Table 3, and the individual credit sales and associated information are presented in Appendix A.

<u>Service Area</u>	<u>Cost/EIU</u>		<u>Cost/AMU</u>		<u>Cost/Wetland Acre</u>
	<u>Transition</u>	<u>End of CY12</u>	<u>Transition</u>	<u>End of CY12</u>	<u>Transition/End of CY12</u>
<u>EIU Region</u>					
Big Sandy	610	650			30,000
Upper Licking	610	610			30,000
Upper Kentucky	610	610			30,000
Upper Cumberland	610	610			30,000
<u>AMU Region</u>					
Lower Licking			215	240	30,000
Lower Kentucky			215	240	30,000
Lower Cumberland			215	240	30,000
Green			215	240	30,000
Salt			215	240	30,000
Purchase			215	240	30,000

Table 3. Advance Credit Balances							
EIU Region							
	<u>Big Sandy</u>	<u>Upper Kentucky</u>	<u>Upper Licking</u>	<u>Upper Cumberland</u>			<u>Total</u>
Advance Credits	240,000.0	240,000.0	240,000.0	240,000.0			
Credits at Transition	23,103.0	0.0	258.0	3954.0			27,315.0
Credits Sold CY12	2,376.3	2,349.9	838.0	3,182.2			8,746.4
Credits Released							
Reserve Released Credits							
Advance Stream EIU Balance	214,520.7	237,650.1	238,904.0	232,863.8			
AMU Region							
	<u>Lower Kentucky</u>	<u>Lower Licking</u>	<u>Lower Cumberland</u>	<u>Green</u>	<u>Salt</u>	<u>Purchase</u>	
Advance Credits	240,000.0	240,000.0	240,000.0	240,000.0	240,000.0	240,000.0	
Credits at Transition	0.0	11,419.0	6,977.0	14,251.0	3,883.0	19.0	36,549.0
Credits Sold in CY12	807.0	11,012.0	8,893.0	10,724.6	1,338.2	0.0	32,774.8
Credits Released							
Reserve Released Credits							
Advance Stream AMU Balance	239,193.0	217,569.0	224,130.0	215,024.4	234,778.9	239,981.0	
Wetlands							
	<u>Big Sandy</u>	<u>Upper Kentucky</u>	<u>Lower Kentucky</u>	<u>Upper Licking</u>	<u>Lower Licking</u>		
Advance Credits	100.0	100.0	100.0	100.0	100.0		
Credits at Transition	3.6	0.0	1.8	0.0	1.0		6.4
Credits Sold in CY12	2.4	0.0	1.0	0.0	0.0		3.4
Credits Released							
Reserve Released Credits							
Advance Wetland AMU Balance	94.0	100.0	97.2	100.0	99.0		
Wetlands							
	<u>Upper Cumberland</u>	<u>Lower Cumberland</u>	<u>Green</u>	<u>Salt</u>	<u>Purchase</u>		
Advance Credits	100.0	100.0	200.0	100.0	200.0		
Credits at Transition	2.3	10.0	10.3	2.5	2.3		27.4
Credits Sold in CY12	0.4	4.2	7.4	0.0	0.0		12.0
Credits Released							
Reserve Released Credits							
Advance Wetland AMU Balance	97.3	85.8	182.3	97.5	197.7		

Program Financial Status

At the beginning of CY12, there was more than \$19M of transitioned project funds, mostly in the Big Sandy Service Area (Table 4). All fees received in the Upper Kentucky River Service Area had been allocated to projects, and less than \$100,000 was available in the Lower Kentucky and Purchase service areas. During the year there was a fairly even distribution of receipts. The Lower Licking, Green, Lower and Upper Cumberland, Upper Kentucky and Big Sandy service areas each received from \$1.0M to \$2.6M (Table 4). The Purchase Service Area had no receipts. When taking both the CY12 receipts and project funds available at the Transition, the Big Sandy Service Area with \$12.1M had by far the largest number of funds available for projects.

Service Area	CY 12 Total Receipts	CY 12 Receipts to Admin (10%)	CY 12 Receipts to Reserve (10%)	CY 12 Receipts to Projects (80%)	Project Funds Available w/ Instrument Jan 2012	Total Project Funds in CY12
Big Sandy	1,046,161	104,616	104,616	836,929	10,649,228	12,132,532 ^a
Upper Kentucky	1,433,372	143,337	143,337	1,146,698	0	1,146,698
Lower Kentucky	224,660	22,466	22,466	179,728	40,425	220,153
Upper Cumberland	1,951,884	195,188	195,188	1,561,507	1,859,495	3,421,002
Lower Cumberland	2,037,270	203,727	203,727	1,629,816	1,349,580	2,979,396
Upper Licking	510,895	51,090	51,090	408,716	117,934	526,650
Lower Licking	2,642,760	264,276	264,276	2,114,208	1,863,350	3,977,558
Salt	321,096	32,110	32,110	256,876	683,310	940,186
Green	2,630,370	263,037	263,037	2,104,296	2,529,296	4,633,592
Purchase	0	0	0	0	54,815	54,815
Total	12,798,468	1,279,847	1,279,847	10,238,774	19,147,433	30,032,582

^aIncludes \$646,375 of excess funds from Laurel Cr Gorge preservation project returned to service area

As in previous years, the majority of receipts in CY12 came from transportation projects, with mining activities contributing the second highest amount (Table 5).

Table 5. FILO Receipts by Source - CY12

<u>Source</u>	<u>Receipts (\$)</u>	<u>Percentage of Total</u>
KY Transportation Cabinet	\$ 8,928,534	72.5
Mining	\$ 2,335,618	19.0
Development	\$ 358,819	2.9
Municipal	\$ 458,228	3.7
Other	\$ 230,999	1.9

Project Fund Status

Table 6 shows: 1) total project funds received in each of the ten service areas by the end of CY12 (see last column of Table 4); 2) funds allocated to “approved” projects during the year; and 3) funds remaining (unallocated) at the end of the year. Total unallocated funds are about \$23.1 M, of which about \$1.2M will go toward wetland mitigation. The vast majority of unallocated funds are in the Big Sandy service area (\$8.8M), followed by the Green (\$4.6M), the lower Cumberland (\$3.0M) and the Lower Licking (\$2.3M) service areas. The Salt, Upper Licking, Lower Kentucky, and Purchase service areas each had less than \$1M of unallocated funds at the end of CY12.

Table 6. Allocated and Unallocated Project Funds for Stream and Wetland, by Service Area (\$)							
<u>Basin</u>	<u>Stream</u>			<u>Wetland</u>			<u>Total Unallocated</u>
	<u>Project</u>	<u>Allocated</u>	<u>Unallocated</u>	<u>Project</u>	<u>Allocated</u>	<u>Unallocated</u>	
Big Sandy	11,919,815	3,302,538	8,617,277	212,717	0	212,717	8,829,994
Upper Licking	526,650	0	526,650	0	0	0	526,650
Lower Licking	3,955,499	1,751,640	2,203,859	22,059	0	22,059	2,225,918
Upper Cumberland	3,361,168	1,885,950	1,475,218	59,834	0	59,834	1,535,052
Lower Cumberland	2,654,592	0	2,654,592	324,804	0	324,804	2,979,396
Upper Kentucky	1,146,698	0	1,146,698	0	0	0	1,146,698
Lower Kentucky	154,960	0	154,960	65,193	0	65,193	220,153
Salt	883,059	0	883,059	57,127	0	57,127	940,186
Green	4,205,423	0	4,205,423	428,169	0	428,169	4,633,592
Purchase	3,002	0	3,002	51,813	0	51,813	54,815
Total	28,810,866	6,940,128	21,870,738	1,221,716	0	1,221,716	23,092,454

Reserve Fund

Pursuant to the Instrument, the Reserve Fund was established to fund additional mitigation projects, minor actions, long term management, and to serve as contingency. In CY 2012, \$10,000 of reserve was used to fund remaining administrative costs of the contractor at the Claysville project. Interest accounts for one component of the reserve; 85% of transition interest and 90% of interest accrued following transition was placed in reserve. The other component of reserve is comprised of 10% of transition service area funds and credit sales (Table 7). With \$3M required by the Instrument for minimum or non-wasting reserve, active reserve at the end of CY12 was \$8,123,425.

	<u>100%</u>	<u>10% to reserve</u>	<u>85% to reserve</u>	<u>90% to reserve</u>
Transition service area funds (Jan 2012)	25,529,911	2,552,991		
CY 2012 receipts	12,798,468	1,279,847		
Transition interest (Jan 2012)	7,369,987		6,264,489	
CY 2012 interest	1,151,220			1,036,098
Total to reserve	11,133,425			
Reserve applied to Claysville project	10,000			
Reserve balance	11,123,425			
Non-wasting reserve	3,000,000			
Active reserve	8,123,425			

Administrative Fund

The Administrative Fund is used for staff salaries, equipment, and other indirect expenses such as travel and training. The administrative fund balance was \$1,654,000 at the time of transition. Added to that amount was 15% of service area and interest funds present at transition and 10% of post-transition receipts and interest collected in CY12 (Table 8). After expenses in CY12 of \$691,822, the administrative fund balance at the end of 2012 was \$7,292,132.

	<u>100%</u>	<u>15% to Admin</u>	<u>10% to Admin</u>
Transition service area funds (Jan 2012)	25,529,911	3,829,487	
CY 2012 receipts	12,798,468		1,279,847
Transition interest	7,369,987	1,105,498	
CY 2012 Interest	1,151,220		115,122
Total to Admin	6,329,954		
Transition Admin (Jan 2012)	1,654,000		
Admin expenditures	691,822		
Admin balance	7,292,132		

Mitigation of Impacts

In the history of the FILO program, programmatic indicators have primarily been based on linear feet: length of stream mitigated and cost of mitigation per linear foot. Impact fees and mitigation were based most recently on a standard of \$170/ft of stream affected. With the requirements of the 2008 Mitigation Rule fully taking effect with the Instrument, program parameters are primarily expressed in credits. To phase in these requirements, the USACE put out a Public Notice (LRL-1999-760) in November 2009 that established fees to be paid for impacts of \$396 per Ecological Integrity Unit (EIU) in the Eastern Kentucky Protocol region of the Commonwealth (in the Eastern Coal Field Region), \$170 per Adjusted Mitigation Unit (AMU) for streams in the rest of the Commonwealth, and \$30,000 per wetland AMU in all parts of the Commonwealth. Also, as required by the 2009 Public Notice and the Instrument, the USACE must provide FILO with the number of credits necessary to compensate for impacts, and FILO must submit receipt for credit purchases to the USACE and the permittee. Thus, all permits issued after the date of the Public Notice must contain the necessary information to track credits from an impact and mitigation perspective. This information was infrequently collected for permits issued prior to the November 2009 Public Notice, although cost per credit was an important factor in the viability and approval of design of proposed mitigation projects by the IRT.

Prior to this it was not possible to relate credits earned by mitigation impacts caused by 404-permitted activities because in-lieu-fee payments to FILO had little documentation of impacts, especially during the first few years of the in-lieu fee program. It was assumed that impacts and mitigation are occurring on similar stream flow types, resulting in similar linear feet and credits affected. Thus, programmatic success was based on cost per linear foot as in the previous MOA. The available data could track the amount of in-lieu fees received and the timing of the allocation of those funds to mitigation projects.

Projects begun prior to 2012 will still be tracked primarily on the basis of funds available vs. project costs and costs per foot. With implementation of the Instrument and conversion of unallocated funds to credits, it will be possible to track impacts (credits sold by FILO) vs. mitigation (credits released by implementation of FILO projects) for projects begun (approved by IRT) in 2012 and later.

Actions Taken by Interagency Review Team

Nine conceptual plans were reviewed and three projects were “approved” by the IRT in CY12; that is, no significant comments were received following the Conceptual Plan and site visit, and the projects are moving toward design phase with funding for a design engineering contractor. Two projects not approved under the previous Agreement were re-introduced in 2012 but were terminated after the IRT site visit (Table 9). Cat Fork had the potential for incompatible uses with an oil/gas lease, and Pigeon Roost Creek had issues with a shared boundary and disinterest of the managing board of the property. Four other potential projects were introduced in 2012, but their status will not be determined until early in 2013 (Table 9).

Table 9. Conceptual Plans Submitted to Interagency Review Team CY12

Stream	Service Area	USACE District	County	Type	Action Taken
Cat Fork	Big Sandy	Louisville	Lawrence	Rehabilitation, Re-establishment, Enhancement, Preservation	Project terminated because of oil/gas lease
Barrett Creek	Big Sandy	Louisville	Carter	Rehabilitation	IRT site visit 9/5/2012; no significant comments; "approved"
Pigeon Roost Creek	Big Sandy	Louisville	Lawrence	Rehabilitation; Re-establishment	IRT site visit 2/15/2012; project terminated
Laurel Creek Gorge #2	Big Sandy	Louisville	Elliott	Rehabilitation Enhancement	IRT site visit 7/27/2012; no significant comments; "approved"
Whites Creek	Big Sandy	Louisville	Boyd	Rehabilitation Re-establishment	IRT site visit 9/5/2012; no significant comments; "approved"
White Oak Creek	Big Sandy	Louisville	Greenup	Rehabilitation	IRT site visit scheduled for Jan 2013
Meyers Station Farm	Lower Licking	Louisville	Nicholas	Rehabilitation, Re-establishment	IRT site visit 12/6/2012; comments due Jan 2013
Sinking Valley	Upper Cumberland	Nashville	Pulaski	Enhancement, Preservation	IRT site visit 4/18/2012; awaiting final comments
Goose Creek	Green	Louisville	Casey	Rehabilitation, Re-establishment, Preservation	IRT site visit 9/6/2012; comments being addressed

Project Statistics and Status

A total of 59 projects have been approved for design by the IRT over the program's history. With the addition of three new projects in 2012, there currently are 47 active or completed projects, of which 31 (11 in AMU, 20 in EIU) are either built or in construction. In addition, the program has preserved two tracts with high quality streams (Laurel Creek Gorge, Buck Creek) and 1557 acres of their surrounding watersheds with over 24 miles of tributaries. Another 6500 feet of stream length is being preserved on the Ross Creek project. FILO has also contributed about 51% of the purchase of a 2500-acre tract in Scott County that preserves 6.1 miles of high quality intermittent and ephemeral streams and restores and enhances another 19 stream miles.

Table 10 provides summary statistics for total cost, length, and credits, and for cost per linear foot and cost per credit; Appendix B provides this data for individual projects. The average estimated project cost in the AMU region is now \$1.74M, is nearly 17,000 feet in length, gains 20,186 credits, and has a cost per credit of \$86 and a cost per foot of \$103. Also, 51.8 acres of wetland are included in projects (Eagle Cr Tributary, Forest Land Group, Cove Spring) in the AMU region at a total cost of \$491,406 or \$10,886 per wetland AMU.

In the EIU region, the average project is estimated at just over \$1M, is more than 10,000 feet in length, gains 2,579 credits, and has a cost per credit of \$418 and a cost per foot of \$106. It should be noted that the two large preservation projects in the EIU region significantly lower the cost per foot, and to a lesser extent the cost per credit, and therefore the average costs do not

reflect the cost of a restoration project. Without the two preservation projects, the estimated costs are \$180 per foot and \$448 per credit.

Table 10. Summary Data for Projects in AMU and EIU Regions of Kentucky^a

	<u>AMU Region</u>	<u>EIU Region</u>
Number of Active/Completed Projects	18	29
Number of terminated/unfunded projects that incurred costs	2	4
Total Project Cost	\$31,898,099	\$31,284,921
Total Stream Cost	\$31,406,693	\$31,284,921
Total Wetland Cost	\$491,406	-
Average Stream Project Cost	\$1,744,816	\$1,078,790
Total Length (ft)	304,757	293,826
Average Length (ft)	16,931	10,132
Cost/ft (all projects)	\$103	\$106
Cost/ft (w/o preservation projects)	-	\$180
Total Stream Credits	363,342	74,803
Average Stream Credits	20,186	2,579
Cost/stream credit (all projects)	\$86	\$418
Cost/stream credit (w/o preservation projects)	-	\$448
Total wetland credits (wetland AMUs)	45.14	-
Cost/wetland credit	\$10,886	-

^aTotal costs include expenses incurred for terminated projects, but total length, total credits and average figures don't include the projects since there were terminated prior to construction.

During this reporting period, Cat Fork (incompatible uses, oil/gas), and Pigeon Roost Creek (shared stream boundary, landowner concerns) were canceled and North Fork Kentucky River was placed in the terminated project status without credit because of tree cutting of the planted riparian zone that will not be replaced.

Brief descriptions of activities during this reporting period are provided below. Monitoring information and compliance status are presented in Appendix C.

BIG SANDY RIVER SERVICE AREA

There are 17 active projects (including repair on Brushy Cr) in this service area, which is within the USACE Louisville District and EKSAP region using the EIU credit system (Figure 3).

Barrett Creek, Carter County. The IRT conducted a site visit on 9/5/12. There were no significant comments and the project is considered approved. The project is now awaiting Real Property's solution to a title issue.

Bolts Fork, Boyd County. Construction began in November of 2012 and will continue into 2013.

Brushy Creek, Greenup County.

Brushy Creek Emergency Repair, Greenup County. No action taken in FY11. Visual assessments show that the repair work done in FY09 was successful.

Brushy Creek Emergency Repair 2, Greenup County. No action taken in FY11.

Cat Fork, Lawrence County. The project, which included the purchase of a 501-acre tract with more than 30,000 ft of additional stream length, much of it preservation quality, was terminated because of an oil/gas lease that was an incompatible use for a project with purchase that was funded by in-lieu-fee funds.

East Fork Little Sandy #1, Lawrence County. Monitoring has exceeded five years. Compliance visit scheduled in 2013 to discuss project release.

East Fork Little Sandy #2, Lawrence County. Year 2 monitoring completed and report was submitted.

East Fork Little Sandy #3, Lawrence County. Year 2 monitoring completed and report was submitted.

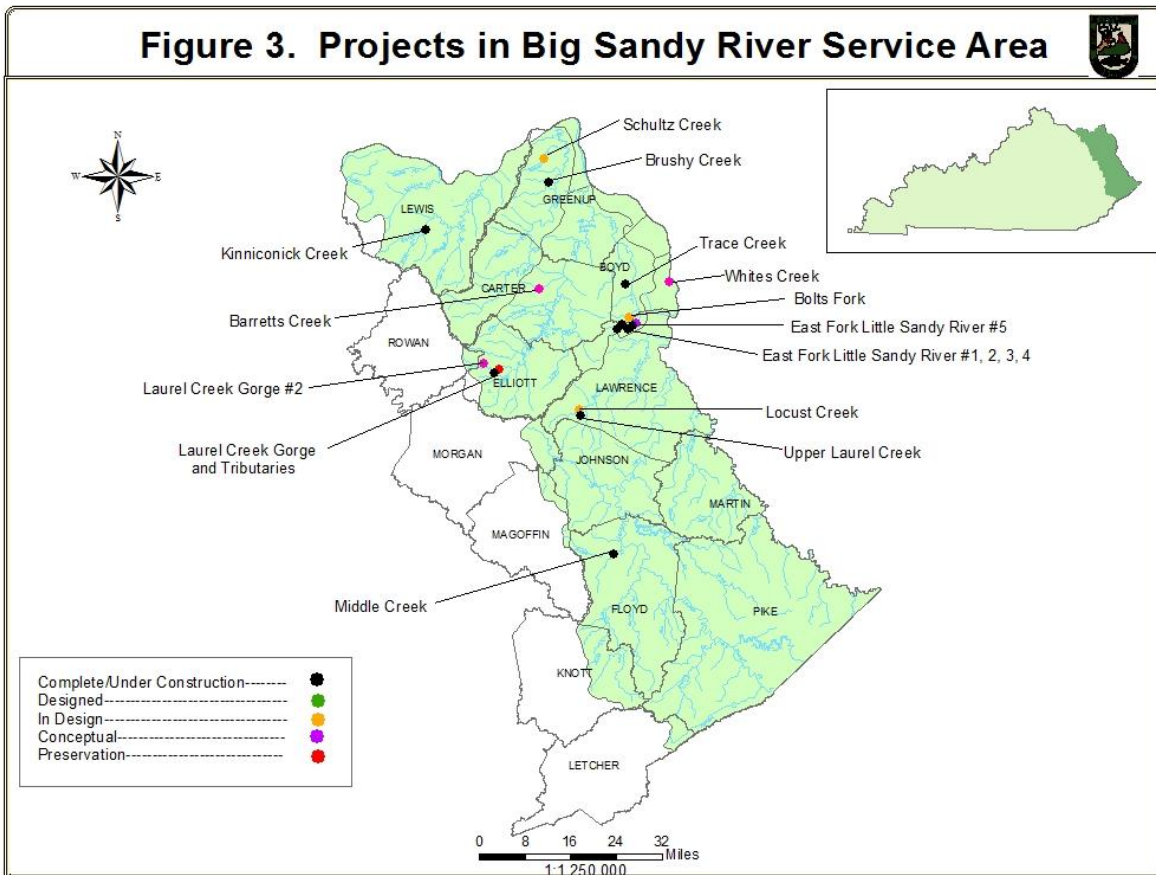
East Fork Little Sandy #4, Lawrence County. Year 2 monitoring completed and report was submitted.

East Fork Little Sandy #5, Lawrence County. The design engineer is completing design of the project. Permit applications have been submitted and comments on the Mitigation Plan have been received. A change of scope to move the waterline and construction funds were approved in FY11.

Keys Creek, Boyd County. Project was terminated because of landowner concerns.

Kinniconick Creek/Indian Creek, Lewis County. Additional funding for repairs was requested and approved in December 2011. Repairs will most likely be made in Summer of 2013. Year 4 monitoring report was submitted.

Laurel Gorge Preservation, Elliott County. The site was dedicated in FY10 as the Ed Mabry-Laurel Gorge WMA. The deed restrictions staved off the threat of potential road construction.



Laurel Creek Gorge #2, Elliott County. IRT site visit was conducted 7/27/12. Project began with three tracts of land (Friend, Greene, and Johnson), but now only consists of the two Greene and Johnson tracts. The remaining two tracts were approved with no significant comments. The Friend tract acquisition was terminated due to owner's refusal of the appraised purchase offer. The remainder of the purchase is proceeding with Real Property's appraisals.

Left Fork Trace Creek, Boyd County. Fourth year monitoring was submitted.

Locust Creek, Lawrence County. Year 3 monitoring completed and report was submitted.

Middle Creek, Floyd County. Year 5 monitoring completed and report was submitted. Project issues to be addressed in 2013. Monitoring will likely be extended.

Pigeon Roost Creek, Boyd County. The project was terminated because of a shared boundary with an un-willing downstream landowner and concerns of the Ramey-Estep Board of Directors.

Schultz Creek, Greenup County. Project is with Real Properties because of title issues. Additional landowners from a previous inheritance were discovered, and additional submittals to Real Properties will be required.

Upper Laurel Creek, Lawrence County. Year 4 monitoring completed and report was submitted.

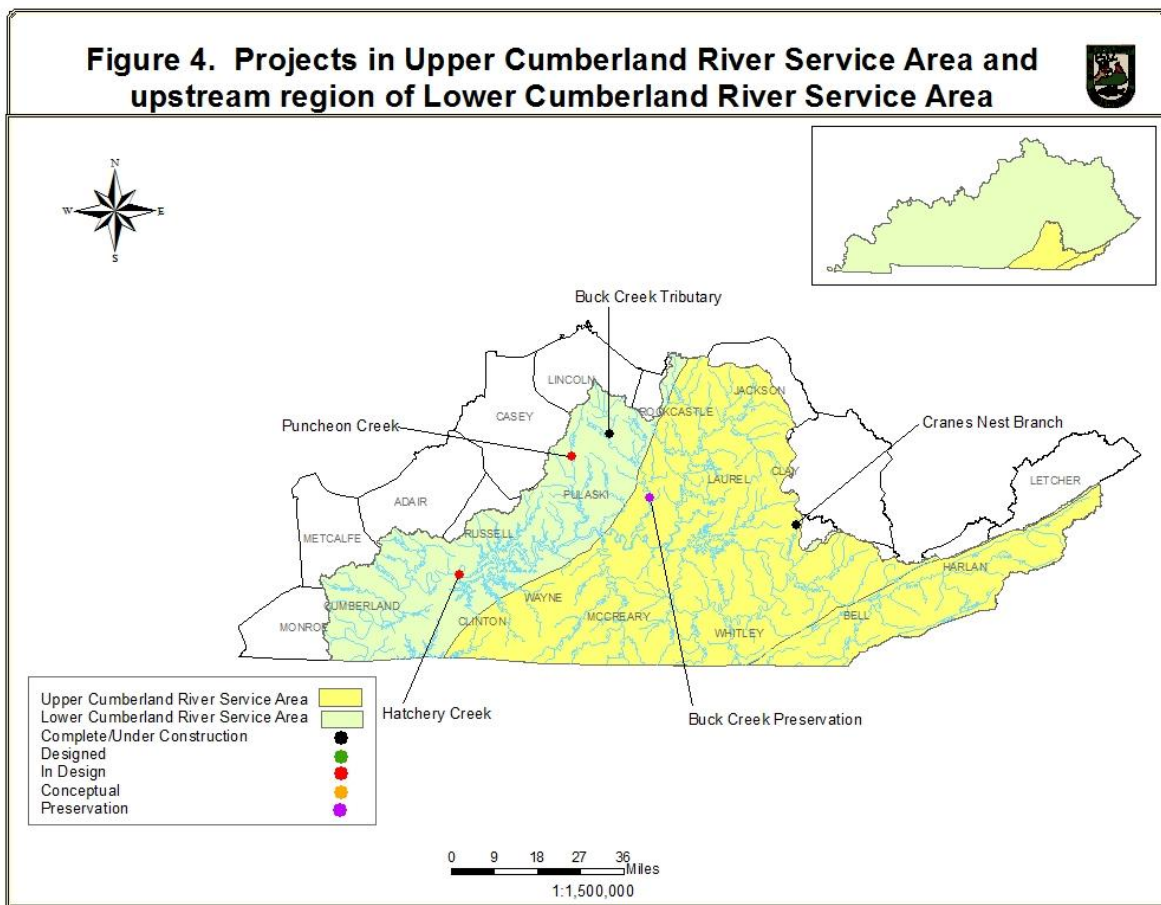
Whites Creek, Boyd County. IRT site visit was conducted 9/5/12. There were no significant comments; and the project is considered approved. Will proceed with tract or easement purchase after Real Property's appraisals.

UPPER CUMBERLAND RIVER SERVICE AREA

There are two projects in the upper Cumberland River basin of this service area, which is in the USACE Nashville District and EKSAP region with the EIU credit system (Figure 4).

Buck Creek Preservation, Pulaski County. Updated property boundary surveys and signage were completed in FY11. A small parking area was constructed and the WMA was opened to the public.

Cranes Nest Branch, Knox County. Construction is complete and is waiting on the as-built survey. Tree planting is pending.



LOWER CUMBERLAND RIVER SERVICE AREA

There are three projects in this service area, which is in the Nashville District and operates under the KAP region using AMU credit system. This service area has two distinct geographic areas in Kentucky, one in Western Kentucky (Figure 4) and one in south-central Kentucky just up-and downstream of the Lake Cumberland area (Figure 9).

Buck Creek Tributary, Pulaski County. Minor repairs were completed after the Spring 2011 rain events. This project is in the second monitoring year. The as-built report from TNC has been received.

Hatchery Creek, Russell County. 90% design was completed and pending submittal to the U.S. Army Corps of Engineers Nashville District's planning and regulatory sections. The topographical survey and core sampling have been completed. Permit applications have been submitted.

Puncheon Creek, Pulaski County. The design engineer is completing design of the project. Construction funding approval is anticipated in FY12.

UPPER LICKING RIVER SERVICE AREA

There is one project in this service area, which is in the USACE Louisville District in Magoffin, Morgan, and parts of Rowan and Menifee counties in the coal region and operates under the EKSAP with the EIU credit system (Figure 5).

Slabcamp/Stonecoal Branch, Rowan County. Project is in construction.

LOWER LICKING RIVER SERVICE AREA

There are two projects in this service area, which is in the USACE Louisville District and the KAP region using the AMU credit system (Figure 5).

Claysville Recovery Land Site, Harrison County. Second year monitoring was submitted.

Salt Lick Creek, Bath County. Construction was completed.

have been held to incorporate USFWS comments into design plans. Construction should begin in fall 2013.

Elisha Creek, Leslie County. The project is on the USFS Daniel Boone National Forest. Permanent protection will be provided by the USFS Management Plan. Project scope was reduced to include only the Left Fork of Elisha Creek. Construction was completed in 2012, and Year 1 monitoring will be 2013.

Guy Cove, Breathitt County. The project is on Robinson Forest owned by the University of Kentucky (UK) in the Troublesome Creek watershed. This is a pilot project to rework the valley fill on a reclaimed mine site. The hollow fill is being reworked to more closely match the valley slope instead of the traditional fill required by mining regulations. In addition the reworked material is being “loose-dumped” per Reclamation Advisory Memorandum 124 that UK research has shown is more successful in restoring forest and hydrologic regimes. During this fiscal year, the fourth year monitoring year was performed.

Red Lick, Estill County. The fifth year monitoring year was performed by KDFWR. A request to be released from monitoring will be sent in 2013.

Ross Creek, Lee County: Project adjacent to the Daniel Boone National Forest involving purchase of 533 acres, preservation, re-establishment, and rehabilitation of several miles of stream was approved by the IRT in December 2011. The McKinney Property was purchased in 2012 (533 acres) and design is underway. KDFWR is pursuing purchase of an additional 100 acres (+/-) at the mouth of Ross creek including both preservation and rehabilitation/re-establishment of stream habitat.

SECC Bank Stabilization., Letcher County. The project has been released from monitoring. KDFWR is working with the school to initiate a supplemental planting for educational purposes and aesthetics.

Terrys Branch, Knott County. The project is an extension of the Ball’s Fork project mentioned above in the Troublesome Creek watershed and is in the fourth monitoring year. KDFWR has successfully completed round 1 of repairs on logvanes at Terry’s Branch. Round 2 of repairs and a final planting are scheduled for 2013. 2013 will be year 6 of monitoring. Aside from the vanes, habitat has been productive at Terry’s Branch and an improved fish assemblage has resulted.

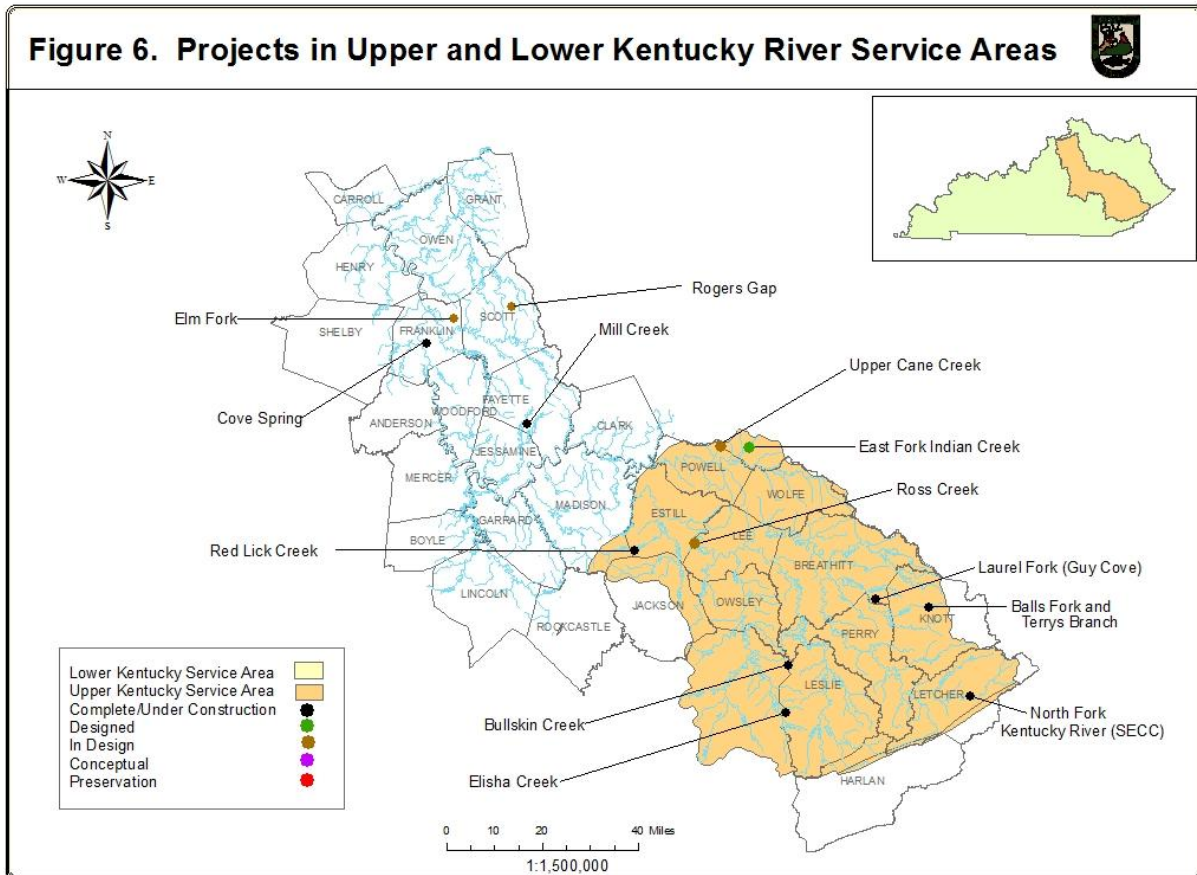
Upper Cane Creek, Menifee County. The conservation easement was surveyed and submitted to Real Properties for approval. Construction is planned for FY12. In addition, KDFWR is working with the county judge to reduce the scope of road relocation associated with the project. KDFWR plans to begin construction in fall 2013.

LOWER KENTUCKY RIVER SERVICE AREA

There are four projects in this service area, which is in the USACE Louisville District and KAP region with AMU credit system in the (Figure 6).

Cove Spring, Franklin County. This project is in Cove Spring Park owned by the City of Frankfort and is accessible to the public. Project construction began in 2012, and much of the project has been completed. Construction will be completed and the site will be planted in spring 2013. KDFWR is working with KDOW and USACE to develop an alternate planting plan in the wetland area of penitentiary branch because of beaver activity. The project has been of interest to educational entities and the public.

Figure 6. Projects in Upper and Lower Kentucky River Service Areas



Elm Fork, Owen County. The project is on Kleber WMA and is accessible to the public. Design was completed and permits obtained. Construction should begin in the Spring of 2013.

Mill Creek, Fayette County. The project is on Mill Creek Elementary School land and provided stream and wetland restoration and ongoing outdoor classroom learning opportunities. Year three of monitoring was completed in 2012 and the report was submitted. The school had expanded its campus on the property.

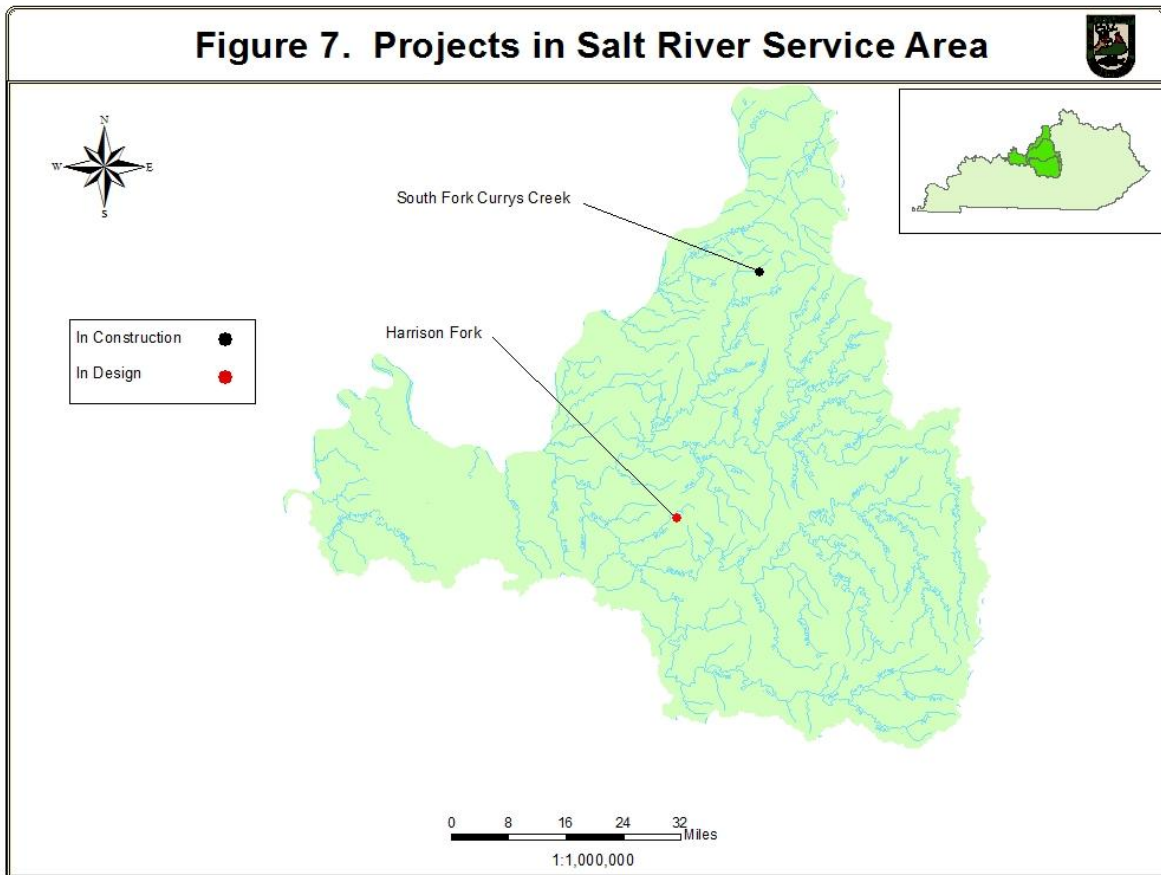
Roger’s Gap, Scott County. This project includes acquisition of 2,500 acres containing approximately 28 miles of stream, representing ephemeral, intermittent, and perennial flow regimes. The property was acquired in December 2011 utilizing funds from the Kentucky Wetland and Stream Mitigation Program and department-contributed federal grant money specifically designated for land acquisition. Restoration or preservation has been proposed for all streams on the property, which will be protected by permanent deed restrictions approved by the USACE. The remainder of the property will be managed as a state-owned wildlife management area and will be open to the public.

SALT RIVER SERVICE AREA

There are two projects in this service area, which is entirely within the USACE Louisville District and KAP region using the AMU credit system (Figure 7).

Harrison Fork, Nelson County. The University of Louisville is working on the project design. A design funding increase was approved in FY10 for extra design work to avoid a gas line, groundwater monitoring, and 2-D hydrologic modeling. Bernheim and KDFWR/Real Properties are negotiating the project easement.

South Fork Currys Fork, Oldham County. The project was constructed in 2012. 2013 will be the first year of monitoring. The project was designed by University of Louisville and constructed by Ecogro/Ridgewater.



GREEN RIVER SERVICE AREA

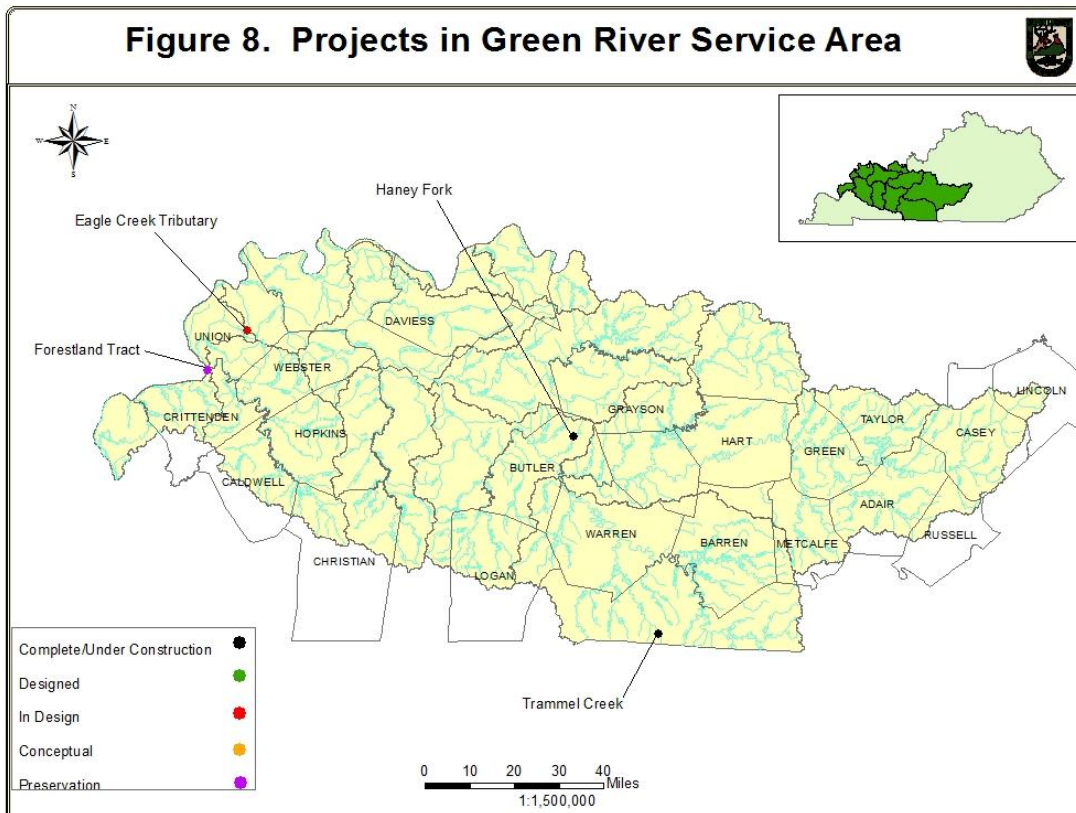
There are four projects in this service area, which is within the USACE Louisville District and KAP region using the AMU credit system (Figure 8).

Eagle Creek Tributary, Union County. The oil/gas lease easement restrictions agreement for permanent protection of the site from mineral extraction was signed early in 2012. Design was approximately 50% complete at the end of CY12. The 401 application was submitted to KDOW and the draft Mitigation Plan was submitted to both the USACE and KDOW for review and comment.

Forestland Group Tract, Union County. Project approval was granted in FY10. Land acquisition for permanent protection of the site will is complete. No FILO funds have been used to date until the second tract encompassing the southern boundary and riparian buffer zone of the Tradewater River has been purchased.

Haney Fork, Butler County. The fifth year monitoring was completed in September 2011 and the report was submitted December 2011. The success criterion for vegetation was met at 464 hardwoods per acre. The annual compliance visit was conducted in May 2012. The project was released from monitoring in September 2012 by written verification from the Corps.

Trammel Creek, Allen County. The project has experienced some minor bank scour and loss of vegetation. Project repairs were completed in summer 2012 and additional tree planting was completed in November 2012. The project will be entering Year 4 monitoring in 2013. The 2013 report should reflect the success of the repair efforts and determine if the project is trending toward success criteria goals.

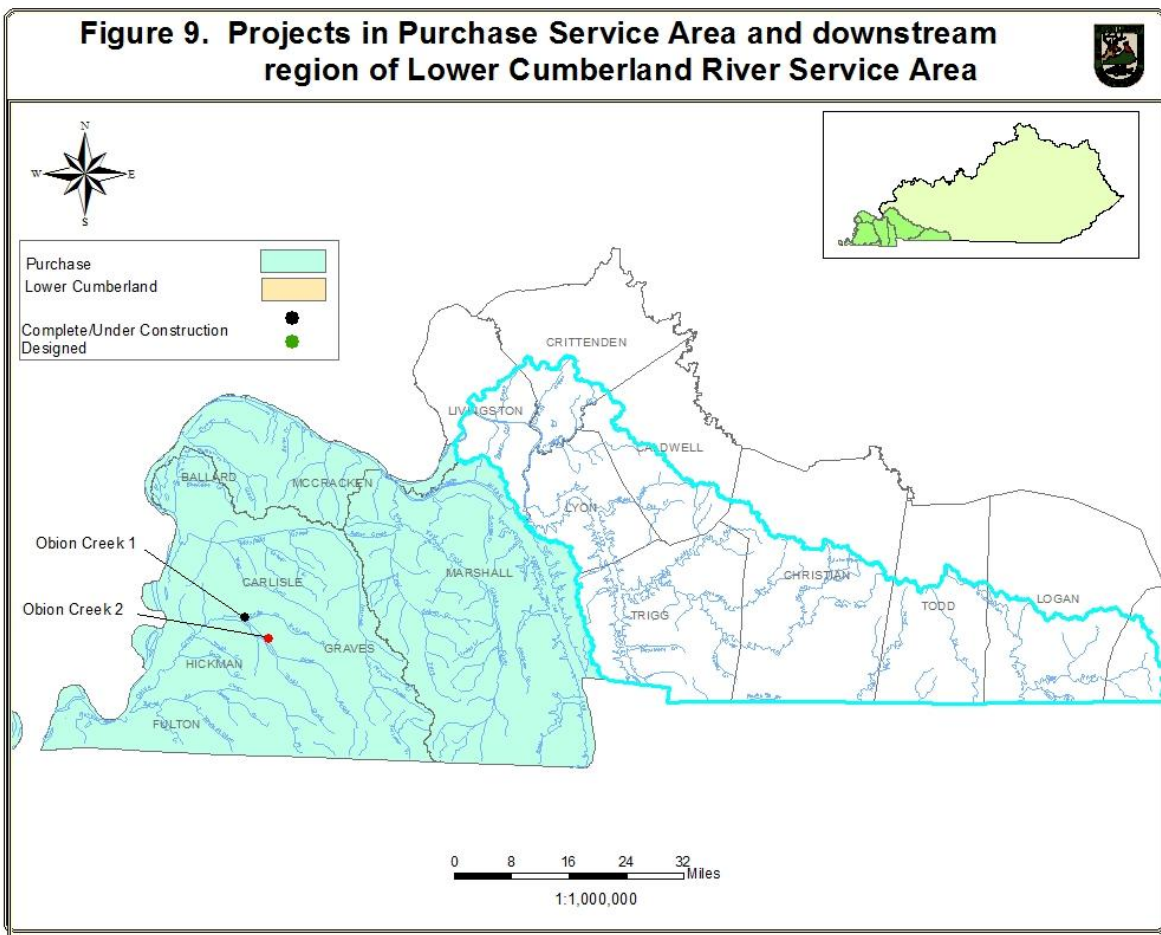


PURCHASE SERVICE AREA (Tennessee and Mississippi River Basins)

There are two projects in the Purchase service area, which is within the USACE Memphis District and KAP region using the AMU credit system (Figure 9).

Obion Creek #1, Hickman County. Due to downstream dredging, a headcut has progressed through the lower portion of the project. KDFWR and the University of Louisville have addressed the problem and planned repairs for FY12. This project is complete pending final repair.

Obion Creek #2, Hickman County. Construction by the University of Louisville's Stream Institute and Douglas Amphibious is progressing. The project is in its second phase of construction which includes repairing any sections and the placement of any structures. The construction of the bypass channel upstream of the debris jam is entering the permitting phase.



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Kentucky Department of Fish and Wildlife Resources. 2012. Wetland and Stream Fee-In-Lieu of Mitigation Program Report for Period July 1, 2011 through December 31, 2011.

U.S. Army Corps of Engineers. 2011. Modification – Number One of the Agreement Concerning In-Lieu Mitigation Fees between U.S. Army Corps of Engineers and Kentucky Department of Fish and Wildlife Resources. LRL-2010-325.

U.S. Army Corps of Engineers. 2008. 33 CFR Chapter II Part 332. Compensatory Mitigation for Losses of Aquatic Resources. Federal Register Vol. 73, No. 70, April 10, 2008.

Appendix A

CY12 Credit Sales, Costs, and Balances

Service Area	Corps 404 ID #	Date of payment	Credits Sold	Cost per Unit	note	Credit balance	
Big Sandy Stream (EIU)	LRL-2003-27	01/17/12	23,103.000	\$610	transition		
	LRL-2012-00040-jea*	04/30/12	61.000	\$653			
	LRL-2008-655	05/07/12	47.000	\$651		240,000.000	Advance credits
	LRL-2009-940-pjl	06/04/12	124.000	\$652		(25,479.280)	Credits sold
	LRL-2011-1099-th	06/11/12	548.000	\$650		214,520.720	Available credits
	LRL-2012-00040-jea*	07/20/12	39.150	\$646			
	LRL-2003-27	07/31/12	879.000	\$650			
	LRL-2009-550-let	08/20/12	167.000	\$652			
	LRL-2008-655	10/23/12	155.750	\$650			
	LRH-2004-931-pgj	11/30/12	355.380	\$650			
			25,479.280		total credits sold		
Upper KY Stream (EIU)	LRL-2003-27	01/17/12	-		transition	240,000.000	Advance credits
	LRL-2005-734	08/30/12	1,117.000	\$610		(2,349.860)	Credits sold
	LRL-2007-217	10/12/12	1,232.860	\$610		237,650.140	Available credits
			2,349.860		total credits sold		
Upper Licking Stream (EIU)	LRL-2003-27	01/17/12	258.000	\$609	transition	240,000.000	Advance credits
	LRL-2006-1015-JCT	08/20/12	838.000	\$610		(1,096.000)	Credits sold
			1,096.000		total credits sold	238,904.000	Available credits
Upper Cumberland Stream (EIU)	LRL-2003-27	01/17/12	3,954.000	\$610	transition		
	LRN-2004-00228-taw	01/04/12	33.000	\$606			
	200602546	01/17/12	327.100	\$610		240,000.000	Advance credits
	LRN-2004-00228-taw	02/09/12	33.000	\$606		(7,136.190)	Credits sold
	LRN-2004-00228-taw	03/08/12	33.000	\$606		232,863.810	Available credits
	LRN-201000563-mc	03/21/12	13.000	\$615			
	200602546	03/26/12	65.000	\$614			
	LRN-2004-00228-taw	03/08/12	33.000	\$606			
	LRN-2004-00228-taw	05/10/12	33.000	\$606			
	LRN-2004-00228-taw	06/04/12	33.000	\$606			
	LRN-2004-00228-taw	07/12/12	33.000	\$606			
	LRN-2004-00228-taw	08/13/12	33.000	\$606			
	LRN-2004-00228-taw	09/12/12	17.870	\$610			
	LRN-2011-00171	09/26/12	2,495.220	\$610			
				7,136.190		total credits sold	

Lower KY Stream (AMU)	LRL-2003-27	01/17/12	-		transition	240,000.000	Advance credits
	LRL-2008-1449-let	04/13/12	327.000	\$240		(807.000)	Credits sold
	LRL-2007-351-mlc	06/29/12	480.000	\$240		239,193.000	Available credits
			807.000		total credits sold		
Lower Licking Stream (AMU)	LRL-2003-27	01/17/12	11,419.000	\$215	transition	240,000.000	Advance credits
	LRL-2010-788-let	09/06/12	9,563.000	\$240		(22,431.000)	Credits sold
	LRL-2012-542-let	12/18/12	1,449.000	\$240		217,569.000	Available credits
			22,431.000		total credits sold		
Lower Cumberland Stream (AMU)	LRL-2003-27	01/17/12	6,977.000	\$215	transition	240,000.000	Advance credits
	LRL-2003-1733	01/17/12	8,893.000	\$215		(15,870.000)	Credits sold
			15,870.000		total credits sold	224,130.000	Available credits
Salt River Stream (AMU)	LRL-2003-27	01/17/12	3,883.000	\$215	transition	240,000.000	Advance credits
	LRL-2009-1284-jt	05/07/12	356.150	\$240		(5,221.150)	Credits sold
	LRL-2008-1421-jt	07/31/12	982.000	\$240		234,778.850	Available credits
			5,221.150		total credits sold		
Green River Stream (AMU)	LRL-2003-27	01/17/12	14,251.000	\$215	transition		Advance credits
	LRL-2003-1733	01/17/12	4,180.000	\$215		240,000.000	Credits sold
	LRL-2011-138	03/15/12	3,402.000	\$215		(24,975.600)	Available credits
	LRL-2011-994-mlc	05/11/12	1,090.000	\$240		215,024.400	
	LRL-2012-268-pjl	11/14/12	470.400	\$240			
LRL2-2011-554-let	12/12/12	1,582.200	\$240				
			24,975.600		total credits sold		
Purchase Stream (AMU)	LRL-2003-27	1/17/2012	19.000	\$211	transition	240,000.000	Advance credits
			19.000			(19.000)	Credits sold
					total credits sold	239,981.000	Available credits
Big Sandy Wetland AMUs	LRL-2003-27	01/17/12	3.550	\$29,961	transition	100.000	Advance credits
	LRL-2011-1099-th	06/11/12	2.410	\$30,055		(5.960)	Credits sold
			5.960		total credits sold	94.040	Available credits
Lower KY Wetland AMUs	LRL-2003-27	01/17/12	1.800	\$29,944	transition	100.000	Advance credits
	LRL-2009-225-let	04/30/12	0.600	\$30,000			Credits

						(2.830)	sold
	LRL-2007-351-mlc	06/29/12	0.432	\$30,000		97.170	Available credits
			2.832	total credits sold			
Lower Licking Wetland AMUs	LRL-2003-27	01/17/12	1.000	\$30,012	transition	100.000	Advance credits
						(1.000)	Credits sold
			1.000	total credits sold		99.000	Available credits
Upper Cumberland Wetland AMUs	LRL-2003-27	01/17/12	2.250	\$30,033	transition	100.000	Advance credits
	LRN-2009-01716	01/17/12	0.014	\$30,000		(2.630)	Credits sold
	LRN-2011-00171	09/26/12	0.367	\$30,000		97.370	Available credits
			2.631	total credits sold			
Salt River Wetland AMUs	LRL-2003-27	01/17/12	2.540	\$29,988	transition	100.000	Advance credits
						(2.540)	Credits sold
			2.540	total credits sold		97.460	Available credits
Green River Wetland AMUs	LRL-2003-27	01/17/12	10.280	\$29,993	transition		Advance credits
	LRL-2011-138	03/15/12	1.790	\$29,966		200.000	Credits sold
	WQC AI No. 22199	10/31/12	3.816	\$36,000		(17.720)	Credits sold
	LRL-2012-469-mad	12/17/12	1.838	\$30,000		182.280	Available credits
			17.724	total credits sold			
Purchase Wetland AMUs	LRL-2003-27	01/17/12	2.300	\$30,037	transition	200.000	Advance credits
						(2.300)	Credits sold
			2.300	total credits sold		197.700	Available credits

Appendix B

Project Data

AMU Area									
Basin/Stream	Type	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit
Big Sandy River									
Monitoring Phase									
Kinniconnick Creek	Rehabilitation Enhancement	Lewis	Louisville	LRL-2007-409-pgj	\$2,061,600	6,782	10,308	\$304	\$200
Lower Cumberland River									
Design Phase									
Hatchery Creek	Re-establishment	Russell	Nashville		\$1,950,000	6,150	19,320	\$317	\$101
Puncheon Creek	Rehabilitation Enhancement	Pulaski	Nashville		\$3,000,000	11,760	17,765	\$255	\$169
Monitoring Phase									
Buck Creek Tributary	Rehabilitation Enhancement	Pulaski	Nashville		\$236,750	1,221	1,262	\$194	\$188
Green River									
Conceptual Phase									
Forestland Gr Tract (Stream)	Preservation Enhancement	Union	Louisville		\$711,223	26,320	7,484	\$28	\$100
Forestland Gr Tract (Wetland)	Restoration Enhancement	Union	Louisville		\$33,949	5.6 ac	5.6		\$6,061
Design Phase									
Eagle Cr Tributary (Stream)	Rehabilitation Enhancement	Union	Louisville		\$800,000	7,750	20,534	\$103	\$39
Eagle Cr Tributary (Wetland)	Establishment	Union	Louisville		\$200,000	25.54 ac	25.54		\$7,831
Monitoring Phase									
Trammel Creek	Rehabilitation Enhancement	Allen	Louisville	LRL-2008-936-pgj	\$712,500	3,800	6,314	\$188	\$113
Released from Monitoring									
Haney Fork Watershed No. 2	Rehabilitation Enhancement	Butler	Louisville	LRL-2004-01363	\$259,900	4,330	3,248	\$60	\$80
Purchase									
Construction Phase									
Obion Creek II	Rehabilitation Enhancement	Hickman	Memphis	MVM-2010-074	\$780,976	23,000	69,000	\$34	\$11
Monitoring Phase									
Obion Creek	Rehabilitation Enhancement	Hickman	Memphis	200300263	\$71,013	5,684	17,052	\$12	\$4
Terminated Project									
East Fork Clarks River		Marshall	Memphis		\$38,528				

AMU Area (con't)									
Basin/Stream	Type	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit
Lower Kentucky River									
Design Phase									
Elm Fork	Rehabilitation Enhancement	Owen	Louisville	LRL 2012-263 pgj	\$1,768,000	7,600	11,100	\$233	\$159
Construction Phase									
Cove Spring (Stream)	Rehabilitation Enhancement	Franklin	Louisville	LRL 2009 614 pgj	\$1,237,543	7,001	9,236	\$177	\$134
Cove Spring (Wetland)	Establishment	Franklin	Louisville	LRL 2009 614 pgj	\$257,457	20.64 ac	14		\$17,784
Rogers Gap	Preservation Enhancement Rehabilitation Re-establishment	Scott	Louisville	LRL-2013-134-jpg	\$12,491,720	170,856	142,149	\$73	\$88
Monitoring Phase									
Mill Creek	Rehabilitation Rehabilitation	Fayette	Louisville	LRL-2009-611-pgj	\$182,050	750	682	\$243	\$267
Not Approved for Further Funding									
Pond Creek		Owen	Louisville		\$17,284				
Terminated Project									
Hinton Branch		Estill	Louisville		none				
Lower Licking River									
Construction Phase									
Salt Lick	Rehabilitation Enhancement	Bath	Louisville	LRL-2011-00891	\$1,647,800	5500	8,250	\$300	\$200
Monitoring Phase									
Claysville Recovery Land Aq Site	Enhancement	Harrison	Louisville	LRL-2008-644-pgj	\$269,500	2,600	2,554	\$104	\$106
Salt River									
Design Phase									
Harrison Fork	Rehabilitation Enhancement	Nelson	Louisville	tba	\$1,700,000	8,900	12,179	\$191	\$140
Construction Phase									
South Fork of Curry's Fork	Rehabilitation Enhancement	Oldham	Louisville	LRL-2009-98-pgj	\$978,900	4,753	4,905	\$206	\$200
Total Stream	18				\$31,406,693	304,757	363,342		
Total Wetland	3				\$491,406	51.78	45.14		
Average Stream					\$1,744,816	16,931	20,186	\$103	\$86
Average Wetland					\$163,802	22.08 ac	15.05		\$10,886

EIU Area									
<u>Basin/Stream</u>	<u>Type</u>	<u>County</u>	<u>USACE District</u>	<u>404 Permit #</u>	<u>Project Cost</u>	<u>Length (ft)</u>	<u>Credits</u>	<u>Cost/ft</u>	<u>Cost/credit</u>
Big Sandy River									
Design Phase									
Barrett Creek	Rehabilitation	Carter	Louisville	LRL-2012-635-pgj	1,586,054	8,878	3,463	179	458
Brushy Creek Repair 3		Greenup	Louisville		\$550,000				
East Fork Little Sandy #5	Rehabilitation Enhancement	Lawrence	Louisville		\$775,000	2,955	1,360	\$262	\$570
Laurel Creek Gorge #2	Rehabilitation Enhancement	Elliott	Louisville	LRL-2012-478-pgj	\$979,662.00	5,350	1,768	\$175	\$458
Schultz Creek	Rehabilitation Enhancement	Greenup	Louisville	2009-806	\$739,795	2,900	1,305	\$255	\$567
Whites Creek	Rehabilitation Re-establishment	Boyd	Louisville	LRL-2012-634-pgj	\$1,517,000	8,355	3,312	\$182	\$458
Construction Phase									
Bolts Fork	Rehabilitation Enhancement	Boyd	Louisville	LRL-2010-00698	\$1,212,923	6,760	2,765	\$179	\$439
Monitoring									
Brushy Creek	Rehabilitation Enhancement	Greenup	Louisville	200400931	\$736,400	4,755	2,140	\$155	\$449
Brushy Creek Repair		Greenup	Louisville	LRL-2008-902-jct	\$115,575	1,027	-	\$113	-
Brushy Creek Repair 2		Greenup	Louisville	LRL-2009-1074-pgj	\$118,900	830	-	\$143	-
East Fork Little Sandy #1	Rehabilitation Enhancement	Lawrence	Louisville	200401120	\$332,893	1,650	742	\$202	\$396
East Fork Little Sandy #2	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2009-332-pgj	\$2,137,548	12,598	5,402	\$170	\$396
East Fork Little Sandy #3	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2008-1082-pgj	\$1,616,400	9,778	4,376	\$165	\$369
East Fork Little Sandy #4	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2009-123-pgj	\$817,700	3,159	1,195	\$259	\$684
Locust Creek	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2008-1249-pgj	\$688,315	3,550	1,338	\$194	\$514
Middle Creek	Rehabilitation Enhancement	Floyd		LRL-2006-1256-pgj	\$858,460	9,180	2,214	\$94	\$388
Upper Laurel Creek	Enhancement	Lawrence	Louisville	200500901	\$697,500	3,000	1,350	\$233	\$517
Left Fork of Trace Creek	Rehabilitation Enhancement	Boyd	Louisville	2006-00160	\$269,200	1,300	585	\$207	\$460
Preservation Project									
Laurel Creek Gorge	Preservation	Elliot	Louisville	-	\$1,925,000	83,059	7,725	\$23	\$249
Terminated Project									
Laurel Creek Tributary		Elliott	Louisville		\$155,858				
Ben Willim Branch		Lewis	Louisville		none				
Cat Fork		Lawrence	Louisville		none				

EIU Area (con't)									
Basin/Stream	Type	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit
Keys Creek		Boyd	Louisville		none				
Pigeon Roost Creek		Boyd	Louisville		none				
Upper Cumberland River									
Construction Phase									
Crane's Nest Branch	Rehabilitation Enhancement	Knox	Nashville	2009-01424	\$527,820	2,275	1,078	\$232	\$490
Preservation Project									
Buck Creek	Preservation	Pulaski	Nashville		\$1,667,413	56,502	5,255	\$35	\$381
Upper Kentucky River									
Design Phase									
East Fork Indian Creek	Rehabilitation	Menifee	Louisville	LRL-2012-273	\$1,042,910	4,299	2,160	\$243	\$483
Ross Cr	Preservation Re-establishment Rehabilitation	Lee	Louisville	LRL-2013-143	\$3,538,760	20,165	7,338	\$175	\$482
Upper Cane Creek	Rehabilitation Enhancement	Menifee	Louisville	LRL-2009-433-pgj	\$1,055,475	5,902	1,297	\$179	\$814
Monitoring Phase									
Laurel Fork of Troublesome Cr	Rehabilitation	Breathitt	Louisville	LRL-2007-615	\$1,576,062	5,515	2,200	\$318	\$228
Balls Fork	Rehabilitation	Knott	Louisville		\$61,450	803	270	\$77	\$796
Bullskin Creek	Rehabilitation	Leslie	Louisville	200500205-pgj	\$218,900	1,823	729	\$120	\$300
Red Lick Creek	Rehabilitation Enhancement	Estill	Louisville		\$100,483	1,860	837	\$54	\$120
Terrys Branch	Rehabilitation Enhancement	Knott	Louisville	200500205	\$734,000	2,992	1,227	\$245	\$598
Construction Phase									
Elisha Creek-USFS	Rehabilitation Enhancement	Leslie	Louisville	LRL-2011-00404	\$788,607	4,067	1,912	\$194	\$412
Released from Monitoring									
SECC Bank Stabilization	Rehabilitation Enhancement	Letcher	Louisville	NA	\$61,888	821	82	\$75	\$755
Terminated Project									
North Fork Kentucky River	Enhancement	Perry	Louisville	NA	\$30,000	3,538	0	\$8	
Frozen Creek		Breathitt	Louisville		\$150,220				
Red Lick #2		Estill	Louisville		\$750				
Sand Lick Creek			Louisville		none				
Upper Licking River									
Construction Phase									
Slabcamp Creek-Stonecoal Branch	Re-establishment	Rowan	Louisville	LRL-2009-762-pgj	\$1,900,000	14,180	9,378	\$134	\$203
Total^a	29				\$31,284,921	293,826	74,803		
Average^a					\$1,078,790	10,132	2,579	\$106	\$418

^aTotal cost includes expenses incurred for terminated projects, but total length, total credits, and average figures don't include the projects since they were terminated prior to construction.

Appendix C
Compliance Information

<u>Project</u>	<u>404 Permit Number/Date Authorized</u>	<u>401PM/KDFWR PM</u>	<u>Date Concept Plan/Pre-Application Site Visit</u>	<u>Approval Date of Design Funds/Const Funds</u>	<u>Project Completion Date (FY)</u>	<u>First/Final Monitoring Year (FY)</u>	<u>Most Recent Monitoring Report Rec'd</u>	<u>Mitigation Status</u>	<u>Comments/Issues</u>
BIG SANDY RIVER									
Bolts Fork	LRL-2010-00698 5/13/11	Tewksbury/ Jamison	Jun 2008	8/20/08 12/8/10	2013	2013/2017	-	Open	In Construction
Brushy Creek	LRH-2004-00931 7/22/04	Tewksbury/ Jamison	Apr 2004	5/4/04 2/2/05	2006	2007	--	Open	Project failure; Approved for bank stabilization. monitoring suspended; repair ongoing
Brushy Creek Stabilization 2	LRL-2009-1074 10/29/09	Tewksbury/ Zimmerman	NA	5/13/09 5/13/09	Jan 2010	-	-	-	No monitoring required
East Fork Little Sandy #1	LRH-2004-01120 4/11/04	Tewksbury/ Jamison	Feb 2003	2/11/03 11/12/05	Jan 2007	2007/2011	-	Open	No monitoring required
East Fork Little Sandy #2	LRL-2009-332-pgj 10/29/09	Tewksbury/ Jamison	Jan 2007	2/21/07 9/16/09	Feb 2011	2011/2015	Year 2 (2012)	Open	
East Fork Little Sandy #3	LRL-2008-1082-pgj 5/7/09	Tewksbury/ Jamison	Apr 2007	6/25/07 2/18/09	2011	2011/2015	Year 2 (2012)	Open	
East Fork Little Sandy #4	LRL-2009-123-pgj 6/12/09	Tewksbury/ Jamison	Sept 2007	10/17/07 3/11/09	2010	2011/2015	Year 2 (2012)	Open	
East Fork Little Sandy #5	LRL-2011-00456	Tewksbury/ Jamison	Dec 2008	2/18/09 12/8/10	-	-	-	-	In Design
Kinniconnick Creek	LRL-2007-409-pgj 3/27/08	Tewksbury/ Jamison	Jul 2004	7/14/04 3/1/08	2009	2009/2013	Year 4 (2012)	Open	Repairs anticipated in 2013. Monitoring schedule will restart post repair construction
Laurel Creek Gorge	NA	Tewksbury/ Jamison	Jul 2007	8/15/07 NA	2010	NA	NA	NA	Preservation only, no monitoring required
Left Fork of Trace Creek	2006-00160 7/10/06	Tewksbury/ Jamison	Sept 2004	1/12/05 4/19/06	2007	2007/2011	Year 5 (2011)	Open	Project needs to be revisited to ensure success criteria are met. Remedial actions will be taken if needed, or request release from monitoring.
Locust Creek	LRL-2008-1249-pgj	Tewksbury/ Jamison	Jun 2005	6/24/05 9/30/09	Dec 2010	2010/2014	Year 3 (2012)	Open	
Middle Creek	LRL-2006-1256-pgj 10/31/07	Tewksbury/ Jamison	Apr 2004	7/14/04 6/25/07	2008	2008/2012	Year 5 (2012)	Open	Additional planting and invasive plant species work required. Monitoring period likely extended.
Schultz Creek	LRL-2009-806 5/24/10	Tewksbury/ Jamison	Sept 2007	10/17/07 3/17/10	-	-	-	-	Project not constructed
Upper Laurel Creek	200500901 3/2/06	Tewksbury/ Jamison	Jun 2003	7/13/03 10/5/05	2008	2009/2013	Year 4 (2012)	Open	
CUMBERLAND RIVER									
Buck Creek	NA	Watt/ Mowrey	Apr 2009	5/13/2009	2010	NA	NA	NA	Preservation only, no monitoring required
Buck Creek Tributary	NRL-2007-0115-1 12/29/07	Watt/ Mowrey	July 2006	6/1/07 6/25/07	Jan 2010	2011/2015	Year 3 (2012)	Open	
Crane's Nest Branch	2009-01424	Watt/	Feb 2008	4/16/08	2012	2013/2017	-	Open	In Construction

	3/1/2010	Mowrey		11/16/09					
Hatchery Creek	-	Watt/ Mowrey	July 2009	8/17/2010	-	2014/2018	-	-	In Design
Puncheon Creek	-	Watt/ Mowrey	May 2008	8/20/2008	-	-	-	-	In Design
LICKING RIVER									
Claysville Recovery Land	LRL-2008-644-pgj 6/3/09	Scott/ Jamison	Apr 2006	10/5/05 3/16/08	2010	2010/2014	-	Open	
Salt Lick Creek	LRL-2011-00891 --	Watt/ Jamison	Jun 2008	8/20/08 8/20/08	2013	2013/2017	-	Open	Construction completed-Should expect as-built in 2013
Slabcamp C r -Stonecoal Br	LRL-2009-762-pgj 10/30/09;8/12/10	Scott/ Jamison	Aug 2005	10/5/05 5/13/09	2013	2013/2017	-	Open	Construction completed-Should expect as-built in 2013
KENTUCKY RIVER									
Balls Fork	LRL-2002-01447 9/26/06	Fry/ Ozburn	-	2/1/02	Dec 2005	2007/2012	Year 7 (2012)	Open	Minor repairs and additional plantings planned for 2013.
Beluga (Rogers Gap)	LRL-2013-134.pgj	Fry/ Mulhall	Mar 2011	April 2011	-	-	-	-	In Design
Bullskin Creek	LRL-2005-0205-pgj 2/22/04	Fry/ Ozburn	Feb 2003	2/11/03 2/6/04	Sept 2005	-	-	Open	No monitoring requirements
Cove Spring	LRL- 2009-614-pgj 1/7/11	Fry/ Ozburn	June 2007	10/17/07 5/13/09	2013	2013/2017	-	Open	In Construction
East Fork Indian Creek	LRL-2012-273-pgj	Fry/ Ozburn	Dec 2007	4/16/08	-	-	-	Open	In Design
Elisha Creek	LRL-2011-00404	Fry/ Ozburn		6/1/06 2/18/09	-	2014/2018	-	Open	In Construction
Elm Fork	LRL-2012-263	Fry/ VanArsdall	Mar 2009	3/17/10 --	-	2014/2018	-	-	In Design
Guy Cove	LRL-2007-00615 9/17/07	Fry/ Ozburn	--	1/12/06 8/15/07	Mar 2009	2009 2013	Year 4 (2012)	Open	repairs made to address problems
Mill Creek	LRL-2009-611-pgj 7/20/09	Fry/ Ozburn	Feb 2008	4/16/08 5/13/09	Oct 2009	2010/2014	Year 3 (2012)	Open	
N Fk KY River tree planting	NA	Fry/ Ozburn		10/14/05 -	2006	-	-	Closed	no credits - trees cut by Perry Co Bd Educ
Pond Creek (stream)	-	Fry/ VanArsdall	Apr 2009	5/13/09 -	-	-	-	-	Not designed
Pond Creek (wetland)	-	Fry/ VanArsdall		5/13/09 -	-	-	-	-	Not designed
Red Lick Creek	LRL-2005-1331	Fry/ Ozburn		10/4/05 4/18/07	Dec 07	2008/2012	Year 5 (2012)	Open	More tree planting will be done by KDFWR; Monitoring release requested in Year 5 (2012) report
SECC Bank Stabilization	NA	Fry/ Ozburn		2/1/03 5/10/06	Apr 2007	2008-2012	None required	Released	No monitoring required
Terrys Branch	LRL-2005-00205 6/27/06	Fry/ Ozburn	June 2003	7/17/03 10/5/05	Dec 2007	2008-2012	Year 5 (2012)	Open	repair log vanes; plant native trees; monitoring likely extended
Upper Cane Creek	LRL-2009-433-pgj 10/18/09	Fry/ Ozburn	--	1/12/05 2/18/09	--	--	-	Open	Not constructed

SALT RIVER									
Harrison Fork	-	Tewksbury/ Ozburn		1/16/08 -	-	2012	-	-	In Design
South Fork of Curry's Fork	LRL-2009-98-pgj 9/29/09	Tewksbury/ Ozburn	April 2006	7/18/06 5/13/09	2013	2013/2017	-	Open	In Construction
GREEN RIVER									
Eagle Cr Tributary (Stream)	-	Jackson/ VanArsdall	Mar 2010 --	3/17/10 --	-	-	-	-	In Design
Eagle Cr Tributary (Wetland)	-	Jackson/ VanArsdall	Mar 2010 --	3/17/10 --	-	-	-	-	In Design
Forestland Gr Tract (Stream)	-	Jackson/ VanArsdall		12/2/09 --	-	-	-	-	Not designed
Forestland Gr Tract (Wetland)	-	Jackson/ VanArsdall		12/2/09 --	-	-	-	-	Not designed
Haney Fk Watershed No. 2	LRL 2004-01363 5/26/05	Jackson/ Mulhall	Mar 2004	5/5/04 4/13/05	2006	2007/2011	Year 5 (2011)	Released	Released from monitoring in FY 2012
Trammel Creek	LRL-2008-936-pgj 4/24/09	Jackson/ Mulhall	Apr 2006	6/7/06 2/18/09	2010	2010/2014	Year 3 (2012)	Open	Repairs and additional plantings completed in 2012
JACKSON PURCHASE									
Obion Creek	200300263	Fry/ Mowrey		6/4/03 6/4/03	2006	2007/2011	2011	Open	Release pending. Site visit scheduled for Feb 2013 to determine date of release
Obion Creek II	MVM-2010-074	Fry/ Mowrey	Feb 2008	4/16/08 5/13/09	-	-	-	Open	In Construction

