

Annual Report – Calendar Year 2014
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 USACE of Engineers and
the Kentucky Department of Fish and Wildlife Resources”
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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 2014 (CY14). This is the third annual report under the modified agreement (Instrument) between the U.S. Army USACE of Engineers (USACE) and KDFWR (USACE, 2011). The report includes summary information, program, credit, financial and project status, staffing, and activities performed during 2014 to fulfill the reporting requirements of the Instrument. The report includes program activities in the Louisville, Nashville, and Memphis USACE district offices. 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 to satisfy compensatory mitigation requirements 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.”

KDFWR 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 stream and wetland projects that improve degraded streams and wetlands throughout the Commonwealth. Mitigation projects are implemented on private lands or on lands owned or acquired by KDFWR; therefore, the success of the program is largely dependent on cooperation with private landowners and purchase of property from landowners that wish to sell lands. The program also has the alternative of preserving high quality aquatic resources through acquisition of properties with such resources and permanently protecting those areas through legal instruments and management.

The USACE has agreements (Instruments) 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 Instruments between the sponsors and the USACE ensure that mitigation is completed, is sufficient to compensate for losses, provides permanent protection and long-term management, and adheres to applicable federal and state regulations and guidelines. By accepting in-lieu fee payments, the sponsor is assuming responsibility to provide compensatory mitigation pursuant to the terms of the Instrument 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), pursuant to federal rules. The U.S. Environmental Protection Agency (USEPA) is not signatory to the Instrument but may provide comments on individual mitigation projects. 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 consults with the IRT 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, and it has assumed jurisdiction for Section 404 regulatory projects in the Huntington District's region of Kentucky. The individual districts are responsible for specific issues with projects under their jurisdiction.

The Instrument requires that all KDFWR 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 for perennial and intermittent streams are typically 50-150 feet from each bank, although older projects were often of less width and ephemeral channels typically have 25 feet. Recent projects also have tended to be of greater length, usually several thousand feet, to provide more ecologically beneficial projects and an economy of scale.

Updated Agreement

The Instrument went into effect on January 13, 2012 by Public Notice from the USACE. Its purpose was to comply with the 2008 Final Mitigation Rule (USACE, 2008). The Instrument 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.

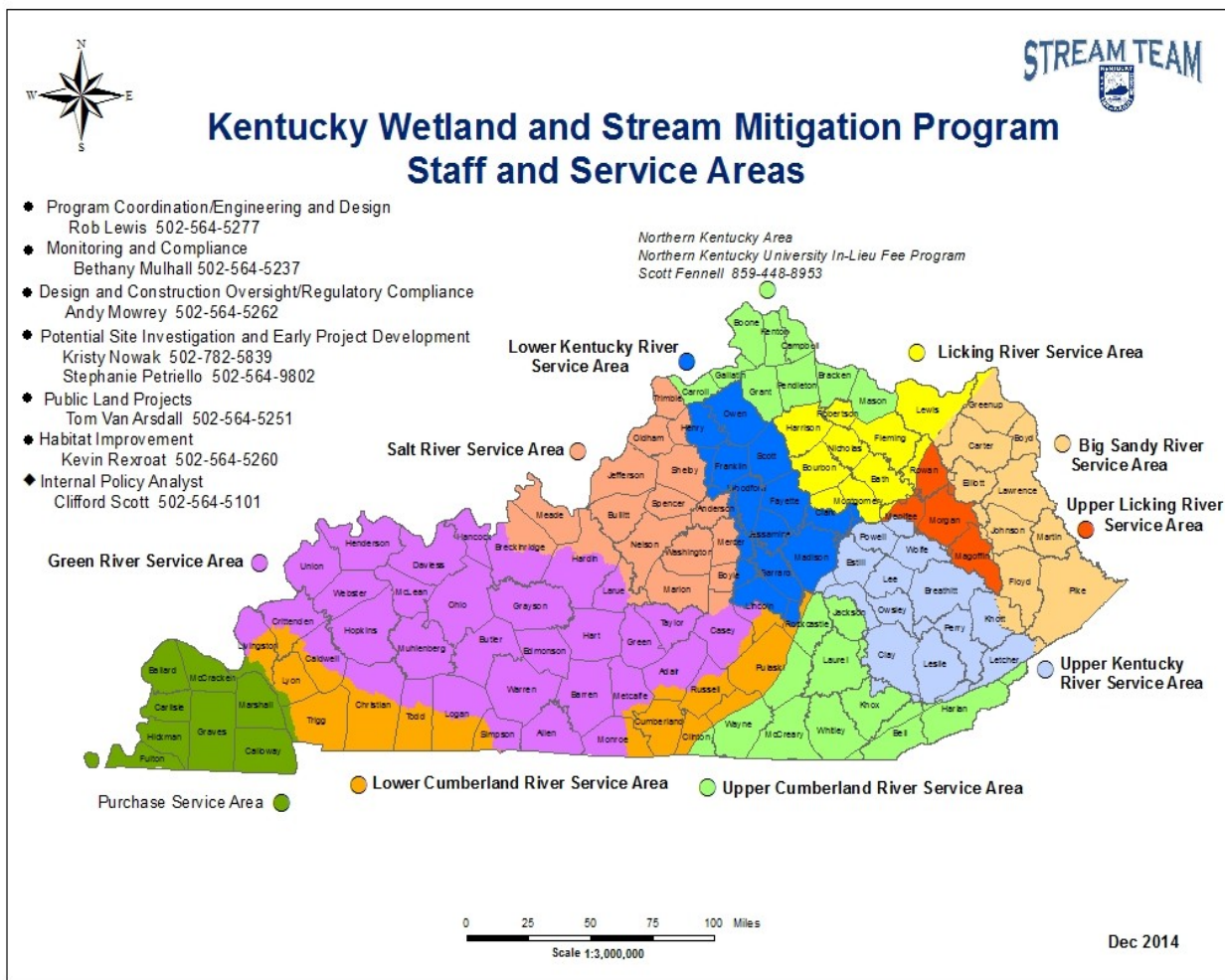
FILO Staff and Basin Assignments

After the departure of two project managers/staff biologists in 2013, Stephanie Petriello was hired in March 2014 to assist in potential site investigations and initial project development. This brought the staff numbers up to eight individuals: Rob Lewis, P.E., Clifford Scott (Internal Policy Analyst), Kevin Rexroat (Management Foreman), and staff biologists Andy Mowrey, Bethany Mulhall, Tom Van Arsdall, Kristy Nowak, and Stephanie Petriello. The program also partially supports a position in Real Properties of the Finance Cabinet, and Jessie Boles, a co-op from the University of Louisville's School of Engineering, assisted staff both in the office and field in the summer months.

In 2013 most FILO workload was allocated functionally instead of by service area:

- Rob Lewis - program coordination; engineering and design
- Clifford Scott – financial and credit accounting
- Kevin Rexroat – repair of failing structures; invasive species removal; habitat improvement; vegetation planting
- Bethany Mulhall – monitoring and inspection
- Andy Mowrey – permitting and construction oversight
- Kristy Nowak and Stephanie Petriello - project search and initial project development
- Tom Van Arsdall - public lands projects

Figure 1.



Landowner Contacts and Potential Project Site Visits

Project development was going well early in 2014. Several projects had been found around the Laurel Gorge area of Elliott County and elsewhere in the Big Sandy River Service River Area, and approved projects actually use more than the fees received at the time in five of the other service areas. But with the loss of several approved projects (because of property and landowner issues) and additional credit sales, FILO staff attempted to locate new projects in the Big Sandy River Service Area. This was often done through realty listings of lands for sale. Table 1 shows the potential project site visits that were made during the year; it does not indicate the many landowner and realtor contacts that did not result in site visits.

Table 1. Initial Site Visits CY14

<u>Service Area</u>	<u>Stream/wetland</u>	<u>County</u>	<u>Landowner/contact</u>
Big Sandy	Buffalo Cr	Carter	Jeffry Lewis
Big Sandy	Dawson Br	Carter	Addington Properties
Big Sandy	Little Cat Fork	Lawrence	Keith Moore
Big Sandy	UT to Barrett Cr	Carter	Lillie Schaffer
Big Sandy	Tygarts Cr	Carter	Doug Morgan
Big Sandy	Smokey Valley Cr	Carter	Keith Walker
Big Sandy	Indian Cr	Morgan	Gala Suffridge
Big Sandy	Deans Br/Cains Cr	Lawrence	Gary Edwards
Big Sandy	Little Fork/Wallow Hole	Elliott	Manning Realty
Big Sandy	Caudill Br	Carter	Addington Properties
Big Sandy	Stockholm Cr	Greenup	KY League Sportsmen
Green	Russell Cr	Green	James
Green	East Fk Bull Cr	Hopkins	Wayne Workman
Green	Dysmal Cr	Edmonson	John Martin
Green	Abell Spring Br	Adair	Tartar
Upper Kentucky	Chester Cr	Wolfe	John Boyken, Whitetail Prop.
Upper Kentucky	UT to Wilder Cr	Leslie	Carriage Gate Real Estate
Lower Licking	Martin Mill Br	Fleming	Meredith Story
Lower Licking	Deep Hole Br	Lewis	Craig Stanfield
Lower Licking	Indian Cr	Bath	Karl Clark
Salt	UT to Salt R in Big Beech Woods area	Jefferson	Twenty-First Century Parks
Salt	Wetland/UTs to Salt River	Jefferson	Twenty-First Century Parks
Salt	Turkey Run	Jefferson	Twenty-First Century Park
Salt	Carpenter Cr	Casey	Central KY Wildlife Refuge
Salt	Trace Cr/ UT Cane Run	Nelson	Jason Schlatter
Salt	Thompson Cr	LaRue	Matthew Peake
Lower Cumberland	Rock Lick Cr	Russell	Eric Dickens
Lower Cumberland	UT to Cumberland River	Russell	Eric Dickens
Jackson Purchase	Wetland	Carlisle	KDFWR – Doug Travis WMA

Credit Costs and Status

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.

During 2012, the cost per EIU in the Big Sandy Service Area was increased to \$650 and the cost per stream AMU was increased to \$240. All stream credit costs were unchanged in 2013 and again in 2014 (Table 2). Wetland AMUs increased from \$30,000 to \$45,840 in July 2014, a fact which was communicated to the USACE at that time. It is anticipated that stream credit costs in both AMU and EIU areas will be increased early in 2015.

In November 2014, credit sales were suspended in the Big Sandy Service Area because of: 1) the difficulty in finding acceptable mitigation projects, i.e. sites without mineral rights, property, or water quality issues; 2) FILO was not going to meet the 3-year deadline for getting projects into construction from the time fees were received; and 3) several approved projects did not materialize because of issues with property purchases. In addition, several large tracts of land involving thousands of acres with mitigation potential could not be developed further because of oil and gas interests.

Another 5,625 EIUs, 24,658 stream AMUs and 14.85 wetland AMUs were sold by FILO in CY14. 4,191 credits were released in the Upper Cumberland Service Area during the year from the Sinking Valley preservation project. Credit balances for streams and wetlands are shown for each service area in Table 3; individual credit sales are presented in **Appendix A**.

Table 2. Credit Costs (\$)

<u>Service Area</u>	<u>Stream</u>						-	<u>Wetland</u>	
	<u>Cost/EIU</u>			<u>Cost/AMU</u>			-	<u>Cost/AMU</u>	
	Transition Jan 2012	End of CY2013	End of CY2014	Transition Jan 2012	End of CY2013	End of CY2014	Transition to July 15, 2014	End of CY2014	
Big Sandy	610	650*	650				30,000	45,840***	
Upper Licking	610	610	610				30,000	45,840***	
Upper Kentucky	610	610	610				30,000	45,840***	
Upper Cumberland	610	610	610				30,000	45,840***	
Lower Licking				215	240**	240	30,000	45,840***	
Lower Kentucky				215	240**	240	30,000	45,840***	
Lower Cumberland				215	240**	240	30,000	45,840***	
Green				215	240**	240	30,000	45,840***	
Salt				215	240**	240	30,000	45,840***	
Jackson Purchase				215	240**	240	30,000	45,840***	

* Big Sandy stream EIU rate increased to \$650 effective March 1, 2012

** All Stream AMU rates increased to \$240 effective March 15, 2012

*** All Wetland AMU rates increased to \$45,840 effective July 15, 2014

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 Sold CY13	5,707.6	999.1	0.0	49.5			6,756.2
Credits Sold CY14	3,535.6	2,037.2		52.3			5,625.0
Credits Released				4,191.0			
Reserve Released Credits							
Advance EIU Balance	205,277.5	234,613.8	238,904.0	236,953.1			
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 CY12	807.0	11,012.0	8,893.0	10,724.6	1,338.2	0.0	32,774.8
Credits Sold CY13	14,654.2	0.0	1,917.7	1,621.9	4,928.0	0.0	23,121.8
Credits Sold CY14	606.0	1,411.0	2,346.0	14,688.2	5,607.1		24,658.3
Credits Released							
Reserve Released Credits							
Advance AMU Balance	223,932.8	216,158.0	219,866.3	198,714.3	224,243.8	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	3.550	0.000	1.800	0.000	0.980		6.330
Credits Sold CY12	2.410	0.000	1.032	0.000	0.000		3.442
Credits Sold CY13	0.024	1.200	3.170	0.000	0.000		4.394
Credits Sold CY14	0.577	0.000	0.400	0.000	0.000		0.977
Credits Released							
Reserve Released Credits							
Advance AMU Balance	93.439	98.800	93.598	100.000	99.020		
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	2.250	9.980	10.280	2.540	2.300		27.350
Credits Sold CY12	0.381	4.180	7.444	0.000	0.000		12.005
Credits Sold CY13	3.360	0.000	3.814	1.900	0.820		9.894
Credits Sold CY14	4.572	3.600	5.700	0.000	0.000		13.872
Credits Released							
Reserve Released Credits							
Advance AMU Balance	89.437	82.240	172.762	95.560	196.880		

Program Financial Status

About \$38.1M of project funds available at the beginning of CY14. During CY14, over \$3.8M in credits were sold in the Green River Service Area, \$2.3M in the Big Sandy Service Area, \$1.3M in the Salt River Service Area, and \$1.2M in the Upper Kentucky River Service Area. No credits were sold in the Upper Licking River and Purchase service areas (Table 4). Available project funds at the end of CY14 totaled \$46.1M. As in previous years, the Big Sandy River Service Area had by far the largest number of funds available for projects (\$16.8M), and the Green River Service Area had \$8.1M; however, as can be seen later in Table 6, most of the project funds have been allocated to approved projects.

Table 4. CY14 Service Area Receipts and Project Funds (\$)

Service Area	CY 14 Total Receipts	CY 14 Receipts to Admin (10%)	CY 14 Receipts to Reserve (10%)	CY 14 Receipts to Projects (80%)	CY14 Beginning Balance	Total Project Funds - end CY14
Big Sandy	2,315,445	231,544	231,544	1,852,356	14,911,797	16,764,153
Upper Kentucky	1,243,197*	124,320	124,320	994,558	1,663,074	2,657,632
Lower Kentucky	163,776	16,378	16,378	131,021	3,109,839	3,240,860
Upper Cumberland	171,155	17,116	17,116	136,924	3,525,798	3,662,722
Lower Cumberland	671,040	67,104	67,104	536,832	3,347,597	3,884,429
Upper Licking	0	0	0	0	526,651	526,651
Lower Licking	338,640	33,864	33,864	270,912	3,977,558	4,248,470
Salt	1,345,702	134,570	134,570	1,076,562	1,931,963	3,008,525
Green	3,786,182**	378,618	378,618	3,028,946	5,036,523	8,065,469
Purchase	0	0	0	0	78,431	78,431
Total	10,035,137	1,003,514	1,003,514	8,028,110	38,109,230	46,137,340

* includes \$5,478.00 returned funds from North Fork Tree Planting LRL-2010-325- closed project

** includes \$4,334.32 returned funds from Haney Fork LRL-2010-325, closed project and \$95,172.00 returned funds from Forestland Group Tract LRL-2003-27

For the first time in several years, the majority of receipts in CY14 came from mining projects, followed by transportation and development (Table 5).

Table 5. FILO Receipts by Source - CY14

Source	Receipts (\$)	Percentage of Total
KY Transportation Cabinet	3,063,580	30.5
Municipal	72,350	0.7
Development	2,029,605	20.2
Mining	4,764,618	47.5
Other	104,984	1.0
Total	10,035,137	100.0

Project Fund Status

Table 6 shows: 1) project funds received in each of the ten service areas from Transition to the end of CY14 for stream and wetland; 2) funds allocated to “approved” projects during the year; and 3) funds remaining (unallocated) at the end of the year. Over \$39.5M is allocated to stream projects, up from about \$29M at the end of CY13 and \$12M at the end of CY12. About \$12.1M is unallocated in the Big Sandy, Upper Kentucky, Upper Licking, Green, and Purchase service areas. This is offset by over-allocation of \$7.4M of project funds in the five other service areas (Lower Kentucky, Salt, Lower Licking, Upper Cumberland, and Lower Cumberland), which will mostly be made up by additional receipt of fees prior to construction and reserve funds, if necessary.

Table 6. Allocated and Unallocated Project Funds for Stream and Wetland, by Service Area (\$)

Basin	Stream			Wetland			Total Unallocated
	Project	Allocated	Unallocated	Project	Allocated	Unallocated	
Big Sandy	16,612,012	8,368,905	8,243,107	152,141	0	152,141	8,395,248
Upper Kentucky	2,628,832	944,768	1,684,064	28,800	0	28,800	1,712,864
Lower Kentucky	3,084,918	4,135,652	(1,050,734)	155,942	133,620	22,322	(1,028,412)
Upper Cumberland	3,410,821	3,657,600	(246,779)	251,900	0	251,900	5,122
Lower Cumberland	3,473,225	3,986,295	(513,070)	411,204	0	411,204	(101,866)
Upper Licking	526,651	-	526,651	-	0	-	526,651
Lower Licking	4,226,411	7,083,682	(2,857,271)	22,059	0	22,059	(2,835,212)
Green	7,336,944	5,732,015	1,604,929	728,525	337,050	391,475	1,996,404
Salt	2,905,798	5,631,538	(2,725,740)	102,727	0	102,727	(2,623,013)
Jackson Purchase	3,002	-	3,002	75,429	0	75,429	78,431
Total	44,208,614	39,540,454	12,061,753^a (7,393,593)^b	1,928,726	470,670	1,458,056	

^aUnallocated funds in 5 service areas

^bOver-allocation of funds in 5 service areas

About \$1.9M will go toward wetland mitigation, of which less than \$0.5M has been allocated in the Green and Lower Kentucky service areas. The Lower Cumberland, Green and Upper Cumberland service areas have the most unallocated wetland credits/funds.

Reserve Fund

Pursuant to the Instrument, the Reserve Fund was established to fund additional mitigation projects, permanent protection activities, minor actions, long term management, and to serve as contingency. Interest accounts for one component of the Reserve; 90% of interest accrued following transition is placed in reserve. The other component of Reserve is comprised of 10% of credit sales (Table 7).

In CY14: 1) \$75,000 was used for long-term maintenance (\$50,000 of which had been mistakenly taken from Admin funds in 2013 report); \$150,000 went toward further repair of Trammel Creek; and \$10,000 was used to help purchase the Howard Tract in Laurel Creek Gorge area. With \$3M required by the Instrument for minimum or non-wasting Reserve, active Reserve at the end of CY14 was \$2,323,366.

Table 7. CY2014 Reserve Fund Activity and Balance (\$)

CY2014 - Beginning Balance	11,236,103
CY2014 - From Stream Receipts (10%)	949,118
CY2014 - From Wetland Receipts (10%)	54,395
CY2014 - Interest (90%)	712,342
*CY2013 - Correction (C6XC - Long Term Maintenance 2014)	(50,000)
CY2014 - Long Term Maintenance 2015	(25,000)
CY2014 - Fund Laurel Gorge Howard Tract	(10,000)
CY2014 - Additional funding for Trammel Creek - Allen County	(150,000)
CY2014 - Over-allocated Stream Funds in 5 service areas that require Reserve coverage	(7,393,593)
CY2014 Reserve Ending Balance	5,323,366
Non-wasting Reserve	3,000,000
Active Reserve Ending Balance	2,323,366
*Long Term Maintenance 2014 incorrectly funded from Admin on CY2013 annual report	

Administrative Fund

The Administrative Fund is used for expenses associated with activities to operate the program and to identify new projects, including outreach and property work; staff salaries; equipment; and other indirect expenses such as travel and training. The administrative fund balance going into CY14 was \$5,804,169, little changed from the beginning of CY13. During 2014, 10% of receipts and interest (\$1,082,662) was added to that amount (Table 8). After normal operating expenses during the year of \$1,100,000, plus \$250,000 to fund service area accounts and an archaeological contract, the administrative fund balance at the end of CY14 was \$5,585,082.

Table 8. Administrative fund Activity and Balance (\$)

CY2014 - Beginning Balance	5,804,169
CY2014 - From Stream Receipts (10%)	949,118
CY2014 - From Wetland Receipts (10%)	54,395
CY2014 - Interest (10%)	79,149
*CY2013 - Correction, money returned (C6XC - Long Term Maintenance 2014)	50,000
CY2014 - Budgeted to C70W - Archaeological Surveys	(50,000)
CY2014 - Transfer to F&W fund (134R) to cover operating budget	(1,100,000)
CY2014 - Fund 2015-2016 Service Area Accounts	(200,000)
CY2014 - Closed Account (Rowe Flats)	(1,750)
CY2014 - Ending Administrative Balance	5,585,082

*Long Term Maintenance 2014 incorrectly funded from Admin on CY2013 annual report - Should have been funded from Reserve

Mitigation Fund Interest Reconciliation

In 2014 an error was discovered by KDFWR regarding interest distribution from seven in-lieu fee mitigation project accounts. This was not associated with the interest accruing to the overall in-lieu fee program fund balance and was restricted to seven specific mitigation project funds. KDFWR and the Kentucky Office of State Budget Director have identified the number of projects affected. Both these offices are in the process of correcting the interest distribution on these and future project funds, and have instituted procedural measures to prevent recurrence. The issue has been described and the status of the corrective measures has been reported to the Corps of Engineers-Louisville District

Mitigation of Impacts

Prior to the 2008 Mitigation Rule fully taking effect with the Instrument early in 2012, 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 occurred 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. With implementation of the Instrument and conversion of unallocated funds to credits, it is possible to compare impacts (credits sold by FILO) to mitigation (credits realized by FILO projects) for projects begun (approved by IRT) in January 2012 and later.

Actions Taken by Interagency Review Team

Seven conceptual plans were submitted and eleven projects were “approved” by the IRT in CY14; that is, the USACE was in support of the projects following the Conceptual Plan and site visit, although there may still have been some response needed to IRT comments (Table 9). In addition, the Sinking Valley project was conditionally approved in late 2013 but final approval did not occur until early 2014 with confirmation that mineral rights were not severed, and some minor corrections of boundary and mitigation were submitted and approved by IRT in 2014 on the previously approved Old Trace Creek project.

Table 9. Conceptual Plans Submitted and Other Actions of Interagency Review Team - CY14

Stream	Service Area	USACE District	County	Type	Action Taken
Laurel Cr Tributary (Rowe Flats)	Big Sandy	Louisville	Elliott	Rehabilitation Re-establishment	IRT site visit Dec 2013; project approved Jan 2014; FILO response to comments Feb 2014; project terminated as landowner did not accept offer
Clifty Creek (Johnson-Linville tract)	Big Sandy	Louisville	Lawrence	Rehabilitation; Re-establishment	IRT site visit Dec 2013; project approved Jan 2014; FILO response to comments Feb 2014; project terminated due to landowner issues
Old Trace Creek	Big Sandy	Louisville	Lewis	Rehabilitation; re-establishment; preservation; enhancement	Revised Conceptual Plan submitted May 2014 reflecting minor boundary and mitigation revisions;
York Property	Big Sandy	Louisville	Elliott	Rehabilitation	IRT site visit May 2014; project approved Nov 2014; FILO response to comments Dec 2014

Stream	Service Area	USACE District	County	Type	Action Taken
Smith property	Big Sandy	Louisville	Elliott	Rehabilitation; re-establishment; enhancement	IRT site visits Mar 2014; project approved May 2014; FILO response to comments Jun 2014
Big Farm	Lower Licking	Louisville	Bath	Rehabilitation; re-establishment; preservation; enhancement	IRT site visit Jun 2014 ; project approved Jul 2014; FILO response to comments Aug 2014
Minors Creek	Lower Kentucky	Louisville	Owen	Rehabilitation; re-establishment; preservation; enhancement	IRT site visit Mar 2013; project approved Apr 2013; property purchase closed Jun 2014
Red Oak Creek	Lower Kentucky	Louisville	Owen	Rehabilitation, Re-establishment, Enhancement, Preservation	IRT site visit Sept 2014; project approved Nov 2014; FILO response to comments Dec 2014
Pond Creek	Lower Kentucky	Louisville	Owen	Wetland enhancement; stream rehabilitation and re-establishment	IRT site visit May 2014; project approval Sept 2014; FILO response to comments Nov 2014
Wolf Run	Salt	Louisville	Jefferson	Rehabilitation, Re-establishment, Enhancement, Preservation	IRT site visit Mar 2014; project approved Apr 2014; FILO response to comments May 2014
Boyds Creek	Green	Louisville	Barren	Rehabilitation Re-establishment	IRT site visit Dec 2013; project approved Feb 2014; FILO response to comments May 2014
Farmers Creek	Green	Louisville	Webster	Wetland enhancement; stream rehabilitation and re-establishment	IRT site visit May 2014; project approval Aug 2014; FILO response to comments Aug 2014
Sinking Valley	Upper Cumberland	Nashville	Pulaski	Preservation	IRT site visit Apr 2012; conditional approval Dec 2013; FILO response on non-separation of mineral rights Jan 2014; IRT approval Feb 2014; property purchase closed Mar 2014
Steele Branch	Upper Cumberland	Nashville	Wayne McCreary	Re-establishment	IRT site visit Apr 2013; conditional project approval Oct 2014
Blue Spring Creek	Lower Cumberland	Nashville	Trigg	Rehabilitation Re-establishment	IRT site visit Aug 2013; project tentatively approved Dec 2013; FILO response Jan 2014

Project Statistics and Status

A total of 80 projects have been approved for design by the IRT over the program's history. With the addition of nine new projects in 2014, there currently are 29 completed projects, three projects in construction, 12 projects in design phase (Ross Cr I and II are considered a single project), and 14 approved projects not yet in design (**Appendix B**). Four other projects (Laurel Cr Gorge, Buck Cr, Sinking Valley, Forestland Tract) are preservation only. Three approved projects were terminated in 2014 because of property or landowner issues. Six projects have been approved under the USACE Letter of Permission (LOP) process that resulted in In-Lieu Fee Instrument modifications for each district (**Appendix C**).

The program has preserved three tracts with high quality streams (Laurel Creek Gorge, Buck Creek, Sinking Valley) and 2,362 acres of their surrounding watersheds with over 38 miles of tributaries. Another 10,300 feet of stream length is being preserved on the two Ross Creek projects. FILO also contributed: 1) about 51% of the purchase of a 2,500-acre tract in Scott County for a project that preserves 6.0 miles of high quality intermittent and ephemeral streams and restores and enhances another 22.4 stream miles; and 2) purchase of 468 acres in Nicholas adjacent to Clay WMA (Myers Station project). Besides Sinking Valley, property purchases were made in 2014 on Minors Creek (309 acres in Lower Kentucky Service Area), and Laurel Creek Gorge #2 (361 acres in Big Sandy Service Area with 12,000 feet of preservation).

Table 10 provides summary statistics for total cost, length, and credits, and 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 \$1.97M, is over 18,000 feet in length, gains 19,100 credits, and has a cost per credit of \$104 and a cost per foot of \$107. Also, 54.96 acres of

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 and Completed Projects	28	34
Number of terminated/unfunded projects that incurred costs	2	9
Total Estimated Project Cost	\$56,063,479	\$41,796,779
Total Estimated Stream Cost	\$55,084,009	\$41,796,779
Total Estimated Wetland Cost	\$979,470	-
Average Estimated Stream Project Cost	\$1,967,286	\$1,229,317
Total Length (ft)	513,712	409,343
Average Length (ft)	18,347	12,040
Cost/ft	\$107	\$102
Total Stream Credits	531,929	96,152
Average Stream Credits	19,100	2,828
Cost/stream credit	\$104	\$435
Total wetland credits (wetland AMUs)	54.96	-
Cost/wetland credit	\$17,821	-

^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.

wetland are included in projects (Eagle Cr Tributary, Forest Land Group, Cove Spring, Farmers Cr) in the AMU region at a total cost of \$979470 or \$17,821 per wetland AMU.

In the EIU region, the average project is estimated at \$1.23M, is more than 12,000 feet in length, gains 2,828 credits, and has a cost per credit of \$435 and a cost per foot of \$102. 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 actual cost of a restoration project.

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

Big Sandy River Service Area

There are 18 active, completed, and pending projects in this service area, which is within the USACE Louisville District and EKSAP region using the EIU credit system (Figure 2).

Barrett Creek, Carter County. The IRT conducted a site visit on 9/5/12. There were no significant comments and the project conceptual plan was approved. The project was terminated in 2014 because of landowner issues.

Bolts Fork, Boyd County. Construction and planting completed Fall/Winter 2013. The first year of monitoring was 2014.

Clifty Creek (Johnson-Linville), Elliott County. The project was approved in 2014 but terminated because of landowner issues.

East Fork Little Sandy #1, Lawrence County. Monitoring has exceeded five years. Project was released from monitoring in a letter from the USACE in May 2013. Project will be periodically monitored for easement encroachments and appropriate measures taken if needed.

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

East Fork Little Sandy #3, Lawrence County. Year 4 monitoring completed and report was submitted.

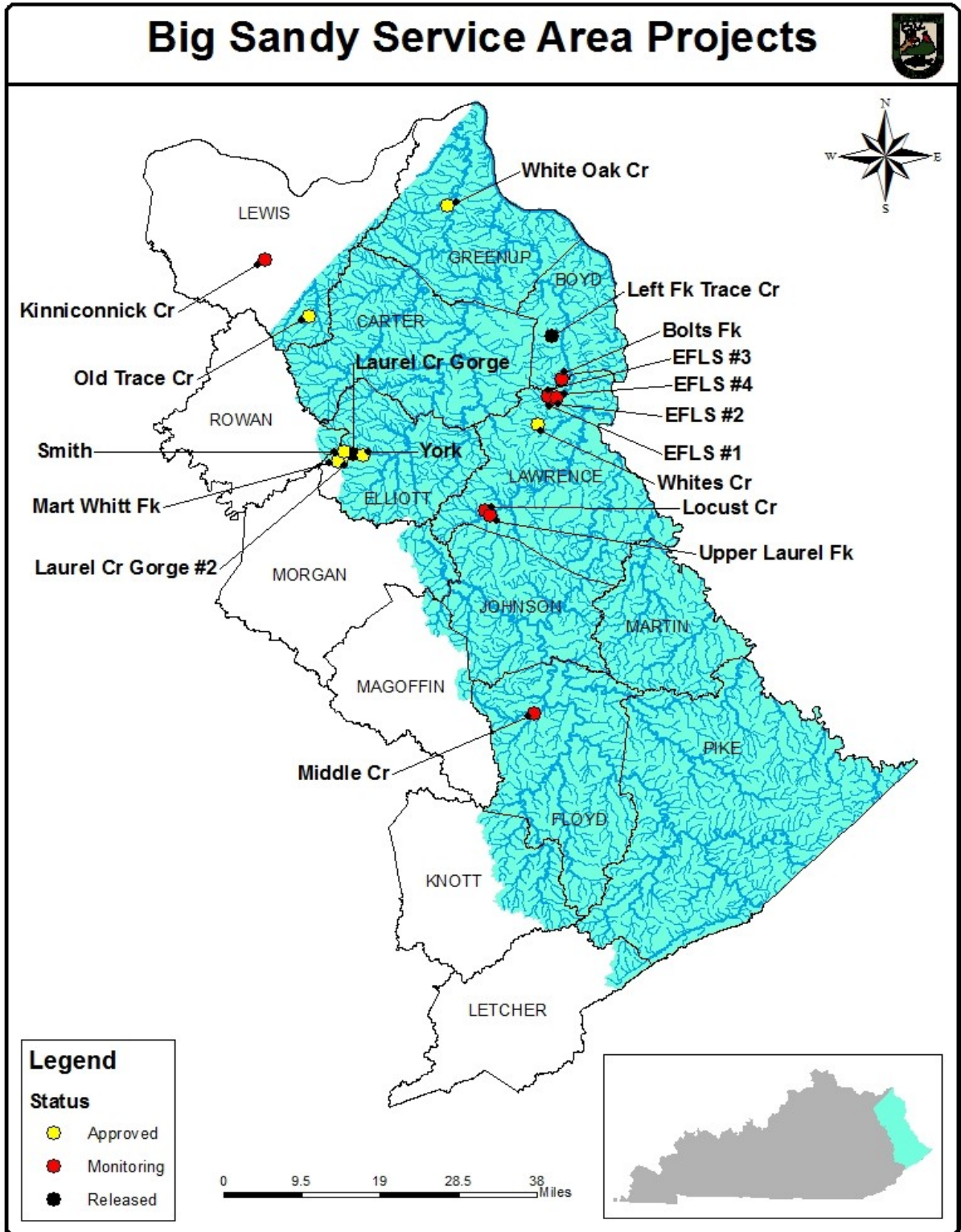
East Fork Little Sandy #4, Lawrence County. Year 4 monitoring completed and report was submitted.

East Fork Little Sandy #5, Lawrence County. Unable to resolve property issues and will be terminated.

Kinniconick Creek/Indian Creek, Lewis County. Repairs commenced in November 2013 and were completed in 2014. Discussions have been made regarding releasing sections of Lower Indian and Kinniconick Creek from monitoring, and continue to monitor Upper Indian (upstream of low water crossing) where majority of repair work occurred. The Year 6 monitoring report was submitted. Note: is now in Lower Licking geographically, but was originally included in Big Sandy)

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. No encroachments or incompatible uses were observed in 2014.

Figure 2.



Laurel Creek Gorge #2 (Greene-Johnson tracts), Elliott County. The project consists of the two tracts with 360 acres. Closing of purchase occurred in 2014. The property is now part of the Ed Mabry WMA.

Laurel Creek Tributary (Rowe Flats), Elliott County. The project was approved in Jan 2014 but terminated because landowner did not accept purchase offer of fair market value as appraised.

Left Fork Trace Creek, Boyd County. Repairs and maintenance were completed in November 2013. Project release letter was received from the USACE in February 2014. Now in the long-term management phase, the project will be periodically monitored for easement encroachments and appropriate measures taken if needed.

Locust Creek, Lawrence County. Year 5 monitoring completed and report was submitted.

Mart Whitt Fork, Elliott County. The project was approved in 2013 and includes purchase of 335 acres and preservation of over 13,000 feet of stream length. The tract will become part of the Laurel Creek Gorge-Ed Mabry WMA.

Middle Creek, Floyd County. Year 5 monitoring report submitted in 2012. Report of intended maintenance activities submitted in 2013. Monitoring period extended. Repair and maintenance tasks occurred in 2014 including easement boundary marking, invasive plant control and supplemental native planting.

Old Trace Creek, Lewis County. Approved in 2013. Revised Conceptual Plan reflecting minor boundary and mitigation revisions submitted to IRT May 2014. Design-build contract will begin in 2015. The project has over 20,000 feet of stream length, including 3,483 feet of preservation.

Schultz Creek, Greenup County. No activity in 2014. Project expected to be terminated in 2015.

Smith Property, Elliott County. The project is adjacent to the existing mitigation land of Laurel Creek gorge area that was approved in 2014. The purchased tract containing 56 acres will become part of the Ed Mabry WMA.

Upper Laurel Creek, Lawrence County. Year 5 monitoring completed and report was submitted in 2013. Monitoring period extended. Maintenance tasks in 2014 included invasive plant control, supplemental native planting, and repair of floodplain scour.

White Oak Creek, Greenup County. Project approved in 2013. Easement and boundary issues need to be resolved.

Whites Creek, Boyd County. Real Property's appraisals were conducted in 2013 and landowner contract should be signed early in 2015.

York Property, Elliott County. Project approved in 2014 that will add to the Laurel Creek Gorge protected area of Ed Mabry WMA. Purchase of the 50-acre tract is expected in 2015.

Upper Cumberland River Service Area

There are five 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 3).

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 in 2013.

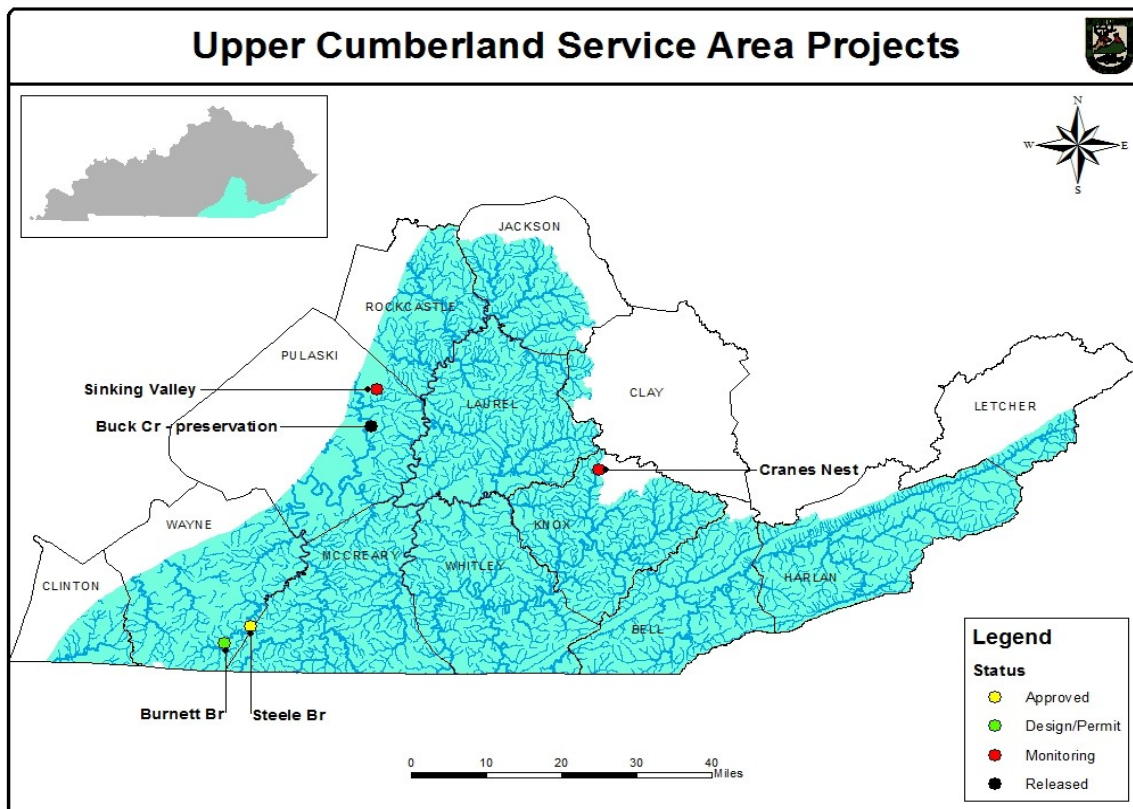
Burnett Branch, Wayne and McCreary counties. KDFWR partnered with KDOW Wild Rivers program to acquire property for preservation and restoration. FILO funds utilized only in stream riparian corridors, accounted for in deed restrictions applied at purchase. One tract was excepted from FILO funds due to mineral severance. That tract carries same deed restrictions and retains potential for future mitigation if/when mineral ownership can be controlled. Design began in 2014.

Cranes Nest Branch, Knox County. Year 2 monitoring report submitted in 2014.

Sinking Valley, Pulaski County. Mitigation Plan for 100% preservation finalized and accepted December 2013. Title required update for consideration of mineral severance/ownership. Mineral issue was resolved early 2014 and the purchase closed March 2014.

Steele Branch, Wayne and McCreary counties. This project is another collaboration with KY Wild Rivers program that was approved in Oct 2014.

Figure 3.



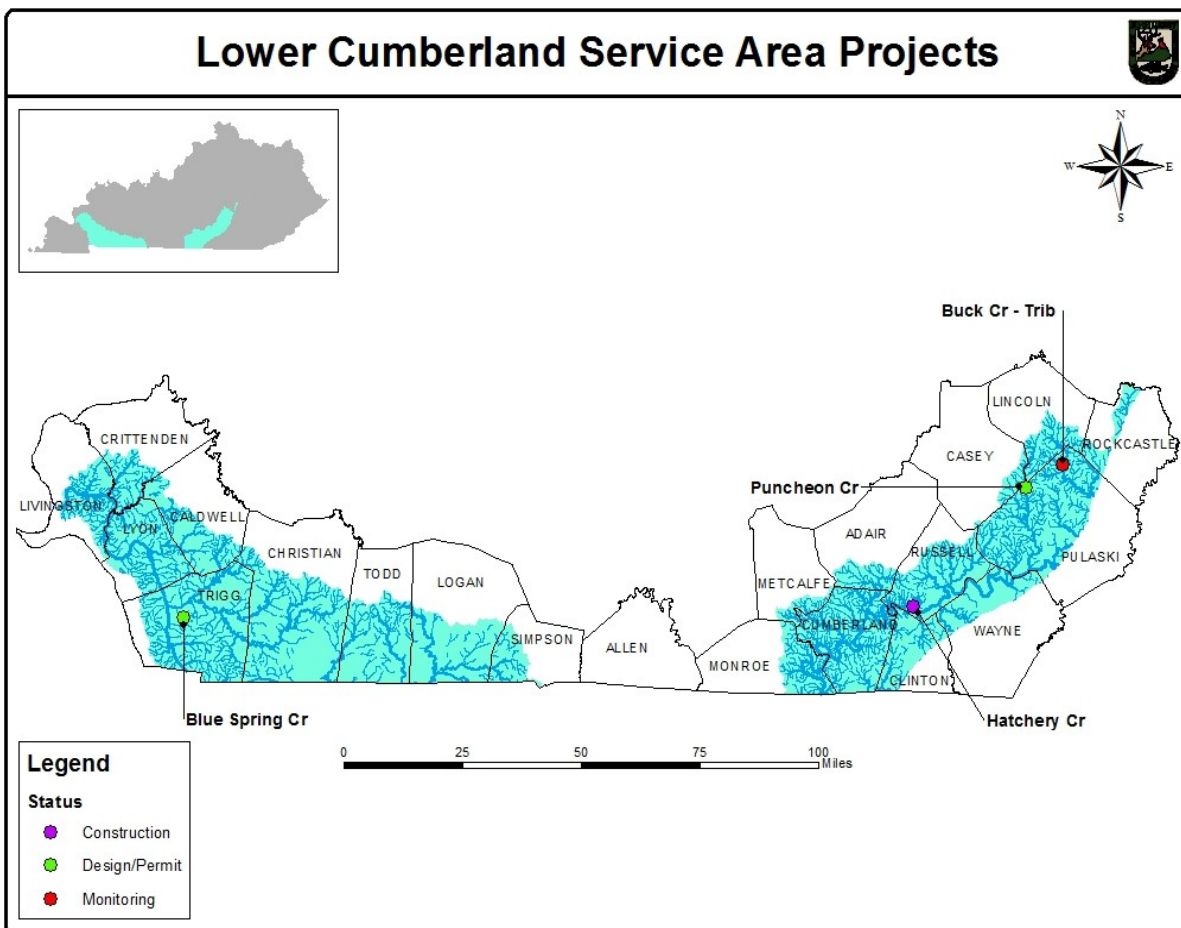
Lower Cumberland River Service Area

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

Blue Spring Creek, Trigg County. The project is entirely within Lake Barkley State Resort Park, with a substantial part of it on the park's golf course. The project was tentatively approved in 2013 on satisfactorily addressing several comments, which was done early in 2014. Approval was obtained from Department of Parks officials prior to presenting it to the IRT. Details on preliminary design have been discussed in detail with golf course managers to ensure that the channel and easement will fit into the layout of the golf course. 30% design and draft Mitigation Plan completed by end of 2014 that will be submitted with 401 WQC application in early 2015.

Buck Creek Tributary, Pulaski County. The fifth year of monitoring was completed and the report was submitted in 2014.

Figure 4.



Hatchery Creek, Russell County. A new contract for a design/build format was initiated in CY13. Construction began in August 2014 and completion is expected in August 2015.

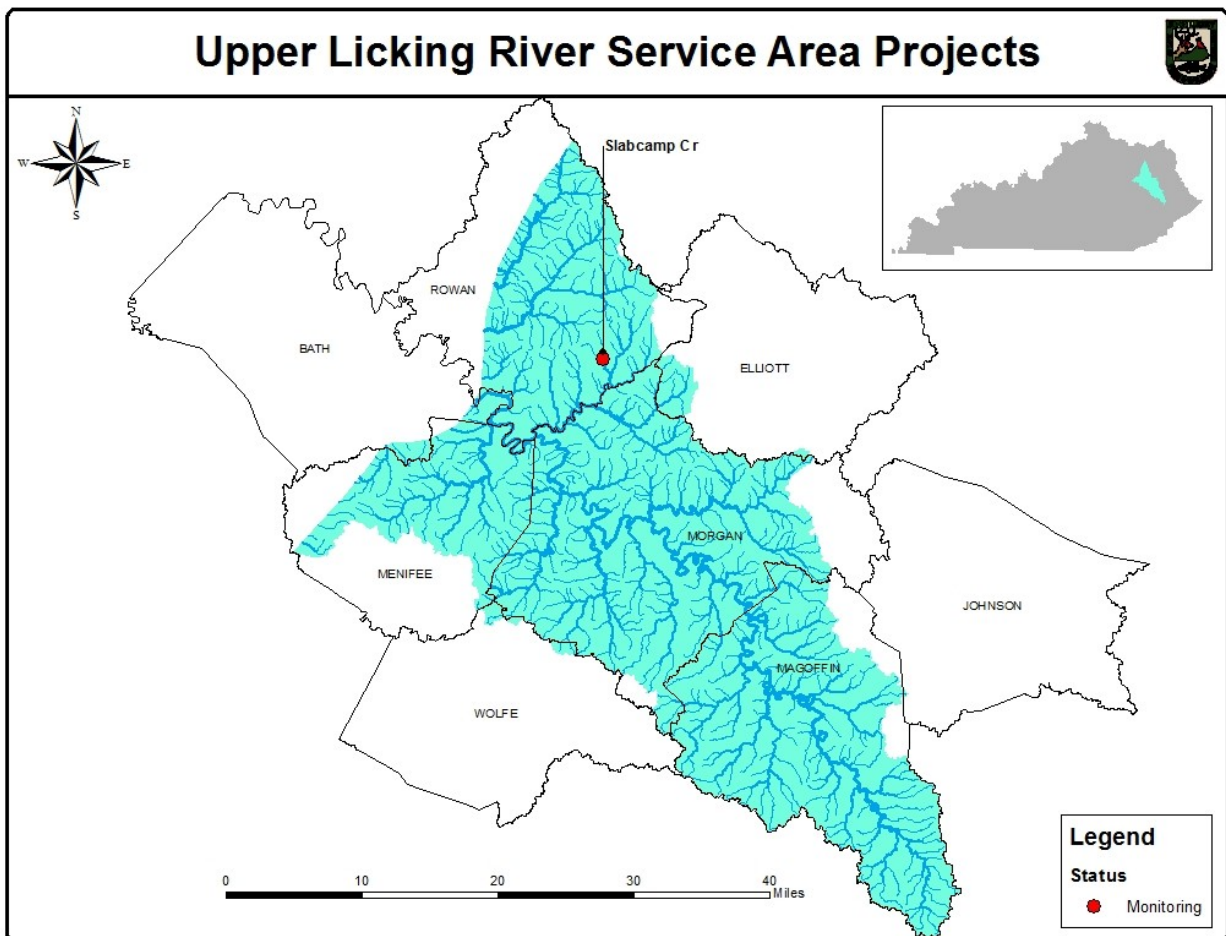
Puncheon Creek, Pulaski County. The design and permits were completed. Several easement revisions were required. Finalization of easement is expected early 2015. Construction is expected summer/fall 2015.

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 with the EIU credit system (Figure 5).

Slabcamp/Stonecoal Branch, Rowan County. Year 2 monitoring report was submitted in 2014.

Figure 5.



Lower Licking River Service Area

There are 4 projects in this service area, which is in the USACE Louisville District and the KAP region using the AMU credit system (Figure 6).

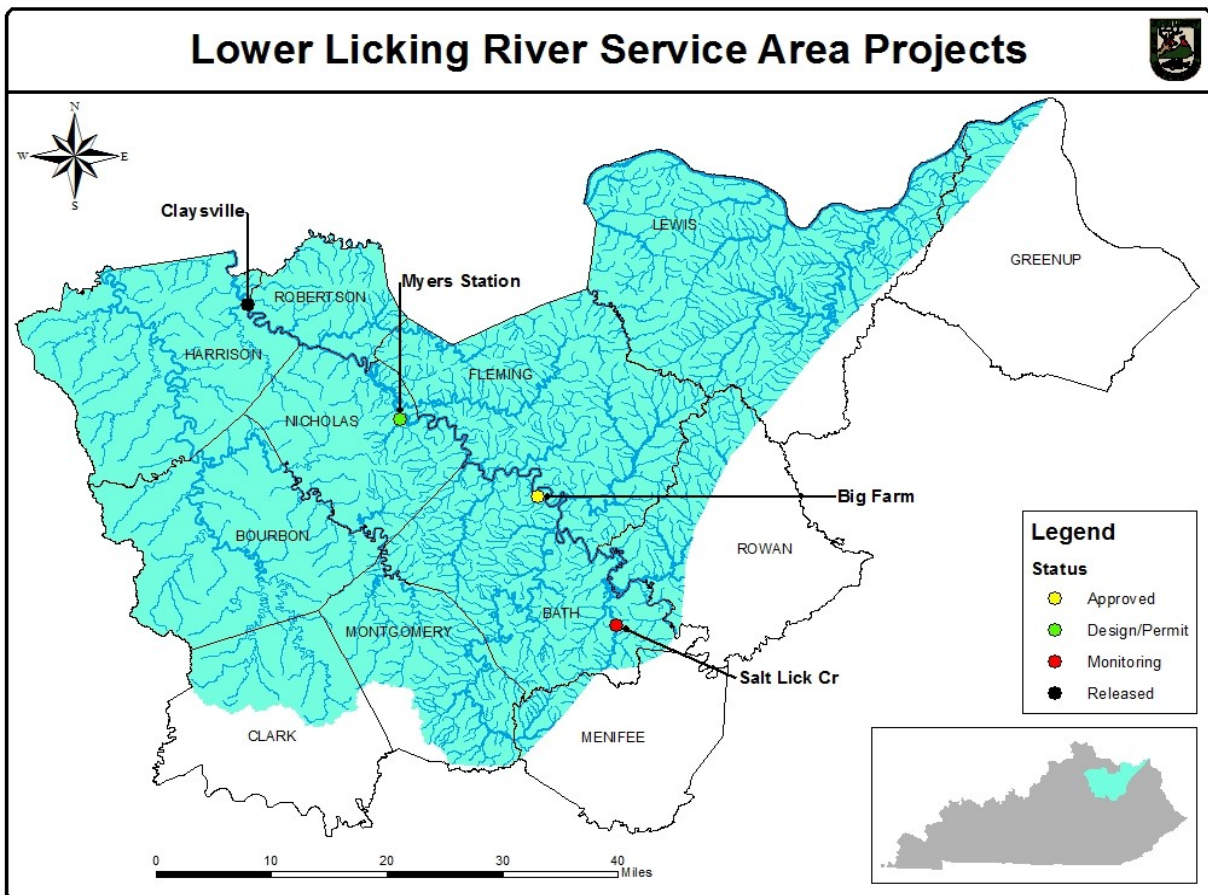
Big Farm, Bath County. The project was approved in 2014 and involves 6.2 miles of stream length, including over one mile of preservation. The 490-acre tract will be purchased and managed by KDFWR as a WMA.

Claysville Recovery Land Site, Harrison County. Year 5 of monitoring completed. Release expected in 2015.

Myers Station, Nicholas County. The purchase of 468 acres was made by KDFWR and became part of the Clay WMA. The project will protect and enhance the riparian corridor on more than a mile of the left bank of the Licking River. Additionally, several intermittent and ephemeral tributaries in Licking River watershed will be restored. 30% design and draft Mitigation Plan were submitted with 401 WQC application in December 2014.

Salt Lick Creek, Bath County. Year 2 monitoring completed. Additional planting and minor floodplain repair scheduled for early 2015.

Figure 6.



Upper Kentucky River Service Area

There are 10 active and completed projects in the Upper Kentucky River service area, which is in the USACE Louisville District and the EKSAP region using the EIU credit system (Figure 7).

Balls Fork, Knott County. This is the first project undertaken by the KDFWR in-lieu fee program and is in the long-term management phase. Supplemental planting occurred in early 2014. Final site visit and project release should occur early in 2015.

Bullskin Creek, Leslie County. No action CY13. Project is in the long-term management phase. Supplemental planting occurred in 2014. Final report submitted and request for release was made in 2014.

East Fork Indian Creek, Menifee County. The project is in the Daniel Boone National Forest. Permanent protection will be provided by the U.S Forest Service (USFS) Management Plan. Several meetings with the design contractor, KDFWR and the USFS have been held to incorporate USFWS comments into design plans. Permits completed in 2013. Construction will begin in March 2015.

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. Year 2 monitoring report received in 2014.

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. The reworked material is being “loose-dumped,” which UK research has shown is more successful in restoring forest and hydrologic regimes. The final monitoring report was received in 2014 after a delay to include Spring 2014 wetland delineation data.

Red Lick, Estill County. The fifth year monitoring year was performed by KDFWR in 2012 and the site is considered to be in long-term management phase. Supplemental planting, final report, and a release request occurred in 2014.

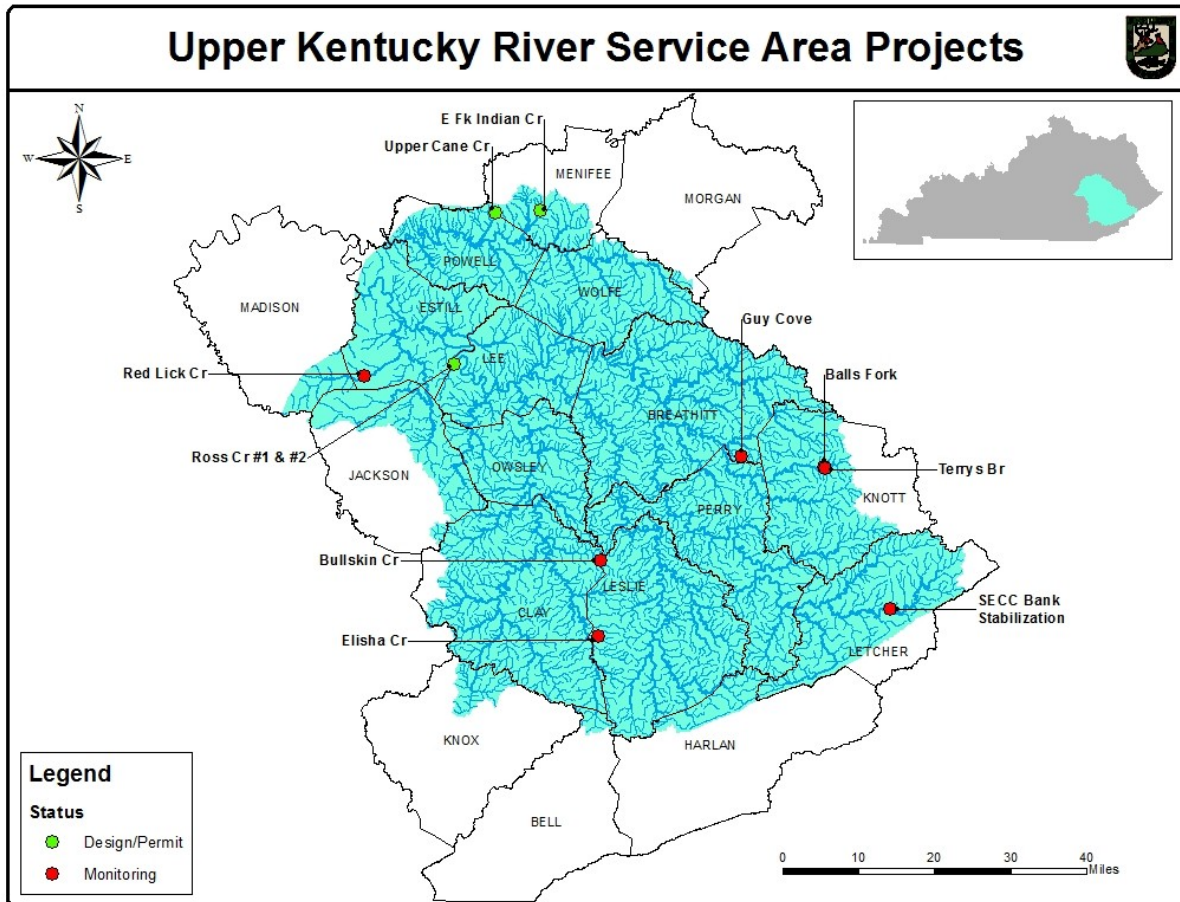
Ross Creek I and II, Lee and Estill County: Project adjacent to the Daniel Boone National Forest involving purchase of 533 acres, preservation, re-establishment, and rehabilitation of several miles of stream was approved by the IRT in December 2011 and Phase II was approved in 2013. The McKinney Property was purchased in 2012 (533 acres) and design is underway. KDFWR purchased an additional 100 acres (+/-) at the mouth of Ross creek including both preservation and rehabilitation/re-establishment of stream habitat. Design initiated in 2014.

SECC Bank Stabilization., Letcher County. The project is in long-term management phase. Project is meeting goals of bank stabilization and release request occurred in 2014.

Terrys Branch, Knott County. The project is an extension of the Ball's Fork project in the Troublesome Creek watershed and is in the long-term management phase. KDFWR successfully completed two rounds of repairs on log structures and some planting was completed in late 2014; a final planting is scheduled for early 2015. Improved habitat has resulted in a more diverse fish assemblage.

Upper Cane Creek, Menifee County. The conservation easement was surveyed and submitted to Real Properties for approval. KDFWR worked with the county judge to reduce the scope of road relocation associated with the project. Construction is planned for 2015.

Figure 7.



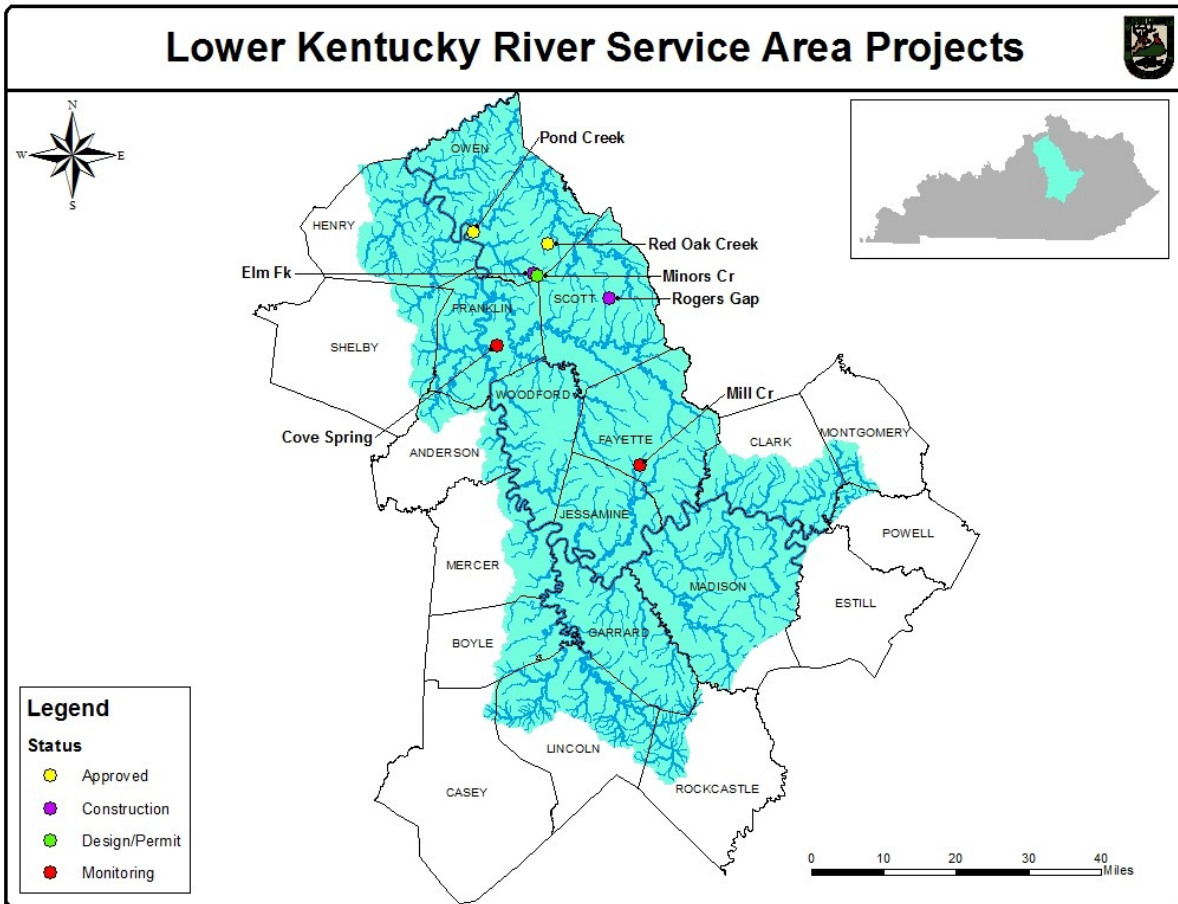
Lower Kentucky River Service Area

There are 7 projects in this service area, which is in the USACE Louisville District and KAP region with AMU credit system in the (Figure 8).

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 final planting occurred in early 2014. The project has been of interest to educational entities and the public. Year 1 of monitoring occurred in 2014.

Elm Fork, Owen County. The project is on Kleber WMA and is accessible to the public. Construction began in June, 2013 and was completed in Fall of 2014; final planting was done in December. The project is expected to be highly successful based on early indications of stability and significant habitat improvement over the former degraded condition.

Figure 8.



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 5 of monitoring was completed in 2014 and project release was requested.

Minors Creek, Owen County. The IRT site visit and project approval occurred in 2013, and purchase of the project site (309 acre former cattle farm) by KDFWR closed in June 2014. It is now part of Kleber WMA. The purchase will significantly improve and permanently protect Minors Creek and its watershed that is directly upstream of the existing project on Elm Fork and Minors Creek. Design was well underway by the end of 2014.

Pond Creek, Owen County. The project was approved in 2014 and is on the Chesney Tract of the Kentucky River WMA. It will involve re-establishment of the altered channel location, raising the riffle inverts and placing groundwater dams at a few critical locations to enhance and re-establish wetland in the valley on mostly existing hydric soils.

Red Oak Creek, Owen County. The project was approved in 2014 and consists of the purchase of more than 600 acres of land adjacent to and will become part of the Dr. James Rich WMA.

Roger's Gap, Scott County. This project included the 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. Required 401 and 404 permits were received in 2013 and construction commenced and is expected to be completed in the Summer of 2015.

Salt River Service Area

There are 4 projects in this service area, which is entirely within the USACE Louisville District and KAP region using the AMU credit system (Figure 9).

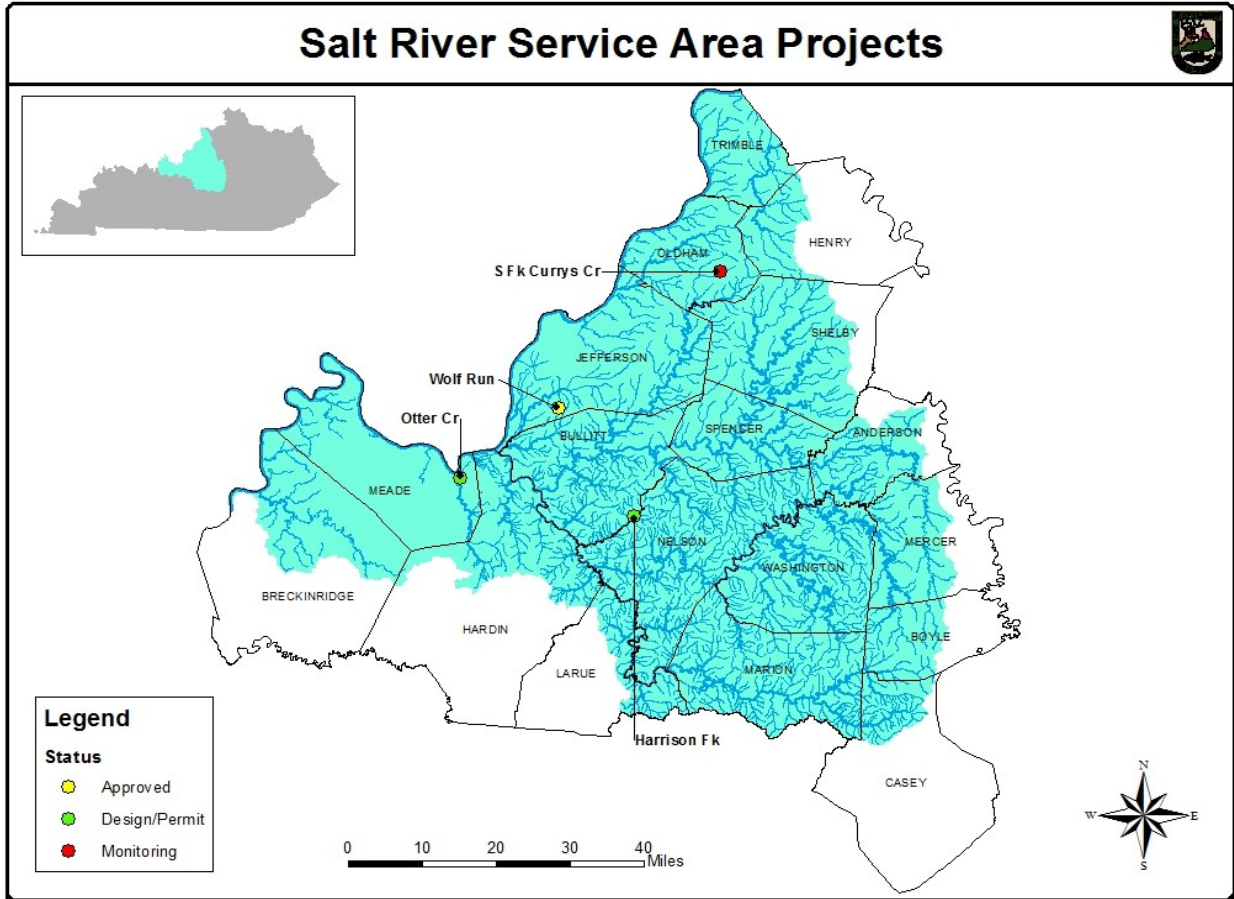
Harrison Fork, Nelson County. University of Louisville is working on the project design. A design funding increase was approved in FY10 for extra design work to avoid a gas line, groundwater monitoring, and 2-D hydrologic modeling. Bernheim and KDFWR/Real Properties are negotiating the project easement.

Otter Creek, Meade County. The project was tentatively approved in 2013, but allocation of project funds will not be made until FY14. FILO funded a study to assure that the cost was feasible. This project has the largest watershed of any FILO project, just over 100 mi². Because of its size, good water quality, and significant physical degradation, the potential exists for creating outstanding habitat that will support an excellent fishery and canoe recreation. Design is well along in 2014. The next step is to secure permanent protection on U.S. Army property along the shared boundary with Ft. Knox.

South Fork Currys Fork, Oldham County. The project was constructed in 2012. Year 2 monitoring report was received in 2014.

Wolf Run, Jefferson County. This project was approved in 2014 and is mostly on the Jefferson Memorial Forest owned by the Louisville-Jefferson County Metro Government, Metro Parks. About 15 acres of one private landowner will be placed in a conservation easement. It will be developed in coordination with the Metro Parks as they establish a new Environmental Center in the Wolf Creek area.

Figure 9.



Green River Service Area

There are 7 projects in this service area, which is within the USACE Louisville District and KAP region using the AMU credit system (Figure 10).

Boyds Creek, Barren County. This project, approved in 2014, is on private land in the upper watershed of this tributary of Skaggs Creek. It will restore 3,235 feet of the Boyds Creek and five small tributaries. A conservation easement will be obtained and design will begin in 2015.

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. The revised design (that will maintain the old channels as ephemeral flow type) and Mitigation Plan were submitted early in 2014, the WQC 401 was approved, and the 404 permit was preliminarily approved and should be received early in 2015.

Farmers Creek, Webster County. This wetland and stream project was approved in 2014. It involves three private landowners and the Lee K. Nelson WMA. The next step is to acquire conservation easements from the private landowners.

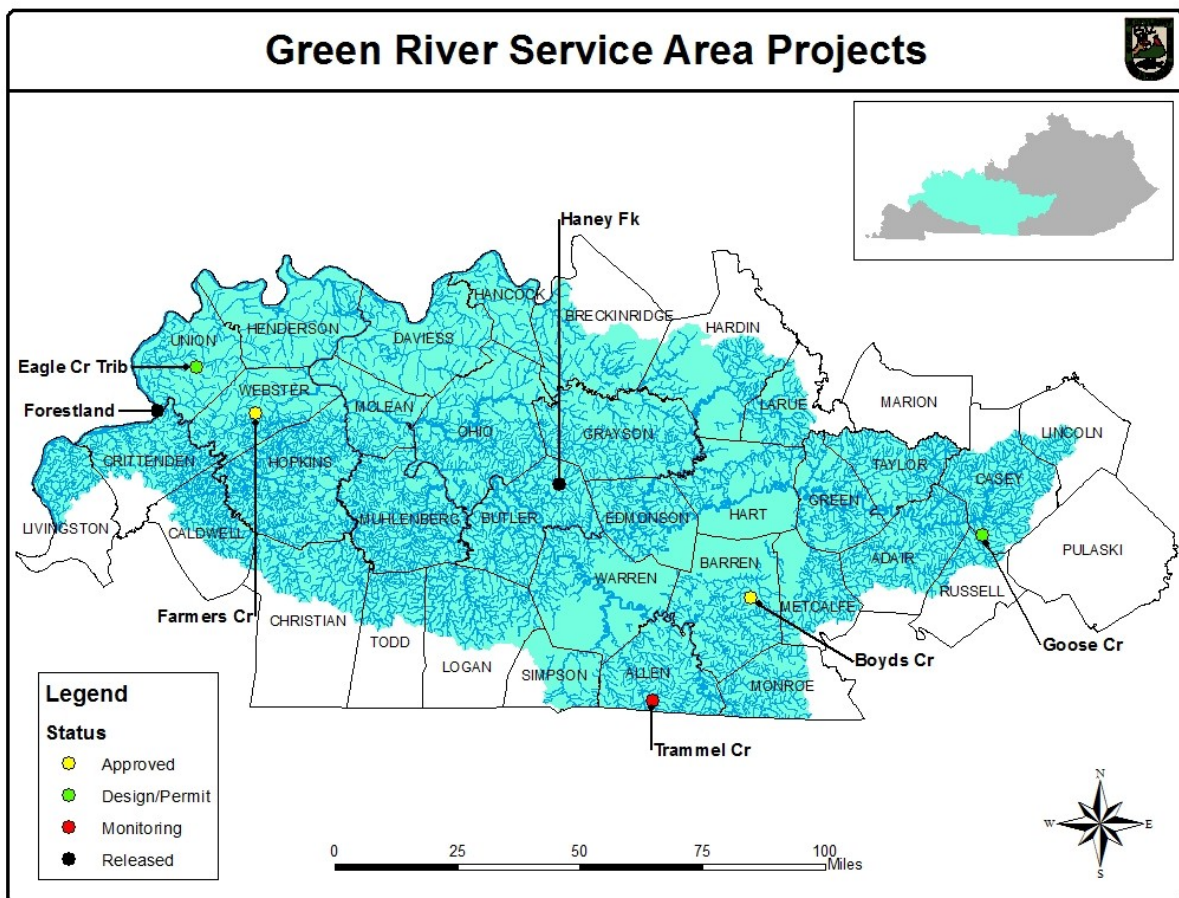
Forestland Group Tract, Union County. Project approval was granted in FY10. Land acquisition for permanent protection of the site is complete. The second (Crittenden County) tract encompassing the southern boundary and riparian buffer zone of the Tradewater River has been purchased. FILO contributed funds associated with preservation of the Tradewater River corridor, which were applied with the second phase.

Goose Creek, Casey County. This project is on a 200-acre cattle farm includes nearly a mile of Goose Creek and several tributaries. The restoration will include creating diverse habitat in a straight, homogenous reach of larger stream and re-establishment of habitat in surrounding tributaries, and will result in permanent cattle exclusion from all restoration streams on the property. Design began in 2014. Some property issues with adjacent landowners are being resolved.

Haney Fork, Butler County. No action in 2014. This project is complete and is in the long-term management phase.

Trammel Creek, Allen County. The project has experienced some minor bank scour and loss of vegetation. Additional tree planting was completed in 2014. Year 5 monitoring report was received in 2014 but will be extended because of additional repairs in 2015.

Figure 10.



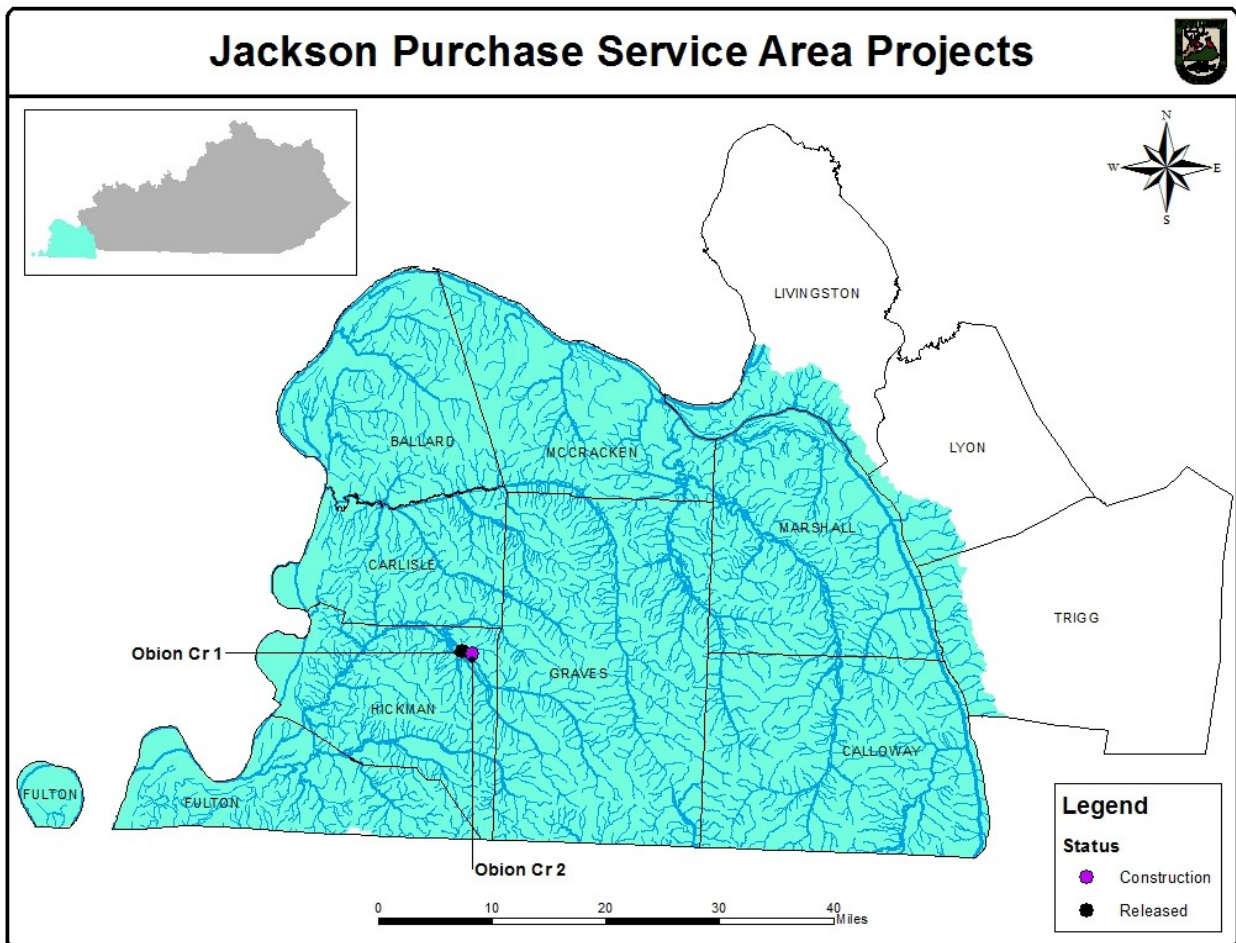
Purchase Service Area (Tennessee and Mississippi River Basins)

There are 2 projects in the Purchase service area, which is within the USACE Memphis District and KAP region using the AMU credit system (Figure 11). In 2013, The Memphis USACE disapproved a wetland enhancement project that included purchase of a 26-acre tract in Hickman County adjacent to the Obion Creek WMA.

Obion Creek #1, Hickman County. A head cut was repaired with a log structure in 2014. The project is in the long-term management phase.

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 began in 2014.

Figure 11.



Literature Cited

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

CY13 Credit Sales, Costs, and Balances

Service Area	USACE 404 ID#	Date of Payment	Credits Sold	Cost per Credit	Status	Credit Balance
Big Sandy Stream (EIU)	LRL-2010-519	04/01/14	1,541.75	\$ 650.00	CY14 Beginning Credit Balance	208,813.12
	LRL-2013-944	05/14/14	110.00	\$ 650.00	CY14 Credit Sold	3,535.58
	LRL-2006-1296	08/19/14	1,678.70	\$ 650.00	CY14 Ending Advanced Credit Balance	205,277.52
	LRL-2007-1026 LRL-2007-1206 200400336	08/21/14	205.13	\$ 649.99		
	CY2014 total credits sold		3,535.58			
Upper Kentucky Stream (EIU)	LRL-2007-439	03/13/14	356.01	\$ 610.00	CY14 Beginning Credit Balance	236,651.01
	LRL-2010-325	03/28/14	8.16	\$ 610.00	CY14 Credit Sold	2,037.17
	LRL-2005-734	08/01/14	225.00	\$ 610.10	CY14 Ending Advanced Credit Balance	234,613.84
	LRL-2012-66	11/25/14	1,448.00	\$ 610.00		
	CY2014 total credits sold		2,037.17			
Upper Licking Stream (EIU)	NO CY2014 Sales				CY14 Beginning Credit Balance	238,904.00
	CY2014 total credits sold		-		CY14 Credit Sold	-
					CY14 Ending Advanced Credit Balance	238,904.00
Upper Cumberland Stream (EIU)	LRN-2013-00602	04/15/14	52.25	\$ 610.00	CY14 Beginning Credit Balance	232,814.31
	CY2014 total credits sold		52.25		CY14 Credit Sold	52.25
	LRN-2013-326	03/01/14	(4,191.00)		CY14 Credit Release	4,191.00
	CY2014 total credits sold		52.25		CY14 Ending Advanced Credit Balance	236,953.06
Lower Kentucky	LRL-2006-579	09/03/14		\$	CY14 Beginning Credit Balance	

Stream (AMU)			606.00	240.00		224,528.80
					CY14 Credit Sold	606.00
		CY2014 total credits sold	606.00		CY14 Ending Advanced Credit Balance	223,922.80

Lower Licking Stream (AMU)	LRL-2007-360	06/02/14	1,411.00	240	CY14 Beginning Credit Balance	217,569.00
					CY14 Credit Sold	1,411.00
		CY2014 total credits sold	1,411.00		CY14 Ending Advanced Credit Balance	216,158.00

Lower Cumberland Stream (AMU)	LRN-2013-00454	04/09/14	2,346.00	\$ 240	CY14 Beginning Credit Balance	222,212.29
					CY14 Credit Sold	2,346.00
		CY2014 total credits sold	2,346.00		CY14 Ending Advanced Credit Balance	219,866.29

Salt River Stream (AMU)	LRL-2013-631	01/14/14	91.36	\$ 240		
	LRL-2009-241	01/16/14	189.33	\$ 240		
	LRL-2014-285	07/24/14	510.00	\$ 240	CY14 Beginning Credit Balance	229,850.85
	LRL-2014-53	10/03/14	1,422.00	\$ 240	CY14 Credit Sold	5,607.09
	LRL-2014-294	10/20/14	974.40	\$ 240	CY14 Ending Advanced Credit Balance	224,243.76
	LRL-2014-53	11/19/14	456.00	\$ 240		
	LRL-2014-00141	11/25/14	1,964.00	\$ 240		
		CY2014 total credits sold	5,607.09			

Green River Stream (AMU)	LRL-2013-254	03/04/14	1,534.00	\$ 240		
	LRL-2003-27	03/12/14	396.55	\$ 240		
	LRL-2004-1363	03/28/14	18.06	\$ 240	CY14 Beginning Credit Balance	213,402.53

	LRL-2004-0527	08/01/14	4,424.70	\$ 240	CY14 Credit Sold	14,688.21
	LRL-2005-0131	08/01/14	6,196.50	\$ 240	CY14 Ending Advanced Credit Balance	198,714.32
	LRL-2005-1057	08/01/14	775.60	\$ 240		
	LRL-2007-1314	08/01/14	522.80	\$ 240		
	LRL-2012-500	10/22/14	820.00	\$ 240		
	CY2014 total credits sold		14,688.21			

Jackson Purchase Stream (AMU)	No CY2014 Sales	-			CY14 Beginning Credit Balance	239,981.00
					CY14 Credit Sold	-
	CY2014 total credits sold		-		CY14 Ending Advanced Credit Balance	239,981.00

Big Sandy Wetland (AMU)	LRL-2013-944	05/14/14	0.200	\$ 30,000.00	CY14 Beginning Credit Balance	94.016
	LRH-2014-242	07/07/14	0.377	\$ 30,000.00	CY14 Credit Sold	0.577
	CY2014 total credits sold		0.577		CY14 Ending Advanced Credit Balance	93.439

Upper Kentucky Wetland (AMU)	NO CY2014 Sales				CY14 Beginning Credit Balance	98.800
					CY14 Credit Sold	-
	CY2014 total credits sold		-		CY14 Ending Advanced Credit Balance	98.800

Lower Kentucky Wetland (AMU)	LRL-2006-579	09/03/14	0.400	\$ 45,840	CY14 Beginning Credit Balance	93.998
					CY14 Credit Sold	0.400
	CY2014 total credits sold		0.400		CY14 Ending Advanced Credit Balance	93.598

Upper Licking Wetland (AMU)	NO CY2014 Sales				CY14 Beginning Credit Balance	100.000
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					CY14 Credit Sold	-
					CY14 Ending Advanced Credit Balance	100.000
Lower Licking Wetland (AMU)	NO CY2014 Sales				CY14 Beginning Credit Balance	99.020
					CY14 Credit Sold	-
					CY14 Ending Advanced Credit Balance	99.020
Upper Cumberland Wetland (AMU)	LRN-2010-01277	03/20/14	0.648	\$ 30,000	CY14 Beginning Credit Balance	94.009
	LRN-2013-00602	04/15/14	3.790	\$ 30,000	CY14 Credit Sold	4.572
	LRN-2013-00863	12/18/14	0.134	\$ 45,840	CY14 Ending Advanced Credit Balance	89.437
Lower Cumberland Wetland (AMU)	LRN-2013-00454	04/09/14	3.600	\$ 30,000	CY14 Beginning Credit Balance	85.840
					CY14 Credit Sold	3.600
					CY14 Ending Advanced Credit Balance	82.240
Salt River Wetland (AMU)	NO CY2014 Sales				CY14 Beginning Credit Balance	95.560
					CY14 Credit Sold	-
					CY14 Ending Advanced Credit Balance	95.560
Green River Wetland (AMU)	LRL-2004-0527	08/01/14	4.600	\$ 45,783	CY14 Beginning Credit Balance	178.462
	LRL-2013-789	08/28/14	1.100	\$ 45,840	CY14 Credit Sold	5.700
					CY14 Ending Advanced Credit Balance	172.762

Jackson Purchase Wetland (AMU)	NO CY2014 Sales	CY14 Beginning Credit Balance	196.880
		CY14 Credit Sold	-
	CY2014 total credits sold	CY14 Ending Advanced Credit Balance	196.880

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									
Blue Spring Creek	Rehabilitation Enhancement	Trigg	Nashville	LRN-2013-00776	\$3,986,295	22,110	27,029	\$180	\$147
Puncheon Creek	Rehabilitation Enhancement	Pulaski	Nashville		\$3,000,000	11,760	17,765	\$255	\$169
Construction Phase									
Hatchery Creek (Stream)	Re-establishment	Russell	Nashville	LRN-2010-00444	\$1,878,557	6,000	13,661	\$313	\$138
Hatchery Creek (Wetland)		Russell	Nashville	LRN-2010-00444	\$21,443		2,200		\$9,747
Monitoring Phase									
Buck Creek Tributary	Rehabilitation Enhancement	Pulaski	Nashville		\$236,750	1,221	1,262	\$194	\$188
Green River									
Preservation Project									
Forestland Gr Tract (Stream)	Preservation Enhancement	Union	Louisville		\$620,100	26,320	7,484	\$24	\$83
Forestland Gr Tract (Wetland)	Restoration Enhancement	Union	Louisville		\$29,900	5.6 ac	5.6		\$5,339
Feasibility Study									
Lock and Dam 6		Edmonson	Louisville		\$100,000				
Approved Phase									
Farmer's Creek (Stream)	Rehabilitation Re-establishment Enhancement	Webster	Louisville	LRL-2014-58-pgj	\$2,222,972	13,610	13,147	\$163	\$169
Farmer's Creek (Wetland)	Enhancement	Webster	Louisville	LRL-2014-58-pgj	\$105,750		4.7		\$22,500
Boyds Creek	Rehabilitation Re-establishment	Barren	Louisville	LRL-2013-545-pgj	\$461,825	3235	2,538	\$143	\$182

AMU Area (con't)

Basin/Stream	Type	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit
Design Phase									
Eagle Cr Tributary (Stream)	Rehabilitation Enhancement	Union	Louisville	LRL-2012-716 pgj	\$1,042,550	12,200	15,926	\$85	\$65
Eagle Cr Tributary (Wetland)	Establishment	Union	Louisville	LRL-2012-716 pgj	\$431,300	25.54 ac	22.305		\$19,336
Goose Creek	Preservation Enhancement Rehabilitation Re-establishment	Casey	Louisville	LRL-2012-646-pgj	\$2,704,668	18,600	16,500	\$145	\$164
Monitoring Phase									
Trammel Creek	Rehabilitation Enhancement	Allen	Louisville	LRL-2008-936-pgj	\$862,500	3,800	6,314	\$227	\$137
Long-Term Management Phase									
Haney Fork Watershed No. 2	Rehabilitation Enhancement	Butler	Louisville	LRL-2004-01363	\$246,715	4,330	3,248	\$57	\$76
Jackson Purchase									
Construction Phase									
Obion Creek II	Rehabilitation Enhancement	Hickman	Memphis	MVM-2010-074	\$781,000	23,000	69,000	\$34	\$11
Long-Term Management Phase									
Obion Creek	Rehabilitation Enhancement	Hickman	Memphis	200300263	\$71,000	5,684	17,052	\$12	\$4
Terminated Project									
East Fork Clark's River		Calloway			\$38,528				
Lower Kentucky River									
Approved Phase									
Red Oak Creek - Rich WMA		Owen	Louisville	LRL-2014-500-pgj	\$500,000	40,910	27,383	\$151	\$225
Design Phase									
Minors Creek	Preservation Enhancement Rehabilitation Re-establishment	Owen	Louisville	LRL-2013-91-pgj	\$3,507,000	19,500	20,300	\$180	\$173

AMU Area (con't)

<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>
Pond Creek (Stream)	Re-establishment	Owen	Louisville	LRL-2014-191-pgj	\$128,652	4,220	852	\$30	\$151
Pond Creek (Wetland)	Enhancement	Owen	Louisville	LRL-2014-191-pgj	\$133,620	11.36 ac	5.68	\$11,762	\$23,525
Construction Phase									
Elm Fork	Rehabilitation Enhancement	Owen	Louisville	LRL 2012-263-pgj	\$1,768,000	8,562	12,000	\$207	\$147
Rogers Gap	Preservation Enhancement Rehabilitation Re-establishment	Scott	Louisville	LRL-2013-134-pgj	\$10,100,000	170,856	142,149	\$59	\$71
Monitoring 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	\$12,474	\$17,784
Mill Creek	Rehabilitation	Fayette	Louisville	LRL-2009-611-pgj	\$187,050	750	682	\$249	\$274
Terminated Project									
Pond Creek (former stream project)		Owen	Louisville		\$17,284				
Lower Licking River									
Approved Phase									
Big Farm		Bath	Louisville	LRL-2014-209-pgj	\$4,631,808	32,792	24,124	\$141	\$192
Design Phase									
Myers Station	Rehabilitation Re-establishment Buffer Enhance Preservation	Nicholas	Louisville	LRL-2012-637-pgj	\$2,451,874	19,725	14,599	\$124	\$168
Monitoring Phase									
Claysville Recovery Land Aq Site	Enhancement	Harrison	Louisville	LRL-2008-644-pgj	\$281,500	2,600	2,554	\$108	\$110
Salt Lick	Rehabilitation Enhancement	Bath	Louisville	LRL-2011-891-pgj	\$1,647,800	5,661	7,487	\$291	\$220

AMU Area (con't)

<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>
Salt River									
Approved Phase									
Wolf Run	Restoration Preservation	Jefferson	Louisville	LRL-2014-60-pgj	\$2,257,138	16,300	14,670	\$138	\$154
Design Phase									
Harrison Fork	Rehabilitation Enhancement	Nelson	Louisville	LRL-2012-274-pgj	\$1,700,000	8,900	12,179	\$191	\$140
Otter Creek	Rehabilitation	Meade	Louisville	LRL-2013-425-pg	\$3,374,400	12,530	17,575	\$269	\$192
Monitoring 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 Projects "	28				\$55,084,009	513,712	531,929		
Total Wetland	6				\$979,470		54.962		
Average Stream					\$1,967,286	18,347	18,997	\$107	\$104
Average Wetland					\$163,245				\$17,821

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									
Approved Phase									
Laurel Creek Gorge #2	Rehabilitation Enhancement	Elliott	Louisville	LRL-2012-478-pgj	\$1,358,593	9,255	2,139	\$147	\$635
Mart Whitt Fork	Enhancement Preservation	Elliott	Louisville	LRL-2013-598-pgj	\$1,561,600	15,311	2,675	\$102	\$584
Old Trace Creek	Rehabilitation Re-establishment Enhancement Preservation	Lewis	Louisville	LRL-2013-336-pgj	\$2,689,643	13,816	5,879	\$195	\$458
White Oak Creek	Rehabilitation	Greenup	Louisville	LRL-2010-787-pgj	\$1,069,078	6,134	2,389	\$174	\$448
Whites Creek	Rehabilitation Re-establishment	Boyd	Louisville	LRL-2012-634-pgj	\$1,482,120	8,355	3,312	\$177	\$448
Smith Tract - Laurel Cr Gorge	Rehabilitation Re-establishment	Elliott	Louisville	LRL-2013-1013-pgj	\$806,115	4,386	1,762	\$184	\$458
York Tract – Laurel Cr Gorge	Rehabilitation	Elliott	Louisville	LRL-2013-1012-pgj	\$119,408	700	261	\$171	\$458
Design Phase									
Schultz Creek	Rehabilitation Enhancement	Greenup	Louisville	2009-806	\$739,900	2,900	1,305	\$255	\$567
Monitoring Phase									
Bolts Fork	Rehabilitation Enhancement	Boyd	Louisville	LRL-2010-00698	\$1,212,900	5,640	2,765	\$215	\$439
East Fork Little Sandy #2	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2009-332-pgj	\$2,137,600	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	\$698,402	3,550	1,338	\$197	\$522
Middle Creek	Rehabilitation Enhancement	Floyd	Louisville	LRL-2006-1256-pgj	\$1,117,335	9,180	2,214	\$122	\$505
Upper Laurel Creek	Enhancement	Lawrence	Louisville	200500901	\$848,000	3,000	1,350	\$283	\$628
Long-Term Management Phase									

EIU Area (con't)

<u>Service Area/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>
East Fork Little Sandy #1	Rehabilitation Enhancement	Lawrence	Louisville	200401120	\$399,700	1,650	742	\$242	\$539
Left Fork of Trace Creek	Rehabilitation Enhancement	Boyd	Louisville	2006-00160	\$300,850	1,300	585	\$231	\$514
Preservation Project									
Laurel Creek Gorge	Preservation	Elliott	Louisville	-	\$1,353,625	83,059	7,725	\$16	\$175
Terminated Project									
Brushy Creek	Rehabilitation Enhancement	Greenup	Louisville	200400931	\$799,187	4,755	2,140	\$168	\$373
Brushy Creek Repair		Greenup	Louisville	LRL-2008-902-jct	\$156,000	1,027	-	\$152	-
Brushy Creek Repair 2		Greenup	Louisville	LRL-2009-1074-pgj	\$118,900	830	-	\$143	-
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
Ison Creek		Elliott	Louisville		\$1,100				
Laurel Creek Tributary		Elliott	Louisville		\$155,858				
Laurel Cr Tributary - Rowe Flats		Elliott	Louisville	LRL-2013-770-pgj	\$1,750	2,575	1,267	-	-
Upper Cumberland River									
		-		-	-		-	-	-
Approved Phase									
		-		-	-		-	-	-
Steele Branch	Re-establishment	Wayne McCreary	Nashville	-	\$579,744	6,877	1,188	\$84	\$488
Design Phase									
		-		-	-		-	-	-
Burnett Branch	Re-establishment Enhancement Preservation	Wayne McCreary	Nashville	LRN-2013-00116	\$1,927,600	37,688	7,497	\$51	\$257
Monitoring Phase									
Crane's Nest Branch	Rehabilitation Enhancement	Knox	Nashville	2009-01424	\$527,853	2,275	1,078	\$232	\$490
Preservation Project									
Buck Creek	Preservation	Pulaski	Nashville		\$1,667,413	56,502	5,255	\$30	\$317
Sinking Valley	Preservation	Pulaski	Nashville	LRN-2012-00326	\$1,730,000	43,131	4,191	\$40	\$413

EIU Area (con't)

<u>Service Area/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>
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 Creek	Preservation Re-establishment Rehabilitation	Lee	Louisville	LRL-2013-143	\$3,538,760	20,165	7,338	\$175	\$482
Ross Creek II	Preservation Re-establishment Rehabilitation	Lee	Louisville	LRL-2013-143	\$944,768	6,672	1,936	\$142	\$488
Upper Cane Creek	Rehabilitation Enhancement	Menifee	Louisville	LRL-2009-433-pgj	\$1,055,475	5,902	1,297	\$179	\$814
Monitoring Phase			Louisville						
Laurel Fork of Troublesome Cr	Rehabilitation	Breathitt	Louisville	LRL-2007-615	\$1,806,300	5,515	2,200	\$328	\$821
Elisha Creek-USFS	Rehabilitation Enhancement	Leslie	Louisville	LRL-2011-404-pgj	\$788,607	4,067	1,912	\$194	\$412
Long-Term Management Phase									
SECC Bank Stabilization	Rehabilitation Enhancement	Letcher	Louisville	LRL-2005-1004-the	\$63,500	821	82	\$77	\$774
Balls Fork	Rehabilitation	Knott	Louisville	2002-01447	\$85,000	803	270	\$106	\$315
Bullskin Creek	Rehabilitation	Leslie	Louisville	200500205-pgj	\$208,700	1,823	729	\$114	\$286
Red Lick Creek	Rehabilitation Enhancement	Estill	Louisville	LRL-2005-131-lad	\$101,500	1,860	837	\$55	\$121
Terrys Branch	Rehabilitation Enhancement	Knott	Louisville	200500205	\$738,500	2,992	1,390	\$247	\$531
Terminated Project									
Frozen Creek		Breathitt	Louisville		\$150,220				
Hinton Branch		Estill	Louisville		\$22,395				
North Fork Kentucky River	Enhancement	Perry	Louisville	NA	\$25,022	3,538	0	\$7	
Red Lick #2		Estill	Louisville		\$750				

EIU Area (con't)

<u>Service Area/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>
Upper Licking River									
Monitoring Phase									
Slabcamp Creek-Stonecoal Branch	Re-establishment	Rowan	Louisville	LRL-2009-762-pgj	\$1,905,000	14,180	9,378	\$134	\$203
Total active projects^a	34				\$41,796,779	409,343	96,152		
Average^a					\$1,229,317	12,040	2,828	\$102	\$435

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

APPENDIX C

LIST OF APPROVED COMPENSATORY MITIGATION PROJECTS

APPENDIX D: LIST OF APPROVED COMPENSATORY MITIGATION PROJECTS

Table of Corps Approved Mitigation Projects: KDFWR Mitigation Program - Louisville LRL-2010-325

PROJECT	COUNTY	SERVICE AREA	404 PERMIT ID.NO.	404 PERMIT APPROVAL DATE	401 WQC ID. NO.	401 WQC APPROVAL DATE	
Elm Fork	Owen	Lower Kentucky	LRL-2012-263-pgj	02/12/12	AI: 114622	05/07/14	mod #2
East Fork Indian Creek	Menifee	Upper Kentucky	LRL-2012-273-pgj	07/09/13	2013-009-1	03/07/13	mod #3
Roger's Gap	Scott	Lower Kentucky	LRL-2012-134-pgj	11/26/13	2013-026-1	06/13/13	mod #4

Table of Corps Approved Mitigation Projects: KDFWR Mitigation Program - Nashville LRN-2011-00709

PROJECT	COUNTY	SERVICE AREA	404 PERMIT ID.NO.	404 PERMIT APPROVAL DATE	401 WQC ID. NO.	401 WQC APPROVAL DATE	
Sinking Valley	Pulaski	Upper Cumberland	LRN-2012-00326	12/11/2013	n/a	n/a	mod #2
Hatchery Creek	Russell	Lower Cumberland	LRN-2010-00444*	7/25/2014	23-041-7M(3)	8/26/2013	mod #3

*Instrument mod actually references modification to LRL-2010-325; instrument mod #3 - should be on Nashville's LRN-2011-007

Table of Corps Approved Mitigation Projects: KDFWR Mitigation Program - Memphis MVM-2013-95

PROJECT	COUNTY	SERVICE AREA	404 PERMIT ID.NO.	404 PERMIT APPROVAL DATE	401 WQC ID. NO.	401 WQC APPROVAL DATE	
Obion II	Hickman	Jackson Purchase	MVM-2010-074	4/29/2014	2010-027-1	3/23/2010	mod #1

Appendix D

Compliance Information

Project	404 Permit Number/Date Authorized	401PM/ KDFWR PM	Date Concept Plan/Pre-Application Site Visit	Approval Date of Design Funds/Const Funds	Project Completion Date (FY)	First/Final Monitoring Year (FY)	Most Recent Monitoring Report Rec'd	Mitigation Status	Comments/Issues
BIG SANDY RIVER									
Bolts Fork	LRL-2010-00698 5/13/11	Bicknell/ Mulhall	Jun 2008	8/20/08 12/8/10	Jan 2014	2014/2018	-	Open	In Monitoring (Year 1:2014)
Brushy Creek	LRH-2004-00931 7/22/04	Bicknell/ Lewis	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	Bicknell/ Lewis	NA	5/13/09 5/13/09	Jan 2010	-	-	-	No monitoring required
East Fork Little Sandy #1	LRH-2004-01120 4/11/04	Bicknell/ Mulhall	Feb 2003	2/11/03 11/12/05	Jan 2007	2007/2011	-	Released	No monitoring reports required. Project released from monitoring in letter dated 5-28-13. Project will be periodically monitored for easement encroachments and appropriate measures taken if needed.
East Fork Little Sandy #2	LRL-2009-332-pgj 10/29/09	Bicknell/ Mulhall	Jan 2007	2/21/07 9/16/09	Feb 2011	2011/2015	Year 3 (2013)	Open	In Monitoring (Year 4:2014)
East Fork Little Sandy #3	LRL-2008-1082-pg 5/7/09	Bicknell/ Mulhall	Apr 2007	6/25/07 2/18/09	2011	2011/2015	Year 3 (2013)	Open	In Monitoring (Year 4:2014)
East Fork Little Sandy #4	LRL-2009-123-pgj 6/12/09	Bicknell/ Mulhall	Sept 2007	10/17/07 3/11/09	2010	2011/2015	Year 3 (2013)	Open	In Monitoring (Year 4:2014)
East Fork Little Sandy #5	LRL-2011-00456	Bicknell/ Lewis	Dec 2008	2/18/09 12/8/10	-	-	-	-	Property and permanent protection issues not resolved
Kinniconick Creek	LRL-2007-409-pgj 3/27/08	Bicknell/ Mulhall	Jul 2004	7/14/04 3/1/08	2009	2009/2013	Year 5 (2013)	Open	Repairs commenced Nov 2013 and expect to be completed in early 2014. Have discussed releasing sections of Lower Indian and Kinniconick Creek from monitoring, and continue to monitor Upper Indian (upstream of low water crossing) where majority of repair work occurred.
Laurel Creek Gorge	NA	Tewksbury/	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	Bicknell/ Mulhall	Sept 2004	1/12/05 4/19/06	2007	2007/2011	Year 5 (2011)	Released	Repairs and maintenance completed in Nov 2013. Project released in letter (2-6-2014). Project will be periodically monitored for easement encroachments and appropriate measures taken if needed.
Locust Creek	LRL-2008-1249-pgj	Bicknell/ Mulhall	Jun 2005	6/24/05 9/30/09	Dec 2010	2010/2014	Year 4 (2013)	Open	In Monitoring (Year 5:2014)
Middle Creek	LRL-2006-1256-pgj 10/31/07	Bicknell/ Mulhall	Apr 2004	7/14/04 6/25/07	2008	2008/2012	Year 5 (2012)	Open	Monitoring period extended. Repair and maintenance tasks to occur during 2013-2014 including easement boundary marking, invasive plant control and supplemental native planting.
Schultz Creek	LRL-2009-806 5/24/10	Tewksbury/ Lewis	Sept 2007	10/17/07 3/17/10	-	-	-	-	Property ownership issues
Upper Laurel Creek	200500901 3/2/06	Bicknell/ Mulhall	Jun 2003	7/13/03 10/5/05	2008	2009/2013	Year 5 (2013)	Open	Monitoring period extended. Maintenance tasks to occur in 2014 include invasive plant control and supplemental native planting
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/ Mulhall	July 2006	6/1/07 6/25/07	Jan 2010	2011/2015	Year 4 (2013)	Open	In Monitoring (Year 5:2014)
Crane's Nest Branch	2009-01424 3/1/2010	Watt/ Mulhall	Feb 2008	4/16/08 11/16/09	2012	2013/2017	Year 1 (2013)	Open	In Monitoring (Year2:2014)
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	Watt/ Mulhall	Apr 2006	10/5/05 3/16/08	2010	2010/2014	-	Open	Project in monitoring
Salt Lick Creek	LRL-2011-00891 --	Watt/ Mulhall	Jun 2008	8/20/08 8/20/08	2013	2013/2017	Year 1 (2013)	Open	Project in monitoring (Year2-2014). Replanting to occur in early 2014. Covered under original planting warranty.
Slabcamp C r -Stonecoal Br	LRL-2009-762-pgj 10/30/09;8/12/10	Watt/ Mulhall	Aug 2005	10/5/05 5/13/09	2013	2013/2017	Year 1 (2013)	Open	In Monitoring (Year2:2014)
KENTUCKY RIVER									
Balls Fork	LRL-2002-01447 9/26/06	Fry/ Mulhall	-	2/1/02	Dec 2005	2007/2012	Year 7 (2012)	Open	Supplemental planting to occur in 2014
Beluga (Rogers Gap)	LRL-2013-134-pgj	Fry/ Mulhall	Mar 2011	April 2011	-	-	-	-	In Design/Construction (Design-Build Project)
Bullskin Creek	LRL-2005-0205-pgj 2/22/04	Fry/ Mulhall	Feb 2003	2/11/03 2/6/04	Sept 2005	-	-	Open	Supplemental planting to occur in 2014
Cove Spring	LRL- 2009-614-pgj 1/7/11	Fry/ Mulhall	June 2007	10/17/07 5/13/09	Feb 2014	2014/2018	-	Open	In monitoring (Year1:2014). Final planting completed 2-20-2014.
East Fork Indian Creek	LRL-2012-273-pgj	Fry/ Lewis	Dec 2007	4/16/08	-	-	-	Open	In Design
Elisha Creek	LRL-2011-00404	Fry/ Mulhall		6/1/06 2/18/09	2013	2013/2017	Year 1 (2013)	Open	In Monitoring (Year2:2014)
Elm Fork	LRL-2012-263	Fry/ VanArsdall	Mar 2009	3/17/10 --	2014	2014/2018	-	-	In Construction
Guy Cove	LRL-2007-00615 9/17/07	Fry/ Mulhall	--	1/12/06 8/15/07	Mar 2009	2009 2013	Year 5 (2013)	Open	2013 (Year 5) monitoring report delayed to include wetland delineation data to be collected in Spring 2014. Project has Sericea Lespedeza present that needs to be addressed
Mill Creek	LRL-2009-611-pgj 7/20/09	Fry/ Mulhall	Feb 2008	4/16/08 5/13/09	Oct 2009	2010/2014	Year 4 (2013)	Open	In Monitoring (Year 5:2014)
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/ Mulhall		10/4/05 4/18/07	Dec 07	2008/2012	Year 5 (2012)	Open	Supplemental planting to occur in 2014
SECC Bank Stabilization	NA	Fry/ Mulhall		2/1/03 5/10/06	Apr 2007	2008-2012	None required	Released	Beaver activities high on site so have proposed to plant a heavy seed mix of native herbaceous plants in spring

									2014.
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	Maintenance and repairs and supplemental planting to occur in 2014.
Upper Cane Creek	LRL-2009-433-pgj 10/18/09	Fry/ Nowak	--	1/12/05 2/18/09	--	--	-	Open	Road relocation issues being resolved
SALT RIVER									
Harrison Fork	-	Tewksbury/ Lewis		1/16/08 -	-		-	-	In Design
South Fork of Curry's Fork	LRL-2009-98-pgj 9/29/09	Tewksbury/ Mulhall	April 2006	7/18/06 5/13/09	2013	2013/2017	Year 1 (2013)	Open	In Monitoring (Year 2:2014)
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 4 (2013)	Open	In Monitoring (Year5:2014). Supplemental planting to occur in 2014.
JACKSON PURCHASE									
Obion Creek	200300263	Fry/ Mowrey		6/4/03 6/4/03	2006	2007/2011	2011	Open	In Monitoring
Obion Creek II	MVM-2010-074	Fry/ Mowrey	Feb 2008	4/16/08 5/13/09	-	-	-	Open	In Construction