

**KENTUCKY DEPARTMENT OF FISH AND WILDLIFE
RESOURCES WETLAND AND STREAM
FEE-IN-LIEU-OF MITIGATION PROGRAM**

2011 ANNUAL REPORT

Reporting Period: July 1, 2010 through June 30, 2011

Kentucky Department of Fish and Wildlife Resources
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Introduction

This report provides information on the Kentucky Department of Fish and Wildlife Resources (KDFWR) “Fee In-Lieu of” (FILO) program for state fiscal year 2011 (FY11), including staffing and activities performed during the year to fulfill the reporting requirements outlined in the 2002 “Agreement Concerning In-Lieu Mitigation Fees” between KDFWR and the U.S. Army Corps of Engineers (USACE).

In July 2000, the Kentucky Legislature passed KRS 150.255, which established The Kentucky Wetland and Stream Mitigation Fund. The KDFWR Stream and Wetland Restoration Program manages this fund to provide a consistent and successful approach to fulfill compensatory mitigation requirements associated with Section 404 and 401 requirements of 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 Corps of Engineers 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 payments made by 404 permit applicants to satisfy regulatory requirements. The monies in the fund are used to implement projects that improve degraded streams and wetlands throughout the Commonwealth, with the majority of projects focused on stream restoration and enhancement on private lands. Thus, 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 (Memorandums of Agreement or MOAs) that established two in-lieu fee programs 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.

In addition to the in-lieu fee agreement with the USACE, KDFWR entered into a second agreement that established an Interagency Review Team (IRT) of resource and regulatory agencies composed of the USACE, KDOW, U.S. Fish and Wildlife Service (USFWS), USEPA, and KDFWR. The function of the IRT is to define conditions under which in-lieu-fees may be used, to review and approve individual mitigation projects, and to provide annual reviews of the completed and on-going mitigation projects. KDFWR participates in programmatic activities of the IRT and votes on projects introduced by NKU, but it cannot vote on its own program’s projects.

The IRT requires that all KDFWR in-lieu fee projects be permanently protected through conservation easements, the purchase of lands with deed restrictions, and long-term management plans on public properties such as U.S. Forest Service National Forest lands. This involves identifying landowners willing to donate a Conservation Easement or purchase of land by a resource agency, institution, or non-profit conservation organization. Conservation easement boundaries were typically 25-50 feet on each bank but have recently not been less than 50 feet. 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 Memorandum of Agreement

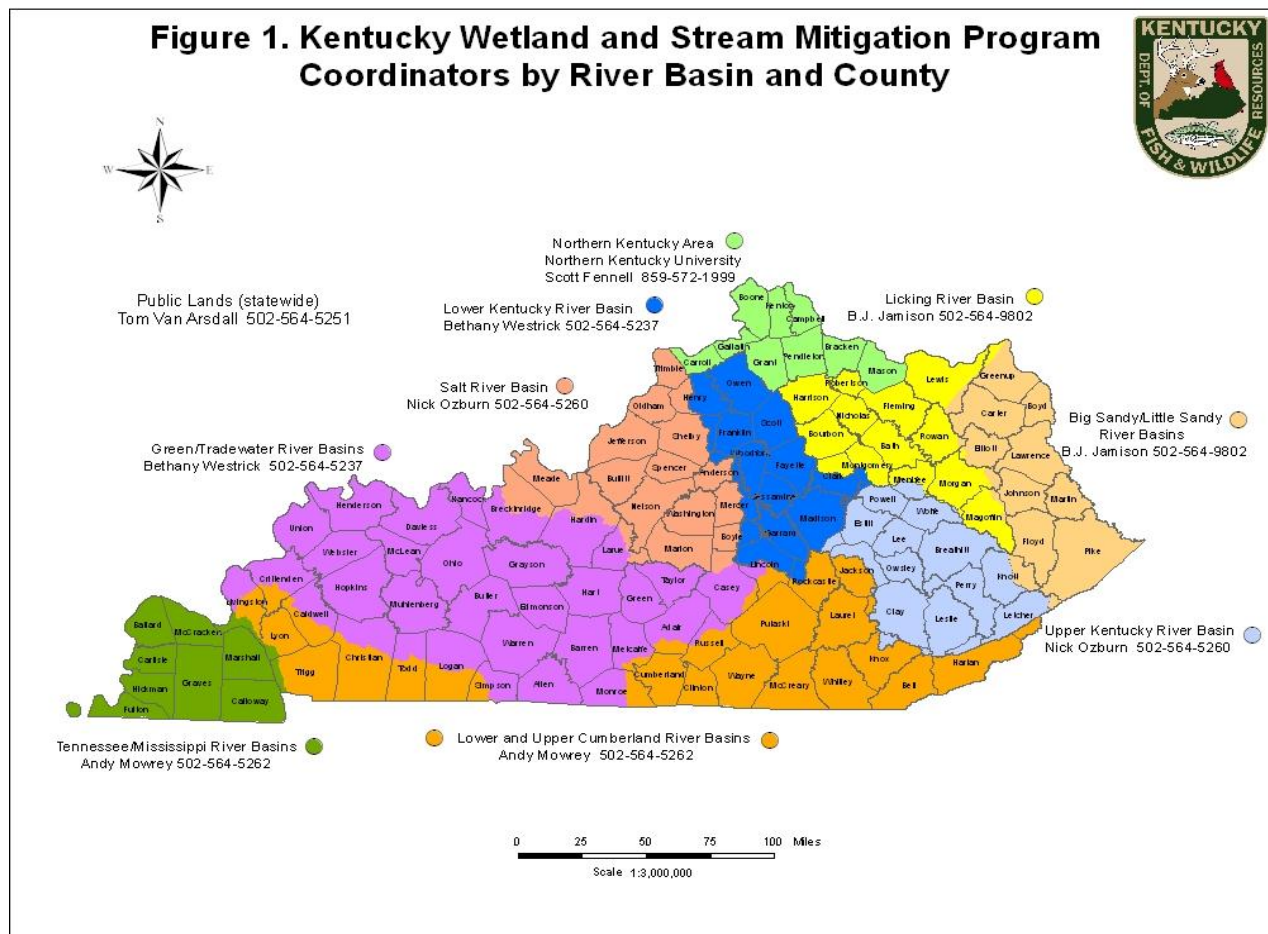
At the end of the fiscal year, final agency comments were being addressed for the updated MOA that complies with the June 2008 Final Mitigation Rule. The current MOA between the USACE and KDFWR has been extended until these changes are made and the new MOA is in effect. The new MOA: 1) delineates service areas into ten units by dividing upper and lower reaches of several major river basins (Licking, Kentucky, and Cumberland) based on mitigation credit units (Eastern Kentucky Stream Assessment Protocol and Ecological Integrity Units are used in the Eastern Kentucky Coalfield and Adjusted Mitigation Units 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 existing 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 release credits.

The FILO program is already in compliance with many of the requirements of the U.S. Environmental Protection Agency (USEPA) and USACE 2008 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

B.J. Jamison and Bethany Westrick were added to the staff as Environmental Biologists in the Fall of 2010, and Joseph Zimmerman moved into another position in the Environmental Section during that same period. That brought the total staff of the FILO program to six. The other four staff are: Nick Ozburn, Andy Mowrey, Rob Lewis, and Tom Van Arsdall. Near the end of FY10, an Internal Policy Analyst position had been advertised and is expected to be filled in early FY12.

Staff is assigned service areas comprised of major watersheds or public lands (Figure 1).



Landowner Contacts/Potential Project Site Visits

A major effort by FILO staff in FY10 was assessing streams on five large tracts of land for determining the feasibility of purchasing the tracts to preserve the high quality waters and enhance and restore degraded waters as needed. These tracts are shown below and on Figure 2.

- 1) Beluga (Rogers Gap), a 2500-acre tract in northern Scott County (Kentucky River Service Area). Project was approved in FY11.
- 2) Sinking Valley, an 804-acre tract in Pulaski County (Cumberland River Service Area). Project will be presented for approval in FY12.
- 3) Hitchens, a 1250-acre tract in Carter County (Big Sandy Service Area). Property sold.
- 4) Ross Creek, a 450-acre tract in Lee County (Kentucky River Service Area). Project will be presented for approval in FY12.
- 5) McCuley property, a 650-acre tract near mouth of Paint Lick Creek in Garrard County (Kentucky River Service Area). Project determined to be unviable.

These potential purchases and other stream corridor and wetland projects that were investigated in FY11 are shown in Table 1 and Figure 2.

The vast majority of contacts do not result in projects because of the extent or type of degradation or landowner concerns with permanent easement requirements.

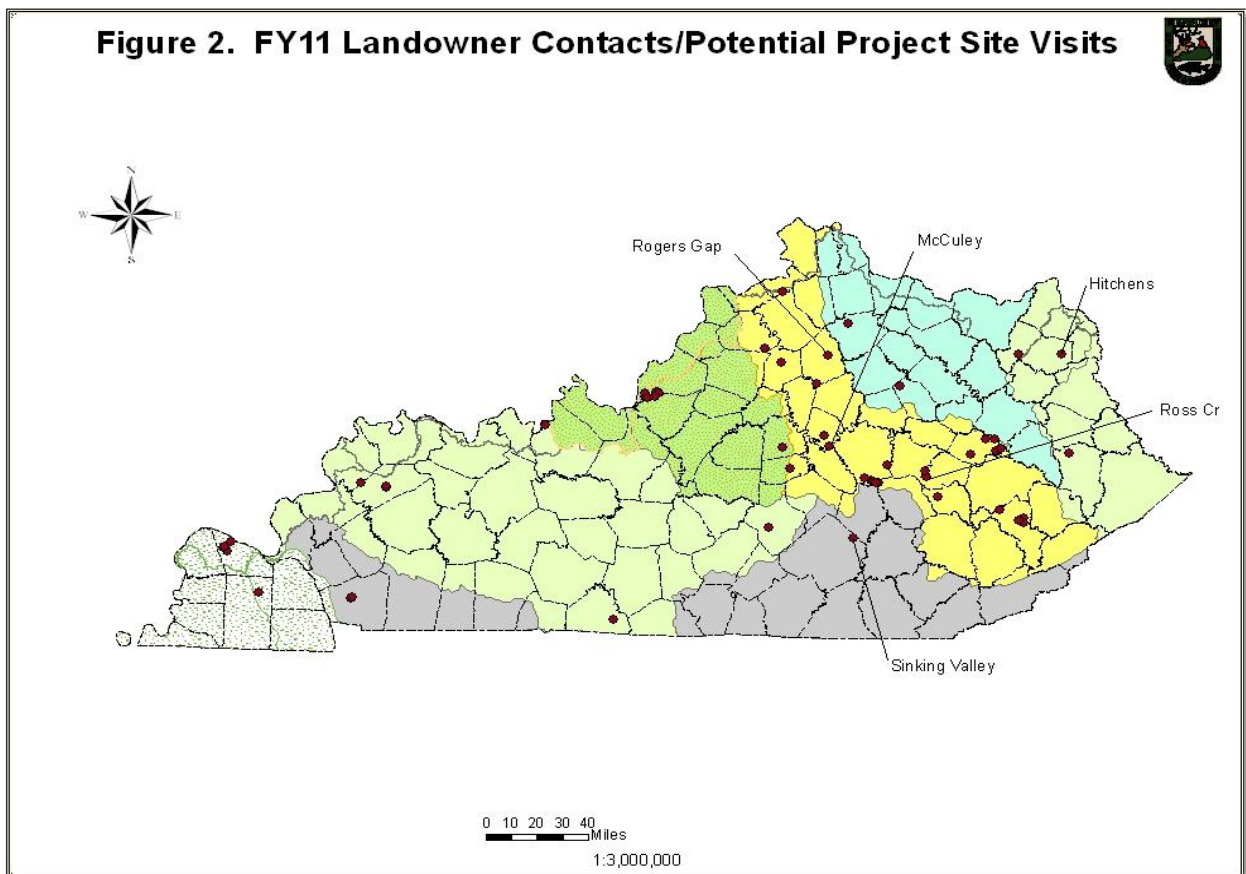


Table 1. Landowner Contacts and Potential Project Site Visits

Date(s) of Visit	Property	Streams	FILO Service Area	County
7/22/2010	Hayes; Rice	Right Fk Georges Cr	Big Sandy River	Lawrence
8/18/2010	Sturckle	Tributary of Indian Run	Big Sandy River	Greenup
2/8/2011	City of Olive Hill	Tygarts Cr	Big Sandy River	Carter
Mar-Jun 2011	Hitchens	Upper Stinson Cr basin; Williams Cr	Big Sandy River	Carter
2/16/2011	Summers	Workmans Br	Big Sandy River	Floyd
4/1/2011	Fischer	S Fk Licking River	Licking River	Harrison
4/25/2011	Prewitt	Aaron's Run	Licking River	Montgomery
7/7/2010	Shaker Village	Shaker Cr and tributaries	(lower) Kentucky River	Mercer
7/15/2010	Sweezy	Tributary of Town Br	(lower) Kentucky River	Fayette
9/20/2010	Redden	Indian Camp Cr	(lower) Kentucky River	Gallatin
9/20/2010	Butler	Tributary of Hickman Cr	(lower) Kentucky River	Jessamine
9/22/2010	Willis	Drowning Cr	(lower) Kentucky River	Madison

Table 1 (con't)				
Date(s) of Visit	Property	Streams	FIL0 Service Area	County
9/28/2010	McCuley	Kentucky R and several tributaries	(lower) Kentucky River	Garrard
10/18/2010	Adams	Kentucky River and tributaries	(lower) Kentucky River	Franklin
10/23/2010	-	Tributary of Clarks Run	(lower) Kentucky River	Boyle
Jan-11	Beluga (Rogers Gap)	Tributaries of Rogers Gap Cr; Shawnee Br and tributaries; Wolf Br and tributaries; tributaries of Little Eagle Cr	(lower) Kentucky River	Scott
2/10/2011	Berea College Forest	E Fk Silver Cr; Brushy Fk	(lower) Kentucky River	Madison
Aug-10	Devers, Claussen, Coffee, Daniels	White Oak Cr and 2 tributaries; Mink Run	(lower) Kentucky River	Shelby
8/24/2010	Campbell	Greenbriar Br	(upper) Kentucky River	Wolfe
8/24/2010	Risner	Tributary of Rose Fk	(upper) Kentucky River	Wolfe
8/24/2010	Brewer	Lacey Cr	(upper) Kentucky River	Wolfe
8/24/2010	Rose	Red River	(upper) Kentucky River	Wolfe
9/1/2010	Caudill	Red River	(upper) Kentucky River	Wolfe
9/8/2010	Briggs	Upper Devil Cr	(upper) Kentucky River	Wolfe
12/28/2010	Gaphard	Rowlette Cr	(upper) Kentucky River	Owsley
2/2/2011	Molpus Timber	Multiple streams	(upper) Kentucky River	Lee
2/10/2011	Berea College Forest	Cowbell Cr; tributary of Owsley Fk	(upper) Kentucky River	Madison
2/22/2011	-	Meadow Br	(upper) Kentucky River	Perry
2/22/2011	-	Trace Br	(upper) Kentucky River	Perry
2/22/2011	-	Second Cr	(upper) Kentucky River	Perry
2/22/2011	Dove	Grapevine Cr	(upper) Kentucky River	Perry
May-Jun 2011	McKinney	Ross Cr and several tributaries	(upper) Kentucky River	Lee
10/26/2010	Lee K. Nelson WMA	Farmers Cr and tributary	Green River	Webster
12/10/2010	Barren River WMA	Long Cr and tributary	Green River	Allen
3/29/2011	Yellowbank WMA	Town Cr and tributaries	Green River	Breckinridge
5/25/2011	Clements	Wetland	Green River	Webster
12/10/2010	Shoemaker	Salt River	Salt River	Mercer
Jan-11	Jefferson Co Memorial Forest	Bee Lick Cr; Crane Run; Wolf Run; Sugartree Run; Salt Block Cr; Bearcamp Run; several tributaries	Salt River	Jefferson
Nov-Dec 2010	Sinking Valley	Un-named sinking streams	(upper) Cumberland R	Pulaski
4/29/2011	City of McKee	Pigeon Roost Cr; Birch Lick Cr	(upper) Cumberland R	Jackson
5/12/2011	Lake Barkley State Park	Blue Spring Cr and tributaries	(lower) Cumberland R	Trigg
2/3/2011	Kaler Bottom WMA	Spring Creek	Jackson Purchase	Graves
5/11/2011	West Kentucky WMA	Bayou Cr; Little Bayou Cr; several tributaries	Jackson Purchase	McCracken

Program Financial Status

FY11

Fund balance at the end of FY11, after revenues of \$4.93M, interest of \$0.55M, and allocations and expenditures of \$8.60M (including monies returned to the fund from terminated projects), was \$36.96M (Table 2). Figure 3 shows the make-up of the fund balance, which includes not only some project funds that have been expended but also *allocated* project funds that have not yet been expended. In-lieu fees were fairly well distributed between the service areas except the Jackson Purchase area comprising the Mississippi and Tennessee river basins (Table 3).

Table 2. Fund Balance (\$)

Beginning Fund Balance	40,077,726
Revenue Collected	4,928,826
Interest Accrued	545,576
Expenditures	
Budgeted to Projects (Pool)	10,000,000
Administration expenses (actual, not 5%)	157,408
Returned to Fund	1,560,502
Ending Fund Balance	36,955,222

Figure 3. FILO fund balance at end of FY11

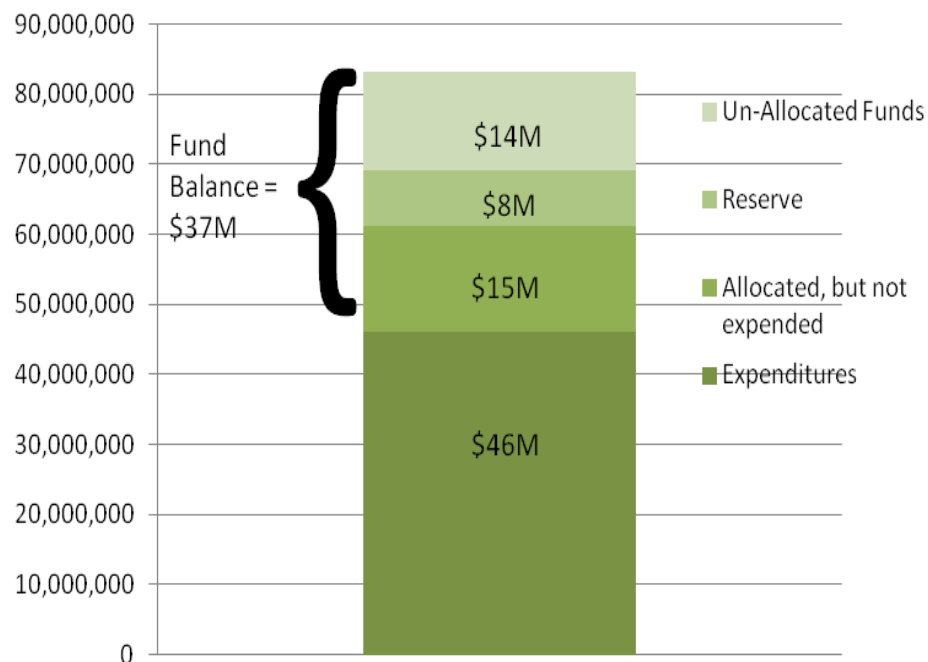


Table 3. FY11 Receipts and Interest to FILO Fund and Administrative Account, by Service Area (\$)

<u>Service Area</u>	<u>Receipts to Projects (92.5%)</u>	<u>Receipts to Admin (5%)</u>	<u>Receipts to Contingency (2.5%)</u>	<u>Total Receipts</u>	<u>Interest</u>	<u>Total (Receipts +Interest)</u>
Big Sandy	851,008	46,000	23,000	920,008	176,472	1,096,480
Kentucky	1,070,107	57,844	28,922	1,156,873	160,881	1,317,754
Cumberland	539,291	29,151	14,575	583,017	82,010	665,027
Licking	1,095,459	59,214	29,607	1,184,280	44,552	1,228,832
Salt	362,700	19,605	9,803	392,108	24,028	416,136
Green	640,599	34,627	17,314	692,540	22,703	715,243
Purchase	0	0	0	0	7,586	7,586
Administrative					27,344 ^a	27,344
Total	4,559,164	246,441	123,221	4,928,826	545,576	5,474,402

The majority of receipts have come from transportation projects, with mining activities contributing the second highest amount (Table 4).

Table 4. FILO Receipts by Source FY11

Source	Receipts (\$)	Percentage of Total
KY Transportation Cabinet	3,057,716	62.0
Mining	926,226	18.8
Development	187,984	3.8
Municipal	663,300	13.5
Other	93,600	1.9

FY02 - FY11

More than \$71M has been received in *project* funds and nearly \$8M has accrued to the program for the ten fiscal years beginning with the first receipts in FY02 (Table 5). Overall, transportation projects have generated the majority of fees (Table 6). Pursuant to federal rules and the current agreement with the USACE, interest is reserved and restricted solely for the mitigation activities of the program. Interest is accounted and presented separately.

Table 5. FILO Program Fund Receipts and Interest Accrued FY02 - FY11 (\$)

<u>Inputs to Fund</u>	<u>Project</u>	<u>Admin (5%)</u>	<u>Contingency</u>	<u>Total</u>
Receipts	71,098,455	3,760,762	356,064	75,215,282
Interest	7,563,807	398,093		7,961,901
Total	78,662,262	4,158,982	356,126	83,177,183

Table 6. FILO Receipts by Source FY02 - FY11

Source	Receipts (\$)	Percentage of Total
KY Transportation Cabinet	43,496,561	57.8
Mining	24,123,595	32.1
Development	3,696,403	4.9
Municipal	1,838,966	2.4
Other	2,059,756	2.7

Allocated Funds FY02-FY11

With total costs allocated for IRT-approved projects (both completed and projected) of \$61,043,733 (Table 7), there is \$13,959,587 remaining at the end of FY11 for future allocation (Table 7). Of these funds, \$656,357 must be used for wetland mitigation. The Kentucky River and Purchase service areas show more funds allocated than funds available. These deficits will be made up using accrued interest, future receipts from the service area prior to the new MOA becoming effective, and by KDFWR financial contributions toward the Rogers Gap property acquisition (see a more detailed explanation in the project update section for Rogers Gap). Accordingly, the unallocated balance for the Kentucky River Service Area is set at zero. Currently, the majority of unallocated funds are in the Cumberland and Big Sandy service areas (Table 7; Figure 4).

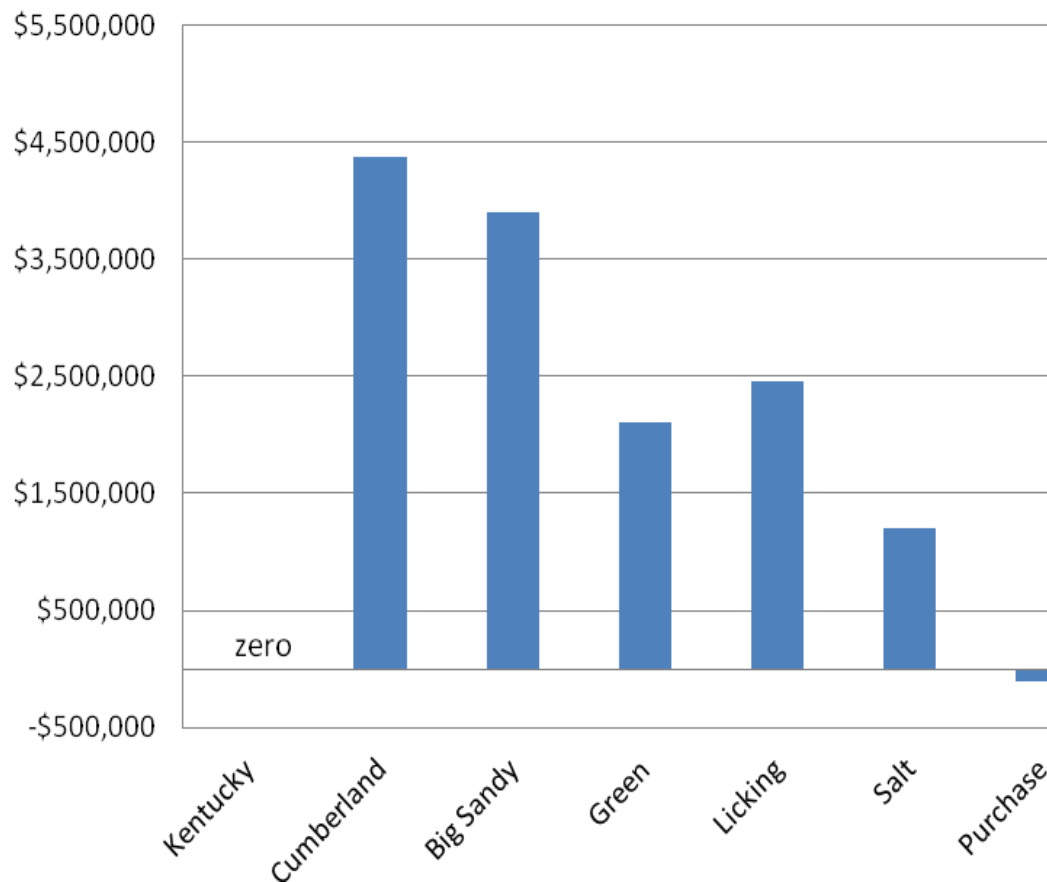
Table 7. Receipts, Allocated Funds, and Unallocated Funds by Service Area, FY02-FY11

	Stream				Wetland		
<u>Basin</u>	<u>Receipts</u>	<u>Allocated</u>	<u>Unallocated</u>		<u>Receipts</u>	<u>Allocated</u>	<u>Unallocated</u>
Big Sandy	21,905,966	18,044,446	3,861,520		45,954	0	45,954
Licking	6,247,873	3,817,300	2,430,573		29,412	0	29,412
Cumberland	10,737,680	6,691,602	4,046,078		334,524	0	334,524
Kentucky	22,566,127	26,570,787	-4,004,660		153,695	53,900	99,795
Salt	3,546,645	2,349,533	1,197,112		9,439	0	9,439
Green	4,157,584	2,213,307	1,944,277		401,893	233,949	167,944
Purchase	892,579	1,068,909	-176,330		69,084	0	69,084
Total	70,054,454	60,755,884	13,303,230^a		1,044,001	287,849	656,357

^aUn-allocated stream funds in Kentucky River Service Area are set at zero (see text)

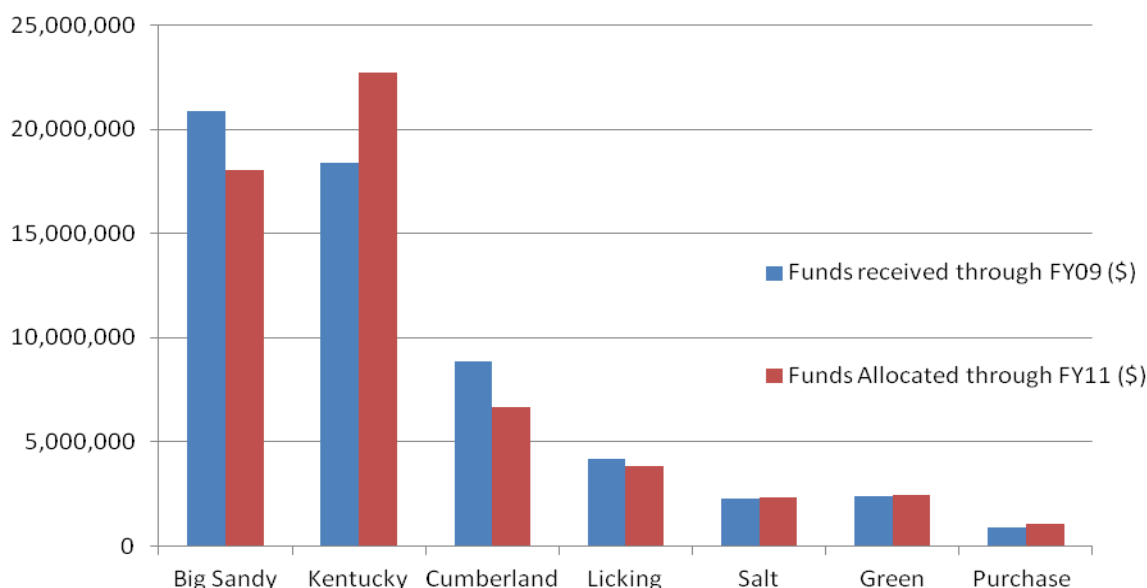
Over the history of the FILO program, the majority of receipts have been generated from the Kentucky River and Big Sandy River service areas, with the Cumberland River service area receiving the third highest amount of receipts (Table 7). The \$61.0M allocated by the end of FY11 is greater than the total receipts of \$57.9M received through FY09. However, as described above, since about \$4.0M of the allocated funds will come from non-project funds (departmental and interest), the actual allocation of project funds is \$57.0M, or about the amount received up to the last third of FY09. All funds have been allocated except those received in the past two fiscal

Figure 4. Un-allocated Funds at end of FY11, by Service Area



years in the Kentucky River, Salt River, Green River, and Purchase service areas. Figure 5 depicts the allocation of funds to mitigation projects in these four service areas for this period. As can be seen in the chart, monies allocated by the end of FY11 exceeded those received by the end of FY09, indicating that new mitigation projects are developed within two years of receiving in-lieu fee payments. In the Licking River and Cumberland River service areas, it required about 2.5 fiscal years for the monies allocated to equal those received, with the Big Sandy service area requiring three fiscal years (the end of FY08). The unallocated funds allow the program to continue to seek and gain approval for new restoration and preservation projects.

Figure 5. Funds Allocated by end of FY11 vs Funds Received by end of FY09



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 on a standard of \$170/ft of stream affected. Recently however, with the requirements of the 2008 Mitigation Rule to fully take effect when the new MOA is established, impact fees and mitigation have increasingly been based on “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 (centered around coal mining activities), \$170 per Adjusted Mitigation Unit (AMU) in the rest of the Commonwealth, and \$30,000 per acre of wetland in all parts of the Commonwealth. The Public Notice also requires that the USACE provide FILO with the number of credits necessary to compensate for impacts, a provision not required under the current MOA, and that FILO provide 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. Although not required, this information has often been collected for permits issued prior to the November 2009 Public Notice, and the cost per credit has been an important factor in the viability and approval of design of proposed mitigation projects by the IRT.

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 is not possible to relate credits earned by mitigation to impacts caused by the various 404-permitted activities. It is assumed that impacts and mitigation are occurring on similar stream flow types, resulting in similar linear feet and credits affected. Thus, programmatic success is based on cost/linear foot as in the existing MOA.

What can be shown is the amount of in-lieu fees received and the funds allocated to mitigation projects by the Kentucky Wetland and Stream Mitigation Program. Data were presented in the previous section showing that funds remaining have come from fees received in the past 2-3 fiscal years. This is further illustrated statewide (Figure 6) and for each service area (Figures 7-13) over the history of the FILO program. In general, it can be seen that the money allocated to mitigation projects has kept pace with fees received. Prior to this year, the Kentucky River basin had seen an influx of fees that have now been directed to the Rogers Gap project. At this time, all fees received have been allocated in the Kentucky River and Jackson Purchase service areas. Other service areas each have at least \$1M of unallocated funds remaining, ranging from \$1.2M in the Salt River Service Area to \$4.4M in the Cumberland River Service Area.

Table 8 provides summary statistics for total cost, length, and credits, and for cost per linear foot and cost per credit; Appendix A provides this data for individual projects. With the addition of the large Rogers Gap project in the Kentucky River Service Area (AMU region), the average project cost is now \$1.64M, is greater than 13,000 feet in length, gains 14,446 credits, and has a cost per credit of \$113 and a cost per foot of \$123. Also, 46.5 acres of wetland are included in projects (Eagle Cr Tributary, Forest Land Group, Pond Cr) in the AMU region at a total cost of \$387,644 or \$6,190 per acre or wetland credit.

In the EIU region, the average project costs \$878,589, is nearly 9000 feet in length, gains 2211 credits, and has a cost per credit of \$397 and a cost per foot of \$98. 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 true cost of a restoration project. Without the two preservation projects, the costs are \$177/ft and \$427/credit in the EIU region.

Table 8. Summary Data for Projects in AMU and EIU Regions of Kentucky

	<u>AMU Region</u>	<u>EIU Region</u>
Number of Projects	21	32 ^a
Total Project Cost	\$34,686,044	\$26,357,682
Total Stream Cost	\$34,398,202	\$26,357,682
Total Wetland Cost	\$287,842	-
Average Project Cost	\$1,638,010	\$878,589
Total Length (ft)	280,274	268,257
Average Length (ft)	13,346	8,942
Cost/ft (all projects)	\$123	\$98
Cost/ft (w/o preservation projects)	-	\$177
Total Stream Credits	303,360	66,327
Average Stream Credits	14,446	2,211
Cost/stream credit (all projects)	\$113	\$397
Cost/stream credit (w/o preservation projects)	-	\$427
Total wetland credits (wetland AMUs)	46.5	-
Cost/wetland credit	6190	-

^aIncludes 2 projects on which design monies were spent but projects were terminated prior to construction

Figure 6. Cumulative in-lieu fees and allocated project funds/operating expenses

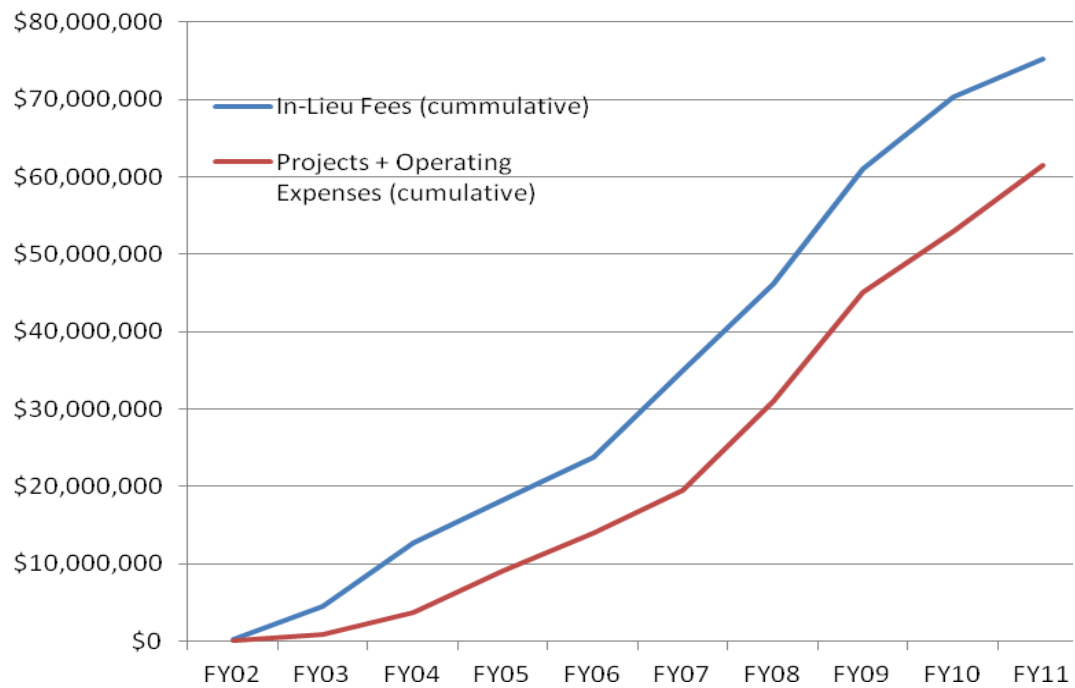


Figure 7. Big Sandy River Service Area in-lieu fees and allocated project funds/operating expenses

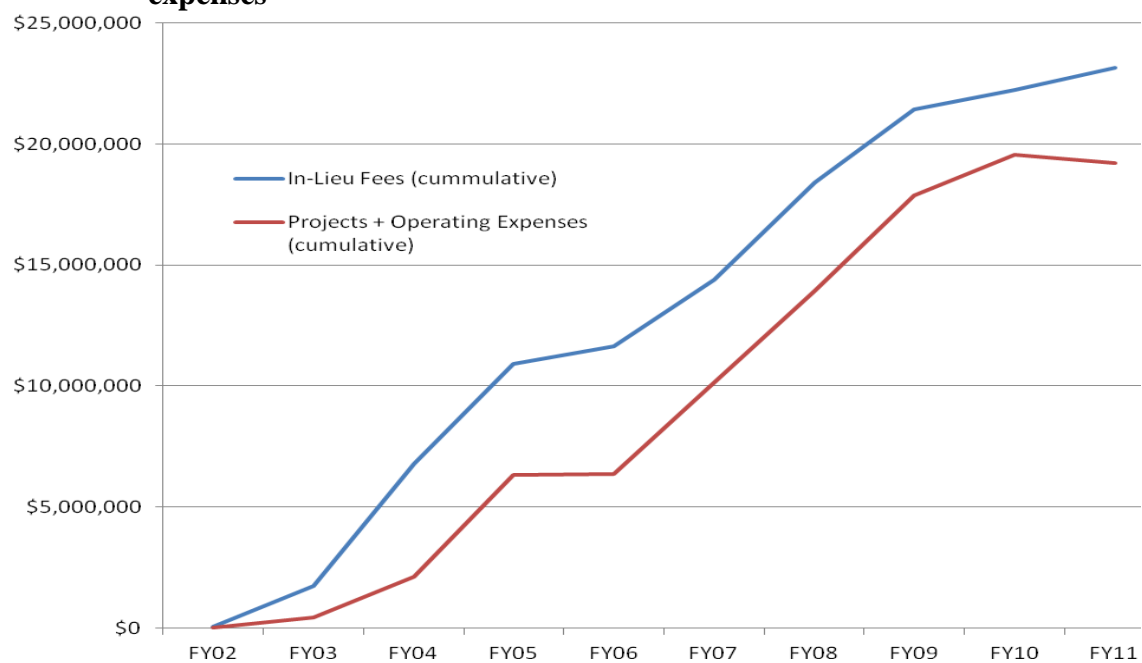


Figure 8. Cumberland River Service Area in-lieu fees and allocated project funds/operating expenses

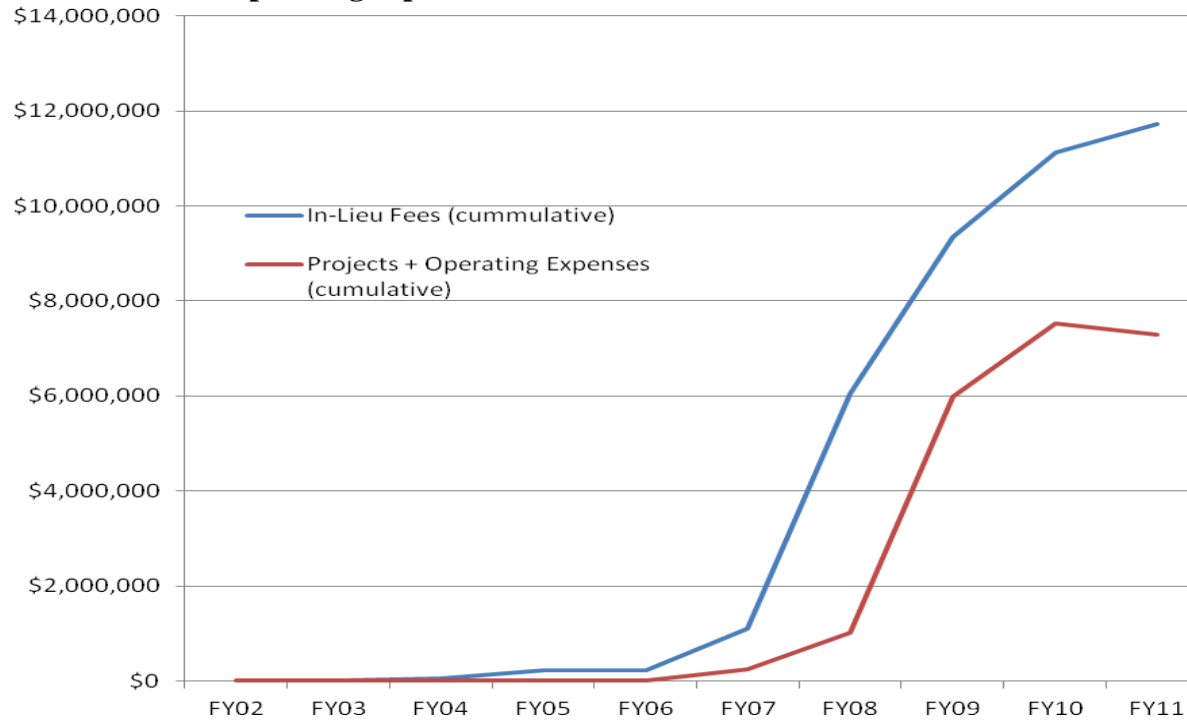


Figure 9. Licking River Service Area in-lieu fees and allocated project funds/operating expenses

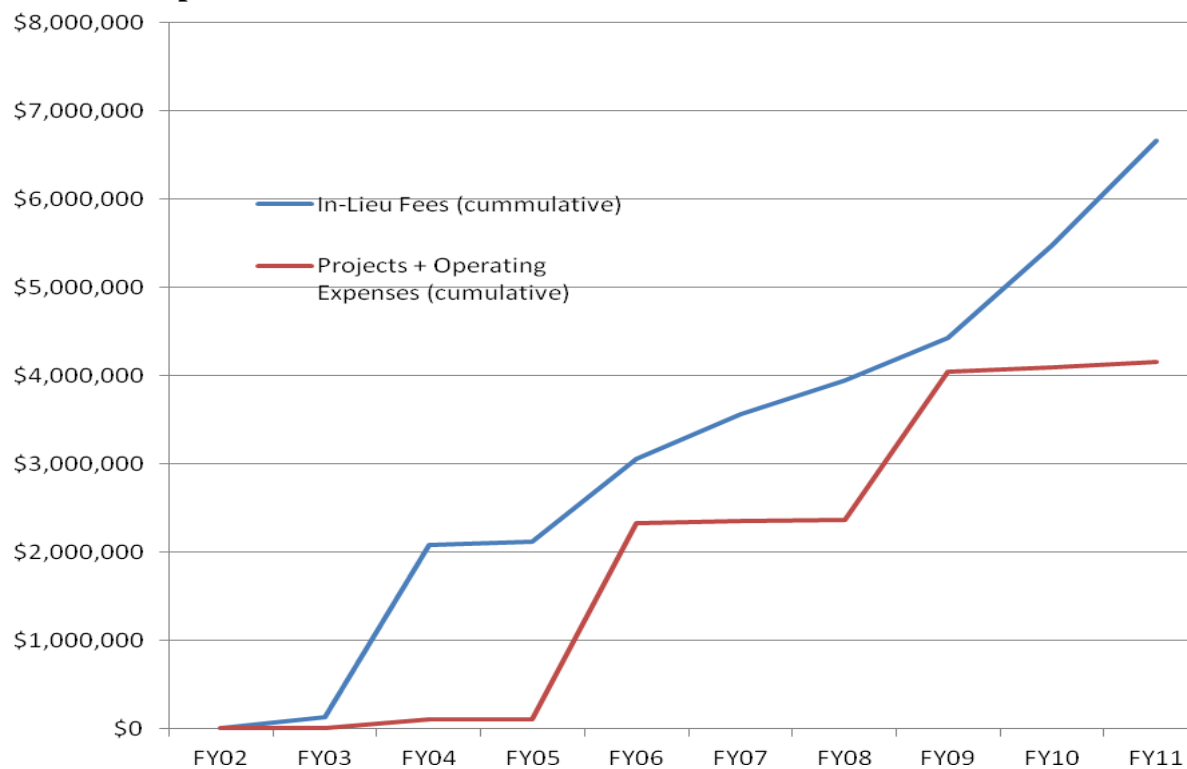


Figure 10. Kentucky River Service Area in-lieu fees and allocated project funds/operating expenses

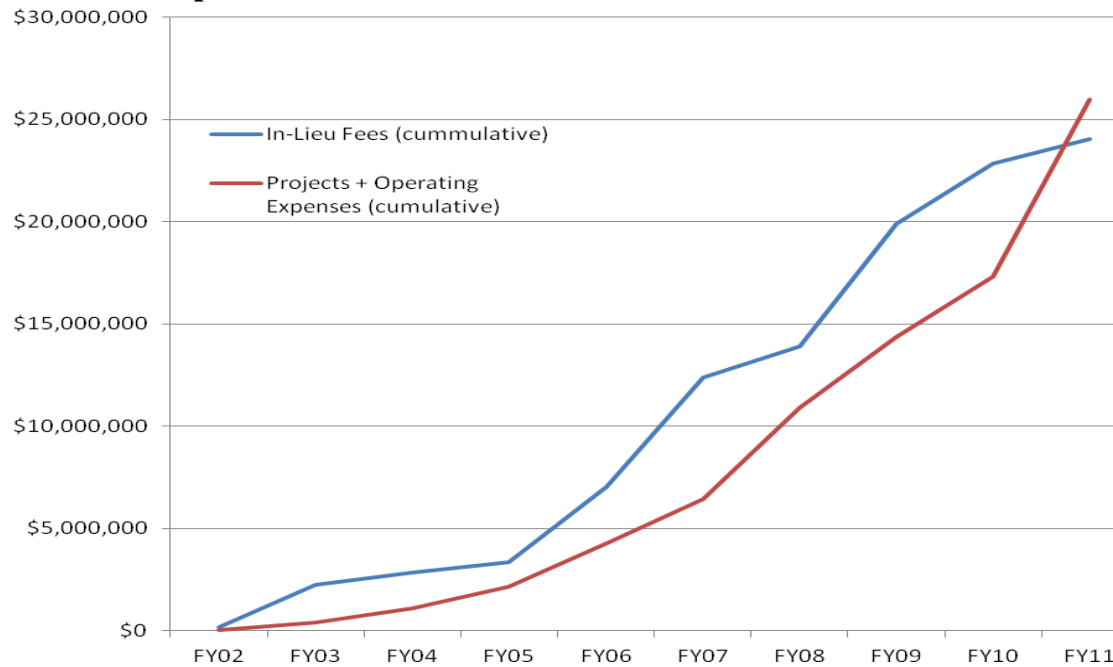


Figure 11. Salt River Service Area in-lieu fees and allocated project funds/operating expenses

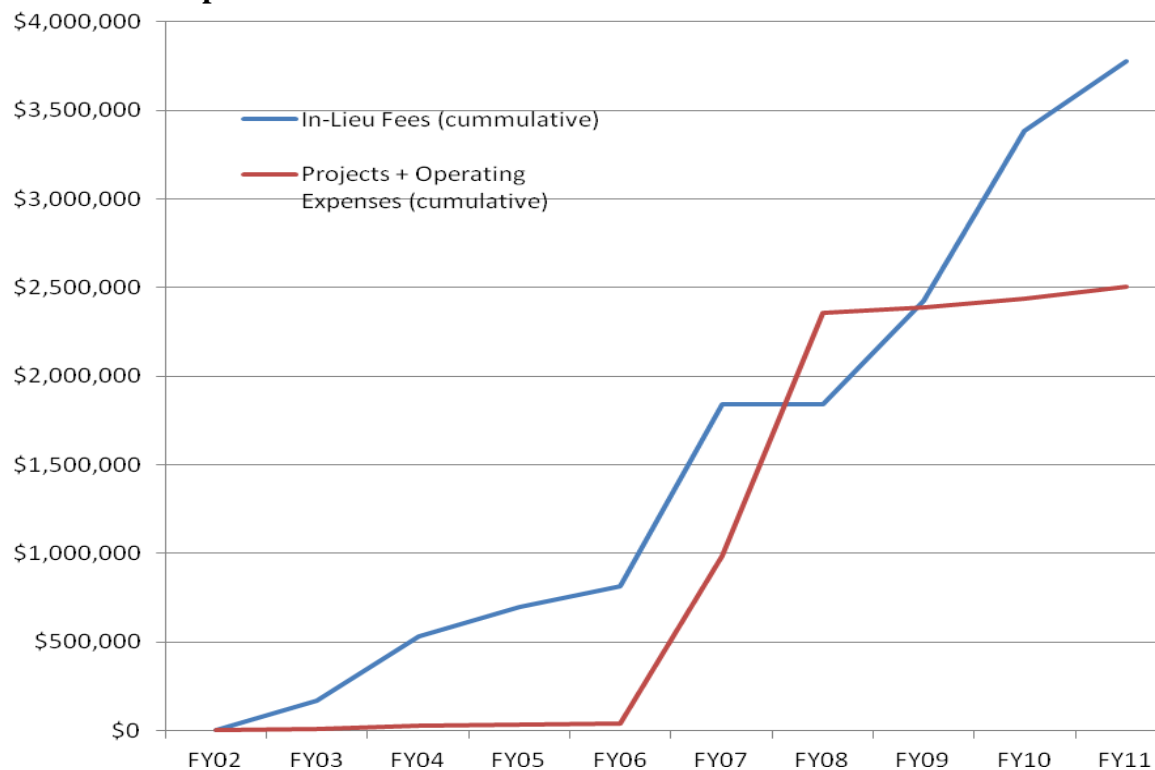


Figure 12. Green River Service Area in-lieu fees and allocated project funds/operating expenses

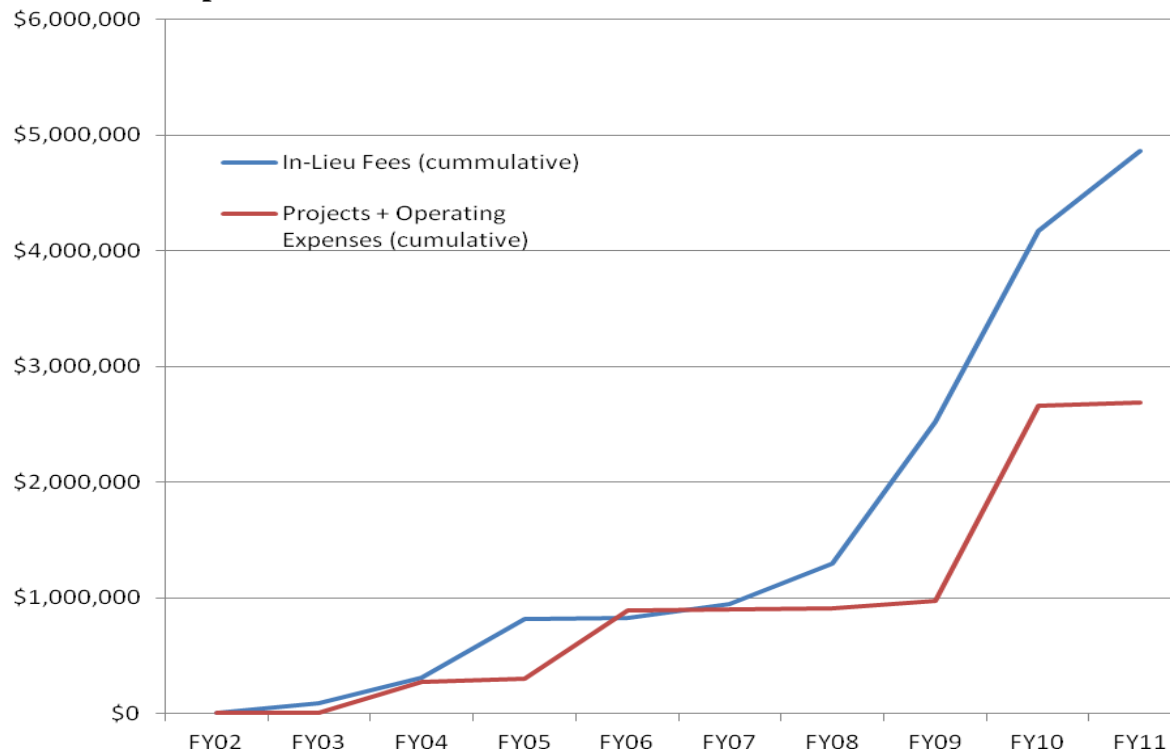
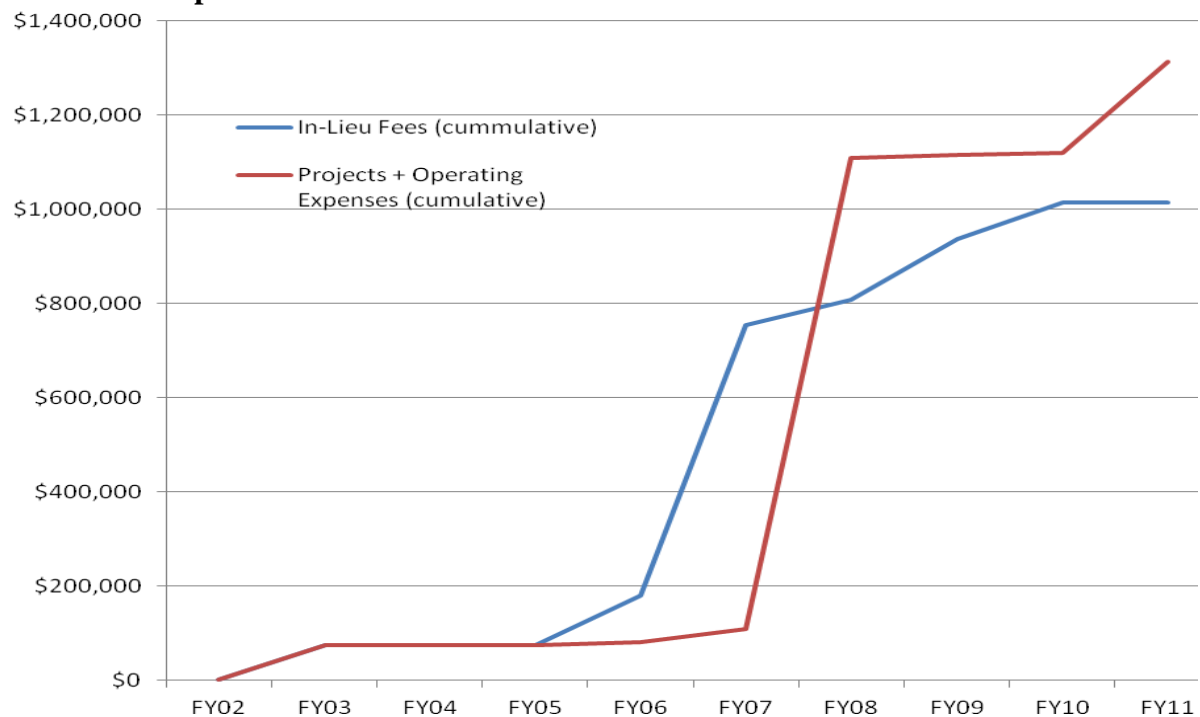


Figure 13. Purchase Service Area in-lieu fees and allocated project funds/operating expenses



Actions Taken by Interagency Review Team in FY11

In FY11 one large new project was approved by the IRT, revisions were made to nine projects (Table 9), and three previously approved projects were terminated.

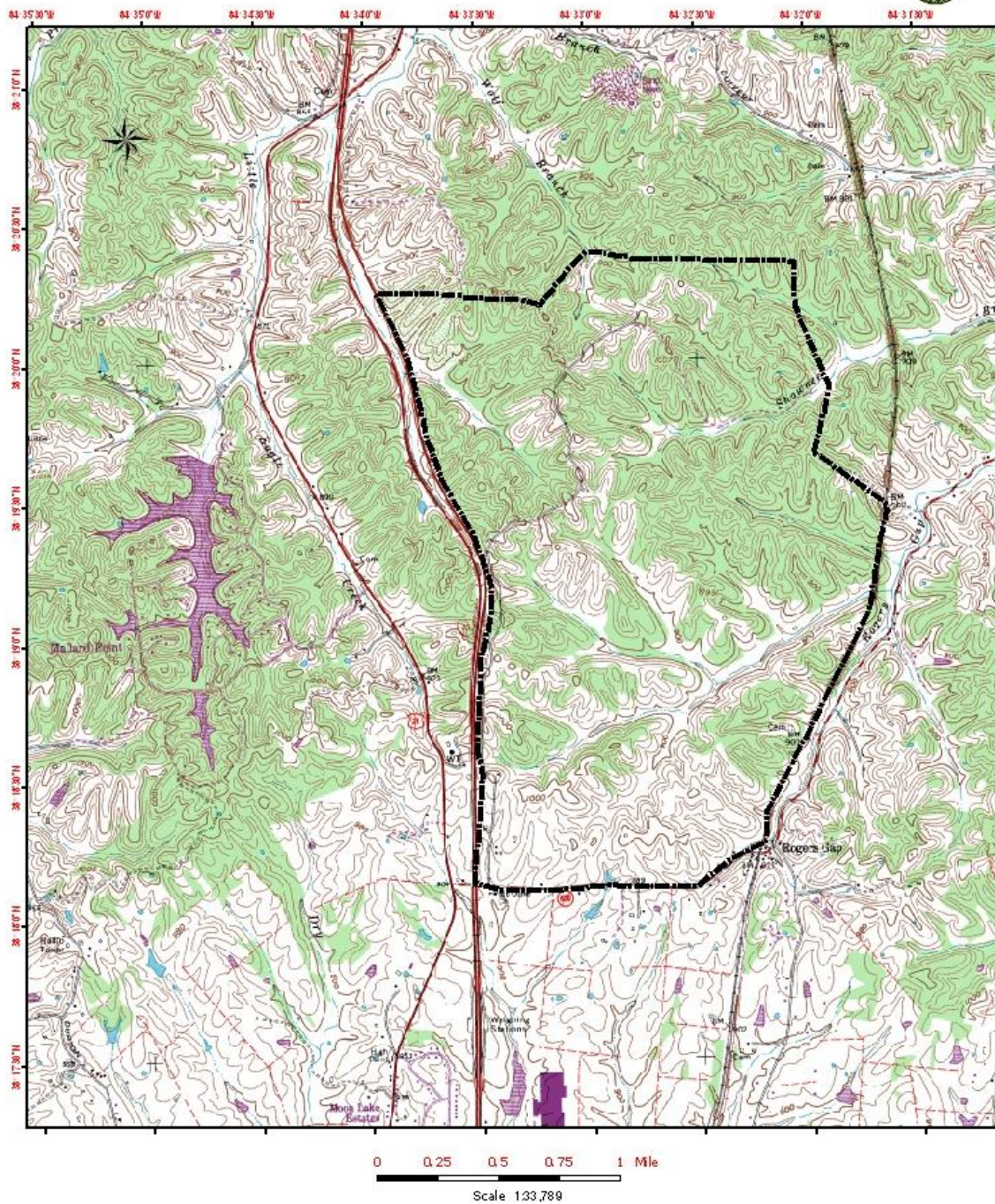
Table 9. Actions Taken by Interagency Review Team in FY11

Stream	Service Area	USACE District	County	Type	Approved in FY11 for:
Bolts Fork	Big Sandy	Louisville	Boyd	Rehabilitation	Reduction in total cost from \$1,417,823 to \$1,212,923
Cat Fork	Big Sandy	Louisville	Lawrence	Rehabilitation	Reduction in Design Costs because of reduced length - \$344,000 to \$286,000
East Fork Little Sandy River #5	Big Sandy	Louisville	Boyd	Rehabilitation	From \$677,098 to \$775,000 because of water line issues
Pond Creek	Kentucky	Louisville	Owen	Rehabilitation	Purchase of additional 7.4 ac, but no change in project cost
East Fork Indian Cr	Kentucky	Louisville	Menifee	Rehabilitation	Increase Design from \$200,950 to \$264,050
Beluga (Rogers Gap) Property	Kentucky	Louisville	Scott	Purchase, preservation, rehabilitation, enhancement	\$15,450,422
Elisha Creek	Kentucky	Louisville	Leslie	Rehabilitation Enhancement	Reduced length by 1288 ft and cost from \$1,052,710 to \$788,607
Buck Creek Tributary	Cumberland	Nashville	Pulaski	Rehabilitation	Increase total project cost from \$172,588 to \$236,750
Harrison Fork	Salt	Louisville	Nelson	Rehabilitation	2D modeling and data collection increased project costs by \$45,738 to \$1,370,633
Obion Creek II	Purchase	Memphis	Hickman	Rehabilitation	Additional channel length and permit increased cost by \$233,600 to \$780,976

Beluga (Rogers Gap) Tract

The Beluga or Rogers Gap tract in northern Scott County (Figure 14) is the most extensive project attempted by the FILO program to date. The 2500-acre tract will be purchased, high quality resources will be preserved, and degraded streams will be rehabilitated and enhanced, resulting in nearly 78,000 AMU credits at a cost of over \$15M (App. A). KDFWR will

**Figure 14. Beluga (Rogers Gap) 2500-ac Property
in northern Scott County**



contribute \$3M of departmental funds to the purchase, and the tract will become a WMA with deed restrictions to protect resources and mitigation work.

Terminated Projects

Sand Lick Creek, Powell County

The IRT was notified of project cancellation and required no action. The USFS indicated that up to 300 oil wells are on the property, and they are undertaking plans to plug these wells.

Additionally, there are ATV and road issues with this area. The USFS indicated that it would be several years before the stream project could be undertaken. As a result, KDFWR terminated the project and returned the \$1,855,000 previously allocated back to the Kentucky River service area account.

Red Lick Creek #2, Estill County

The IRT was notified of project cancellation, primarily because of high cost per credit. The \$876,000 allocated for the project was returned to the Kentucky River service area account.

Laurel Fork, Elliott County

Design work was completed for this project, which is adjacent to the Laurel Creek Gorge tract that FILO purchased (now Ed Mabry WMA). However, final landowner consent was not obtained.

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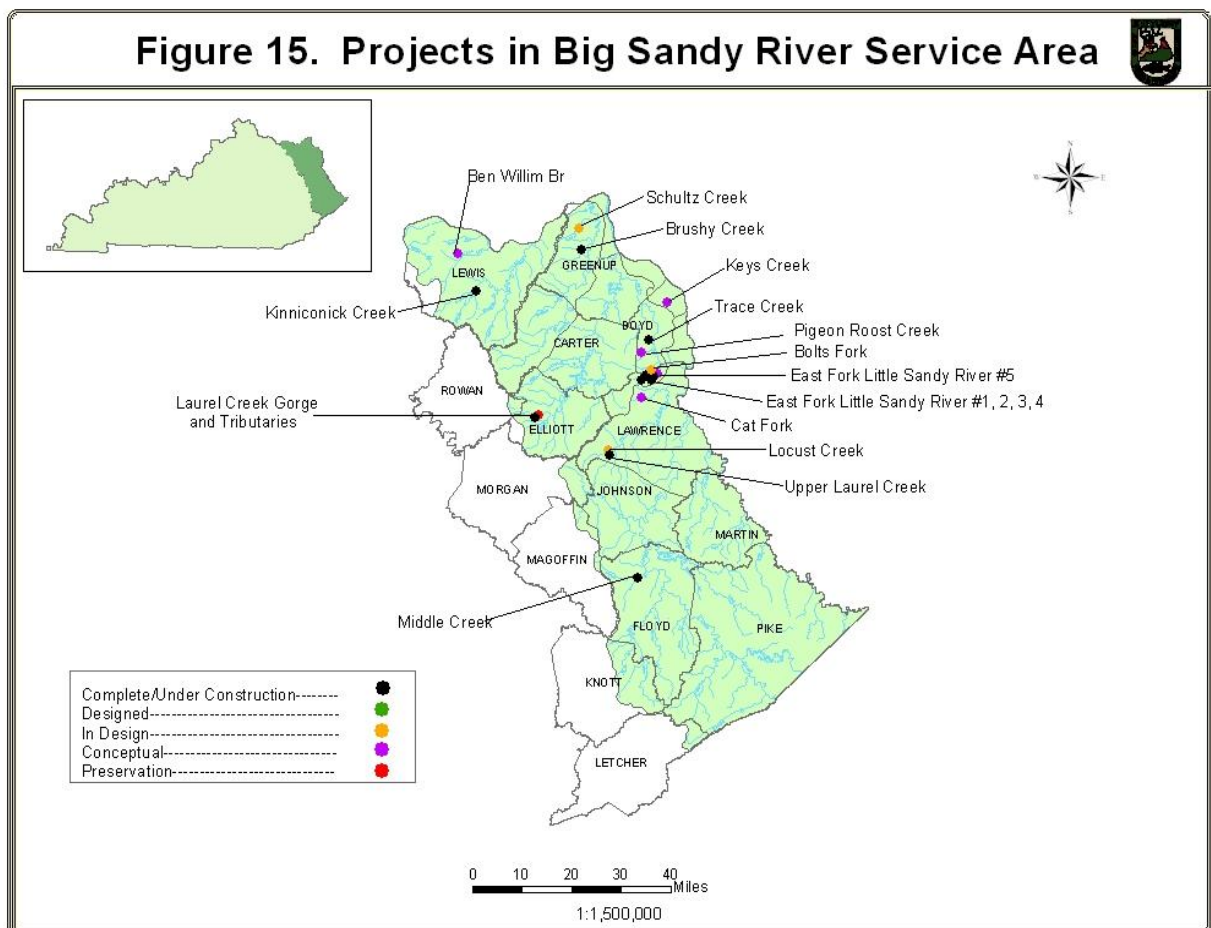
Project Status

With the addition of the one new project in FY11, there are 51 active or completed projects, of which 26 are either built or in construction.. A total of 55 projects have been approved for design by the IRT. (The two repair projects on Brushy Creek are combined with the original Buck Creek project for this report.) As discussed above, three projects were terminated in FY11 and the Frozen Creek project was terminated previously. The program has preserved two high quality streams (Laurel Creek, Buck Creek) and 1557 acres of their surrounding watersheds with over 24 miles of tributaries.

FILO projects are shown by service area in Figures 16 – 21, and brief descriptions of FY11 activities on all projects are provided below. Monitoring information and compliance status are presented in Appendix B.

BIG SANDY RIVER SERVICE AREA

There are 18 projects in this service area, which is all within the USACE Louisville District and coal region using Eastern Kentucky protocols with the EIU credit system.



Ben Willim Branch, Lewis County. The project will likely be terminated in FY12 because of landowner concerns.

Bolts Fork, Boyd County. Third Rock Consultants is completing design of the project. Permits have been received. Landowner contracts and Conservation easements need to be signed.

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. Re-establishment and rehabilitation will occur on about 4400 feet of Cat Fork and another 850 feet of tributaries. Real Properties completed the title work, and a design fee has been negotiated. The landowner contract will be completed in FY12; design should begin in FY12 and be completed in FY13.

East Fork Little Sandy #1, Lawrence County. The fourth monitoring year report was submitted and the fifth year monitoring was performed. The project was in compliance.

East Fork Little Sandy #2, Lawrence County. Construction was completed and the first year of monitoring was performed.

East Fork Little Sandy #3, Lawrence County. Construction is completed and the first year of monitoring was performed.

East Fork Little Sandy #4, Lawrence County. The project was completed in summer 2010 by Bluegrass Stream. The first year of monitoring was performed.

East Fork Little Sandy #5, Lawrence County. Mactec Engineering 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. Real Properties is completing the title work.

Kinniconick Creek/Indian Creek, Lewis County. Repairs from high flows FY09 completed Oct 2009, but a May 2010 flood event caused substantial damage to the upper 1,500 feet of the project on Indian Creek. Stantec, Inc. and KDFWR worked on addressing the cause of the problem and various remedies. Project repair was completed in early FY11. Year 2 monitoring was performed.

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

Laurel Creek Tributary, Elliott County. Project was terminated because of landowner concerns.

Left Fork Trace Creek, Boyd County. The third monitoring year report was submitted and the fourth year monitoring was performed. The project is in compliance.

Locust Creek, Lawrence County. Construction by ASR of Kentucky was completed in June 2010. The as-built and first year monitoring report was submitted in FY11.

Middle Creek, Floyd County. The third monitoring year report was submitted and the fourth year monitoring was performed. A large debris jam will be removed in FY12 and scour caused by the jam will be addressed to comply with success criteria.

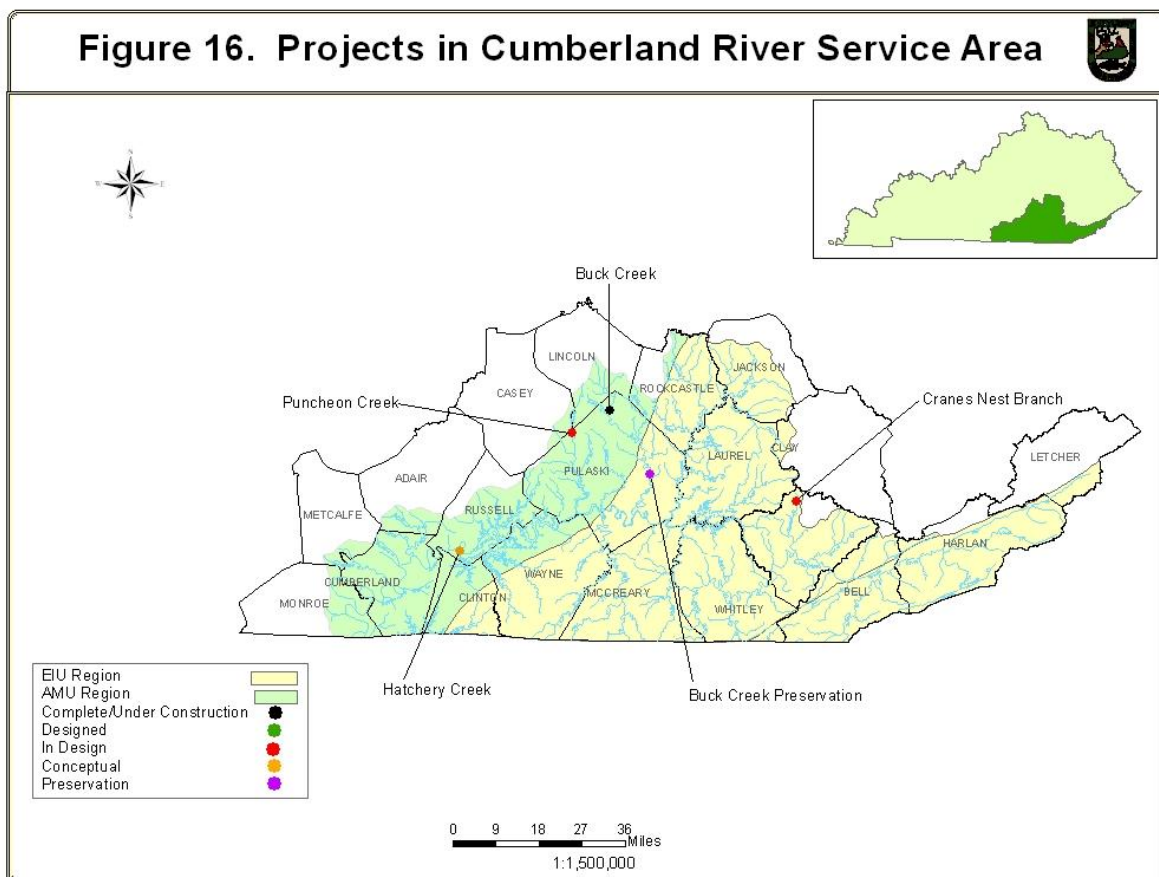
Pigeon Roost Creek, Boyd County. This project came about as the result of landowner contact to FILO on a stream within the Ramey-Estep Children's Home campus in Boyd County. Real Properties completed the title work in FY11. A design fee was negotiated with Baker and design will begin in FY12.

Schultz Creek, Greenup County. Project is with Real Properties with several title issues.

Upper Laurel Creek, Lawrence County. The second year monitoring report was submitted and the third year monitoring was performed. Success criteria were met except for high mortality of shrubs and live stakes, caused by drought and sand deposition.

CUMBERLAND RIVER SERVICE AREA (Lower Cumberland River basin shown with Purchase Area)

There are five projects in the upper Cumberland River basin of this service area, which is in the USACE Nashville District and partially in the coal region with Eastern Kentucky protocols and the EIU credit system and partially in the AMU region.



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.

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.

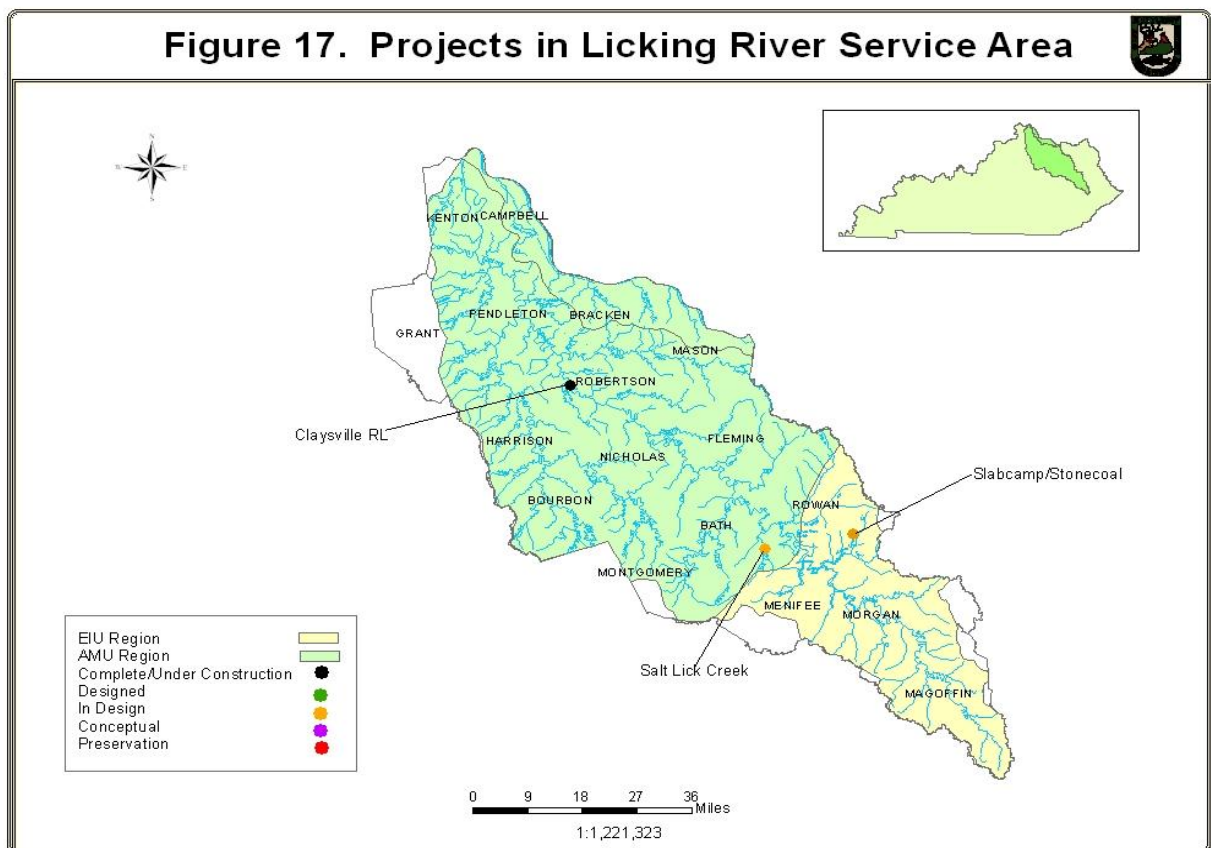
Cranes Nest Branch, Knox County. Beaver Creek Hydrology has completed design and conservation easement survey of the project. Permits applications were made and permits received. Construction is planned for FY12.

Hatchery Creek, Russell County. 30% design was completed and approved by the Nashville district corps' planning section. The topographical survey was completed and the core sampling is in progress. The project limits were established and the work towards the 50% design will establish the channel location.

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

LICKING RIVER SERVICE AREA

There are three projects in this service area, which is in the USACE Louisville District and uses the AMU credit system, except for Magoffin, Morgan, and parts of Rowan and Menifee counties, which are in the coal region and are under Eastern Kentucky protocols with the EIU credit system.



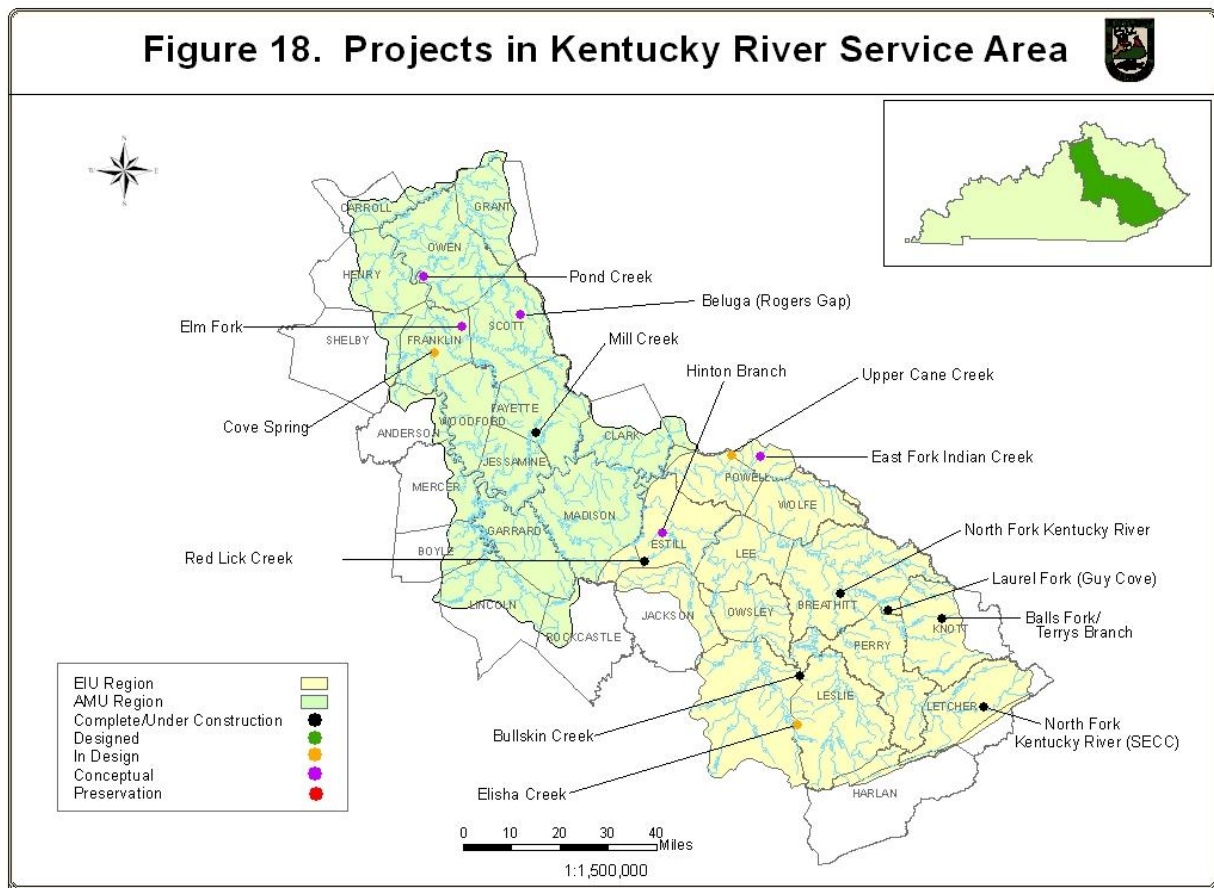
Claysville Recovery Land Site, Harrison County. First year monitoring report was received and second year monitoring performed.

Salt Lick Creek, Bath County. A design/build team was chosen and the project will go to construction in FY12.

Slabcamp/Stonecoal Branch, Rowan County. The project is on the U.S. Forest Service (USFS) Daniel Boone National Forest; permanent protection will be provided by the USFS Management Plan. The University of Louisville completed the design and applied for permits. Construction began in the fall of FY10. Conservation easement on downstream 100ft not owned by USFS was obtained, and the project will be completed in FY12.

KENTUCKY RIVER SERVICE AREA

There are 15 active projects in the Kentucky River service area, which is fairly evenly divided into the coal region with Eastern Kentucky protocols using the EIU credit system and the lower basin using the AMU credit system. Two projects were terminated during this fiscal year. The entire service area is in the USACE Louisville District



Balls Fork, Knott County. This is the first project undertaken by the KDFWR in-lieu fee program. It is in the Troublesome Creek watershed and was completed in December 2005. KDFWR negotiated a sewer line crossing under the stream with Troublesome Creek Environmental Authority so as not to disturb the riparian zone. Balls fork was released from monitoring in FY11.

Bullskin Creek, Leslie County. This enhancement project was completed in September 2005. This project is pending release from monitoring in FY12

Cove Spring, Franklin County. This project is in Cove Spring Park owned by the City of Frankfort and is accessible to the public. Biohabitats and Ecotech have completed project design, permits have been received, and municipal engineers provided an easement survey. Final project easements are pending, with construction anticipated in FY12

East Fork Indian Creek, Menifee County. The project is in the USFS Daniel Boone National Forest; permanent protection will be provided by the USFS Management Plan. Real Properties approved the Right of Entry provided by the USFS. HMB/Beaver Creek Hydrology and KDFWR are at 60% design and have coordinated several meetings with USFS to incorporate their comments into design plans.

Elisha Creek, Leslie County. The project is on the USFS Daniel Boone National Forest; permanent protection will be provided by the USFS Management Plan. Beaver Creek Hydrology has completed the design for the project. Project scope was reduced to include only the Left Fork of Elisha Creek. Permit applications were submitted this year. Construction is anticipated in FY12.

Elm Fork, Owen County. The project is on Kleber WMA and is accessible to the public. The deed restriction was prepared for permanent protection of the site. Stantec and KDFWR negotiated a design fee and design was at the approximate 30% stage at the end of FY11.

Guy Cove, Breathitt County. The project is on Robinson Forest owned by the University of Kentucky 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 second monitoring year report was submitted and the third year monitoring year was performed. Groundwater dams were successfully installed to remedy water loss in one reach. .

Hinton Branch, Estill County. This project was established after several attempts to gain approval from the landowner to work on an incised, highly visible stream in the Knobs region of Estill County in the Kentucky River service area. It will re-establish and rehabilitate over 6000 feet of Hinton Branch and a small distance of ephemeral tributaries, and it will restore floodplain access and sinuosity to the straightened channel. HMB/Beaver Creek Hydrology and KDFWR negotiated a design fee for the project. The Finance Cabinet is currently completing the design and landowner contracts. Design should be completed in FY12.

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. Monitoring began in FY10 and the first report was submitted in FY11. The school had expanded its campus on the property. KDFWR and Ridgewater coordinated with the school to ensure protection of the project.

North Fork Kentucky River, Perry County. No action taken in FY11. Credits were not given because trees planted along 3500 feet of stream were cut down by Perry County Board of Education.

Pond Creek, Owen County. The site is on public land on the Kentucky River WMA, accessible to the public. KDFWR purchased a small (7.4 ac) tract of at the downstream end of the site to secure access to both banks. Design completion has not been determined.

Red Lick #1, Estill County. The third year monitoring year was performed by KDFWR. Although the project was determined to be in compliance, additional tree planting will be performed during the monitoring period.

Red Lick #2, Estill County. Project was terminated because of high cost per credit.

Sand Lick Creek, Powell County. Project was terminated because of unresolved issues on the U.S. Forest Service property.

SECC Bank Stabilization., Letcher County. The project has been released from monitoring.

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 plans to remedy failed logvanes in FY12. Aside from the vanes, habitat has been productive at Terry's Branch. KDFWR and Biohabitats presented on the project (Terry's Branch: lessons learned in design and implementation) at the Southeastern Stream Restoration Conference in Raleigh, NC in Nov 2010. One highlight of the presentation included findings of an improved fish assemblage measured in total abundance, richness, and KIBI). KDFWR was in negotiations with American Electric Power over a proposed transmission line. AEP plans to avoid the project.

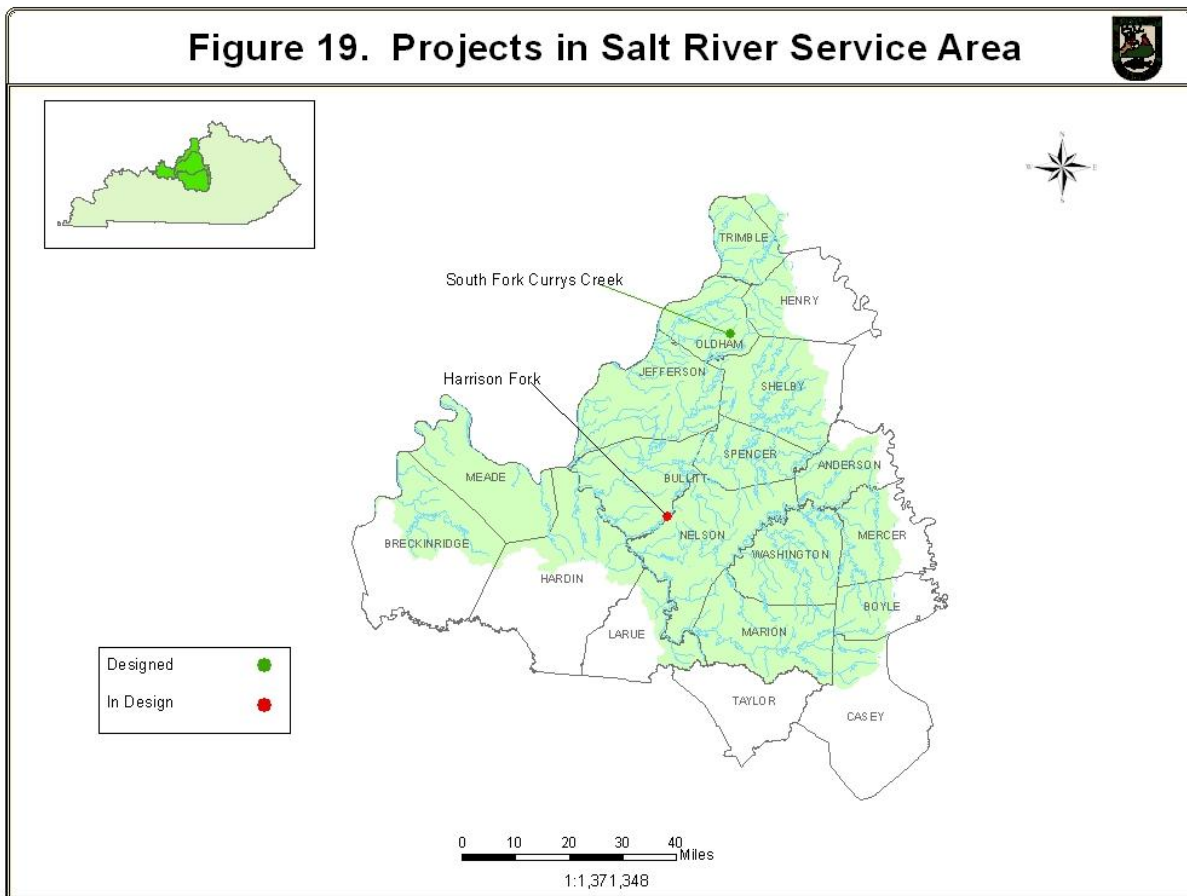
Upper Cane Creek, Menifee County. Baker consultants completed the design and permits for the project. Construction bidding was put on hold to reduce the project costs. The conservation easement was surveyed and submitted to Real Properties for approval. Construction is planned for FY12.

SALT RIVER SERVICE AREA

There are two projects in this service area, which is entirely within the USACE Louisville District and operates with the AMU credit system.

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 University of Louisville completed the design and KDFWR submitted the application and received permits for the project. The conservation easement was surveyed and submitted to Real Properties for approval. Construction is planned for FY12.



GREEN/TRADEWATER RIVER SERVICE AREA

There are four projects in this service area, which is within the USACE Louisville District and operates under the AMU credit system.

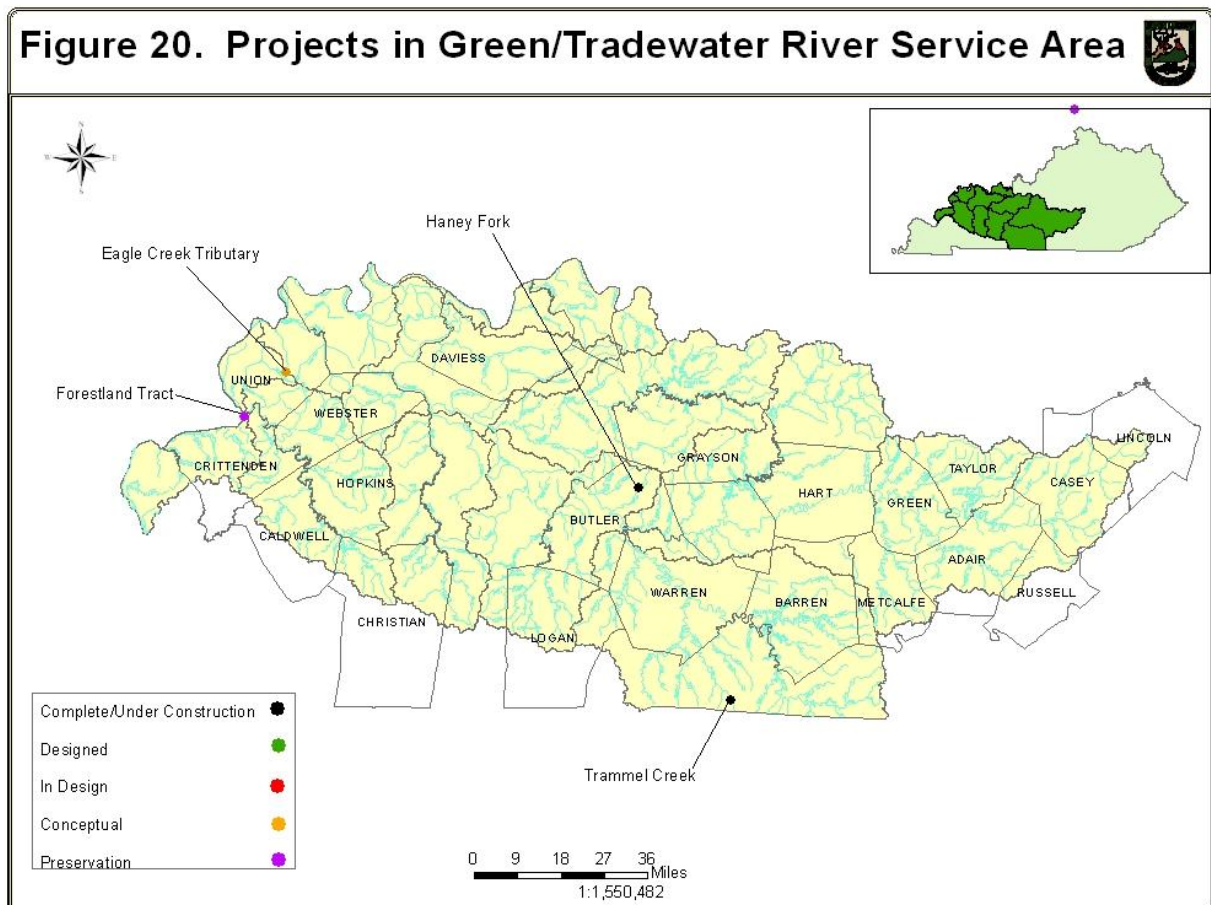
Eagle Creek Tributary, Union County. Design approval was granted in FY10. KDFWR is working on the oil/gas lease easement restrictions for permanent protection of the site.

Forestland Group Tract, Union County. Project approval was granted in FY10. Land acquisition for permanent protection of the site is pending.

Haney Fork, Butler County. The fourth year monitoring was completed in September 2010 and the report was submitted December 2010. The success criterion for vegetation was met at 415 hardwoods per acre. The annual compliance visit was conducted in June 2010.

Trammel Creek, Allen County. An early flood event in May 2010 caused minor damage to portions of the project. Stantec and KDFWR worked on addressing the cause of the problem and various remedies. Project repair was completed in summer 2010. Year 1 monitoring was completed in FY11 and the

monitoring report was submitted in December 2010. The annual compliance visit was conducted in June 2010. Based on information obtained from the Year 1 monitoring report and the annual compliance visit, it was determined that the site required tree planting and minor stream bank repairs. The repairs are anticipated to occur in FY12.



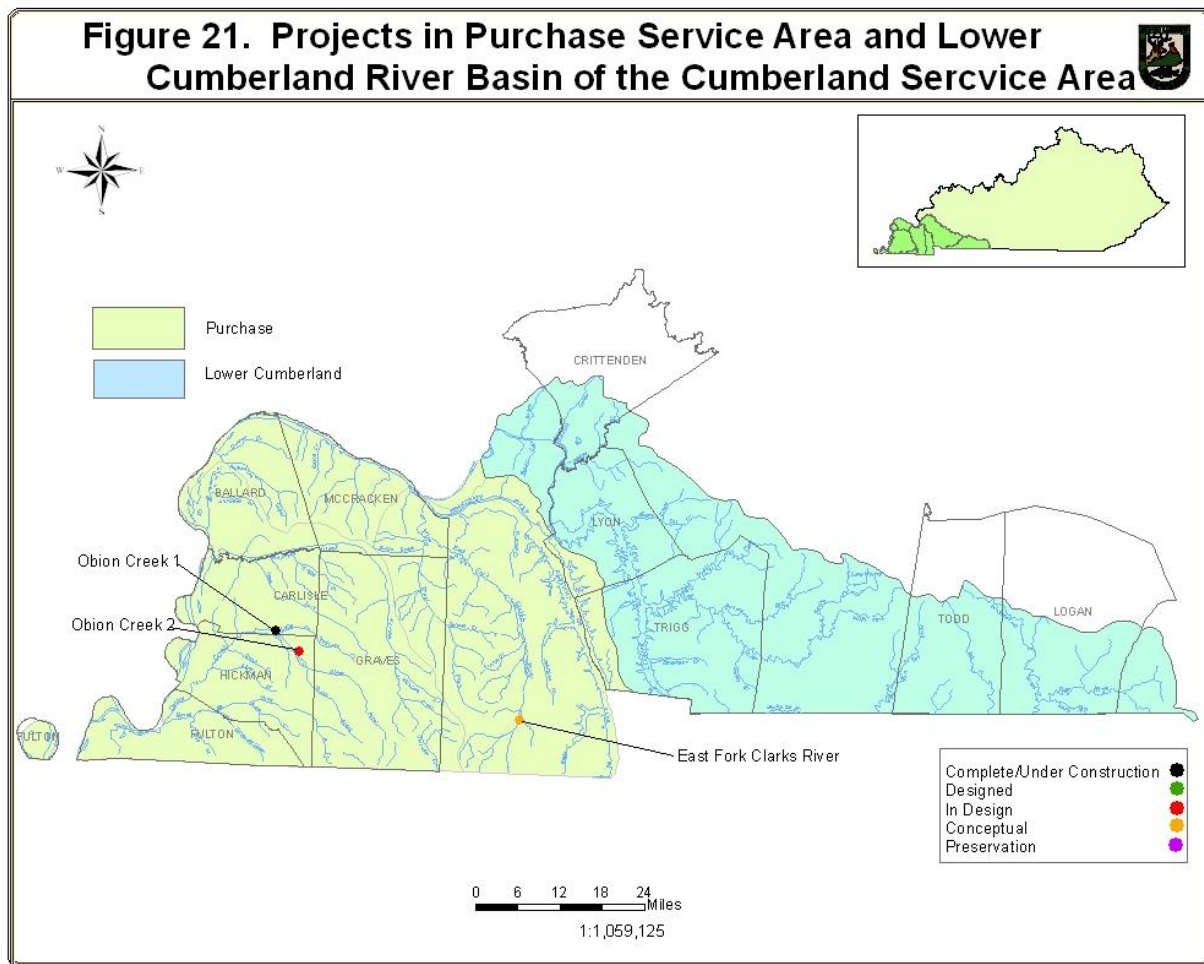
PURCHASE AREA (Tennessee River and Mississippi River) and LOWER CUMBERLAND RIVER BASIN

There are three projects in the Purchase service area, which is within the USACE Memphis District and operates under the AMU credit system. The lower Cumberland River basin area of the Cumberland River Service Area is shown here because of proximity to the Purchase area; it has no projects at this time.

East Fork Clarks River, Callaway County. Construction approval was not approved due to the lack of conservation easement on the right side of the project area. KDFWR and the landowner are working to acquire a complete conservation easement. Construction funding approval is pending.

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 in the fifth monitoring year.

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.



Appendix A

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	\$1,663,287	6,782	10,308	\$245	\$161
CUMBERLAND RIVER									
Conceptual Phase									
Hatchery Creek	Establishment	Russell	Nashville		\$1,441,766	6,500	15,750	\$222	\$92
Design Phase									
Puncheon Creek	Rehabilitation Enhancement	Pulaski	Nashville		\$2,817,853	11,760	17,765	\$240	\$159
Monitoring Phase									
Buck Creek Tributary	Rehabilitation Enhancement	Pulaski	Nashville		\$236,750	1,221	1,262	\$194	\$188
GREEN RIVER									
Conceptual Phase									
Eagle Cr Tributary (Stream)	Rehabilitation Enhancement	Union	Louisville		\$654,784	7,750	13,840	\$84	\$47
Eagle Cr Tributary (Wetland)	Establishment	Union	Louisville		\$200,000	40 ac	40		\$5,000
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
Monitoring Phase									
Trammel Creek	Rehabilitation Enhancement	Allen	Louisville	LRL-2008-936-pgj	\$587,400	3,800	6,314	\$155	\$93
Haney Fork Watershed No. 2	Rehabilitation Enhancement	Butler	Louisville		\$259,900	4,330	3,248	\$60	\$80
JACKSON 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

Basin/Stream	Type	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit
Permitting Phase									
East Fork Clark's River	Rehabilitation Enhancement	Calloway	Memphis		\$216,920	1,122	841	\$193	\$258
KENTUCKY RIVER									
Conceptual Phase									
Beluga (Rogers Gap)	Preservation Enhancement Rehabilitation	Scott	Louisville		\$15,450,422	133,191	77,820	\$116	\$198
Hinton Branch	Enhancement	Estill	Louisville		\$1,267,200	6,710	7,170	\$189	\$177
Elm Fork	Rehabilitation Enhancement	Owen	Louisville		\$1,525,725	7,600	11,100	\$201	\$137
Pond Creek (stream)	Rehabilitation Enhancement	Owen	Louisville		\$882,500	5,000	6,600	\$177	\$134
Pond Creek (wetland)	Establishment	Owen	Louisville		\$53,900	0.85 ac	0.85		\$63,411
Monitoring Phase									
Mill Creek	Rehabilitation Rehabilitation	Fayette	Louisville	LRL-2009-611-pgj	\$182,050	750	682	\$243	\$267
Permitting									
Cove Spring	Rehabilitation Enhancement	Franklin	Louisville	LRL 2009 614 pgj	\$1,381,600	7,001	9,236	\$197	\$150
LICKING RIVER									
Design Phase									
Salt Lick	Rehabilitation Enhancement	Bath	Louisville		\$1,647,800	5500	8,250	\$300	\$200
Monitoring Phase									
Claysville Recovery Land Aq Site	Enhancement 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	\$1,370,633	8,900	12,179	\$154	\$113
South Fork of Curry's Fork	Rehabilitation Enhancement	Oldham	Louisville	LRL-2009-98-pgj	\$978,900	4,753	4,905	\$206	\$200
Total Stream					\$34,398,202	280,274	303,360		
Total Wetland					\$287,842	46.5 ac	46.5		
Average Stream					\$1,638,010	13,346	14,446	\$122.73	\$113.39
Average Wetland					\$95,947	15.5 ac	15.5		\$6,190.30

				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									
Conceptual Phase			-						
Pigeon Roost Creek	Rehabilitation Enhancement	Boyd	Louisville		\$768,714	4,330	1,703	\$178	\$451
Ben Willim Branch	Rehabilitation Enhancement	Lewis	Louisville		\$774,284	4,200	1,866	\$184	\$415
Keys Creek	Rehabilitation Enhancement	Boyd	Louisville		\$798,494	4,750	2,138	\$168	\$373
Cat Fork	Rehabilitation Enhancement	Lawrence	Louisville		\$942,200	5,250	2,071	\$179	\$455
Construction Phase									
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 #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	\$1,516,400	9,778	4,376	\$155	\$347
East Fork Little Sandy #4	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2009-123-pgj	\$817,700	3,159	1,195	\$259	\$684
East Fork Little Sandy #5	Rehabilitation Enhancement	Lawrence	Louisville		\$775,000	2,955	1,360	\$262	\$570
Locust Creek	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2008-1249-pgj	\$688,315	3,550	1,338	\$194	\$514
Permitting									
Bolts Fork	Rehabilitation Enhancement	Boyd	Louisville		\$1,212,923	6,760	2,765	\$179	\$439
Schultz Creek	Rehabilitation Enhancement	Greenup	Louisville	2009-806	\$739,795	2,900	1,305	\$255	\$567
Monitoring									
East Fork Little Sandy #1	Rehabilitation Enhancement	Lawrence	Louisville	200401120	332,893	1,650	742	\$202	\$396
Middle Creek	Rehabilitation Enhancement	Floyd	-	LRL-2006-1256-pgj	\$858,460	9,180	2,214	\$94	\$344
Upper Laurel Creek	Enhancement	Lawrence	Louisville	200500901	\$697,500	3,000	1,350	\$232	\$517
Left Fork of Trace Creek	Rehabilitation Enhancement	Boyd	Louisville	2006-00160	\$269,200	1,300	585	\$207	\$388
Preservation Project			Louisville						
Laurel Creek Gorge	Preservation	Elliot	Louisville	-	\$1,925,000	83,059	7,725	\$23	\$249

<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>
Terminated Project									
Laurel Creek Tributary	Enhancement	Elliott	Louisville		\$155,858				
Cumberland River									
Permitting									
Crane's Nest Branch	Rehabilitation Enhancement	Knox	Nashville	2009-01424	\$527,820	2,275	1,078	\$232	\$490
Preservation Project									
Buck Creek	Rehabilitation Enhancement	Pulaski	Nashville		\$1,667,413	56,502	5,255	\$35	\$381
Kentucky River									
Design Phase									
East Fork Indian Creek	Rehabilitation Enhancement	Menifee	Louisville		\$1,008,645	2,948	1,787	\$352	\$581
Monitoring Phase			Louisville						
Laurel Fork of Troublesome Cr		Breathitt	Louisville	LRL-2007-615	\$1,751,622	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
North Fork Kentucky River	Enhancement	Perry	Louisville		\$30,000	3,538	0	\$8	
SECC Bank Stabilization	Rehabilitation Enhancement	Letcher	Louisville		\$61,888	821	82	\$75	\$755
Terrys Branch	Rehabilitation Enhancement	Knott	Louisville	200500205	\$654,000	2,992	1,227	\$219	\$533
Permitting									
Upper Cane Creek	Rehabilitation Enhancement	Menifee	Louisville	LRL-2009-433-pgj	\$1,055,475	5,902	1,297	\$179	\$814
Elisha Creek-USFS	Rehabilitation Enhancement	Leslie	Louisville		\$788,607	4,067	1,912	\$194	\$412
Terminated Project									
Frozen Creek		Breathitt			150,220				
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					\$26,357,682	268,257	66,327		
Average^a					\$878,589	8,942	2,211	\$98.25	\$397.39

^aTotal cost includes design for Laurel Cr Trib and Frozen Cr, but total length, total credits, and average figures do not include the projects since they were terminated prior to construction

Appendix B

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/Cons t Funds</u>	<u>Project Completion Date (FY)</u>	<u>First/Final Monitoring Year (FY)</u>	<u>Monitoring Report Rec'd</u>	<u>Mitigation Status</u>	<u>Comments/Issues</u>
BIG SANDY RIVER									
Ben Willim Branch	-	Tewksbury/ Jamison		5/13/09 --					Project likely terminated in FY12
Boltz Fork	LRL-2010-00698 5/13/11	Tewksbury/ Jamison	Jun 2008	8/20/08 12/8/10	-	2012	-	Open	Not constructed
Brushy Creek	LRH-2004-00931 7/22/04	Tewksbury/ Jamison	Apr 2004	5/4/04 2/2/05	2006	2007	--	Released from monit	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
Cat Fork	-	Tewksbury/ VanArsdall	Nov 2009	12/2/09 --	-	-	-	-	Not designed
East Fork Little Sandy #1	LRH-2004-01120 4/11/04	Tewksbury/ Jamison		2/11/03 11/12/05	Jan 2007	2007/2011	None	Open	
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	As-Built	Open	
East Fork Little Sandy #3	LRL-2008-1082-pg 5/7/09	Tewksbury/ Jamison	Apr 2007	6/25/07 2/18/09	2011	2011/2015	-	Open	
East Fork Little Sandy #4	LRL-2009-123-pgj 6/12/09	Tewksbury/ Jamison	Sept 2007	10/17/07 3/11/09	2010	2012/2016	-	Open	
East Fork Little Sandy #5	LRL-2011-00456	Tewksbury/ Jamison	Dec 2008	2/18/09 12/8/10	-	-	-	-	Not constructed
Keys Creek	-	Tewksbury/ Jamison		5/13/09 ---	-	-	-	-	Not designed
Kinniconnick Creek	LRL-2007-409-pgj 3/27/08	Tewksbury/ Jamison	Jul 2004	7/14/04 3/1/08	2009	2009/2013	2010	Open	Missing as-built and Yr1 report; repairs 10/09 and after 5/10 flood
Laurel Creek Gorge	-	Tewksbury/ Jamison	Jul 2007	8/15/07 NA	2010	NA	NA	NA	Preservation
Laurel Creek Tributary	-	Tewksbury/ Jamison		6/24/2005 --	-	-	-	Terminated	
Left Fork of Trace Creek	2006-00160 7/10/06	Tewksbury/ Jamison	Sept 2004	1/12/05 4/19/06	2008	2008/2012	2010	Open	
Locust Creek	LRL-2008-1249-pgj	Tewksbury/ Jamison	Jun 2005	6/24/05 9/30/09	Dec 2010	2010/2014	As-Built; 2010	Open	
Middle Creek	LRL-2006-1256-pgj 10/31/07	Tewksbury/ Jamison	Apr 2004	7/14/04 6/25/07	2008	2008/2012	2010	Open	Missing as-built and Yr 1- 2 reports; some repair + additional tree plantings and invasive species removal
Pigeon Roost Creek	-	Tewksbury/ VanArsdall	Aug 2009	9/16/09 --	-	-	-	-	Not designed
Schultz Creek	LRL-2009-806 5/24/10	Tewksbury/ Jamison	Sept 2007	10/17/07 3/17/10	-	2012	-	-	Not constructed

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Upper Laurel Creek	200500901 3/2/06	Tewksbury/ Jamison	Jun 2003	7/13/03 10/5/05	2008	2009/2013	2010	Open	Missing as-built and Yr 1 Monit Report some maintenance and non-native species removal
CUMBERLAND RIVER									
Buck Creek	NA	Scott/ Mowrey	Apr 2009	5/13/2009	2010	NA	NA	NA	preservation
Buck Creek Tributary	NRL-2007-0115-1 12/29/07	Scott/ Mowrey		6/1/07 6/25/07	Jan 2010	2011/2015	As-built survey	Open	
Crane's Nest Branch	2009-01424 3/1/2010	Scott/ Mowrey		4/16/08 11/16/09	-	2012	-	Open	Not constructed
Hatchery Creek	-	Scott/ Mowrey		8/17/2010	-	2013	-	-	Not designed
Puncheon Creek	-	Scott/ Mowrey		8/20/2008 --	-	2012	-	-	Not designed
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	Missing as-built and Yr 1 Monit report
Salt Lick Creek	LRL-2011-00891 --	Scott/ Jamison	Jun 2008	8/20/08 8/20/08	--	-	-	Open	Not constructed
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	2012	2012/2016	-	Open	under construction
KENTUCKY RIVER									
Balls Fork	LRL-2002-01447 9/26/06	Fry/ Ozburn	---	2/1/02	Dec 2005	2007/2012	Na	Released	
Beluga (Rogers Gap)	--	Fry/ Westrick	Mar 2011	4/11 4/11	-	-	-	-	Not designed
Bullskin Creek	LRL-2005-0205-pgj 2/22/04	Fry/ Ozburn	--	2/11/03 2/6/04	Sept 2005	-- 2011	-	Released	
Cove Spring	LRL- 2009-614-pgj 1/7/11	Fry/ Ozburn		10/17/07 5/13/09	-	2012	-	Open	Not constructed
East Fork Indian Creek	-	Fry/ Ozburn		4/16/08	-	-	-	-	Not constructed
Elisha Creek	LRL-2011-00404	Fry/ Ozburn		6/1/06 2/18/09	-	-	-	Open	Not constructed
Elm Fork	-	Fry/ VanArsdall	Mar 2009	3/17/10 --	-	-	-	-	30% design at end of FY11
Guy Cove	LRL-2007-00615 9/17/07	Fry/ Ozburn	--	1/12/06 8/15/07	Mar 2009	2009 2013	2009-10	Open	repairs made to address problems
Hinton Branch	-	Fry/ Ozburn		12/2/09 --	-	2012	-	-	Not designed

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Mill Creek	LRL-2009-611-pgj 7/20/09	Fry/ Ozburn	--	4/16/08 5/13/09	Oct 2009	2010/2014	2010 and As-built	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 -	-	2013	-	-	Not designed
Pond Creek (wetland)	-	Fry/ VanArsdall		5/13/09 -	-	2013	-	-	Not designed
Red Lick Creek	LRL-2005-1331	Fry/ Ozburn		10/4/05 4/18/07	Dec 07	2008/2012	2010	Open	More tree planting will be done by KDFWR; missing Monit Reports Yrs 1-2
Red Lick Creek #2	-	Fry/ Ozburn		8/20/08 -	-	-	-	Terminated	
Sand Lick Creek	-	Fry/ Ozburn		4/16/08 -	-	-	-	Terminated	
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	--	7/17/03 10/5/05	Dec 2007	2008-2012	2010	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	-	-	Not designed
South Fork of Curry's Fork	LRL-2009-98-pgj 9/29/09	Tewksbury/ Ozburn	--	7/18/06 5/13/09	-	2012	-	Open	Not constructed
GREEN RIVER									
Eagle Cr Tributary (Stream)	-	Jackson/ VanArsdall	Mar 2010 --	3/17/10 --	-	-	-	-	Not designed
Eagle Cr Tributary (Wetland)	-	Jackson/ VanArsdall	Mar 2010 --	3/17/10 --	-	-	-	-	Not designed
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/ Westrick	Mar 2004	5/5/04 4/13/05	2006	2007/2011	All rec'd	Open	
Trammel Creek	LRL-2008-936-pgj 4/24/09	Jackson/ Westrick	Apr 2006	6/7/06 2/18/09	2010	2010/2014	2010	Open	As-built report posted 7/1/11
JACKSON PURCHASE									
East Fork Clark's River	-	Fry/ Mowrey		4/16/08 --	-	-	-	-	contacting landowner for easement on right bank

Obion Creek	200300263	Fry/ Mowrey		6/4/03 6/4/03	2006	2007/2011	2011	Open	Release pending
Obion Creek II	MVM-2010-074	Fry/ Mowrey		4/16/08 5/13/09	-	-	-	Open	Not constructed