YEAR TWO MONITORING REPORT UNITED STATES CORPS OF ENGINEERS Clear Fork Mitigation KDNR PERMIT NO. 813-8018 Rev. 3

ICG Hazard, LLC.



A SUBSIDARY OF:



Prepared: November 29, 2010

Prepared by:



Aquatic Resources Management

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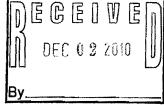
AQUATIC RESOURCES MANAGEMENT, LLC

29 November, 2010

United States Army Corps of Engineers Louisville District 845 Sassafras Creek Road Sassafras, KY 41759-8806

Re: DNR# 813-8018 Rev. 3

Dear Reviewer,



Please find enclosed one (1) original copy of the Second Year Monitoring report for the UT to Clear Fork Mitigation site.

Should you require any more information upon your review of this package or require a site visit feel free to contact me at 859-388-9595 or by e-mail at nbaker@aquaticresources.us.

Sincerely,

Nick Baker

Vice President and Environmental Scientist

ICG Hazard, LLC Unnamed Tributaries to Clear Fork Mitigation Year Two Monitoring report

Project Overview

This report is to notify the United States Army Corps of Engineers (USACE) of the completion on two full growing seasons for the ICG Hazard, LLC, Unnamed Tributaries to Clear Fork (Clear Fork) Mitigation site. This USACE permit is a Nation Wide 21 associated with ICG Hazard, LLC (ICG) KDSMRE Permit # 813-8018 Rev. 3. Aquatic Resources Management is the agent responsible for conducting the monitoring reports on behalf of ICG. The inspection date of the field visit was conducted on March 11, 2010.

Purpose of the Approved Project

This mitigation project was conducted in order to offset stream impacts associated with ICG's 813-8018 Rev. 3 mining project. There is an existing underground mining method and the jurisdictional stream impacts are associated with the necessitated coarse refuse fill needed to dispose of the washed coal byproducts. The coarse refuse fill will be impacting approximately 651 linear feet of intermittent stream. The mitigation performed in Clear Fork has provided 1,541 linear feet of intermittent stream mitigation to compensate for the 651 linear feet of intermittent stream impacts.

Site Location

Clear Fork is located 1.7 miles east of the intersection of Highway 378 and Clear Fork road in Breathitt County Kentucky. The latitude and longitude of the project

ICG Hazard, LLC Clear Fork Mitigation Year Two Monitoring Report

be responsible for annual monitoring reports to inform the Louisville District of the United States Army Corps of Engineers of progress. The applicant is obligated to maintain the projects mitigation area following the requirements set by the KDSMRE and USACE. Monitoring and site maintenance will continue until final approval of the mitigation is achieved.

The compensatory mitigation project site is achieving partial success in regards to the standards set forth in the approved USACE permit. After reconstruction of the flood impaired areas, one can assume that the mitigation project will progress in such a manner that the stated goals, demonstrated by the Rapid Bioassessment Protocol shown in Table 1, will be achieved.

Table 1:

Clear Fork Mitigation Monitoring Unnamed Tributary to Clear Fork #1									
Epifaunal Substrate	2	12	12			12			
Embeddedness	2	12	12			13			
Velocity/Depth Regime	3	10	10			14			
Sediment Deposition	4	12	10			12			
Channel Flow Status	2	13	14			13			
Channel Alteration	8	13	13			14			
Frequency of Riffles	8	12	13			12			
Bank Stability (both)	12	14	14			14			
Veg. Protection (both)	14	14	14			14			
Riparian Width (both)	10	10	10			12			
Total Habitat Score	65	120	122			130			

		g ogs 12			# 0	
RPB Habitat	Unname Pre-	d Tribut Year	tary to C	lear Fork Year	#2 Year	Predicted Year
Parameters	mitigation	One	Two	Three	Four	Five
Epifaunal Substrate	10	12	12			14
Embeddedness	8	12	12			12
Velocity/Depth Regime	8	14	14			14
Sediment Deposition	10	13	12			13
Channel Flow Status	9	12	14			12
Channel Alteration	8	14	13			14
Frequency of Riffles	12	13	13			13
Bank Stability (both)	10	12	12			12
Veg. Protection (both)	12	12	12			12
Riparian Width (both)	12	8	10			12
Total Habitat Score	99	122	124			128
	Unname	d Tribut	ary to C	lear Fork	#3	
RPB Habitat						
KED HADITAT	Pre-	Year	Year	Year	Year	Predicted Year
Parameters	Pre- mitigation	Year One	Year Two	Year Three	Year Four	Predicted Year Five
Parameters Epifaunal Substrate	mitigation 10	One 12	Two 12			Five 12
Parameters Epifaunal Substrate Embeddedness	mitigation	One	Two			Five
Parameters Epifaunal Substrate Embeddedness Velocity/Depth Regime	mitigation 10	One 12	Two 12			Five 12
Parameters Epifaunal Substrate Embeddedness Velocity/Depth Regime Sediment Deposition	mitigation 10 11	12 12	12 12			12 14
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Parameters Epifaunal Substrate Embeddedness Velocity/Depth Regime Sediment Deposition Channel Flow Status Channel Alteration	mitigation 10 11 9	One 12 12 12 12 14	12 12 12 12			12 14 12 14
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Parameters Epifaunal Substrate Embeddedness Velocity/Depth Regime Sediment Deposition Channel Flow Status Channel Alteration Frequency of Riffles Bank Stability (both) Veg. Protection	mitigation 10 11 9 10 9 12 10 10	One 12 12 12 14 12 14 12 14 12	12 12 12 12 14 13 14 13			12 14 12 14 13 14 12 14 12 14

ICG Hazard, LLC Clear Fork Mitigation Year Two Monitoring Report

Summary Data

The success of the project is based on the stabilization of the stream as well as the creation of fish and macroinvertebrate habitat. The Pre-mitigation versus year 1 and year 2 post mitigation scores are listed in Table 1 above. The table shows the general trend toward the stated goals in the compensatory mitigation plan.

This restoration project had various challenges to overcome to ensure its success. One of the major challenges was the bedrock that outcropped in various places throughout the stream. A priority one approach was taken for this stream restoration project. Bedrock was encountered during the excavation; therefore grade changes occurred to ensure the deposition of sediment would be conveyed into the new channel. Pictures of the mitigation site are illustrating the current conditions as well as year one conditions (figures 1-6), and finally the map showing the locations of the photos (figure 7). The only aspect of the mitigation project that is not meeting the stated standards is the riparian width. Trees were not implemented during the first dormant season, however, it is expected that trees will be planted this season.

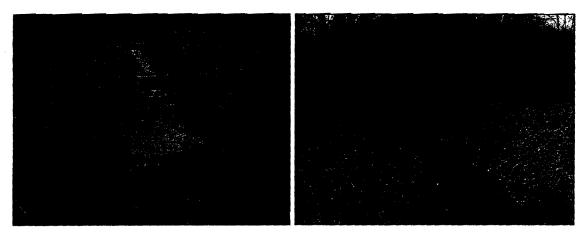


Figure 1 Looking Upstream Reach 3 12/18/08 Pic. 344 Figure 2 Looking Upstream Reach 3, 3/11/10 Pic. 838

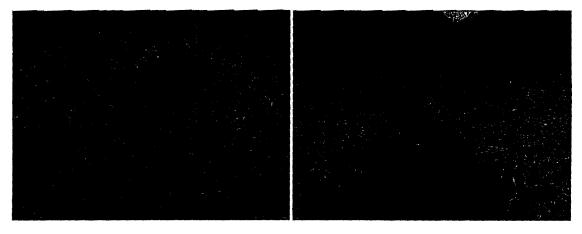


Figure 3 Looking Upstream Reach 2 12/18/08 Pic. 362 Figure 4 Looking Upstream Reach 2, 3/11/10 Pic. 846

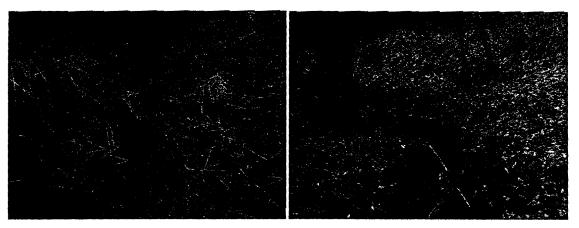


Figure 5 Looking Upstream Reach 1 12/18/08 Pic. 370 Figure 6 Looking Upstream Reach 1 3/11/10 Pic. 2853

Conclusions

Currently, the Clear Fork mitigation site, with the exceptions of stream riparian width and other flood impacts, all performance standards are being meet. To ensure recovery of the riparian zone, trees will be planted during this upcoming dormant season to assist in erosion control and bank stabilization. Conversely, due to the bedrock influence occurring along the left bank of UT #2, tree planting may be limited. All flood impacts will also be ameliorated to ensure performance standards are met.