



Nally & Hamilton Enterprises, Inc. USACE LRL-2008-00751 KDNR #866-0311 2013 Annual Mitigation Report

May 17, 2013

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NALLY & HAMILTON ENTERPRISES, INC. (KDNR #866-0311) MITIGATION SITE

USACE, LRN-2008-00751

Project Overview	
United States Army Corps of Engineers District	Lakes Region Louisville (LRL-2008-00751)
Party Responsible for Monitoring	Biological Systems Consultants, Inc.
Date of Annual Report	May 17, 2013
Mitigation Location	Leslie County, KY
Type of Impact	Stream
Type of Mitigation	On-site Stream Mitigation Following Pond Removal
Location Coordinates	Lat.: N 36.934543 / Long.: W -83.477452

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1.0 EXECUTIVE SUMMARY

This monitoring report summarizes the 2013 monitoring activities for U.S. Army Corps of Engineers (USACE) permit authorization number LRL-2008-00751. Included is documentation of the mitigation project. The field visit occurred on April 30, 2013. During this investigation it was determined that the mitigation areas are still being utilized as sediment control for the mining operation. Mitigation activities will commence as proposed following Kentucky Department for Natural Resources (KDNR) approval of pond removal.

2.0 INTRODUCTION

The site can be located in Leslie County, Kentucky (Figure 1) near the town of Warbranch on the Helton 7.5 minute USGS topographic quadrangle; the center coordinates of the site are N 36.934543 / W -83.477452. Figure 2 illustrates the existing pond locations.

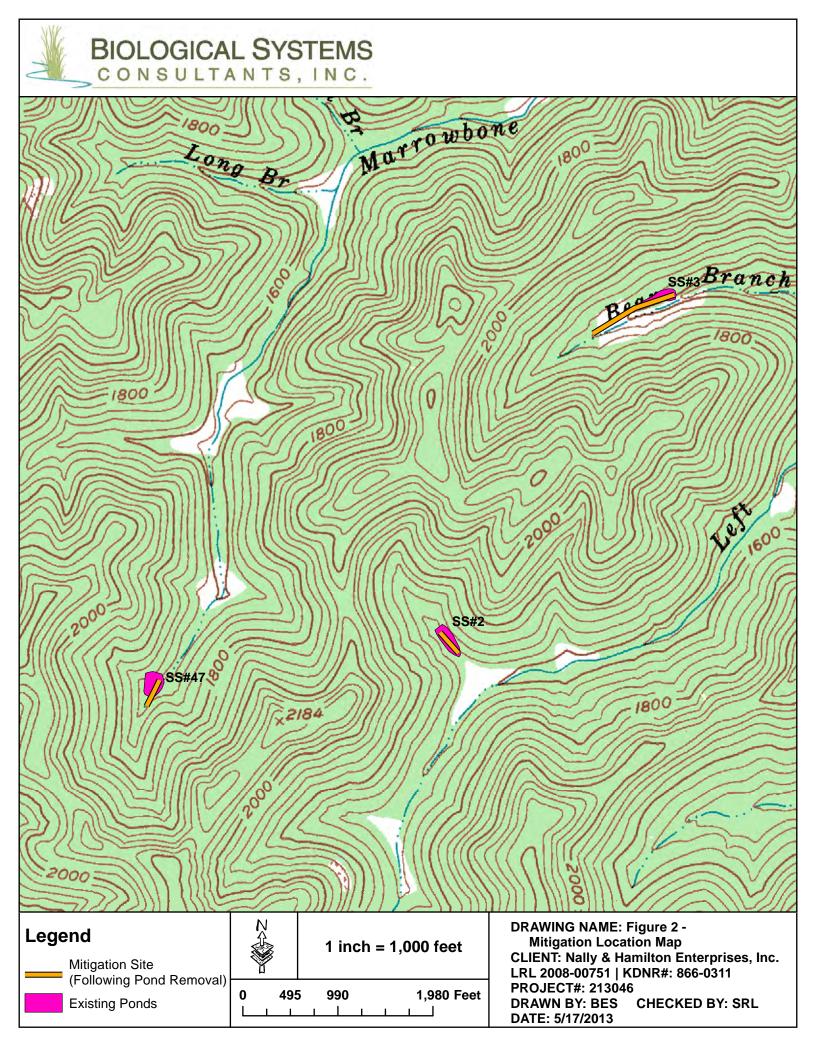
The following mitigation was proposed:

1) Stream restoration along Ponds 2, 3 and 47 following pond removal

Table 1 summarizes the mitigation construction status of each site.

Table 1 Summary of Mitigation Construction Status	
MITIGATION AREA	MITIGATION CONSTRUCTION STATUS
Pond 2	Pond in place
Pond 3	Pond in place
Pond 47	Pond in place

BIOLOGICAL SYSTEMS CONSULTANTS, INC. Aerial imagery obtained via 2012 National Agricultural CLAY LESLIE COUNTY COUNTY Imagery Program State Mosaics. NAD 1983 StatePlane Kentucky FIPS 1600 (Feet) Pups Branch KNOX COUNTY HARLAN **BELL COUNTY** COUNTY (1780) Project Location (2058) Beverly Dry Fork Spruce Pine (2011) Lick Branch Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012 **DRAWING NAME: Figure 1 -Highway Location Map** 1 inch equals 1 mile CLIENT: Nally & Hamilton Enterprises, Inc. Legend LRL-2008-00751 | KDNR#: 866-0311 PROJECT#: 213046 Project Location 10,200 Feet 0 2,550 5,100 DRAWN BY: BES CHECKED BY: SRL DATE: 5/20/2013



3.0 PERFORMANCE MEASURES

The following performance measures were included in the mitigation plan dated November 18, 2008:

Performance Measure 1: Rapid Bioassessment Protocol (RBP) habitat scores shall be used to determine the status of the mitigation area, and monitored and compared with the stream mitigation plan.

Performance Measure 2: Channel width and depth shall be measured to determine the cross-sectional area.

Performance Measure 3: Substrate materials shall be measured to determine percent fines and embeddedness, and compared with the d50 sizes and dimensions.

Performance Measure 4: Typical profiles of the mitigated area shall be constructed to determine the streams structural success (riffle/pool ratios), and meander and sinuosity patterns.

Performance Measure 5: Conductivity readings shall be examined to determine the viability of projected values.

Performance Measure 6: Canopy cover shall be examined and success determination based on the SMCRA bond release criteria and actions.

Performance Measure 7: Velocity depth regimes will be considered successful when determined consistent with those illustrated on RBP forms.

Performance Measure 8:

Planting will be considered successful when 80% plants survive after five years.

3.1 Performance Measures Evaluation

Performance measures were not evaluated for this report. The performance measures will be evaluated after stream restoration activities have commenced, following pond removal.

3.2 Site Photographs



Mitigation Area: Pond 2 **Latitude/Longitude:** N 36.929315 / W-83.774796

Direction Facing: North **Date:** April 30, 2013 **Notes:** Pond in place

4.0 SUMMARY

Following pond removal all restoration should be constructed according to the mitigation plan. These sites will continue to be monitored annually in order to provide the USACE with the status of the mitigation project.