

Authorization to Proceed (ATP)

South Perry Phase III
Abandoned Mine Land (AML) Water Supply Project
based on Environmental Assessment (EA)
Perry County, Kentucky

The Office of Surface Mining Reclamation and Enforcement (OSM) has completed a review of the October 7, 2011, request for ATP with construction activity on the South Perry Phase III Abandoned Mine Land Water Supply Project prepared by the Kentucky Department for Natural Resources, Division of Abandoned Mine Lands (DAML), with a proposed budget of \$2,093,090.00.

OSM found that the appropriate request documents were submitted and appear to support the need for the proposed construction activity. OSM confirmed that the required information for this project has been included in the AML Inventory System (e-AMLIS) for Problem Areas (PA) #s KY-003827-SGA and KY-004162-SGA. OSM has approved PA # KY-003827-SGA on October 7, 2011 and PA # KY-004162-SGA on October 24, 2011 respectively.

OSM reviewed the EA prepared by DAML documenting the National Environmental Policy Act (NEPA) environmental review of this project. OSM determined that the EA adequately discusses the environmental issues and impacts associated with the construction of the project. Based on the analysis in the EA, I have determined that reclamation of this abandoned mine site would not have significant effects on the quality of the human environment. Therefore, I conclude that no environmental impact statement is necessary. As a result, I have signed the Finding of No Significant Impact (FONSI) for the South Perry Phase III Abandoned Mine Land Water Supply Project. Please give special attention to the following recommendation (s).

- With the exception of trees directly impacted by the AML problem, there is no purposeful removal of standing trees larger than 5 inches diameter at breast height or standing snags with loose bark that are 9 inch or greater diameter at breast height and at least 10 feet in height, during the period of April 1 to November 15, and provided the activity does not occur in "Known Indiana Bat Habitat".
- A floodplain permit is required for the waterline construction within this project. Please follow all requirements within the permit during construction.
- The Kentucky Department of Fish and Wildlife Resources (KDFWR) recommended eight items to consider for any work that may occur within the stream to reduce impacts to the stream habitat and quality. Please review the September 26, 2011 comment letter to include from the KDFWR to review and include these recommendations.

- The Kentucky Office of State Archaeology provided comments after reviewing this project. They recommend that the DAML consult with the State Historic Preservation Office (SHPO) on this project due to concerns of archaeological sites in the vicinity of the project. Although DAML has a programmatic agreement with the SHPO for AML projects, DAML did contact the SHPO for comments. If any response is received, please provide a copy to OSM for our records, and include the recommendations in your construction for the protection of these resources.

Accordingly, pursuant to Section 5-11-20D.3 of the Federal Assistance Manual and my signature on this notification document, DAML is authorized to proceed with the construction activity for this project as described in the ATP request documents submitted by DAML for this project and further conditioned in this notification, and expend Federal funds in accordance with AML grant terms and conditions.

 Acting

Joseph L. Blackburn, Field Office Director
OSM Lexington Field Office



Date

Memorandum

Date:

To: South Perry Phase III Abandoned Mine Land (AML) Water Supply Project
File SubAccount# 99.138040000

From: Corey Miller, Program Specialist
Lexington Field Office (LFO), Program Support Branch (PSB)

Subject: Review of "Authorization to Proceed" (ATP) Request

The Branch recommends that the Field Office Director (FOD) authorize the State of Kentucky to proceed with the construction activity proposed on the South Perry Phase III Abandoned Mine Land (AML) Water Supply Project. The Branch prepared an ATP letter, and a Finding of No Significant Impact (FONSI) for the FOD review. The Branch recommends that the FOD sign the FONSI and ATP in the space provided on each document. The original signed ATP letter will be sent to the Division of Abandoned Mine Lands (DAML) Director, along with associated approval documents consisting of a copy of the LFO review memorandum and FONSI. A scanned copy of these authorization documents will be attached to an email to the Department for Natural Resources (DNR) Commissioner.

The Kentucky DAML ATP request dated October 7, 2011, was received at LFO attached to an email on October 10, 2011. The ATP delayed due to some information being requested from the US Fish and Wildlife Service and from the State Historic Preservation Officer, so the proposal was not processed within 14 working days; and the customer service target of 14 working days to process an ATP was not met. The ATP was processed in 36 calendar days; therefore, the Federal employee performance appraisal standard of 30 calendar days to process an ATP was not met. The delays totaled 1

The project area may be centrally located on the Tilford and Leatherwood, Kentucky U.S.G.S. 7.5 minute Topographic Quadrangle map(s) centrally located at 37° 04' 47" North Latitude and 83° 06' 40" West Longitude near the community of Leatherwood, Kentucky. The project location, AML problems to be addressed, and proposed reclamation activity/cost are also available at <http://www.eamlis.osmre.gov> in the E-AMLIS under PA#s KY-003827-SGA and KY-004162-SGA. The project involves reclamation of AML conditions consisting of PWHC at 173 sites.

DAML did not designate a funding source under the budget category entitled Project Costs (Non-Water Supply) of any of Kentucky's AML Annual Construction Grant's (ACG). In previous discussions, DNR indicated they would assign projects to a grant before they go to construction. Until a final AG and Location Code are assigned the LFO Project/Site ID # 99.138040000 was assigned to the project file for LFO tracking purposes until actual AG and Location Code numbers are assigned by DAML and can

be inserted in the appropriate positions at the beginning and end of the LFO Project #. No bid advertisement, bid opening, or construction completion dates were provided by DAML in the ATP request letter, therefore I inserted dates in the database based on the South Perry Phase III AML Reclamation Project October 27, 2011

ATP request letter stating that these activities will occur as soon as possible. The following proposed dates were assigned and entered by LFO for database tracking purposes: Bid Advertisement Date was entered as December 1, 2011, Contract Award was entered as December 15, 2011, and Contract/Construction Completion was entered as December 15, 2012.

An office review of the request documents was conducted. The documents consisted of; a project description, a location map, water quality sampling analysis, a National Environmental Policy Act (NEPA) review documented in an Environmental Assessment (EA) with agency consultation response letters attached; and an Abandoned Mine Land Inventory System (E-AMLIS) Problem Area Description (PAD) summary and appropriate Priority Documentation Form's, with engineer cost estimates and reference to a water supply study, for PA#s KY-003827-SGA and KY-004162-SGA.

A pre-approval field inspection of the proposed project was deemed unnecessary, since no unique characteristics warranting special field verification were noted and it wasn't selected for field verification under the EY 2012 Oversight Agreement.

The EA submitted for the construction activity at the site was reviewed and found to adequately document the environmental review of the construction activity within the current NEPA review guidance.

No significant impacts have been reported to this office or identified by the Branch. The Branch recommends that the Office of Surface Mining Reclamation and Enforcement (OSM) accept the EA submitted by the Kentucky DAML. The EA prepared by the State and the State's ATP request letter summarized the responses from agencies consulted for the NEPA review and discussed appropriate resolution of all their concerns and recommendations. The responses from agencies consulted for the NEPA review are summarized in the FONSI prepared by OSM for the EA:

The comments from the Kentucky State Clearinghouse, Kentucky's "Single Point of Contact" (SPOC) pertaining to AML Non-Water Supply projects included no comments that affect this proposal.

The information to update PA #s KY-003827-SGA and KY-004162-SGA was input into the E-AMLIS by the DAML. This information reflects the changes in units and costs based upon the design and classification of the funded category. This was confirmed by LFO's review of the e-AMLIS data and a PAD summary printout from the OSM e-AMLIS database. PA #s KY-003827-SGA and KY-004162-SGA represent "new Problem Areas" requiring FOD approval under OSM Directive AML-1-2 (signed June 22, 2007).

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

South Perry Phase III Abandoned Mine Lands (AML) Water Supply Project Perry County, Kentucky

The Commonwealth of Kentucky submitted an Authorization to Proceed with Construction Activity (ATP) request for Federal AML grant funds to the Office of Surface Mining Reclamation and Enforcement (OSM) for this project. The ATP request consists of a request letter, Environmental Assessment (EA) with consultation correspondence, project description, location map, AML Inventory System (e-AMLIS) Problem Area (PA) Description forms, and other supporting enclosures. The project area may be centrally located on the Tilford and Leatherwood, Kentucky U.S.G.S. 7.5 minute Topographic Quadrangle map(s) centrally located at 37° 04' 47" North Latitude and 83° 06' 40" West Longitude near the community of Leatherwood, Kentucky. The project location, AML problems to be addressed and proposed reclamation activity/cost are also available at <http://www.eamlis.osmre.gov> in the E-AMLIS under PA#s KY-003827-SGA and KY-004162-SGA. The project involves reclamation of AML conditions consisting of PWHC at 173 sites.

OSM has thoroughly reviewed the EA prepared for this project by the Kentucky Division of Abandoned Mine Lands (DAML) and determined that it adequately discusses the environmental issues and impacts as required by the National Environmental Policy Act (NEPA) for OSM abandoned mine lands reclamation grant construction activities for authorization purposes.

Based on the analysis in the EA, I find that the construction activity performed under this project will not have significant impacts on the quality of the human environment. Therefore, I conclude that a detailed Environmental Impact Statement is unnecessary. My specific reasons are as follows:

The alternative to not fund the project would result in no favorable impacts and the adverse impacts would continue unabated. The long-term beneficial impact of the proposed action will result in the protection of the health, safety, general welfare, and property of the local citizens and other persons who may come in contact with these AML conditions. No long-term adverse impacts are anticipated. Short-term environmental impacts are limited to sedimentation, noise, and inconvenience to the local residents while the project is constructed. Sedimentation will be controlled by using silt control and prompt revegetation of the disturbed area. Noise, dust, and other inconveniences to local residents are unavoidable impacts related to construction activities.

All appropriate government agencies were consulted or their review criteria applied by

agreement. As a result, it was determined that the project area does not contain or significantly affect threatened or endangered species or their habitat, jurisdictional wetlands, cultural or historic values, prime and unique farmland values, recreational resources, or Class I air quality regions. To reduce impacts from the project, the recommendations made by the agencies consulted were considered and, as appropriate, incorporated into the EA prepared by DAML and/or as an element of their request for ATP with construction submitted for OSM authorization. The responses from agencies consulted for the National Environmental Policy Act (NEPA) review include the following comments and/or recommendations.

The Kentucky Department of Fish and Wildlife Resources (KDFWR) identified the federally threatened/endangered fish and wildlife species (the Indiana bat) within a 10 mile radius of the project area. They also identified the state listed species of concern; (the American Black Bear) within 1 mile radius of the project area. They recommended eight items to consider for any work that may occur within the stream to reduce impacts to the stream habitat and quality. Please review these recommendations prior to construction. The KDFWR also recommended that the erosion control measures, as mentioned in the proposal, should be installed prior to construction and periodically maintained throughout the life of the project.

The DAML staff biologist reviewed the Kentucky State Nature Preserves Commission's (KSNPC) BIOTICS database in lieu of further consultation. The findings are noted in the ATP request letter and an attached memorandum. DAML found that KSNPC data indicated three federally listed threatened or endangered species within a 10-mile radius and two species of State concern within a 1-mile radius of the project. DAML discussed the species in the biologist's memorandum, referenced in the EA and their ATP request letter, finding that the noted species will not be impacted, since the project will not result in a significant negative impact to their critical habitat and/or suitable habitat does not exist within the project area to support the species. DAML states that the aquatic species records were deemed to be very far away from the project location, and implementation of the erosion control plan should present little no impact to the species. The three bat species have been addressed by the USFWS comments below on the project. No reason was identified to dispute their determination.

The DAML Biologist also noted that the federally listed endangered Indiana bat, although not indicated to exist in the project vicinity; by his and the KDFWR reviews, would not be disturbed by the project. This is based on the fact that the project proposes to disturb no mine portals, cliffs, or caves, and proposes no disturbance of forested areas that could be utilized as roosting sites other than that area impacted by the AML problem that is creating a threat to the public; and in the event that any trees that represent potential Indiana bat habitat need to be removed, it will occur based on

input from the USFWS and removal will only occur between October 15 and March 31 to avoid potential impacts to the Indiana bat.

In a meeting held in February 2010 between LFO, USFWS Kentucky Field Office (KFO) and DAML; Steve Hohmann, Director of DAML, offered to coordinate NEPA consultation with the KFO of the USFWS in Frankfort, Kentucky, utilizing the agreements in the September 18, 2009, Memorandum of Agreement (MOA) signed by the OSM, LFO and USFWS, KFO. This document outlined the acceptable conditions that the projects potential impacts can have where the KFO will not need to be further consulted for comment. When the conditions within the agreement are present, processing of the ATP may proceed with the confidence that the biological environment is being protected. It was agreed to by all parties, acknowledging that LFO would retain the final review to determine if the NEPA documentation is complete.

After review of the ATP documents for this project, which included consultation with the KSNPC and the KDFWR, DAML determined that additional consultation with the USFWS is required because the proposed project is located within an area designated as "Known Indiana Bat Habitat". The USFWS responded via email on November 2, 2011 stating: "Since no trees or potential/known Indiana bat hibernacula are being disturbed, we would not expect this project to negatively impact Indiana bats or their habitat and no further consultation is necessary."

With the specifics of the proposal meeting the criteria set out in the MOA, OSM agrees with DAML's determination that the proposed project would not adversely impact the species if these conditions are present. With this information, they found the requirements of Section 7 of the Endangered Species Act have been fulfilled.

The Office of State Archaeology found that their records indicate that only a small portion of this project has been previously surveyed and one archaeological site located in the immediate vicinity of the project area. Since they have insufficient information to determine the likelihood that archaeological sites may be present or potentially impacted by construction of this project, they recommended coordination with the State Historic Preservation Officer (SHPO) before beginning construction activities. The Kentucky Heritage Council and State Historic Preservation Officer (SHPO) was generally would not be contacted for this project, based upon the MOA signed on January 3, 2011. The Kentucky Heritage Council (KHC)/State Historic Preservation Officer (SHPO) and the DAML signed an agreement which identified the criteria to be used to determine which projects are exempt from review by the. The agreement defines exempt projects as: *"Routine and recurring projects whose impacts are foreseeable and cause little or no ground disturbance or that have a low probability of affecting known or unknown historic properties..."*

The agreement also includes a list of previous site activities that would substantially diminish the likelihood of affecting known or unknown historic sites or properties. They are listed below. They are listed below.

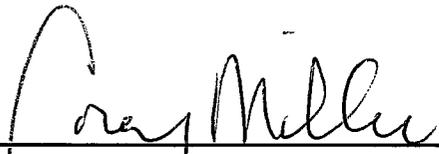
1. Activities that occur on previously disturbed land, including highwalls, refuse piles, slurry cells, subsidence areas, mine benches, mine portals with no constructed entry support, and any coal mining remains less than 50 years of age, including tipples, other structures, intact rail tracks, and mining equipment.
2. Roads and roadside ditches.
3. Areas disturbed by timber operations.
4. Areas disturbed by gas and oil well development.
5. Areas disturbed by residential and commercial development.
6. Areas with water flows from mine discharges.
7. Trenches excavated for waterline installation in previously disturbed soils.”

All construction activity for this project is in areas that have been previously disturbed by these activities, and does fit into several items within the agreement. According to the project description, all of the project area has been impacted by items 1, 2, and 5 in the above list; therefore, the project is exempt from further consultation with the KHC. However, in consideration of the comments from the Office of State Archaeology, the SHPO has been contacted and their comments will be considered for this project. This fulfills the responsibility to consult with the SHPO under the Section 106 review process. Neither agency recommended conducting archeological surveys/investigations or mitigation measures.

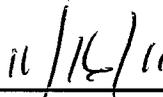
Environmental and Public Protection Cabinet (EPPC) (changed to the Environment and Energy Cabinet (EEC) in July 2008) Secretary order dated December 12, 2006, transferred authority for issuance of Clean Water Act (CWA) Section 401 Water Quality Certifications (WQC) associated with surface coal mine operations, to include any reclamation projects proposed by the DAML, to the Kentucky Department for Natural Resources (DNR) DNR. DNR assigned this responsibility to their Division of Mine Permits (DMP). The DMP further delegated this responsibility to DAML, with consultation as needed on a case by case basis. In addition, the DAML Director in a meeting held in February 2010, offered and agreed to coordinate consultation with the U.S. Army Corps of Engineers (COE) concerning CWA 404 (CWA) permits, as DAML had been doing without an agreement in the past. OSM LFO accepted DAML's offer to conduct this consultation.

Under a 2005 agreement with the DOW Floodplain Management Section (FMS) of the Water Resources Branch, DOW authorized DAML to apply DOW floodplain standards in lieu of a DOW review. In this agreement, DAML will directly consult with DOW if it

appears a permit may be required. DAML has acquired a set of Federal Emergency Management Agency (FEMA) floodplain maps that include the project area. As a result, DAML applies each responsible agency's criteria by agreement or physically consults with the DMP and DOW concerning CWA 401 WQC and floodplain permits to "Construct Across or Along a Stream", and with the COE concerning CWA 404 permits. This review has been centralized with DAML's Design Branch, whose staff has previous experience in this area and with the Kentucky DOW. DAML determined from the written description that the project does not impact a stream or wetland that requires a 401 WQC, a 404 CWA permit. DAML further notes in their ATP letter that they will request a copy of all necessary permits prior to expending AML funds.



OSM Environmental Reviewer
AML Program Specialist



Date



Joseph L. Blackburn
Field Office Director



Date

Miller, Corey T.

Subject: FW: South Perry Phase III WSP - KHC response
Attachments: South Perry Phase III - KHC response 11.21.11.pdf

From: Howell, Ryan (EEC) [<mailto:Ryan.Howell@ky.gov>]
Sent: Tuesday, November 22, 2011 9:19 AM
To: Cassel, Steven R. "Steve"; Miller, Corey T.; Estes, Loren A.; Smith, Gail
Cc: Rickwa, Vanna (EEC); Overman, Bill (EEC)
Subject: FW: South Perry Phase III WSP - KHC response

From: Rickwa, Vanna (EEC)
Sent: Tuesday, November 22, 2011 9:07 AM
To: Howell, Ryan (EEC); Ruebens, Jeff (EEC)
Subject: South Perry Phase III WSP - KHC response

Attached is the agency response from KHC for the South Perry III WSP.

Thanks,

*Vanna Rickwa
Administrative Specialist III
Energy and Environment Cabinet
Department for Natural Resources
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, Kentucky 40601
502/564-2141, Ext. 130*



STEVEN L. BESHEAR
GOVERNOR

**TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY HERITAGE COUNCIL**

MARCHETA SPARROW
SECRETARY

THE STATE HISTORIC PRESERVATION OFFICE
300 WASHINGTON STREET
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-7005
FAX (502) 564-5820
www.heritage.ky.gov

LINDY CASEBIER
ACTING EXECUTIVE DIRECTOR AND
STATE HISTORIC PRESERVATION OFFICER

November 18, 2011

Mr. Steve Hohmann, Director
Department for Natural Resources
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, Kentucky 40601

2011 NOV 21 P 2:46
DIV OF ABANDONED
MINE LANDS

**Re: South Perry Phase III AML Water Supply Project
Perry County**

Dear Mr. Hohmann:

Thank you for your letter concerning the above-referenced project. Based on the information provided and our review of the project maps, an archaeological survey should not be necessary for the proposed project area. Due to previous ground disturbance, the proposed undertaking should have No Effect to archaeological resources. Should the project plans change, or should additional information become available regarding cultural resources or citizens' concerns regarding impacts to cultural resources, please submit that information to our office as additional consultation may be warranted.

In order to make a preliminary determination if above-ground properties eligible for listing in the National Register of Historic Places will be affected by this project, the applicant must submit photographs of all structures 50 years or older that are within and visible from the areas impacted by the proposed pump station and other above ground structures associated with this project. Each photograph should be labeled by street address or map coordinates with a brief description of potential impacts or proposed treatment, and should be accompanied by a project map showing their location. Upon completion of our review, this office will advise the applicant if further consultation is required.

Should you have any questions, feel free to contact Nick Laracuate of my staff at 502.564.7005, ext. 151.

Sincerely,

Lindy Casebier,
Acting Executive Director and
State Historic Preservation Officer

LC:nrl

Miller, Corey T.

Subject: FW: USFWS Consultation for the South Perry Phase III - AML Water Supply

From: Coleman, Keith (EEC) [<mailto:KeithB.Coleman@ky.gov>]
Sent: Wednesday, November 02, 2011 9:25 AM
To: Miller, Corey T.; Cassel, Steven R. "Steve"; Meade, Mark (EEC)
Cc: Overman, Bill (EEC); Howell, Ryan (EEC)
Subject: FW: USFWS Consultation for the South Perry Phase III - AML Water Supply

Corey,

I hope this helps with your ATP review.

Thanks,
Keith

Keith Coleman, Environmental Technologist

Division of Abandoned Mine Lands

2521 Lawrenceburg Rd.
Frankfort, KY 40601
502-564-2141

KeithB.Coleman@ky.gov
<http://aml.ky.gov>

From: [Carrie Allison@fws.gov](mailto:Carrie.Allison@fws.gov) [<mailto:Carrie.Allison@fws.gov>]
Sent: Wednesday, November 02, 2011 9:19 AM
To: Coleman, Keith (EEC)
Cc: Overman, Bill (EEC); [Carrie Allison@fws.gov](mailto:Carrie.Allison@fws.gov); Howell, Ryan (EEC)
Subject: Re: USFWS Consultation for the South Perry Phase III - AML Water Supply

Keith-

Since no trees or potential/known IN bat hibernacula are being disturbed, we would not expect this project to negatively impact IN bats or their habitat and no further consultation is necessary. Thanks!

Carrie L. Allison

U.S. Fish and Wildlife Service
330 W. Broadway, Rm. 265
Frankfort, KY 40601
502-695-0468 ext. 103

*"It is not enough to fight for the land; it is even more important to enjoy it."
~Edward Abbey*

"Coleman, Keith (EEC)" <KeithB.Coleman@ky.gov>

To <Carrie.Allison@fws.gov>

cc "Howell, Ryan (EEC)" <Ryan.Howell@ky.gov>, "Overman, Bill (EEC)" <Bill.Overman@ky.gov>

10/31/2011 10:00 AM

Carrie,

Corey Miller (OSM) is currently reviewing the NEPA documentation for the above-mentioned project. He suggested that we contact you, as the project does fall within an Indiana Bat known habitat area.

No tree removal or disturbance to any cave-like structures is anticipated.

Please provide any comments you may have regarding the project.

Thanks,
Keith

Keith Coleman, Environmental Technologist

Division of Abandoned Mine Lands

2521 Lawrenceburg Rd.

Frankfort, KY 40601

502-564-2141

KeithB.Coleman@ky.gov

<http://aml.ky.gov>

[attachment "South Perry III WSP Memo.pdf" deleted by Carrie Allison/R4/FWS/DOI] [attachment "South Perry III AML WSP MySo Map.pdf" deleted by Carrie Allison/R4/FWS/DOI]



Corey Miller <ctmsbc@gmail.com>

ATP Request Package for South Perry Phase III AML Water Supply Project (Perry County)

Bill Overman <kyaml2008@gmail.com>

Mon, Oct 10, 2011 at 11:05 AM

To: scasselsr <scasselsr@gmail.com>, ctmsbc <ctmsbc@gmail.com>, osmlorenestes@gmail.com

Please see attached ATP request package for our South Perry Phase III AML Water Supply Project.

Respond accordingly.

If you have any questions or concerns ref. this package, please contact Bill Overman or Ryan Howell.

Thanks,

Vanna Rickwa
AML-Frankfort



South Perry Phase III - ATP request 10.10.11.pdf
17846K



ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR NATURAL RESOURCES

Division of Abandoned Mine Lands

2521 Lawrenceburg Road
Frankfort, Kentucky 40601
www.ky.gov

Steven L. Beshear
Governor

Leonard K. Peters
Secretary

Carl E. Campbell
Commissioner

October 7, 2011

Mr. Joseph L. Blackburn, Director
U. S. Department of the Interior
Office of Surface Mining
Lexington Field Office
2675 Regency Road
Lexington, KY 40503

RE: South Perry Phase III AML Water Supply Project (Perry County)

Dear Mr. Blackburn:

We are requesting "Authorization to Proceed" with site-specific construction activities on the referenced project, as described in the enclosed package. Enclosed are a project description, location maps, and an eligibility statement with supporting information for the above-referenced project. Additional, eligibility information is available at the Frankfort AML office. The PADs for problem area #s KY 3827 SGA and KY 4162 SGA have been prepared and entered into the e-AMLIS by the division. PAD # KY 4162 SGA is pending OSM approval, and KY 3827 SGA has been approved. The PAD information has not been included in this ATP package; however, all necessary information (the problem area description (PAD), supplemental forms, and an engineer cost estimate) can be found online in e-AMLIS for your review. An eligibility determination that finds the proposed project eligible for AML funding has been reviewed and signed by the Office of Legal Services. Support documents for the PAD and the eligibility determination will be made available to you upon request. Also, enclosed is an Environmental Assessment, with two agency consultation response documents and two DAML consultation documents attached. The Kentucky Heritage Council (KHC) was not contacted, as this project is exempt under the Programmatic Agreement between AML and KHC due to the previous disturbances by mining, road construction, and/or houseseat development.

AML Program Development staff conducted a search of the Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database. This search revealed two species of state concern, monitored by the KSNPC, are known to occur within one mile of the project site, and that three species listed as threatened or endangered, under the United States Endangered Species Act (USES), are known to exist within ten miles of the project site. The species noted in the search are the:

KSNPC species found within 1 mile from the project sites:

- Mountain Midget Crayfish (*Cambarus parvoculus*)
- Eastern Small-footed Myotis (*Myotis leibii*)

USESA listed species found within 10 miles from the project site:

- Indiana Bat (*Myotis sodalis*)
- Blackside Dace (*Chrosomus cumberlandensis*)
- Gray Myotis (*Myotis sodalis*)

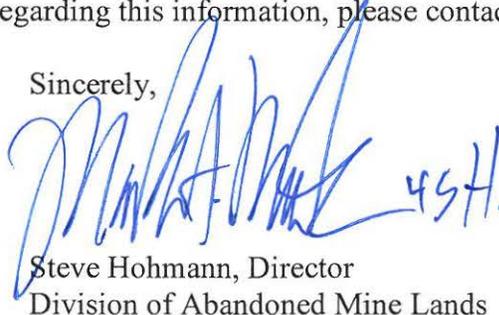
According to the memorandum by Keith B. Coleman, dated September 21, 2011, none of these species should be negatively impacted by the proposed reclamation work. Although the entire state of Kentucky has been declared to be potential Indiana Bat habitat, since the removal of trees over 5" DBH is not anticipated and no cave-like structures will be closed, no negative impacts should result upon the Indiana Bat, regardless of the timing of construction.

A letter was sent to the DAML floodplain and hydrology staff specialist, soliciting their comments regarding this project. The letter requested comments regarding water quality certification (WQC) and floodplain permit issues. The response stated that a floodplain permit would be required, but no WQC or COE permits will be required as long as the work performed is subsurface (directional boring method). The engineers and/or contractors retained for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are received. The other consulted agencies had no objections or concerns regarding this project.

Overall, the project is a Priority 2. The project is estimated to cost \$2,093,090.00, exclusive of "in-house" personnel costs associated with project administration, design, support, surveying, and bid activities. Completion of the project will not require the acquisition of any land and will not significantly affect the potential recovery of residual coal reserves at the sites. The principal benefits to be derived from the successful completion of the project are the elimination of abandoned mine land problems as described in the attached project description.

Construction contract bidding, awarding, and subsequent construction completion will occur as soon as possible. Should you have any questions regarding this information, please contact us at 502/564-2141.

Sincerely,



Steve Hohmann, Director
Division of Abandoned Mine Lands

SH:BO:RH:vr

Enclosures

South Perry Phase III AML Water Supply Project

Perry County – Tilford, Leatherwood, Hazard South, and Vicco Quads.

Project Description

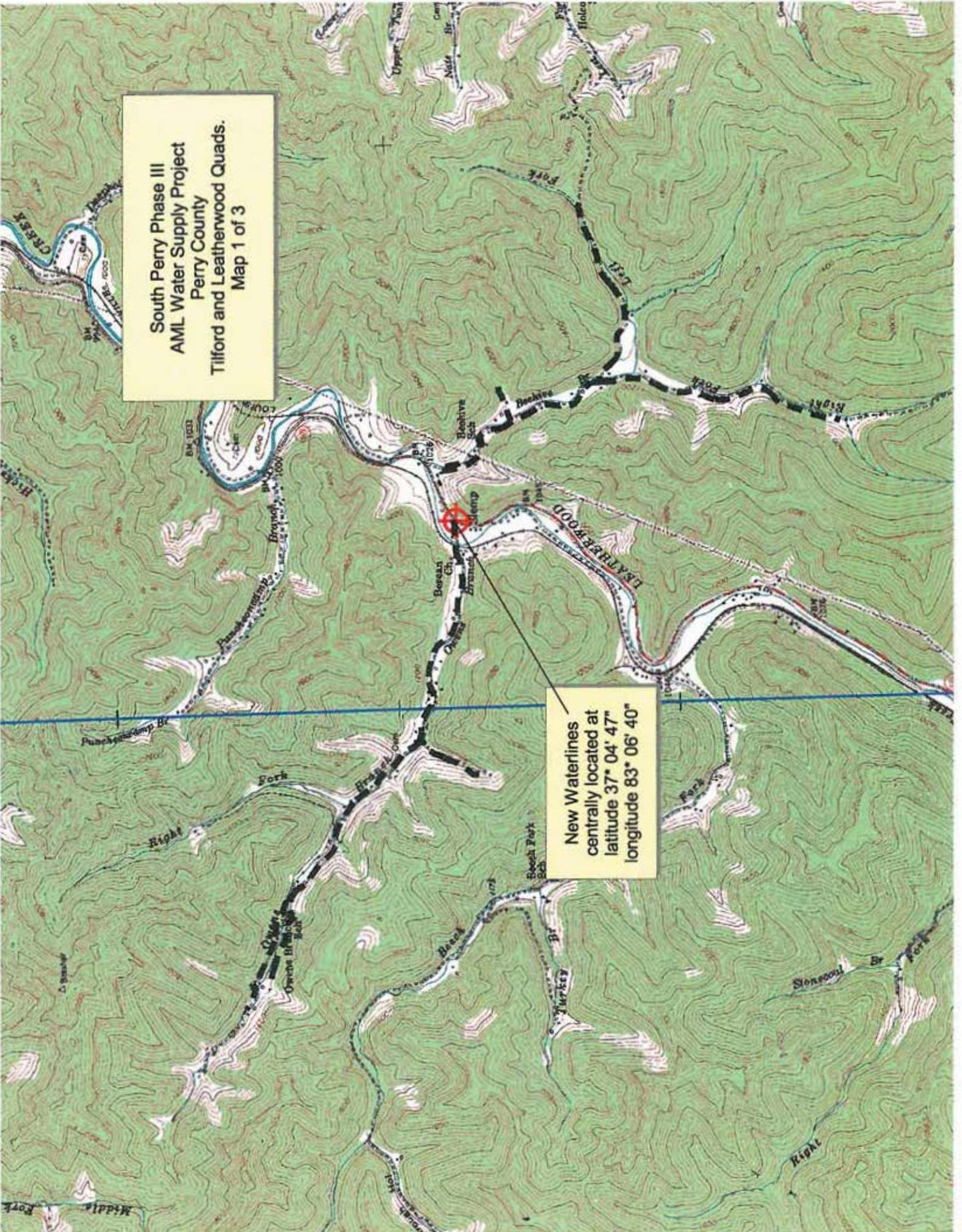
Groundwater in three areas of Perry County has been damaged by pre-law coal mining operations. Therefore, these three areas are eligible for an AML-funded waterline extension project to abate the problems. The project includes proposed waterlines shown on three maps. Map 1 waterlines are centrally located on the Tilford 7.5' United States Geological Survey (USGS) quadrangle at Latitude 37° 04' 47" and Longitude 83° 06' 40". Map 2 waterlines include a proposed Booster Station #1 located on the Tilford 7.5' USGS quadrangle at Latitude 37° 02' 06" and Longitude 83° 06' 36". Map 3 waterlines are centrally located on the Hazard South 7.5' USGS quadrangle at Latitude 37° 11' 00" and Longitude 83° 07' 54" (see the 3 attached maps).

A total of approximately 84,525 linear feet of new water supply pipe is proposed for the project. The pipe diameters will range from 3/4" to 10". Approximately 173 new water meters will be installed. The booster pump station site is previously disturbed by road construction, with no trees less than 5" in diameter at breast height that will have to be removed. Waterlines will be installed in previously disturbed ditches and shoulders of public road right-of-ways or at cleared private roads, and in mowed residential yards.

Installation and maintenance of hay-bale silt checks and erosion control netting will minimize sedimentation at creek crossings and other critical areas. Construction of this project will require stream crossings, likely within floodplains. Creek crossings will be constructed quickly and with as little intrusion of equipment into streams as possible, thereby limiting the disturbance of sediments and resulting turbidity to those found during heavy storm events. All construction disturbances will be kept to a minimum and vegetated as soon as practical. Consulting engineering companies retained for this project submitted design plans for this water supply project to the Kentucky Division of Water (DOW) for their review and approval. This approval process includes the identification and notice, to the party submitting the design plans, of all necessary permits, including floodplain permits and 401 WQC permits. The engineers and/or contractors retained for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are issued.

South Perry Phase III
AML Water Supply Project
Perry County
Tilford and Leatherwood Quads.
Map 1 of 3

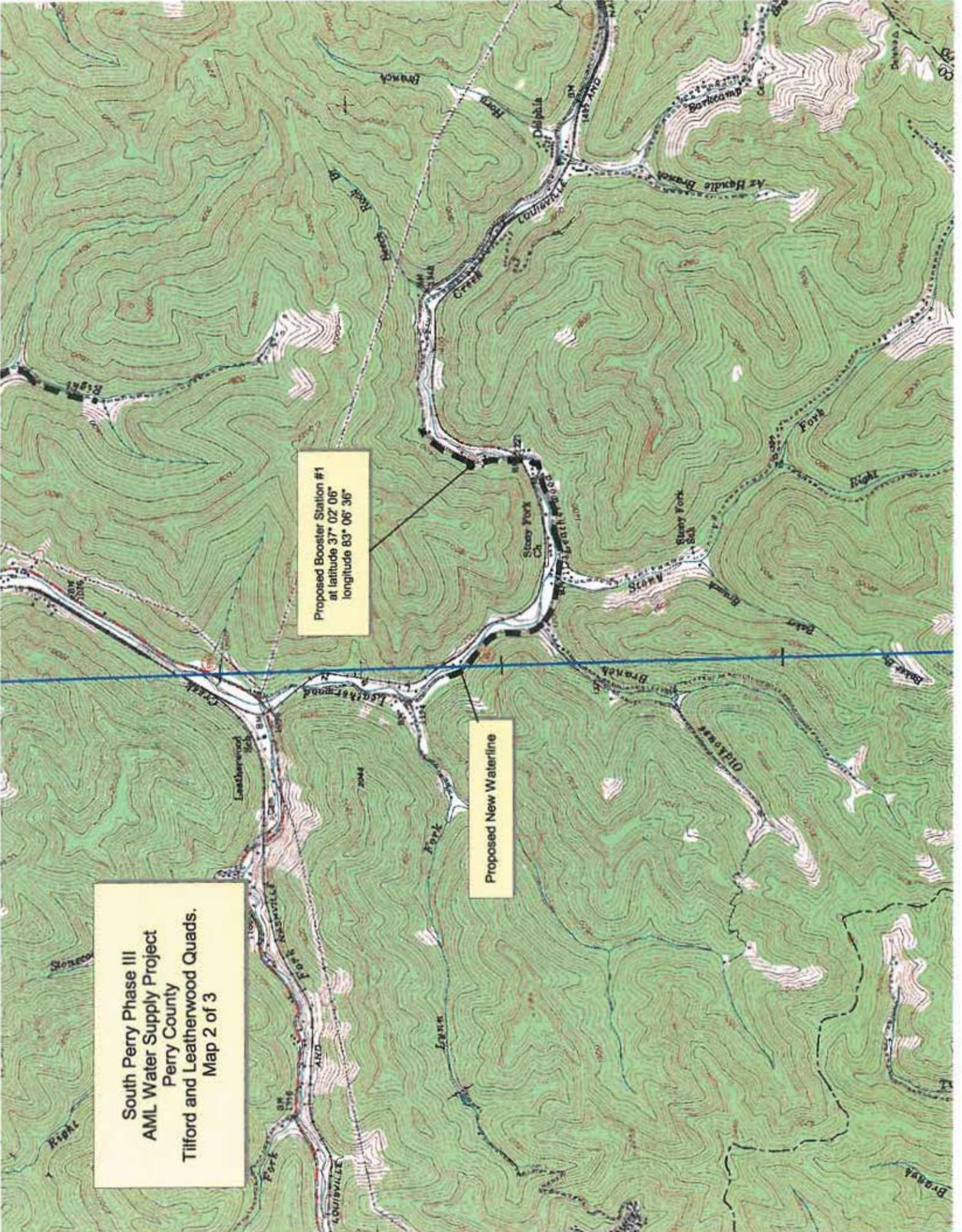
New Waterlines
centrally located at
latitude 37° 04' 47"
longitude 83° 06' 40"



South Perry Phase III
AML Water Supply Project
Perry County
Tilford and Leatherwood Quads.
Map 2 of 3

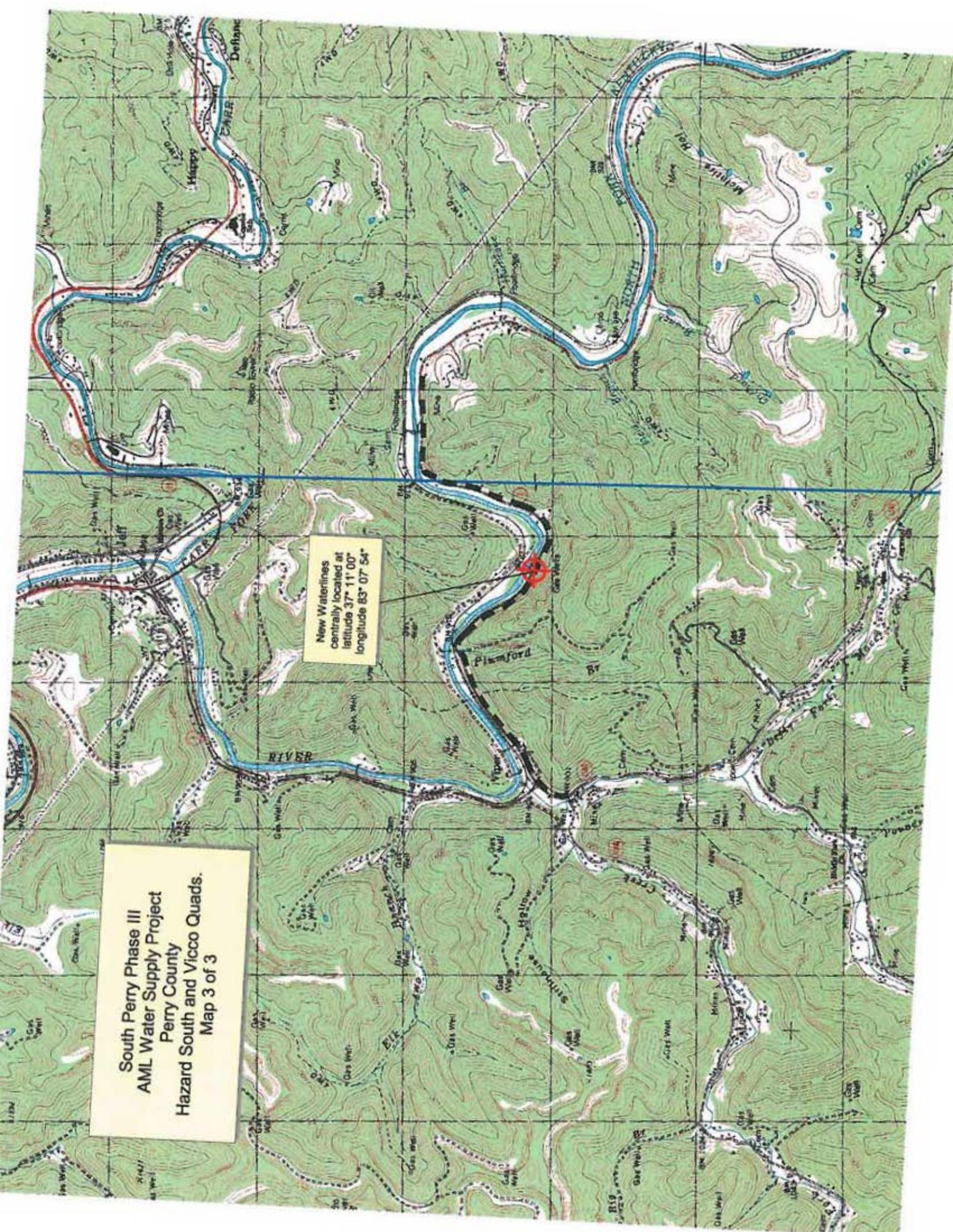
Proposed Booster Station #1
at latitude 37° 02' 06"
longitude 83° 06' 36"

Proposed New Waterline



**South Perry Phase III
AML Water Supply Project
Perry County
Hazard South and Vicco Quads.
Map 3 of 3**

**New Waterlines
centrally located at
latitude 37° 11' 00"
longitude 83° 07' 54"**



South Perry
Phase II AML Water Supply Project
Perry County
Leatherwood and Tilford Quad.

Environmental Assessment

A. Description of the Proposed Action:

The Kentucky Division of Abandoned Mine Lands (AML) proposes to provide 173 residences with a public water supply, by constructing approximately 84,525' of new water service lines that will tie into existing public water service lines. The project includes three waterline areas within the Tilford, Leatherwood, Hazard South, and Vicco 7.5' United States Geological Survey (USGS) quadrangles, including a proposed booster pump station located in the Tilford 7.5' United States Geological Survey (USGS) quadrangle at Latitude 37° 02' 06" and Longitude 83° 06' 36" (see the attached map). The federal Office of Surface Mining (OSM) has requested that all water supply project proposals include an environmental assessment.

B. Need for the Proposed Action:

Poor quality well water threatens the health of anyone who drinks it. The problems proposed to be mitigated by this project are rated as Priority 2. The problems are further described in the priority documentation form for national AML inventory problem areas KY 3827-SGA and KY 4162-SGA.

C. Alternatives Considered:

1. Extend existing public waterlines, to replace groundwater wells contaminated or destroyed by previous mining.
2. Drill wells and/or provide and maintain cisterns.
3. Take no action, allowing the human health hazards to continue.

C.1. Preferred Alternative:

An AML-funded ground water study for several areas in Perry County, (see the attached map) has shown that groundwater in portions of the area are degraded primarily due to pre-law coal mine operations. As a result, portions of the study areas are eligible for AML expenditures to abate the problems.

The project consists of providing full municipal water service to approximately 173 residences. New service lines will tie into existing public water lines. Approximately 84,525' of water-supply pipe will be installed, with diameters

ranging from 3/4" to 10". Pipes will mostly be installed in previously disturbed ditches and shoulders of public road rights-of-way. A small section of waterline will be placed within a residential yard that has previously been disturbed during the placement of spoil material and topsoil by a local coal company. Meters and service lines will primarily be located in residential yards. All of the project areas have no forest areas to be cleared.

C.2. Drilled Wells:

Should the Commonwealth drill wells and/or provide and maintain cisterns, the cost would be prohibitive, and encountering a good water source by drilling in an area already disturbed by mining is unlikely.

C.3. No Action:

Should the Commonwealth take no action, people drinking well water contaminated by pre-law mining, or drinking contaminated water from other sources after their well was destroyed by pre-law mining, could suffer from health problems.

D. Affected Environment:

D.1. General Setting:

The predominant land uses in the vicinity are residential, commercial (small businesses), agricultural, and forestland. Second growth, unmanaged upland hardwood forest and coal mines are on the steep slopes.

D.2. Affected Resources:

The following agencies and databases were consulted to identify resources that may occur in the project vicinity:

- Kentucky Department of Fish and Wildlife Resources (KDFWR)
- Kentucky Division of Mine Permits (KDMP) floodplain database
- Kentucky Heritage Council (KHC) – exempt under Programmatic Agreement
- Kentucky Office of State Archaeology (OSA)
- Kentucky State Nature Preserves Commission (KSNPC) BIOTICS database

Replies from these agencies and memos addressing the KSNPC database search and floodplain/water issues are attached.

E. Environmental Impacts of the Proposed Alternative:

Resources that could, but will not, be negatively affected by the proposed project include:

- Historic/Cultural
- Fish and Wildlife/Plants
- Soils
- Agricultural
- Recreation
- Small Business Use
- Air Quality
- Noise
- Topography
- Other (Socioeconomic or Political)

The proposed project will not adversely impact low income or minority persons. Development of an area for residential and business uses usually increases after a public water supply is available, especially for locations with existing poor quality and quantity well water, which may result in more jobs available.

Due to the proposed disturbances to install water lines in drainage ditches and right-of-way property along roads, in residential yards, and at stream crossings, hydrology will be discussed. Due to the Kentucky State Nature Preserves Commission (KSNPC) database search indicating the possible occurrence of three species listed as threatened or endangered under the United States Endangered Species Act (USESA) that are known to occur within ten miles of the project sites, and two species of state concern, monitored by KSNPC, that are known to occur within one mile of the project sites, fish and wildlife/plants will be discussed. Because KHC was not contacted for this project, archaeology will be discussed.

E.1.a. Hydrology:

A formulated erosion, sediment, and drainage control plan will be implemented during construction, to minimize sedimentation of receiving streams. This plan includes hay-bale silt checks and silt fences maintained throughout the life of the project, and prompt vegetation of disturbed areas, especially at and near stream crossings. The completed project will provide non-eroding drainage controls and a vigorous, complete cover of perennial vegetation, which will result in the same or less stream sedimentation after project construction. The disturbance of sediments and resulting turbidity in streams will be limited to those found during heavy storm events. Therefore, the hydrology of the project areas and downstream areas should not suffer long-term negative impacts due to construction of this project.

As indicated in the attached email dated September 21, 2011, a floodplain permit will be required. Because the waterlines are to be installed subsurface, no COE permit or WQC will be required. The engineers and/or contractors retained for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are received.

E.1.b. Fish and Wildlife/Plants

AML personnel searched the KSNPC BIOTICS database in order to determine if any species that are monitored by the KSNPC are known to occur within the near vicinity (a 1-mile radius) of the project site, and if any federally-listed threatened and endangered species are known to occur within the general area (a 10-mile radius) of the project site. This search revealed two species of state concern monitored by the KSNPC are known to occur within one mile of the project site and three species listed as Threatened and Endangered under the United States Endangered Species Act (USES A) are known to exist within ten miles of the project site. The species noted in the search are:

- Blackside Dace (*Chrosomus cumberlandensis*- USESA Listed Threatened)
- Gray Bat (*Myotis grisescens*- USESA Listed Endangered)
- Indiana Bat (*Myotis sodalist*- USESA Listed Endangered)
- Mountain Midget Crayfish (*Cambarus parvoculus*- KSNPC Threatened)
- Eastern Small-footed Myotis (*Myotis leibii*- KSNPC Threatened)

As indicated in the attached memorandum dated September 21, 2011, none of the species in the KSNPC search should be negatively impacted by construction of this project. The KDFWS also indicated that the American Black Bear is known to be within 1 mile of the project sites; however the roadside ditch and residential yards are not suitable bear habitats.

The US Fish and Wildlife Service (USFWS) has declared the whole of the state of Kentucky to be the potential habitat of the Indiana Bat. This species day roosts and establishes maternity colonies in trees with exfoliating bark or cavities in their trunks and larger limbs, and hibernates in caves and other similar underground structures. However, since tree clearing is not anticipated within any of the project sites, and since no portals or cave-like structures are associated with this project, project-related construction should not impact this species, regardless of the timing of the construction.

E.1.c. Archaeology

The Kentucky Heritage Council (KHC) was not contacted, as the project was determined to be exempt under the Programmatic Agreement between KHC and AML as the waterlines will be placed in roadside ditches with the exception of a small area that will be placed in spoil waste that has been covered with topsoil.



ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR NATURAL RESOURCES

Division of Abandoned Mine Lands

2521 Lawrenceburg Road
Frankfort, Kentucky 40601
www.ky.gov

Steven L. Beshear
Governor

Leonard K. Peters
Secretary

Carl E. Campbell
Commissioner

To: Files of City of Hazard Kentucky
South Perry Supplemental AML Project
Groundwater Contamination Study

Through: *MM* Mark Meade, AML Assistant Director

From: *PPB* Phillip Bowling, Environmental Scientist III

Date: April 6, 2011

Subject: South Perry Supplemental
AML Groundwater Contamination Study
City of Hazard, Water & Sewer District
Hazard, Kentucky

On February 9, 2011 a supplemental groundwater contamination study began on the above-referenced site and concluded on April 6, 2011. The main purpose for this memorandum is to provide eligibility determination for the below-listed area and to confirm that these specific areas have been mining impacted. The study area is located off Kentucky 699 on Bee Hive Road, Left Fork of Bee Hive and Kentucky Hwy. 463 Little Leatherwood Creek, Straight Fork Road, and Ky. Hwy. Route 7 from Viper to Cornettsville, KY in Perry County Kentucky.

The South Perry Supplemental Groundwater Study was conducted at the request of the City of Hazard to supplement the existing groundwater study that had been conducted by HA Spaulding Engineering. This area was deemed DAML eligible through field groundwater sampling that was conducted at different sites throughout the study area. These sites were field tested, and confirmed positive for possible mine contamination by our staff hydrologist. See both the original South Perry groundwater contamination study and New AML South Perry Supplemental Groundwater list and test analysis provided within the design packages for further details concerning this area.

The mine history revealed that a Pre-Law Surface and Deep mining sites were located within the immediate area and had been mined within the Amburgy, Hazard # 4, Hazard 5A, and Hazard # 7 Coal Seam Elevations. For additional information see the attached copies of Mine History / Eligibility Review Forms and Maps for further details concerning these areas.

Random groundwater samples were taken at 45 different locations throughout the study areas. ■ sites are marked in green on the maps to confirm water sampling location sites with a positive hit for mining impacts. There were ■ sites deemed to be negative for contamination, are marked in red on the map. See South Perry Supplemental Hydrological Report and Groundwater Sampling Work sheet for additional information regarding this area.

The above-designated study areas appear to qualify for AML funding, with the exceptions of the Right Fork of Bee Hive Road. The Right Fork of Bee Hive Road WILL NOT qualify for AML assistance due to it's failure of meeting both required components, groundwater sampling positive and mine history reviews. The information herein is confirmed by infield raw groundwater sampling. All sampling has been verified as correct and certified to date. The mine history has been reviewed and confirmed as correct for those designated areas and further confirms contamination of water systems within these areas.

For further details concerning all information, see the Original South Perry Groundwater Study Mine History, South Perry Supplemental hydrological report, and completed eligibility packet compiled for this proposed areas. If I can be of further assistance concerning this matter please, advise.



ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR NATURAL RESOURCES

Division of Abandoned Mine Lands

2521 Lawrenceburg Road
Frankfort, Kentucky 40601
www.ky.gov

Steven L. Beshear
Governor

Leonard K. Peters
Secretary

Carl E. Campbell
Commissioner

May 23, 2011

City Manager Carlos Maggard
City of Hazard Water & Sewer District
Main Street
Hazard Ky. 41701

Honorable Carlos Maggard:

We have conducted a ground water study known as (South Perry Supplemental) for those designated areas in Bee Hive, Right Fork of Bee Hive, Little Leatherwood Creek, and Straight Fork in Perry Co. Kentucky as requested. As you know, the Kentucky Division of Abandoned Mine Lands waterline funding is based on two major components: pre-law mine history and ground water that has been mining impacted by any pre-law mining activities. Both of these components must be met in order for the Kentucky Division of Abandoned Mine Lands Program to consider any type of funding for those areas.

A comprehensive mine history review has been completed by our Program Development Branch, and a final determination of eligibility has been rendered. Based on our review of the requested areas and watersheds of Bee Hive Branch, Little leatherwood Creek, Straight Fork areas. Those three areas have an abundance of Pre-Law mining works, with the exception of the Right Fork of Bee Hive Branch. Documented pre-law mining had been conducted throughout the South Perry Supplemental Site study areas on the Hazard # 4, 5A, 7 Coal seam elevations. Post-Law surface mining has been conducted on the Hazard # 7,8,9, upper coal seams; however, the groundwater systems do appear to have been impacted by the Pre-Law mining works within that specific area based on groundwater sampling compared to the pre-law mine history documentation.

The final determination of eligibility is based on two major components as referenced-above. Based on these two components the following areas will qualify for AML funding if available:

(South Perry Supplemental Study) Bee Hive Branch up to and including the Left Fork of Bee Hive, Little Leatherwood Creek from the end of the existing line up to and including Straight Fork Fork Road. The Right Fork of Bee Hive Branch did not meet the mine history or groundwater sampling component that is necessary to qualify for AML assistance. An alternative funding source will need to be sought for this particular area.

The Kentucky Division of Abandoned Mine Lands Program can only fund waterline projects in those areas that have been impacted by the effects of pre-law mining on the groundwater systems. AML can only fund those designated areas referenced-above that has met both eligibility components as outlined in the waterline protocol requirements. If I can be of further assistance concerning this matter, please feel free to contact me at the Frankfort Office (502) 564-2141 any time.



May 23, 2011
Page 2

Respectfully,

A handwritten signature in black ink, appearing to read "Phillip Bowling". The signature is fluid and cursive, with the first name "Phillip" and last name "Bowling" clearly distinguishable.

Phillip Bowling, Environmental Scientist III
(606) 224-2232
cc: SH/MM/BH

Howell, Ryan (EEC)

From: Hall, Samantha (EEC)
Sent: Wednesday, September 21, 2011 6:34 AM
To: Rickwa, Vanna (EEC)
Cc: Howell, Ryan (EEC); Ruebens, Jeff (EEC); Overman, Bill (EEC)
Subject: RE: Request for floodplain and WQC review for South Perry Phase III AML WSP

Floodplain/Stream Construction Permit

A floodplain permit will be required.

US Army Corps of Engineers Permit (ACOE)

No permit is necessary as long as the stream crossings are subsurface.

Water Quality Certification

No permit is necessary as long as the stream crossings are subsurface.

From: Rickwa, Vanna (EEC)
Sent: Monday, September 19, 2011 1:00 PM
To: Hall, Samantha (EEC)
Cc: Howell, Ryan (EEC); Ruebens, Jeff (EEC)
Subject: Request for floodplain and WQC review for South Perry Phase III AML WSP

Attached please find the project description and maps for the South Perry Phase III AML Water Supply Project.

Please do a floodplain and WQ review to determine if there would be any issues reference this project.

Please notify Bill Overman, Ryan Howell, Jeff Ruebens, and myself of your response.

Thanks,

*Vanna Rickwa
Administrative Specialist III
Energy and Environment Cabinet
Department for Natural Resources
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, Kentucky 40601
502/564-2141, Ext. 130*



W. S. Webb Museum of Anthropology
Office of State Archaeology
College of Arts and Sciences
211 Lafferty Hall
Lexington, KY 40506-0024
(859) 257-8208
Fax (859) 323-1968
www.uky.edu

September 30, 2011

Mr. Steve Hohmann, Director
Energy and Environment Cabinet
Department for Natural Resources
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, KY 40601

RE: South Perry Phase III AML Water Supply Project (Perry County)

Dear Mr. Hohmann:

Concerning the above referenced project, I have reviewed the Office of State Archaeology files to determine if any prehistoric or historic sites are located in proximity to the proposed AML project. The following information is provided to assist in your decision to proceed with an Environmental Assessment or a Categorical Exclusion Determination for the project.

Our records indicate that only a very small portion of this project area has been previously surveyed for archaeological resources and one archaeological site is located in the immediate vicinity of the project area as depicted on Map 1. Currently, there is no determination of the eligibility of this site for inclusion on the National Register. The proposed lines pass through areas that have potential for archaeological sites and we do not have sufficient information to determine whether archaeological sites will be impacted by the project. It is my recommendation that you consult with the State Historic Preservation Office to determine whether an archaeological survey is required.

Sincerely,

A handwritten signature in blue ink that reads "George M. Crothers". The signature is written in a cursive style with a large, sweeping flourish at the end.

(Christina A. Pappas for)
George M. Crothers, Ph.D.
Director



**KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES
TOURISM, ARTS, AND HERITAGE CABINET**

Steven L. Beshear
Governor

#1 Sportsman's Lane
Frankfort, Kentucky 40601
Phone (502) 564-3400
1-800-858-1549
Fax (502) 564-0506
fw.ky.gov

Marcheta Sparrow
Secretary

Dr. Jonathan W. Gassett
Commissioner

26 September 2011

Steve Hohmann, Director
Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, KY 40601

RE: South Perry Phase III AML Water Supply Project (Perry County)

Dear Mr. Hohmann:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) has received your request for information pertaining to the subject project. The Kentucky Fish and Wildlife Information System indicates that the federally-endangered Indiana bat (*Myotis sodalis*) is known to occur within close proximity to the project sites. The American Black Bear (*Ursus americanus*), a state-listed species of concern, is also known to occur within one mile of the proposed project sites.

The KDFWR recommends the following measures for any work that may occur within a stream to help reduce impacts to stream habitat and quality:

- When crossing a stream, any pipe should be laid perpendicular to the stream bank to minimize the direct impacts to the streambed.
- Avoidance of impacts to intermittent and perennial streams if it is feasible.
- Development/excavation during low flow period to minimize disturbances.
- Proper placement of erosion control structures below highly disturbed areas to minimize entry of silt to the stream.
- Replanting of disturbed areas after construction, including reforestation of stream banks, with native vegetation for soil stabilization and enhancement of fish and wildlife populations.
- Avoid impacts to forested areas if possible. If impacts cannot be avoided we recommend reforestation of common areas with native trees to promote use by various species of wildlife.
- Return all disturbed instream habitat to stable condition upon completion of construction in the area.
- Preservation of any tree canopy overhanging the stream.

Erosion control measures, as mentioned in the proposal, should be installed prior to construction and periodically maintained during the life of the project. Please be aware that our database system is a dynamic one that only represents our current knowledge of various species distributions. I hope this information is helpful to you, and if you have questions or require additional information, please call me at (502) 564-7109 extension 4453.

Sincerely,



Dan Stoelb
Wildlife Biologist

Cc: Environmental Section File

Memorandum

To: South Perry – Phase III
AML Water Supply Project

From: *Keith B. Coleman*
Environmental Technician, AML Program Development Branch
Keith B. Coleman 9-21-11

Through: *Bill Overman*
Manager, AML Program Development Branch
Bill Overman 9/21/11

RE: Results of Kentucky State Nature Preserves Commission (KSNPC)
BIOTICS Database Search

Date: September 21, 2011

On September 21, 2011, I conducted a search of the KSNPC database in order to determine if any species of state concern (monitored by KSNPC) are known to occur within the near vicinity (1 mile radius) of the sites to be disturbed by this project, and if any federally listed “threatened or endangered” species are known to occur within the general vicinity (10-20 mile radius) of the project sites. The project has been broken into 3 mapped areas, and separate searches were conducted for each of the mapped sections. The search revealed that two species of state concern, monitored by KSNPC, are known to occur within one mile of the Map #1 section, and that no other records documented species of state concern within 1 mile of Map #2 or #3 sections. The search also revealed that three species, currently listed as threatened or endangered under the United States Endangered Species Act (USES A), are known to occur within ten miles of the Map #1 and #2 sections, and that one species, currently listed as threatened or endangered under USESA, is known to occur within 10 miles of the Map #3 section. Lastly, all three mapped sections are associated with Indiana Bat records within 10-20 miles from each.

The project (approximately 16 miles total) consists of the installation of water supply lines, 1 booster station, and 173 new water meters within roadside right-of-ways, residential yards, and other previously-disturbed areas within valley floors. No mine portals or cave-like structures will be disturbed. No trees over 5” DBH will need to be cleared from any project areas. The project falls within the North Fork of the Kentucky

River drainage, as indicated by the attached DOW HUC 8-digit map. To minimize sediment and erosion problems, a stringent control plan, including the utilization of such measures as hay-bale silt checks, silt fences, erosion control blankets, and prompt vegetation of all disturbed areas, will be implemented and monitored during the construction process.

Installation and maintenance of hay-bale silt checks and erosion control netting will minimize sedimentation at creek crossings and other critical areas. Construction of this project will require stream crossings, likely within floodplains. Creek crossings will be constructed quickly and with as little intrusion of equipment into streams as possible, thereby limiting the disturbance of sediments and resulting turbidity to those found during heavy storm events. All construction disturbances will be kept to a minimum and vegetated as soon as practical. Consulting engineering companies retained for this project submitted design plans for this water supply project to the Kentucky Division of Water (DOW) for their review and approval. This approval process includes the identification and notice, to the party submitting the design plans, of all necessary permits, including floodplain permits and 401 WQC permits. The engineers and/or contractors retained for this project are required to obtain all necessary permits. This Division will not fund this project until all required permits and authorizations are issued.

KSNPC Species of State Concern

Mountain Midget Crayfish (*Cambarus parvoculus*, KSNPC Threatened, Section #1)

Eastern Small-footed Myotis (*Myotis leibii*, KSNPC Threatened, Section #1)

USESA Listed Species

Blackside Dace (*Chrosomus cumberlandensis*, USESA Threatened, Sections # 1&2)

Gray Myotis (*Myotis grisescens*, USESA Endangered, Sections # 1, 2, 3)

Indiana Myotis (*Myotis sodalis*, USESA Endangered, Sections # 1&2)

Aquatics

The **Blackside Dace** inhabits small upland streams, usually within pools that are well-shaded by dense riparian vegetation. The **Mountain Midget Crayfish** inhabits rocky streams and small headwater creeks, seepages and springs. The only Blackside Dace record, within 10 miles from sites 1 & 2, is within the Upper Cumberland drainage, far removed from the project sites. Since the AML Sediment and Erosion Control Plan will be implemented and monitored during construction, as described above, no negative impacts should result from project-related construction to ~~any of~~ the above-mentioned Mountain Midget Crayfish.

Bats

The **Eastern Small-footed Myotis** inhabits a variety of habitats, including caves, mines, protected sites (such as crevices) along clifflines, abandoned buildings, and is occasionally found roosting under rocks on the ground (talus slopes) or on the floors of caves. No disturbances are planned to any of the above-described habitats; therefore, no negative impacts should result due to project-related construction, regardless of the timing of the project construction.

The **Gray Myotis** inhabits caves throughout the year, and may migrate from one cave to another seasonally. No disturbances are planned for any caves or cave-like structures, such as mine portals; therefore, no negative impacts should result due to project-related construction, regardless of the timing of the project construction.

The US Fish and Wildlife Service (USFWS) has declared the whole of the state of Kentucky to be the potential habitat of the **Indiana Bat** (*Myotis sodalis* – USESA Endangered). This species day roosts and establishes maternity colonies in trees with exfoliating bark or cavities in their trunks and larger limbs, and hibernates in caves and other similar underground structures.

The search of the KSNPC BIOTICS database revealed 10 records of this species within 10 miles of the project site 1, and 11 records within 10 miles of site 2. Of the 11 records in total, 5 are records of hibernacula, 2 are records of “summer mist-net surveys”, 2 are of potential maternity areas (?), 1 record is a “foraging area”, and 1 record is a “transient mist-net” capture. Additional records document the Indiana Bat within 10-20 miles from the project sites. Sites # 1 & 2 both fall within areas buffered as “known Indiana Bat habitat” by USFWS. (See attached map.) As described, no disturbances to any cave-like structures or to any potential summer roost habitat areas are anticipated at any of the project sites.

Since no records of hibernacula are within 10 miles of the site # 3 project area and no maternity area records are within 5 miles from the site # 3 project area, and since no maternity colonies or non-maternity records are within 2.5 miles from the site #3 project area, no special conditions would apply to the accepted tree removal period, a time at which bats are secured within their hibernacula (October 15 – March 31).

However, since tree clearing is not anticipated within any of the project sites, and since no portals or cave-like structures are associated with this project, project-related construction should not impact this species, regardless of the timing of construction.

Should the clearing of trees (trees which are over 5” DBH and also display characteristics such as shaggy, exfoliating bark, or crevices and hollowed-out cavities within their trunks and larger limbs) become necessary, a habitat assessment and/or presence/absence survey may be required for site #3. Tree clearing at sites # 1 or 2 is not permissible without consultation with USFWS, to be conducted by AML staff, should the need arise. Adherence to these best management practices should prevent any negative impacts upon the Indiana Bat.