

US, it would also have substantial economic impacts to the mining operation. The actual economically obtainable coal reserves would be left unmined. This minimal alternative discussion isn't a feasible option as Oxford has already reduced impacts to the greatest extent practicable within the permit area.

Information that demonstrates the social and economic impacts of this alternative, and why preservation of this aquatic resource is not a reasonable decision in light of those impacts, is provided below. Several minimization alternatives were investigated to extract the coal seam. No minimal alternative (beyond what is currently being proposed) would be technically or economically feasible to commence mining of the site.

**Description of Construction or Placement of Fill:**

The minimization alternative is to avoid 1,735 feet of stream channel as described **Appendix A**.

**Magnitude of Lowering Water Quality:**

Under the minimization alternative, approximately 1,735 additional linear feet of stream will not be affected by proposed mining activities. Impacts to stream habitats, although reduced, will be similar to the preferred alternative. Although stream impacts are reduced, the tonnage is greatly reduced as well.

**Technical Feasibility:**

The minimization alternative would provide similar erosion and sediment protection for surface waters as the revised minimal alternative. Valuable coal reserves (based on a combination of the seam thickness and amount of cover) would be avoided, which would increase the cost per ton of coal removed from the site.

**Social and Economic Benefits:**

The minimization alternative would result in the generation of \$256,176 in state tax revenues, support of the existing jobs for a temporary amount of time. The minimal alternative will result in a loss of approximately 55,638 tons of coal. Additional economic impacts of this alternative to Oxford Mining Company would result in potential layoffs and economic hardships. These effects must be considered in light of the temporary nature of the proposed impacts.

**Environmental Benefits:**

The proposed project areas consist primarily of undisturbed forests. Under this alternative, this habitat would be subject to timber harvest (at the landowner request) activities and possibly the development of agricultural fields in the lower lying areas.

## SUMMARY

Oxford Mining Company, while obligated to deliver coal resources that provide necessary energy for local communities, is dedicated to the preservation and enhancement of natural resources and water quality within the watershed. Mining reclamation activities, including stream mitigation, are geared towards protecting surface waters outside the permit area and restoring/enhancing streams and their associated functions and habitats within the permit area. Oxford Mining Company will be responsible for success of the mitigation areas during the monitoring period. Long-term maintenance of the site will be the responsibility of the property owner. The reconstructed streams will be under the same protection afforded to those watercourses prior to the mining and reclamation of the permit area. As such, the applicant will make every attempt to preserve and protect the reconstructed streams in perpetuity. Any future impacts to jurisdictional waters will require a permit from the U.S. Army Corps of Engineers, Huntington District.

## **VI. CUMULATIVE IMPACT ASSESSMENT**

### **INTRODUCTION**

The preferred alternative is proposing to affect approximately no perennial channel, 1,345 linear feet of intermittent stream channel, and 663 linear feet of ephemeral stream channel for a total of 2,008 feet of stream impacts. These impacts are necessary to develop the No. 8 coal seam. All affects are described in the charts used to assess impacts (see **Appendix A**). As previously described, these streams will need to be disturbed by coal removal.

The preferred alternative is proposing to affects no acres of jurisdictional wetlands on site.

The applicant has estimated that the project would result in the recovery of approximately 278,400 tons of coal.

The unnamed, undesignated streams drain to Leatherwood Creek, which eventually drains to Wills Creek and the Muskingum River. The site is within the Wills Creek drainage basin, which is under the jurisdiction of the U.S. Corps of Engineers (Corps) Huntington, WV District. Affected stream lengths were determined to be unavoidable to economically extract and maximally utilize coal resources on the site. Fill is required for overburden storage, the construction of the staging area, equipment crossing, coal loading, coal extraction, haul road construction, and hauling. Mining activities are expected to begin after issuance of this alternative as presented in the 401/404 submittal.

### **STREAMS**

#### **IMPACTS TO STREAMS**

Please refer to “USACE Jurisdictional Stream Impact Summary Table” for stream specifics as they relate to the Gibson permit area. Tables and charts are a better representation of numerical data rather than lengthy discussions pertaining to flow direction, development, and miscellaneous, trivial information. The quality and quantity of streams are represented in the referenced tables.

### **WETLANDS**

#### **IMPACTS TO WETLANDS**

The proposed mining activity will impact no acres of wetlands associated with coal removal activities.

### **SEDIMENT PONDS**

Sediment ponds will protect the local watershed from receiving excessive sediment during mining and reclamation. Their proposed locations are illustrated on the mining application map. Ponds will trap sediment resulting from mining and reclamation activities; thus, reducing sedimentation and pH impacts while maintaining water quality standards in the

Wills Creek watershed. Ponds will remain as permanent on site.

## **EVALUATION OF CUMULATIVE EFFECTS PREVIOUS AND CURRENT LAND USE/COVER**

This Cumulative Impact Assessment (CIA) associated with the Wills Creek Drainage Basin was conducted to evaluate the potential cumulative impacts of proposed coal mining on the watershed that may result from the development of the proposed approximately 132 acre Gibson coal mine. This CIA has been developed in support of the Clean Water Act Section 404 (b) (1) guidelines at the request of the U.S. Army Corps of Engineers, Huntington District (COE).

The Wills Creek Watershed is located in east-central Ohio, mostly in Guernsey County but also includes portions of Belmont, Coshocton, Monroe, Muskingum, Noble, and Tuscarawas Counties. Oxford Mining Company, LLC is proposing to extract coal from the Gibson Site located south of the town of Quaker City and situated in both Guernsey and Noble Counties in Ohio.

The Wills Creek watershed is larger than the defined study area. The entire watershed comprises approximately 546,048 acres (853.2 square miles).

The entire proposed permit area totaling 132 acres is undeveloped, and there are no existing land use policies or plans espoused by governmental agencies for the land area. Mining activities are expected to begin upon issuance of permits. The proposed project will be impacting approximately 2,008 linear feet of stream and no acres of wetland, while avoiding 133 linear feet of stream and all wetlands on site. The anticipated timeline of environmental effects will include mining for approximately five years.

## **WATERSHED FUNCTION, RESOURCES, AND IMPAIRMENTS**

For the purposes of this study, unless otherwise stated, the information presented pertains to the Wills Creek watershed and selected tributaries. The study area is part of the much larger Muskingum River Watershed.

The study watersheds are located within the Western Allegheny Plateau area. This area is situated in an unglaciated portion of the county and is characterized by steep hillsides and narrow valleys produced by stream erosion (USDA, SCS 1996). The soils developed under deciduous forest cover in a temperate climate. Upland soils formed from parent material consisting of weathering underlying bedrock. Soil within the floodplains developed from alluvial parent material deposited as streams eroded the hillsides. The area is dissected by several first and second order streams forming a dendritic drainage pattern. In the lower reaches of the study area, within the Rush Run watershed, broad valleys have formed between the ridge tops. Many of the stream valleys are terraced (CRCDC, 2004).

Farming and mining are the major enterprises in the area. Livestock is the major agricultural industry with a vast amount of pasture land totaling 91,686 acres, some of which is strip mined and then reclaimed. Agricultural land accounts for approximately 166,000 acres,

which is 39 percent of the total land use within the Wills Creek watershed. Several natural resources are mined. Coal deposits are very prevalent in the area and mining activity is vigorous, particularly in Coshocton County. The Middle and Lower Kittaning members (seams # 5 and # 6) are the most mined coal beds (USDA, SCS 1996; CRCDC, 2004).

Coal mining has had a substantial impact on the landscape, with about one-third of the study area affected by surface mining since 1960. From 1800 until 1948 underground mining was the principle method of mining. Prior to 1977 the mining industry was not required to reclaim land to similar pre-mining conditions. These abandoned mine areas have had a negative impact on water quality in two primary ways: erosion of spoil piles resulting in sedimentation and turbidity of streams and acid mine drainage (AMD). The occurrence of AMD results from the reaction of specific minerals with air and water that releases iron, aluminum, and manganese causing low pH levels in receiving water bodies (CRCDC, 2004).

According to the Ohio EPA and the Ohio Division of Natural Resources (ODNR), High Magnitude Causes of the historic impairment of these watersheds included siltation and direct habitat alterations stemming from forest removal. Current High Magnitude Sources include non-irrigated crop production, range grazing — riparian, pastureland, channelization — agriculture, surface mining, and flow regulation/modification. Impacts from previous “prelaw” mining within the greater Wills Creek watershed include:

- High sediment loading in the streams and rivers;
- High metal loading in the aquatic environment;
- Contaminated surface waters from mining byproduct seepage (AMD); and
- Reduced or non-existent upland buffers.

Much of the Wills Creek channel has been modified, particularly within the study watershed, for agriculture and flood control (Seneca Lake). Because of modifications the channel has a low gradient and has little of its natural free flowing character near the Permit Site. There is a tremendous silt and clay load suspended within the stream which is attributed to unreclaimed strip mines and gob piles, upland erosion, and livestock with access to the main stem and tributaries throughout the watershed (OEPA 1995).

## **SITE PROTECTION AND TIMING OF MITIGATION**

Measures will be taken to avoid/minimize impacts to surface waters via the timing of impacts to surface waters and reconstruction. Topsoil and subsoil will be removed prior to mining, so that mining is not interrupted waiting on topsoil/subsoil removal. This may occur days to several months prior to mining, especially in the fall when topsoil/subsoil needs to be removed to facilitate the winter mining operation. Following topsoil/subsoil removal the operator will remove overburden and extract coal, as the mining plan indicates. There are several factors influencing the time frame needed for coal removal that include the following:

- The size of the watershed/permit area being mined. Example: a small permit area may be mined and reclaimed within one year, while a large area may take five years or more.

- Coal market conditions have the greatest influence on coal removal. If market conditions change such that demand for coal decreases, it may take considerably longer to mine and reclaim an area.
- Equipment failure can affect the efficiency of mining and reclamation.
- The number of coal seams proposed for mining and the mining technique (e.g., augering, stripping) has a substantial affect on timely mining and reclamation.

Stream reconstruction will commence at the first suitable construction/ planting season after approval of the preferred alternative. Timing of reconstruction will obviously be weather-dependent, but reconstruction will occur as soon as possible following mining.

## **MITIGATION AND RESTORATION TECHNIQUES**

The proposed surface mining activity will impact functions, including stream length, aquatic life habitat, stormwater attenuation, and wildlife habitat. Impacted values include flood reduction, aesthetic and recreational. The streams affected by the activity have small watersheds (<0.1 square miles individually) and provide minimal functionality. The proposed project will impact approximately 2,008 linear feet of stream and no acres of wetland. Oxford Mining is proposing to reconstruct these features on site. Reclamation is expected to replace stream length, aquatic life and wildlife habitat, and stormwater attenuation functions. The natural channels will replace flood reduction values. The mitigation site will continue to be under private ownership and will, therefore, provide the same aesthetic and recreational values.

The proposed mitigation area is the mine site. The surface mining activities on the Gibson area allows for the reconstruction of streams on the project site during the reclamation phase. Streams will be relocated while coal resources are recovered and reconstructed in their approximate original locations when the areas are reclaimed. Therefore, stream aquatic resources will be replaced on-site. No off-site mitigation is proposed. Because the entire site will be regraded and vegetated, it is practicable to replace stream length at a 1:1 ratio. Because the post-mining land use will be grazingland, the likelihood of successfully reestablishing the appropriate stream length is good. Protection of riparian upland buffers will compensate for temporal impacts and contribute to the likelihood of success. As indicated in the Hydrologic Inventory (submitted in the mining application), onsite streams have acceptable water quality. Diversion ditches will be constructed and maintained to assure that all runoff from the permit area will be directed to the sediment ponds to reduce sedimentation within the watershed.

Mitigation protocols to minimize and avoid deleterious effects on the Wills Creek Watershed will be implemented. These processes will involve erosion and sediment controls for stormwater management, revegetation of riparian habitat, reconstruction of streams, and use of original materials in restoring riparian zones. Temporary vegetation will be installed for the post-mining use of grazing land.

Stream restoration and design will follow the concepts and principles of “A Natural Channel Design Procedure for Steep and Moderately Steep Streams” issued by ODNR-DMRM.

Approximate dimensions of original pools, riffles, and runs will be determined and utilized, as well as bank structures (e.g. overhangs, boulders), wood debris (e.g., root wads, tree stumps), and live vegetation. Vegetation (e.g., grasses and forbs) and other materials (e.g., mulch, hay) will be used to stabilize banks, allowing trees time to grow. Planted and existing trees will eventually constitute the forested riparian strip present along streams, and provide long-term bank stabilization function. Forested riparian strips will also serve as habitat for wildlife and provide a buffer between streams and the surrounding environment. These buffers can slow and prevent potential runoff into streams.

Standing timber resources will be utilized when economically feasible. All water will flow through sediment traps prior to discharge to any unaffected surface water. Topsoil will be stockpiled, labeled, and protected from erosion. Soils are stockpiled for redistribution over spoil.

## **SUMMARY**

By using the best available technology and management practices and implementing mitigation techniques, only minimal individual and cumulative adverse impacts on the environment are expected from the proposed Gibson Mine. Such procedures can act to effectively and efficiently extract coal resources, while minimizing impacts to the watershed. Implementing sediment controls will assist in preventing harmful effects on the Wills Creek watershed, such as acid mine drainage and sediment runoff, and restore pre-mining conditions. These management practices implemented by Oxford Mining Company and efforts to reclaim abandon mine lands put forth by ODNR, Division of Mineral Resources Management and local watershed groups will help to clean-up, restore, and maintain the natural functions and health of the watershed.

# MEASURES TO AVOID & MINIMIZE IMPACTS TO SURFACE WATERS ON THE PROPOSED GIBSON AREA MINE SITE, GUERNSEY COUNTY AND NOBLE COUNTY, OHIO

## INTRODUCTION

Oxford Mining Company intends to conduct surface mining activities on a 132 acre site in Millwood Township, Guernsey County, Ohio and Beaver Township, Noble County, Ohio to extract the No. 8 coal seam. The originally proposed mining activity would have impacted a much greater area, and that area would have included impacts to wetlands delineated in 2011.

In an effort to protect surface waters to the greatest extent practicable, Oxford Mining Company designed their permit limit and mining procedures for the proposed Gibson site to avoid much of these water resources. This document provides a discussion of how the proposed project has been designed and constructed to avoid and minimize adverse effects to waters of the United States to the maximum extent practicable at the site. A preferred, avoidance, and minimization alternatives were evaluated to develop the least environmentally damaging alternative.

### I. DEMONSTRATION THAT THERE IS NOT A PRACTICABLE ALTERNATIVE OUTSIDE WATERS OF THE U.S.

An avoidance alternative was very carefully examined to determine if any mining could occur on the proposed site without impacting water quality. A plan under this alternative would be to extract only the coal reserves located outside of stream buffer zones and other waters of the U.S. As this is typical mining in Appalachia, coal underlies a portion of the streams in the mining area. This does not give the operator much opportunity to avoid waters. Either affect the streams or leave the coal in the ground. It was determined that avoiding the streams and wetlands would also result in the applicant not being able to mine the majority of the permit area. Due to the small size of the coal removal area associated with an avoidance alternative, it was determined that no cost-effective mining could occur on the project site without impacting water quality. Therefore, the avoidance alternative is not practicable and should be considered a no-action alternative.

#### **Description of Construction or Placement of Fill:**

Under the avoidance alternative, no fill would be placed in onsite surface waters. To accomplish this, some areas would have to be avoided entirely while others would require alternate mining methods, crossings, or surface water controls. Streams would be protected from runoff by diversion ditches that direct runoff to constructed sediment ponds. To maintain a negative drainage gradient, the sediment ponds would be constructed near existing streams. This alternative requires that several face openings be constructed to avoid mining through streams. Water resources occur proximal to proposed mining areas, spoil would have to be transported much greater distances for storage. In addition, adequate upland area would be lacking to store all of the spoil overlying coal resources creating an inability to continue mining in that area because the cut has become "dirt-bound" (i.e., no

where to place spoil). All of this would substantially increase the cost associated with mining and would make this alternative not feasible or practicable. If required to implement this alternative, no action would be taken.

#### **Technical Feasibility:**

The avoidance alternative is not technically feasible because economical recovery of coal resources on the proposed site is impossible without affecting surface water quality. As described above, waters lie in proximity to remaining coal resources in areas necessary for economical spoil storage. Transporting overburden to alternate upland sites is expensive and technical. Fuel consumption would substantially increase from longer haul distances and steeper slopes. Longer haul distances would also decrease the rate at which coal could be recovered with the same amount or type of equipment. As upland areas reached their maximum allowable spoil slopes, no more overburden could be moved in those areas. This would result in otherwise economically obtainable coal reserves being left behind.

#### **Social and Economic Benefits:**

The determination of practicability considered social and economic benefits and impacts. No social or economic benefits would be realized under this alternative. This alternative would have no benefit to tourism or recreational activities. Under avoidance or no-action alternative, 148,892 tons of coal would be lost. The loss in coal value under this alternative is therefore approximately \$4,764,544. The loss of coal under this alternative will result in the projected total tax loss of \$171,226.

#### **Environmental Benefits:**

Within the permit site, substantial vegetation and substrate disturbance typical of surface mining will occur. However, this disturbance will be temporary as an extensive, phased post-mining reclamation and restoration plan has been developed that will be instituted over the life of the mine as portions of the mine are closed. The reclamation plan has been developed with all due consideration for the local physical, environmental, and climatological conditions.

Temporary impacts are expected to occur within the study watersheds if the proposed action is approved, as land disturbance will occur on the permit site. These impacts will result from the potential removal of forest habitat and disturbance of streams. An extensive mining reclamation plan and stream mitigation plan have been developed to mitigate for these impacts. Buffers will be replanted on the permit site. Long-term watershed impacts will be limited to forest conversion to agricultural use, which will eventually return to forest habitat. This is typical of surface mining operations within the study watersheds as this type of mining requires removing large amounts of vegetation and overburden to harvest coal seams.

No effect on endangered or threatened species is expected.

## **II. AVOIDANCE AND MINIMIZATION OF IMPACTS TO WATERS TO THE U.S.**

Upon completion and verification of the determination of waters of the U.S., the proposed Gibson permit limits were studied for possible modifications to avoid waters. It was apparent this could not be accomplished without significant coal reserve loss. Minimization alternatives, including avoidance of stream and wetland areas that would appear to have the least impact on the proposed mining operation, were examined in detail. Several areas were considered for avoidance. Avoidance of all stream segments examined resulted in substantial losses of economically recoverable coal resources. These alternatives additionally impacted the economic recovery of coal reserves adjacent to water resource areas. Included in the considerations of economical recovery were the offsets created by those reserves that have very low cover ratios. These reserves typically, as they do on the proposed site, occur in the hollows (i.e., stream valleys). By avoiding streams on portions of this site, adjacent reserves with higher cover are no longer economically recoverable.

The evaluated minimization alternative is to avoid the Stream 10 complex on the west end of the site. However, avoidance of these areas would leave significant profitable coal reserves left to be mined, reducing coal recovery by approximately 55,638 tons. This alternative would have substantial economic impacts to the mining operation by leaving this economically obtainable coal left unmined. Information that demonstrates the social and economic impacts of this alternative, and why preservation of this aquatic resource is not a reasonable decision in light of those impacts, is provided in the Clean Water Act 404 Alternatives Analysis. Several minimization alternatives to extract the No. 8 coal seams were investigated. No minimization alternative would be technically feasible or economically practicable to commence mining of the site.

Portions of the affected waters within the proposed permit limits will be completely mined out as the coal seam lies beneath. The areas avoided under this minimization alternative would not be filled as a result of this mining activity. As described in the Clean Water Act 404 Alternatives Analysis, the proposed impact minimization alternative creates spoil storage space problems and results in a reduction in coal recovery. This reduction in coal recovery severely impacts the economic viability of the project, decreases energy production from Ohio coal, results in a loss of local tax revenue, and threatens jobs. Environmental benefits under this alternative include the creation of wildlife habitat reclamation of existing habitat impacted by previous disturbance.

Mitigation proposed for the preferred alternative was designed to compensate for the loss of waters on the project site by reconstructing streams. A replacement of or an overall gain of aquatic resource function is expected.

## **III. AVOIDANCE OF HIGH QUALITY WATER**

The Ohio Administrative Code (3745-1-05(9)) defines five categories of high quality waters. "General high quality waters" include wetlands that are categorized as Category 2 or 3.

Wetland A, the only wetland on site, is categorized as a Category 2 wetland, and has been entirely avoided.

#### **IV. CONCLUSIONS**

No alternate sites were considered because the selected site provides economical recovery of coal and because there is no reason to believe that an alternate site would result in decreased impacts to water quality. The proposed site also has the benefit of being located in an area of Guemsey and Noble County with a relatively low population density.

The applicant has avoided and minimized impacts to waters of the U.S. to the extent practicable as significant coal reserves underlie the site. This project proposes the use of sediment control structures to prevent the contribution of solids to streams located downstream of the project. During construction, the temporary sediment control structures may include, but not be limited to, temporary silt basins, ditches, straw/hay bale fencing, and cloth filter fences. Measures proposed to be taken to control drainage around, over and through the mining operation would include the construction of appropriately designed sediment ditches, diversion ditches, culverts, flumes, and drains. Timely construction and maintenance of sediment control structures combined with concurrent reclamation and revegetation of disturbed areas will also minimize any downstream sediment impacts. Monitoring of all outlets where water is discharged from the permit area would take place according to the Section 402 permit issued for this project. It is unlikely that the project would result in any adverse effects on human use characteristics such as municipal and private water supplies, recreational and commercial fisheries, water related recreation, aesthetics, local, state, or national parks. Additionally, no human health effects are anticipated as a result of the proposed project.

# APPENDIX A

USACE Jurisdictional Stream Impact Summary Table

Applicant: Oxford Mining Company, LLC

Project Name: Gibson

COE #: LRH-2010-1028

Date: 2/25/13

Stream ID	Flow Regime	Total Stream Length On-site	Preferred Impacts			Minimal Degradation Impacts (only if individual 401 required)		
			Stream Length		Describe proposed types of Impacts Haul Road (HR), Mine Through (MT), Pond Construction (PC), Sediment Transport (ST), Spoil Placement (SP), other	Stream Length		Describe proposed types of Impacts Haul Road (HR), Mine Through (MT), Pond Construction (PC), Sediment Transport (ST), Spoil Placement (SP), other
			Impacted	Avoided		Impacted	Avoided	
3	I	712	399	313	MT	399	313	MT
3C	I	386	306	80	MT	306	80	MT
3D	E	155	155	0	MT	155	0	MT
7	I	266	241	25	MT	241	25	MT
10	E	139	139	0	MT	0	139	--
10	I	307	210	97	MT	0	307	--
10A	I	253	189	64	MT	0	253	--
10B	E	236	236	0	MT	0	236	--
10C	E	382	133	249	MT	0	382	--
	Totals	2,836	2,008	828		1,101	1,735	



<b>Comparison of Stream Impacts</b>			
Flow Regime	Preferred Alternative	Minimization Alternative	No Impact Alternative
	On-site l.f./ Impacted l.f.	On-site l.f./ Impacted l.f.	On-site l.f./ Impacted l.f.
Perennial	0 / 0	0 / 0	0 / 0
Intermittent	1,924 / 1,345	1,924 / 946	1,924 / 0
Ephemeral	912 / 663	912 / 155	912 / 0
Total	2,836 / 2,008	2,836 / 1,101	2,836 / 0

<b>Comparison of Wetland Impacts</b>			
Wetland Category	Preferred Alternative	Minimization Alternative	No Impact Alternative
	On-site ac./ Impacted ac.	On-site ac./ Impacted ac.	On-site ac./ Impacted ac.
Category 1	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00
Category 2	0.29 / 0.00	0.29 / 0.00	0.29 / 0.00
Category 3	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00
Total Impacts	0.29 / 0.00	0.29 / 0.00	0.29 / 0.00

<b>Estimated Coal Tonnage / Value By Alternative</b>			
Metric	Preferred Alternative	Minimization Alternative	No Impact Alternative
Coal Tonnage	278,400 tons	222,762 tons	129,508 tons
Coal Value (\$30/ton)	\$8,352,000	\$6,682,860	\$3,885,240

# APPENDIX B



DEPARTMENT OF THE ARMY  
HUNTINGTON DISTRICT, CORPS OF ENGINEERS  
502 EIGHTH STREET  
HUNTINGTON, WEST VIRGINIA 25701-2070

July 11, 2011

Operations and Readiness Division  
Regulatory Branch  
LRH-2010-1028

Mr. Michael Wellman  
153 North Broadway  
New Philadelphia, Ohio 44663

Dear Mr. Wellman:

This letter is in response to the Wetland and Stream Delineation Report for Oxford Mining Company's proposed Gibson Surface Mine Area. The project area consists of an approximately 324 acre site. An on-site field investigation was conducted on April 07, 2011. Representatives from the United States Army Corps of Engineers (USACE), Ohio Environmental Protection Agency (OEPA), Ohio Department of Natural Resources (ODNR) and Bair, Goodie and Associates were present for the on-site field investigation. Waters identified on-site flow into Leatherwood Creek, an indirect tributary to the Muskingum River, a Section 10 Navigable Water. The proposed Gibson Surface Mine Area is located in Sections 1 and 7, Millwood Township, Guernsey County and Sections 6 and 12, Beaver Township, Noble County, Ohio. N 39.9541, W 81.2524.

The USACE authority to regulate waters of the U.S. is based, in part, on the definitions and limits of jurisdiction contained in 33 CFR 328 and 33 CFR 329. Section 404 of the Clean Water Act (CWA) requires that a Department of the Army (DA) permit be obtained prior to the discharge of dredged or fill material into waters of the U.S., including wetlands. Section 10 of the Rivers and Harbors Act of 1899 requires that a DA permit be obtained for any work in, on, over or under a navigable water. In addition, our December 2, 2008 headquarters guidance titled "Revised Guidance on Clean Water Act Jurisdiction Following the U.S. Supreme Court Decision in *Rapanos v. United States* and *Carabell v. United States*" must be followed for the USACE to provide final verification of CWA jurisdiction.

You have requested a preliminary jurisdictional determination (PJD) for the proposed permit area. The waters listed below are potential waters of the United States:

Stream:

Stream	Flow Regime	Length in Project Area
Leatherwood Creek	RPW	6085
1	RPW	637
2	RPW	97
2	NRPW	229
2A	NRPW	1121
2A1	RPW	81
2A2	RPW	34
2A3	NRPW	72
2B	NRPW	392
3	RPW	2525
3A	RPW	1739
3B	RPW	487
3C	RPW	800
3D	NRPW	282
3E	RPW	128
4	RPW	546
4A	NRPW	148
5	RPW	531
5A	NRPW	95
6	RPW	403
7	RPW	1197
8	RPW	832
9	RPW	709
10	RPW	1284
10	NRPW	139
10A	RPW	395
10B	NRPW	236
10C	NRPW	382
11	RPW	235
12	RPW	287
13	NRPW	575

Total stream length on-site: 22,703

Wetland:

Wetland	Acreage
WD-A	0.57

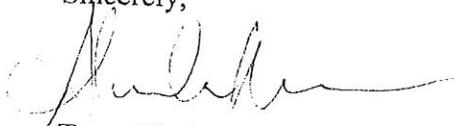
Total wetland acreage on-site: 0.57

Based on a review of the information provided, one wetland totaling 0.57 acre and thirty-one streams totaling 22,703 linear feet was identified within the proposed permit area. This office has determined that these waters **may** be jurisdictional waters of the United States in accordance with the Regulatory Guidance Letter for Jurisdictional Determinations issued by the U.S. Army Corps of Engineers on June 26, 2008 (RGL No. 08-02). As indicated in the guidance, this PJD is non-binding and cannot be appealed (33 C.F.R. 331.2) and only provides a written indication that waters of the U.S, including wetlands, may be present on-site.

You have declined to exercise the option to obtain an approved JD in this instance and at this time. However, for the purposes of the determination of impacts, compensatory mitigation, and other resource protection measures for activities that require authorization from this office, the stream and water impoundment identified above will be evaluated as if they are jurisdictional waters of the United States. Additional details concerning these waters may be found in the attached *Preliminary Jurisdictional Determination Form*.

If you have any questions concerning the above, please contact Mr. Shawn Blohm of our Dillon Lake Field Office at (740) 454-2225 ext. 6 or at [shawn.u.blohm@usace.army.mil](mailto:shawn.u.blohm@usace.army.mil).

Sincerely,

  
FJR

Terry Clarke  
Acting Chief, Energy Resources Section

Enclosures:

Copy Furnished (Via E-mail):

OEPA- Ric Queen [Ric.Queen@epa.state.oh.us](mailto:Ric.Queen@epa.state.oh.us)

ODNR- Brent Heavilin [Brent.Heavilin@epa.state.oh.us](mailto:Brent.Heavilin@epa.state.oh.us)

USFWS- Jeromy Applegate [Jeromy\\_applegate@fws.gov](mailto:Jeromy_applegate@fws.gov)

Bair, Goodie and Associates, Inc. [Michael.Wellman@bairgoodie.com](mailto:Michael.Wellman@bairgoodie.com)

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. Report Completion Date for Preliminary Jurisdictional Determination (JD): July 08, 2011

B. Name and Address of Person Requesting Preliminary JD: Michael Wellman, 153 North Broadway, New Philadelphia, Ohio 44663

C. District Office, File Name, and Number: Huntington District, Gibson Site, LRH-2010-1028

D. Project Locations and Background Information:

State: Ohio

County: Guernsey and Noble

City: Millwood Township and Beaver Township

Longitude: -81.25240

Latitude: 39.95413

Nearest Waterbody: Leatherwood Creek

Identify (estimate) amount of waters in review area:

Wetland:

Wetland	Acreage
WD-A	0.57

Total acreage of wetland at this site: 0.57 acres

Non-Wetland

Stream	Flow Regime	Length in Project Area
Leatherwood Creek	RPW	6085
1	RPW	637
2	RPW	97
2	NRPW	229
2A	NRPW	1121
2A1	RPW	81
2A2	RPW	34
2A3	NRPW	72
2B	NRPW	392
3	RPW	2525
3A	RPW	1739
3B	RPW	487
3C	RPW	800

Stream	Flow Regime	Length in Project Area
3D	NRPW	282
3E	RPW	128
4	RPW	546
4A	NRPW	148
5	RPW	531
5A	NRPW	95
6	RPW	403
7	RPW	1197
8	RPW	832
9	RPW	709
10	RPW	1284
10	NRPW	139
10A	RPW	395
10B	NRPW	236
10C	NRPW	382
11	RPW	235
12	RPW	287
13	NRPW	575

Total length of stream at this site: 22,703 l.f.

**Impoundment:**

Total acreage of impoundment at this site: Zero (0) acre

Name of any water-body on site that has been identified as Section 10 waters: None  
Tidal waters: None

**E. Review Performed for Site Evaluation (Check All That Apply)**

Office (Desk) Determination Date:

X Field Determination Date(s): 04/07/2011

**SUPPORTING DATA:** Date reviewed for preliminary JD (check all that apply – checked items should be included in case file, where checked and requested, appropriately reference sources below):

X Maps, plans, plots, or plat submitted by or on behalf of the applicant/consultant:

Data sheets prepared by Corps:

Corps Navigable Water Study:

U.S. Geological Survey Hydrologic Atlas:

USGS NHD Data

USGS 8 & 12 digit HUC Maps

U.S. Geological Survey Map(s). Cite scale and quad name:

**USDA Natural Resources Conservation Service Soil Survey - Citation:**  
 **Other information (please specify):** Oxford Mining Company, LLC., Gibson Wetland and Stream Delineation Report, Prepared by Bair, Goodie and Associates, Inc. December 2010. Revised April 22, 2010.

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

Shawn U. Bide 7/11/2011  
Signature and date of  
Regulatory Project Manager  
(Required)

Miss Webb 7/16/11  
Signature & Date of Person  
Requesting Preliminary JD  
(Required unless obtaining  
Signature is impracticable)