



# Cambria County Conservation & Recreation Authority

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December 19, 2005

Delores J. Columbus  
Executive Director

Ms. Sheila Hartless  
Office of Surface Mining  
3 Parkway Center  
Pittsburgh, Pa 15220

Dear Ms. Hartless:

Re: Webster Mine Discharge Ecosystem Restoration  
Final Report


Enclosed is the final report for the above referenced project. Included in this report is the Project Narrative, Financial Report, and the In Kind Recapitulation.

The objectives as stated in the CA 170118 are considered to be complete. All payments from OSM for all allowable costs have been made. OSM is now released from all liabilities and obligations under or arising from Cooperative Agreement CA 170118.

If you have any questions, please contact us immediately.

Happy Holidays!

Sincerely yours,

  
Delores J. Columbus  
Executive Director

Enclosure

cc: Dr. Robert Eppley  
Blacklick Creek Watershed Association

**WEBSTER MINE DISCHARGE ECOSYSTEM RESTORATION  
NANTY-GLO BOROUGH, CAMBRIA COUNTY**

**FINAL REPORT**

**GENERAL INFORMATION**

The Blacklick Creek Watershed consists of 420 square miles of drainage area with headwaters in Cambria and Indiana County in southwestern Pennsylvania. A major subwatershed with significant flow and pollution contribution to the total watershed is that of the South Branch Blacklick Creek. The entire watershed is severely degraded by acid mine drainage (AMD) from abandoned deep mine workings and coal refuse piles.

The abandoned Webster Mine Discharge located in Nanty Glo Borough is one (1) of four (4) significant sources of AMD in the South Branch Blacklick Creek Watershed. AMD has degraded the South Branch Blacklick Creek to the point that ecosystem functions in the stream have been severely impaired. Aquatic life has essentially been eliminated.

The Webster Mine Discharge was flowing unregulated and untreated into Pergrin Run a tributary to the South Branch of Blacklick Creek. The discharge did enter Pergrin Run approximately 1,300 feet upstream from its confluence with the South Branch of Blacklick Creek. After entering the South Branch the water flows approximately 14 miles until it enters the mainstem of Blacklick Creek. Blacklick Creek flows approximately 33 miles before entering Conemaugh River Lake. The poor quality of the Webster Mine Discharge has contributed to the degradation of a total of approximately 50 miles of waterways from Pergrin Run to the Conemaugh River Lake.

The Webster Mine Discharge has been monitored at various times over the past two decades. The most recent flow data and pollutant identification and qualification was completed in 1997-1998. The data indicated an average flow of 446 gallons per minute (gpm). The maximum and minimum flows were recorded as 1,266 gpm and 74 gpm.

After data gathering and evaluation were completed it was determined that a passive treatment system would achieve the required results to accomplish ecosystem restoration.

**PROJECT**

The US Army Corps of Engineers Webster Mine Discharge Ecosystem Restoration Project was initiated by public interest and authorized by Congress in public law. The project was accomplished through a partnership between the Cambria County Conservation and Recreation Authority (CCCRA) and the Corps' Pittsburgh District. The CCCRA provided 25% of the approximately \$3,200,000 construction cost and worked with the Corps to plan and design this project from a conceptual study of acid mine drainage problems in the watershed through the many details and challenges of construction.

In addition to the CCCRA and the Corps, other organizations including the Department of Environmental Protection's, Bureau of Abandoned Mine Reclamation and Grant Center, the U. S. Office of Surface Mining, the Western Pennsylvania Watershed Protection Program, the Blacklick Creek Watershed Association, the Blacklick Valley Industrial Development Authority,

the Department of Transportation, the Borough of Nanty Glo and the property owners contributed time, money and expertise to make the project a reality.

The Webster Acid Mine Discharge was discharging directly into Pergrin Run. The discharge is now piped from the resealed mine opening, piped under State Route 271 and Pergrin into a passive treatment system constructed on 19 acres between Pergrin Run and the South Branch Blacklick Creek. The system designed to treat 450 gpm consists of two (2) vertical flow ponds and a wetland. The discharge flows into the ponds, which increase alkalinity by limestone dissolution and bacterial sulfate reduction. The water flows from the ponds into an aerobic wetland where the metals are oxidized and precipitated. The treated water is discharged into Pergrin Run, which flows into South Branch Blacklick Creek just downstream of the treatment system.

The construction of this passive treatment system accomplishes the objective, which is to treat the Webster Mine Discharge sufficiently, allowing the continued restoration of the ecosystem in the South Branch Blacklick Creek.

**WEBSTER MINE DISCHARGE ECOSYSTEM RESTORATION PROJECT**  
**Nanty Glo, Cambria County, Pennsylvania**

**Financial Report**

<b><u>TOTAL CONSTRUCTION COST</u></b>	<b>\$3,100,000</b>
<b><i>Total Local Sponsor Cash Match Requirement (25%)</i></b>	<b>\$ 640,000</b>

**Construction Sponsor Match Breakdown**

DEP/BAMR Growing Greener	\$ 600,000
DEP/BAMR Grant	201,253
Western Pennsylvania Watershed Protection Program	20,000
Pa. Department of Transportation (In-Kind, Pipe Sleeve)	20,000
<i>U.S. Department of Interior, OSM Clean Streams Initiative</i>	50,000

**Property Acquisition Cost Breakdown**

Smith Property Appraisal (CCCRA) Acquisition	\$ 72,500
LaMantia Dodge Market Value, Permanent Easement	300
Nanty Glo Borough, Consideration	800

**CCCRA Property Acquisition Funding In Place**

Blacklick Valley IDA (Local Fundraising Efforts)	\$ 8,000
DEP/BAMR, Remainder of Plans & Specs Phase Funding	12,000
<i>U.S. Department of Interior, OSM Clean Streams Initiative</i>	<u>52,500</u>

**TOTAL COMMITTED FUNDING, PROPERTY ACQ. \$ 72,500**

**WEBSTER MINE DISCHARGE ECOSYSTEM RESTORATION PROJECT**  
**Nanty Glo, Cambria County, Pennsylvania**

**In Kind Services Recapitulation**

1.	CCCRA Staff Time/Expenses	\$10,980
2.	Legal Fees For Project To Date	\$21,720
3.	DEP/BAMR Staff Time/Expenses	\$33,648
4.	Cambria County Conservation District Staff Time/Expenses	<u>\$ 1,162</u>
	<b>TOTAL IN KIND SERVICES FOR PROJECT</b>	<b>\$67,510</b>