General Project Information	DA 054				
Project Name and or No.:COLD	STREAM, Site A: and Site B: PA-054				
Location: Municipality and County:	Rush Township, Centre County				
Watershed: COLD STREAM					
USGS Quadrangle: SANDY RIDGE					
Latitude and Longitude:40.866110	999999997 -78.21500000000003				
Contact Information					
Contact Organization:	PADEP BAMR				
Contact Person:	PAM MILAVEC / P. J. SHAH				
Contact Address:	286 INDUSTRIAL PARK ROAD				
Contact radioss	EBENSBURG				
-	PA				
	15931				
Contact Telephone Number:	814-472-1800				
Contact Email:	pmilavec@state.pa.us / pshah@state.pa.us				
	ng to the and Maintenance				
Organization Currently Responsib	le For Project Operations, Monitoring and Maintenance				
Is this organization different from Co	ntact Organization? True and False				
Organization Name:	BAMR Cambria Office and Mashannon DMO				
Organization Contact Name:	P. J. Shah and Steve Starner				
Organization Contact Address:	286 INDUSTRIAL PARK ROAD, EBENSBURG, Pa 15931				
Organization Telephone Number:	814-472-1800				
Organization Email:	pshah@state.pa.us				
Organization Email.					

Site Information

Who owns the property the project is constructed upon?

Property owners for site A:

Frederick A. Barnhart, Rosalie A. Baldessaro & Betty Vail, Jerry L. & Betty Vail, Jesse D. and Anna M. Price, Samuel W. Scaife, Kenneth T. Barnhart Estate, Kenneth A. Reed, Linda E. Grub-Colvin

Property owners for site B:

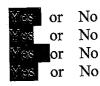
Jaro Development Company Inc.

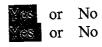
Driving Directions to the Project Site (from an easily identifiable reference point):

The site A: is located approximately 1.25 miles south of the town of Philipsburg near the village of Glass City on the eastern side of SR 350 near the intersection of T-600, and along the northern edge of T-600. Site B: is about ½ mile on the southern side of T-600 on the top of the hill.

Special instructions for entry to the site (gates, keys, notifications or permissions, etc.): Both sites have locked gates. These locks can be opened with standard master key # 356.

Is there a perpetual access agreement for monitoring and O&M?
Is the site readily accessible (by 2WD vehicle)?
Was project completed as part of an overall watershed restoration plan?
Is the plan available electronically?





Project Description (Describe the treatment system including each individual component):

The Cold Stream project is located approximately 1.25 miles south of the town of Phillipsburg near the village of Glass City on the eastern side of SR 350 near the intersection of T-600. The Cold Stream project consists of two separate passive treatment systems designated as Site A and Site B. Each system contains two vertical flow successive alkalinity producing (SAP) units in series.

SITE A

Site A is the larger of the two systems covering a total area of approximately 4 acres. The system is located at the intersection of SR 350 and T-600 just off the eastern edge of SR 350 and along the northern edge of T-600. Site A is surrounded entirely by a chain link fence with an entrance gate along the edge of T-600. This system treats a collapsed deep mine entry discharge, which is the largest source of mine drainage within the Glass City area, and related coal outcrop seeps. These discharges are located along a roadside ditch on the opposite side of T-600 from the system. The discharges are collected by the roadside ditch and directed to a central point where they are piped under T-600 to the treatment system. Site A consists of an initial Stabilization Pond followed by SAP 1, a Sedimentation Pond, an Aerobic Wetland, and SAP 2 as the final system unit. A small seep (approximately 1 to 3 gpm) that was too low in elevation to be directed into the beginning of the system is piped into the Aerobic Wetland prior to the SAP 2 final treatment unit. The final treated system effluent from Site A discharges directly into the Glass City UNT.

SITE B

Site B is located approximately ½ mile south of Site A along the side of a forested ridge above Cold Stream approximately 100 feet higher in elevation than Site A. Site B is accessed via a dirt haul road located directly across T-600 from the entrance to Site A. Site B covers an area of approximately 2.25 acres. This system treats a single collapsed deep mine entry discharge which is located on a steep hillside approximately 25 feet higher in elevation from the first unit of the system. The discharge is conveyed by a steep riprap ditch downslope to the system. A chain link safety fence runs along the top of the slope above the discharge. Site B consists of an initial Stabilization Pond, Aerobic Wetland 1, SAP 1, a Sedimentation Pond, Aerobic Wetland 2, SAP 2 and a Sedimentation Pond as the system final unit. The final treated system effluent from Site B discharges into the woods and down over the forested ridge slope towards Cold Stream which is approximately 500 feet away and 120 feet lower in elevation.

Pre-Construction Discha Is data available electronic In what format? Microsoft Indicate how flow was me	cally? t Excel _ pasured:	Acc	ess Data	base nents were	Other(sp	ed	Yes N/A	-	No
Indicate how how was hed Indicate laboratory that an were analyzed by state lab Could you provide this da Is a copy of the data attack. Files are in Harrisburg, ho	<u>in Harri</u> ta to the hed?	sburg, DEP?	<u>Pa.</u>		,		yes Yes	or or	No No
		;	Site A S	ystem Wat	ter Quali	ty Averages	S		
Pre-Construction	Flow gpm 48	<u>рН</u> 2.6	Fe Total mg/l 52.1	Fe Ferrous <u>mg/l</u>	Acidity mg/l 465.7	Alkalinity mg/l 0	Al mg/l 24.5	Mn mg/l 1.3	SO ₄ mg/l

E		Site	B System	m Water Q	uality Ave	erages			
Pre-Construction	Flow gpm 12	<u>рН</u> 2.6	Fe Total <u>mg/l</u> 49	Fe Ferrous <u>mg/l</u>		Alkalinity mg/l 0	Al mg/l 23.3	Mn mg/l 2.3	SO ₄ mg/l
Pre-Construction Recei Is data available electron In what format? Microso Indicate how flow was m Indicate laboratory that a	ically? It Excel heasured:	Ac	cess Dat	abase	Other(s		Yes	·	NO NA
Were any biological or f Could you provide this d Is a copy of the data atta	lata to the	ys com e DEP	npleted?				<u> </u>	or or or	No No No
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Water Insect 1-2005-table.doc (3:31-2005.doc	oc (45 KI	oc (35 l	KB) m	croinvertebra etric Summa	ite Cold Yacroinv	Stream ertebrate			
Treatment System Des Who or what firm comp person, if available):	oleted pro	oject de <u>MMARC</u> BAMR	esign? (E	Criteria nolude nar	me, addre	ess, phone,	email a	nd con	tact

Are digital photographs of the site before, during and/or after construction available? or No Was there a Specific Restoration or Treatment Goal for this treatment system? or No If yes, please describe the goal:

PROJECT GOALS:

Cold Stream Dam is a popular recreational facility located in the town of Philipsburg. The dam and its water supply source, Cold Stream, are both heavily used trout stocked fisheries. In the 1970's Scarlift Project 70 constructed a dike and channel system along the eastern flank of Cold Stream, as far as topography would allow, to intercept and divert contaminated drainage from abandoned mines for a length of almost two miles downstream and around Cold Stream Dam. This project improved water quality and allowed for the trout stocked fishery in Cold Stream and Cold Stream Dam. The headwaters of Cold Stream support reproducing brook trout populations. The first significant degradation of Cold Stream occurs at the confluence of an unnamed tributary (UNT) conveying AMD from the Glass City area. This tributary is on the opposite side of Cold Stream and approximately one mile upstream from the Project 70 channel which was unable to intercept this discharge. The Wood Duck Chapter of Trout Unlimited has initiated an effort to address the Glass City UNT and a few

other remaining sources of AMD that were beyond the scope of Scarlift Project 70. The Wood Duck Chapter submitted an application for assistance from BAMR's Set Aside Program which proposed an extension of the Scarlift Project 70 dike and channel system. For the same issues of topography and geology which limited the extent of the original project, BAMR decided against the proposal to extend the Scarlift Project 70 dike and channel system. BAMR instead agreed to address the Glass City discharges through the Cold Stream passive treatment project with the goal of improving water quality in the one mile section of Cold Stream beyond the extent of the Project 70 channel and for further improvement of water quality in the two stream miles and Cold Stream Dam below.

What is the Design Flow Rate? the Design Flow Rate?	removal
What is the Design Flow Rate: Other design criteria (retention time, acidity loading or removal rate, metals loading or	10,110
rate, alkalinity generation rate, etc.)	

See the pre-construction data.

Does the treatment system take all of the flow or is some of the flow bypassed?

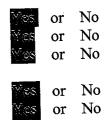
Some of the flow by-pass.

Specifications:

As-Bid Project Drawings and Technical Specifications
Is this information available electronically?
Could you provide the DEP a copy of the plan?
Is a copy attached?

As-Built Drawings

Is this information available electronically? Could you provide the DEP a copy of the plan? Is a copy attached?



No

Construction and Project Funding Information

What year was the project constructed? _____1998____

When (specific date) did project construction begin? Late 1997

When (specific date) was project construction completed? Final inspection was on 9/24/98 Who was the Construction Contractor? (Name, Address, Phone, email, contact person)

Kukurin Contracting, Inc., RD 2, Route 286, Export, PA 15632

When (specific date) did the treatment system go on-line? September 1998

Primary Funding Partners, and funding provided:

Primary Funding Partners, and	Tunding provided.	A
Source	True or false	Amount
Title IV, Appalachian Clean Streams	False	\$.00
Title IV, Apparachian Clean Streams	False	\$.00
PADEP Growing Greener	True	\$394,072.00
10% AMD Set Aside Funds	False	\$.00
EPA Section 319		\$.00
OSM Watershed Cooperative Assistance Program	False	\$.00
NRCS	False	
EPA Watershed Protection	False	\$.00
USCOE	False	\$.00
University	False	\$.00
Omvorsity		

Private/Foundation	False	\$.00	
ow or by whom was treatment system	construction funded or othe	r funding n	ot include	d in th
	College de College			
ible? Sourc	e		Amoun	t
Boure		\$.00	
		\$.00	
ost Construction Operation, Monito	ring and Maintenance			> T
s there a Sempling and Monitoring Plat	1?		X OX	or No
sampling of monitoring points are done	every two months. Flushin	g of VFPs		
Are done every month			N. Ac	om Mo
s the plan available electronically?				or No or No
s a copy of the plan attached?				3.7
s treatment system currently being sam	pled and monitored?		0.52	or No
fso by whom?				
A1-amoun DMO staff and P I Shah O	f BAMR Cambria Office	Com Aloia area	rtom?	
Approximately how many hours per year	ar are spent doing O,M&M	for this sys	stell!	
16 Man hours ner vear				
Where are samples being analyzed? (Name of the control of the cont	ame, Address, Phone, email	i, comaci p	CISOII)	
By Harrisburg Lab	TD 1 db a Commila In	formation	System (S	IS)
By Harnsburg Lab If DEP Lab is being used, what is the p	roject ID and the Sample II	liolination	Dystein (D.	,
monitoring point IDs?	I was it a sing ID is DA0850			
Project ID is COLD STREAM and SIS	monitoring in is rade of			
- i O Line and Mointononce	Dlan?		Yes	or N
Is there an Operation and Maintenance	1 iaii:			
We flush VFPs once a month			Yes	or N
Is the plan available electronically? Could you provide the DEP a copy of t	his information?		Yes	or
Is a copy of the information attached?			Yes	or
is a copy of the information attached:				
Comments on the treatment system:				•
	·	4 -1	. dl. a immea	wamar
With regular maintenance, the system	is working fine. Bio assessi	ment snows	s the mipro	VCITICI
In the stream				
	1 Manifesting Data	•		
Post- Construction Discharge Flow	and Monitoring Data		Yes	or N
Is the data available electronically?	Access Database Other	(specify)		
In what format? Microsoft Excel Yes Indicate how flow was measured: sys	Access Database Officer	and on sys	stem B wit	h buck
	telli A. with 50 degree wen	tare vary		
and stop watch	this information?		¥ 88	or 1
Could you provide the DEP a copy of	tins information.		W es	or 1
Is a copy of the information attached?	,			
Post-Construction Receiving Stream	n Flow and Monitoring Da	ata		_
- v 1 1 11alala alaatranically?				or
Is the data available electronically? In what format? Microsoft Excel	Access Database Othe	r(specify)		
In what format: wheresome executed.	100005 Datas as		·	
Indicate how flow was measured:				

Could you provide the DEP a copy of this information? Is a copy of the information attached? Were any biological or fish surveys that were completed on the receiving stream?	Yes or No	
Treatment System Maintenance and/or Rehabilitation Has rehabilitation work been performed at the site? True(yes) or false(no): False	Yes or No	-
If yes, please list the rehabilitation activity.		
 Constructing a weir to measure flow on system A Compost removal from VFP2 on system A Lowering 4 feet of dirt from VFP2 on system A Fixing erosin and sedimentation after two hurricanes Fixing pond liners on VFP1 on systemA Replaced 75% of all stop logs on both systems Planning to replace flow control box on VFP 1 on systemA Unfortunately, I do not have record of exact dates when we completed these actions for the work performed.	vities or actual	
please list the date of rehabilitation0		<u>-</u>
If yes, please list the rehabilitation cost. \$.00		
What routine or non-routine maintenance issues have arisen since system was p	ut online?	<u> </u>
How was maintenance work funded?		
What routine or non-routine maintenance is currently needed or anticipated in t May face the problem with new land owners. May have to replace all flow com-		
of corrosion.		
Other Comments		

Person(s) Completing this Form (Name, Address, Phone, email, Date Completed):

P. J. Shah, P.E., Permit Chief, BAMR Cambria Office, 286, Industrial Park Road,

Ebensburg, PA 15931
Email address: pshah@state.pa.us
Date completed this report: January 16, 2009

Is there any other person, company or organization that should be contacted for information about this treatment system or the information requested in this form? (Include Name, Address, Phone, email, etc):

Same as above contact.