

## PRIORITIES AND COST SUMMARY

Priorities for implementation of recommended abatement within the Blacklick Creek watershed were chosen on the basis of cost/lb./day of acid abatement and expected pollution load reduction. These priorities were not grouped according to sites, but were evaluated on an individual abatement location basis because of the vast differences in cost benefit from one location to another.

The following Table is a summary of the recommended abatement measures for the watershed with estimated total cost, listed from highest to lowest priority. The abatement which would eliminate the most pollution at the lowest cost is considered the first priority (coal waste utilization grouped as priority #1) followed by the lesser benefit recommendations.

These same recommendations for each location, grouped according to respective sites, are presented in the Pollution Site Analysis section of this report. Costs for abatement at individual locations within a site and total costs relative to abatement of the whole site are included in that section for purposes of comparison.

TABLE 2

PRIORITIES AND COST SUMMARY FOR ABATEMENT MEASURES WITHIN THE BLACKLICK CREEK WATERSHED

Priority	Abatement Location	Part of Site	Recommended Abatement	Maximum Pollution Reduction (lb./day)/Sub-basin	Cost of Abatement	Cost/lb./day	Percent Pollution of Site Abated	Percent Pollution Blacklick Creek Abated	Comments
1	Coal Waste Banks D34, D35 and D36	N	*	58,731/76	None	--	80.74	21.94	*Part of waste has already been utilized-complete utilization is encouraged
	D13 and D14	K	*	53,958/48B	None	--	100	20.16	*Part of waste has already been utilized-complete utilization is encouraged
	D3	I	*	13,223/60	None	--	68.53	4.94	*Part of waste has already been utilized-complete utilization is encouraged
	D24	F	Utilization	8,840/34	None	--	52.93	3.30	
	D1 and D2	J	*	8,196/64B	None	--	100	3.06	*Part of waste has already been utilized-complete utilization is encouraged
	D4	I	*	5,498/60 573/76	None	--	31.47	2.27	*Part of waste has already been utilized-complete utilization is encouraged
	Mine Waste in Strip Mine #115	R	Utilization	4,464/75	None	--	?	Less than 1.67	
	D5, D6 and D7	H	*	2,400/45 114/46 1,937/75	None	--	33.15	1.66	*Part of waste has already been utilized-complete utilization is encouraged
	Mine Waste in Strip Mine #55	E	Utilization	2,885/32	None	--	42.60	1.08	
	D8	D	*	1,902/27	None	--	63.06	0.71	*Part of waste has already been utilized-complete utilization is encouraged

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1	D10	C	Utilization	1,558/75	None	--	15.36	0.58	
	D9	D	Utilization	1,114/27	None	--	36.94	0.42	
	D38, D39 and D40	Q	Utilization	526/76	None	--	100	0.20	
	D45	O	Utilization	484/54	None	--	60.96	0.18	
	D12	A	Utilization	404/75	None	--	15.06	0.15	
	Mine waste in strip mine #45	C	Utilization	381/25	None	--	3.76	0.14	
	D51, D52 and D53	P	Utilization	151/59	None	--	100	0.06	
	D28	G	Utilization	43/35	None	--	3.87	0.02	
2	Strip Mine #67	F	Clearing and grubbing of unben-eficial ground cover, revegetation, diversion ditch construction	1,236/75	\$ 59,300	\$48	7.40	0.46	Abatement geared at infiltration control to reduce discharge at pollution source #4858
3	Unnamed deep mine monitored by Station #32C	V	4 grouted double bulkhead hydraulic mine seals with grout curtain	1,631/21	\$120,000	\$74	79.99	0.61	Maximum head of 30 feet above seals proposed
4	Strip Mine #44	C	Clearing and grubbing, back-filling and grading, revegetation and diversion ditch construction	472/26	\$ 38,800	\$82	4.65	0.18	Abatement geared at infiltration control to reduce discharge at pollution source #4890. Strip mine located on State Game Land.

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5	Strip Mine #47-47A	C	Clearing and grubbing, backfilling and grading, revegetation and diversion ditch construction	1,080/26	\$139,000	\$129	10.65	0.40	Abatement geared at infiltration control to reduce discharge at pollution source #4890. Strip mine located on State Game Lands.
6	Strip Mine #45	C	Clearing and grubbing, clay seal along highwall, backfilling and grading, revegetation and diversion ditch construction	480/26	\$ 61,700	\$129	4.73	0.18	Abatement geared at infiltration control to reduce discharge at pollution source #4890. Strip mine located on State Game Land.
7	Strip Mine #7	A	Clearing and grubbing, backfilling and grading, revegetation	352/75	\$ 53,400	\$152	13.12	0.13	Abatement geared at infiltration control to reduce deep mine discharge at pollution source #22.
8	Luciusboro Mine openings at pollution source #4922	X	2 grouted double bulkhead hydraulic mine seals with grout curtain	338/21	\$ 60,000	\$178	50	0.13	Maximum head of 30 feet above seals proposed
9	Strip Mine #27	C	Clearing and grubbing, backfilling and grading, revegetation and diversion ditch construction.	1,008/26	\$208,700	\$207	9.94	0.38	Abatement geared at infiltration control to reduce discharge at pollution source #4890. Strip mine located on State Game Land.
10	Strip Mine #82	H	Clearing and grubbing, expose coal seam, clay seal along highwall, backfilling and grading, revegetation, diversion ditch construction	315/43 121/44	\$126,200	\$289	3.25	0.16	Abatement geared at dual control of infiltration into deep mine and seepage associated with spoil.

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11	Strip Mine #102	M	Clearing and grubbing, expose coal seam, clay seal along highwall, backfilling and grading, revegetation, diversion ditch construction	232/48	\$ 73,400	\$316	1.53	0.09	Abatement geared at infiltration control to reduce deep mine discharge at pollution source #80A. Strip mine located on State Game Land.
12	Strip Mine #8	A	Clearing and grubbing, backfilling and grading, revegetation	125/75	\$ 50,400	\$403	4.66	0.05	Abatement geared at infiltration control to reduce discharge at pollution source #22
13	Strip Mine #81	H	Clearing and grubbing, expose coal seam, clay seal along highwall, backfilling and grading, revegetation	120/43 120/44	\$ 98,100	\$409	1.79	0.09	Abatement geared at dual control of infiltration into deep mine and seepage associated with spoil
14	Strip Mine #108	L	Clearing and grubbing, backfilling and grading, revegetation, diversion ditch construction	161/60	\$ 70,600	\$439	2.99	0.06	Abatement geared at infiltration control to reduce discharges at pollution source #119A
15	Strip Mine #79	T	Clearing and grubbing, backfilling and grading, revegetation and diversion ditch construction	346/44	\$167,000	\$483	75.22	0.13	
16	Strip Mine #97	Y	Clearing and grubbing, backfilling and grading, revegetation and diversion ditch construction	292/50	\$142,000	\$486	100	0.11	

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17	Western section of strip mine #29	B	Clearing and grubbing, expose coal seam, clay seal along highwall, back-filling and grading, revegetation and diversion ditch construction	168/19 12/20 391/75	\$318,700	\$558	29.25	0.21	Abatement geared at infiltration control to reduce discharge of Jewell No. 3 mine (some benefit to site S also)
18	Strip Mine #98	L	Clearing and grubbing, expose coal seam, clay seal along highwall, back-filling and grading, revegetation, and diversion ditch construction	489/52 17/55 123/60 54/76	\$416,700	\$610	12.70	0.26	Abatement geared at dual control of infiltration into deep mine and seepage associated with spoil
19	Strip Mine #101	M	Clearing and grubbing, expose coal seam, clay seal along highwall, back-filling and grading, revegetation, and diversion ditch construction	125/48	\$ 84,100	\$673	0.82	0.05	Abatement geared at infiltration control to reduce deep mine discharge at pollution source #80A. Strip mine located on State Game Land.
20	Strip Mine #99	U	Clearing and grubbing, back-filling and grading, revegetation and diversion ditch construction	57/76	\$ 41,400	\$726	4.83	0.02	Abatement geared at infiltration control to reduce deep mine discharge at pollution source #4542
21	Strip Mine #117	F	Clearing and grubbing, expose coal seam, clay seal along highwall, back-filling and grading, revegetation and diversion ditch construction	157/75	\$142,700	\$909	0.94	0.06	Abatement geared at infiltration control to reduce discharges at pollution sources #4857 and #4858

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22	Strip Mine #118	M	Clearing and grubbing, expose coal seam, clay seal along highwall, backfilling and grading, revegetation and diversion ditch construction	39/48	\$ 48,400	\$1,241	0.26	0.01	Abatement geared at infiltration control to reduce deep mine discharge at pollution source #80A. Strip mine located on State Game Land.
23	Strip Mine #103	M	Clearing and grubbing, expose coal seam, clay seal along highwall, backfilling and grading, revegetation and diversion ditch construction	15/48 some benefit to sub-basin 53	\$ 19,700	\$1,313	0.10	0.01	Abatement geared at infiltration control to reduce deep mine discharge at pollution source #80A. Strip mine located on State Game Land.
24	East end of Strip Mine #20 (drift mined)	V	Expose coal seam, clay seal along highwall, backfilling and grading, planting and diversion ditch construction	36/21	\$ 55,000	\$1,528	1.77	0.01	Abatement geared at infiltration control to reduce deep mine discharge near pollution source #32C
25	Strip Mine #111	A	Clearing and grubbing, expose coal seam, clay seal along highwall, backfilling and grading, revegetation, and diversion ditch construction	23/75	\$ 39,700	\$1,726	0.86	0.01	Abatement geared at infiltration control to reduce discharge at pollution source #22
26	Strip Mines #29, #31, #32, #33, and #34	S	Clearing and grubbing, backfilling and grading, revegetation and diversion ditch construction	210/22	\$1,179,200	\$5,615	100	0.08	