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TABLE I
QUICK START NO. 1
ESTIMATED EARTHMOVING QUANTITIES
HILLMAN STATE PARK

<u>Subwatershed</u>	<u>Area Restored Acres</u>	<u>Estimated Quantities - Cubic Yards</u>		
		<u>Cut</u>	<u>Fill</u>	<u>Balance</u>
I-1	--	--	--	--
I-6	42	170,000	170,000	--
I-12	42	96,500	106,000	(9,500)
I-15	15	--	2,700	(2,700)
<u>I-28</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
Sub-Total	99	266,500	278,700	(12,200)
I-2	12	27,500	28,800	(1,300)
I-3	6	8,900	8,800	100
I-4, I-5	37	184,000	150,000	34,000
I-7	47	133,000	128,000	5,000
I-8, I-9, I-10	16	--	13,500	(13,500)
I-11	14	17,500	39,200	(21,700)
<u>I-27</u>	<u>10</u>	<u>2,700</u>	<u>2,700</u>	<u>--</u>
Sub-Total	142	373,600	371,000	2,600
I-13	48	52,800	86,500	(33,700)
I-14	37	81,400	42,900	38,500
I-20	12	2,400	3,500	(1,100)
<u>I-29</u>	<u>--</u>	<u>No Work</u>	<u>--</u>	<u>--</u>
Sub-Total	97	136,600	132,900	3,700
I-17	20	--	36,800	(36,800)
<u>I-16, I-18</u>	<u>85</u>	<u>280,000</u>	<u>270,000</u>	<u>10,000</u>
Sub-Total	105	280,000	306,800	(26,800)
I-21	--	No Work	--	--
<u>I-23</u>	<u>--</u>	<u>No Work</u>	<u>--</u>	<u>--</u>
Sub-Total	--	--	--	--
I-22	40	73,000	74,000	(1,000)
<u>I-24</u>	<u>7</u>	<u>10,000</u>	<u>8,500</u>	<u>1,500</u>
Sub-Total	47	83,000	82,500	500
<u>I-25</u>	<u>--</u>	<u>No Work</u>	<u>--</u>	<u>--</u>
Total	490	1,139,700	1,171,900	(32,200)

TABLE 2
QUICK START NO. 2
ESTIMATED EARTHMOVING QUANTITIES
HILLMAN STATE PARK

<u>Subwatershed</u>	<u>Area Restored Acres</u>	<u>Estimated Quantities - Cubic Yards</u>		
		<u>Cut</u>	<u>Fill</u>	<u>Balance</u>
2-1	--	No Work		--
2-2	--	No Work		--
2-3	--	No Work		--
2-4	10	1,000	1,000	--
2-5	--	No Work		--
2-6	--	No Work		--
2-7, 2-8	16	33,000	30,000	3,000
<u>2-9</u>	<u>5</u>	<u>1,000</u>	<u>1,000</u>	<u>--</u>
Total	31	35,000	32,000	3,000

TABLE 3
QUICK START NO. 3
ESTIMATED EARTHMOVING QUANTITIES
HILLMAN STATE PARK

<u>Subwatershed</u>	<u>Area Restored Acres</u>	<u>Estimated Quantities - Cubic Yards</u>		
		<u>Cut</u>	<u>Fill</u>	<u>Balance</u>
3-1, 3-4	24	11,500	66,000	(54,500)
3-2	3	1,000	1,000	---
3-3	3	500	500	---
3-5	4	2,000	2,000	---
3-6	--	No Work		---
3-7	10	---	15,000	(15,000)
3-8	18	13,300	16,500	(3,200)
3-9	3	500	500	---
3-10	11	11,000	20,000	(9,000)
3-11	46	220,000	91,000	129,000
3-12	28	21,800	19,200	2,600
3-13	--	No Work		---
3-14	11	2,000	7,500	(5,500)
3-15	11	---	55,000	(55,000)
3-16	7	1,000	1,000	---
<u>3-17, 3-18</u>	<u>--</u>	<u>No Work</u>		<u>---</u>
Total	179	284,600	295,200	(10,600)

TABLE 4
QUICK START NO. 4
ESTIMATED EARTHMOVING QUANTITIES
HILLMAN STATE PARK

<u>Subwatershed</u>	<u>Area Restored Acres</u>	<u>Estimated Quantities - Cubic Yards</u>		
		<u>Cut</u>	<u>Fill</u>	<u>Balance</u>
4-1	---	No Work		---
4-2	---	No Work		---
4-3	---	No Work		---
4-5, 4-6	60	60,000	60,000	---
4-7	---	No Work		---
4-8	---	No Work		---
4-9	16	63,000	62,000	1,000
4-10	---	No Work		---
4-11, 4-4	25	40,000	46,000	(6,000)
4-12	---	No Work		---
4-13, 4-14	---	No Work		---
4-15	---	No Work		---
4-16	---	No Work		---
4-17	---	No Work		---
4-18	---	No Work		---
4-19	---	No Work		---
4-20	---	No Work		---
4-21	---	No Work		---
<u>Total</u>	<u>101</u>	<u>163,000</u>	<u>168,000</u>	<u>(5,000)</u>

TABLE 5
SUMMARY
ESTIMATED EARTHMOVING QUANTITIES
HILLMAN STATE PARK

<u>Quick Start Designation</u>	<u>Area Restored Acres</u>	<u>Estimated Quantities - Cubic Yards</u>		
		<u>Cut</u>	<u>Fill</u>	<u>Balance</u>
1	490	1,139,700	1,171,900	(32,200)
2	31	35,000	32,000	3,000
3	179	284,600	295,200	(10,600)
<u>4</u>	<u>101</u>	<u>163,000</u>	<u>168,000</u>	<u>(5,000)</u>
Total	801	1,622,300	1,667,100	(44,800)

TABLE 6

SUMMARY
ACID LOAD DATA
HILLMAN STATE PARK

<u>By Streams</u>	<u>Total Acid Load, Lbs/Day</u>		<u>Net Acid Load, Lbs/Day</u>	
	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Maximum</u>
Brush Run	6,400	18,600	4,395	15,980
Dillioe Run	2,350	6,800	2,070	6,270
Hogs Run	1,070	4,700	804	4,700
Others	<u>780</u>	<u>1,300</u>	<u>631</u>	<u>1,230</u>
Total	10,600	31,400	7,900	28,180

By
Quick Start
Areas

Quick Start 1	5,660	13,900	4,460	12,400
Quick Start 2	520	1,100	0	400
Quick Start 3	1,500 ✓	6,000	1,260	5,200
Quick Start 4	<u>1,440</u>	<u>5,900</u>	<u>1,050</u>	<u>5,700</u>
Total	9,120	26,900	6,770	23,700

- NOTES:
- 1) Net acid load is based on acidity less alkalinity.
 - 2) Average represents average obtained over total survey period.
 - 3) Maximum represents maximum recorded during the survey period.

TABLE 7
SUMMARY OF PRINCIPAL AMD CONTRIBUTING SUBWATERSHEDS
TO IDENTIFIED SOURCES
HILLMAN STATE PARK

<u>Source</u>	<u>Principal Contributing Subwatersheds</u>
4	1-3, 1-4, Properties Outside Park
4A	1-3, 1-4, 1-5, 1-27, 3-1
5	3-7, 3-8, 3-10, 3-11, 3-12
6	3-11, 3-12, 3-15, 3-13, 3-17
9	1-22, 1-24
11	4-2, 4-3
12	1-5, 1-7, 1-8, 1-9, 1-10, 1-11, 3-1
12A	1-5, 1-7, 1-8, 1-9, 1-10, 1-11, 1-16, 1-18, 3-1
13	3-11, 3-14, 3-15
14	3-15, 3-16, 3-17
15	1-18, 1-21
16	1-17, 1-18, 1-21, 1-23
17	1-6, 1-12, 1-15
17A	1-1, 1-6, 1-12, 1-13, 1-14, 1-18, 1-19, 1-20
19A	1-13
23	2-7, 2-8, 2-9
25X	4-14 Properties Outside Park
28	Properties Outside Park
29	4-4, 4-5, 4-6, 4-11
30	1-23
31	2-1, 2-2, 2-3, 1-14
34	4-1, 4-2, 4-3
38	2-1, 2-2, 2-3, 2-4, 207, 2-8
43	4-4, 4-5, 4-6, 4-11, 4-12, 4-13

NOTES:

1. Subwatershed locations are identified on the Composite Map of Appendix C.
2. Subwatersheds 1-21, 1-23, 2-1, 2-2, 2-3, 3-13, 3-17, 4-1, 4-2, 4-3, 4-12, 4-13 and 4-14 are listed above as contributors but are not included within recommended work areas on the basis of priority considerations.
3. The Composite Map of Appendix C indicates work to be performed in certain subwatersheds (1-2, 3-2, 3-3, 3-4, 3-5, 4-9 and 4-10) which are not listed above as principal contributors. Work is recommended within these subwatersheds because they are minor contributors, the completion of adjacent, high priority work increases the feasibility of doing the work, and/or the work is required to obtain the desired drainage patterns for specific work areas.

TABLE 8
ESTIMATED ACID LOAD REDUCTIONS
THROUGH ABATEMENT
HILLMAN STATE PARK

Quick Start	Estimated Current Loads, Lbs/Day		Net Acid	Lbs/Day	Estimated Average Load Reductions		Estimated Average Residual Loads		
	<u>Total Acid</u> Avg.	<u>Max.</u>			<u>Avg.</u>	<u>Max.</u>	<u>Lbs/Day</u>	<u>% Of Total</u>	<u>Lbs/Day</u>
1	5660	13900	4460	12400	3590	63	2070	37	20
2	520	1100	0	400	150	29	370	71	--
3	1500	6000	1260	5200	840	56	660	44	34
<u>4</u>	<u>1440</u>	<u>5900</u>	<u>1050</u>	<u>5700</u>	<u>550</u>	<u>38</u>	<u>890</u>	<u>62</u>	<u>48</u>
Total	9120	26900	6770	23700	5130	56	3990	44	26

TABLE 9
ESTIMATED COSTS FOR ABATEMENT
HILLMAN STATE PARK

<u>Quick Start</u>	<u>Estimated Earthmoving Quantities - Cubic Yards</u>	<u>Estimated Abatement Cost</u>
1	1,171,900	\$ 772,000
2	35,000	38,000
3	295,200	200,000
<u>4</u>	<u>168,000</u>	<u>134,000</u>
Total	1,670,100	\$1,144,000

TABLE 10
ABATEMENT PRIORITIES
HILLMAN STATE PARK

<u>Quick Start</u>	<u>Acres Restored</u>	<u>Estimated Lbs/Day (Avg)</u>	<u>Acid Load % (Avg)</u>	<u>Load Reductions % (Net)</u>	<u>Earthmoving Cubic Yards</u>	<u>Estimated Cost</u>	<u>Ratios</u>		<u>Priority</u>
							<u>Cost/Day</u>	<u>Cost/Abatement</u>	
1	490	3590	63	80	1,171,900	\$ 772,000	\$1580	\$215	1
2	31	150	30	--	35,000	38,000	1230	254	--
3	179	840	55	66	295,200	200,000	1120	238	2
<u>4</u>	<u>101</u>	<u>550</u>	<u>38</u>	<u>52</u>	<u>168,000</u>	<u>134,000</u>	<u>1330</u>	<u>244</u>	<u>3</u>
Total	801	5130	56	76	1,670,100	\$1,144,000	\$1430	\$223	--

TABLE II
 QUICK START NO. 1
 PRIORITIES FOR SPECIFIC WORK AREAS
 HILLMAN STATE PARK

Work Area	Subwatershed	Area Restored Acres	Existing Vegetation	Earthwork Cubic Yards	Estimated Abatement Lbs/Day	Estimated Abatement Cost	Ratio Cost/Abatement	Indicated Priority
1	1-6	42	Poor	170,000	---	---	---	---
	1-12	42	Poor	106,000	---	---	---	---
	1-15	15	Fair	2,700	---	---	---	---
	Sub-Total	99	Poor	278,700	960	\$183,000	\$191	3
2	1-2	12	Poor	27,500	---	---	---	---
	1-3	6	Fair	8,900	---	---	---	---
	1-4, 1-5	37	Fair	184,000	---	---	---	---
	1-7	47	Poor	133,000	---	---	---	---
	1-8, 1-9, 1-10	16	Fair	---	---	---	---	---
	1-11	14	Fair	17,500	---	---	---	---
	1-27	10	Fair	2,700	---	---	---	---
	Sub-Total	142	Fair	373,600	650	\$244,000	\$375	4
3	1-13	48	Poor	52,800	---	---	---	---
	1-14	37	Poor	81,400	---	---	---	---
	1-20	12	Fair	2,400	---	---	---	---
	Sub-Total	97	Poor	136,600	650	\$ 90,000	\$138	1
4	1-17	20	Fair	36,800	---	---	---	---
	1-16, 1-18	85	Poor	270,000	---	---	---	---
	Sub-Total	105	Poor	306,800	1,200	\$201,000	\$167	2
5	1-22	40	Fair	73,000	---	---	---	---
	1-24	7	Poor	10,000	---	---	---	---
	Sub-Total	47	Fair	83,000	150	\$ 54,000	\$360	5
	Total	490	---	1,178,700	3,590	\$772,000	\$215	---

TABLE 12

LISTING OF
PROPERTY OWNERS
ADJACENT TO
HILLMAN STATE PARK

<u>Quick Start</u>	<u>Deed Index</u>	<u>Owner</u>
1	34-23-13	Hough, Anna, et al 138 Jefferson Avenue Washington, Pennsylvania
1	34-23-3	Van Gorder, Andrew, et ux 3229 Apache Road Pittsburgh, Pennsylvania 15234
1	34-23-15	Williams, Joseph, et ux 8067 Marmion Drive Pittsburgh, Pennsylvania 15237
1	34-24-3 34-24-1 34-24-2 34-25-1 34-25-1-1	Witzberger, Edward A. 718 Hope Hollow Road Carnegie, Pennsylvania 15106
2	34-23-16	Miller, Irvin Rd. #1 Box 70B Burgettstown, Pennsylvania 15021
2	34-24-17	Miller, Irvin, et ux Rd. #1 Box 70B Burgettstown, Pennsylvania 15021
2	34-34-75	McCutcheon, Francis, et ux Box 69 Rd. #1 Burgettstown, Pennsylvania 15106
2	34-34-74	Winkler, Viola Rd. #1 Burgettstown, Pennsylvania 15106

Property Owners, Table 12 Con't.

<u>Quick Start</u>	<u>Deed Index</u>	<u>Owner</u>
3	34-27-2	Mandell, Richard, et ux 1158 Woodbine Street Pittsburgh, Pennsylvania 15201
3	34-27-9	Tarr, William A. et ux Rd. #1 Box 153 Clinton, Pennsylvania
4	34-33-13	Lane, James G. Box 18 Rd. #1 Burgettstown, Pennsylvania 15021
4	34-29-8 34-30-6	Maglich, Joseph, et ux Findlay Township Imperial, Pennsylvania
4	34-29-6	Secco, Peter J. Box 85 Jeffre, Pennsylvania
4	34-33-10	Stroud, Fred C. Rd. #3 Burgettstown, Pennsylvania