TABLES

TABLE 1

WATER QUALITY AND POLLUTION LOAD
STATE GAME LANDS NO. 117

SAMPLING POINT	FLOW (gpm)	pH	ACIDITY[1]		IRON		SULFATES	
			mg/1	lb/day	mg/1	lb/day	mg/1	lb/day
December 1970								
6	525	6.9	(38)	(240)	0.5	3.2	1400	8820
12	30	2.8	750	270	60	21.6	2800	1008
26	1300	3.6	180	2808	6.0	93.6	1600	24,960
35	130	5.0	86	134.2	0.3	0.5	600	936
June 1971								
3	30	7.7	(46)	(16.2)	0.2	0.1	1600	576
11	5	4.2	84	5.0	1.0	0.1	2000	120
16	200	3.6	176	422	3.5	8.4	2000	4800
25	15	4.1	44	7.9	0.8	0.14	950	170
26	40	4.9	94	45.1	0.25	0.12	800	384
27	60	3.2	240	173	4.0	2.9	220	158
28	90	4.6	56	60.5	4.5	4.9	950	1026
36	100	2.4	1100	1320	72.5	87.0	4200	5040
May 1972								
3	1140	6.8	10	136.7	0.3	4.37	1280	17,500
16	720	3.9	140	1209	6.5	55.92	2020	17,400
26	440	7.0	10	52.8	0.5	2.53	1760	9285
27	820	4.5	110	1082	9.3	91.25	1860	18,290
36	120	2.9	710	1022	17.9	25.78	2720	3917

[1] Quantities in parentheses are alkalinity.

TABLE 2

AVERAGE pH AND POLLUTION LOAD[1]
STATE GAME LANDS NO. 117

SAMPLING POINT	pH	ACIDITY (lb/day)	ALKALINITY (lb/day)	IRON (lb/day)	SULFATE (lb/day)
1	7.10	26	302	1.6	2746
2[2]	4.55	43	0	0.12	351
3[2]	7.10	5.5	223	0.60	2392
4	7.00	45	515	1.2	6170
5	2.75	532	0	44	1376
6[2]	4.30	306	0	21	3283
7[2]	6.05	62	49	2.4	4231
8[2]	4.30	308	0	5.2	5184
9[2]	2.90	1050	0	38	2232
10	4.00	1167	0	63	11,268
11[2]	3.60	1291	0	36	9648
12[2]	6.80	9.3	58	0.34	1268
13	6.95	4.4	218	0.28	2010
14	7.35	6.5	1270	2.2	6283
15	7.45	0	342	1.0	2105
A[3]	2.80	622	0	31	2508
B	4.80	82	17	0.82	1032
C	6.90	27	16	0.64	272

(1) pH average based on field measurements for 9/73, 10/73 and 1/74. Pollution load averages based on measurements for 9/73, 10/73, 12/73 and 1/74.

(2) Pollution load calculations based on discharge measurement by weir. For other sampling points discharge was estimated.

(3) Sampling points designated by letters were sampled only once and discharge was estimated.

TABLE 2A

CORRELATION OF SAMPLING STATION NUMBERS
STATE GAME LANDS NO. 117

STATION NO. 1973-1974	STATION NO. DECEMBER 1970	STATION NO. 1971-1972	RECEIVING STREAM
1	4	6	Raccoon Creek
2	3A	40	Raccoon Creek
3	7	2	Raccoon Creek
4	6	3	Raccoon Creek
5	12	22	Raccoon Creek
6	-	27	Raccoon Creek
7	-	23	Burgetts Fork
8	19	18	Burgetts Fork
9	-	24	Burgetts Fork
10	21	17	Burgetts Fork
11	26	16	Burgetts Fork
12	-	13	Harmon Creek
13	-	-	Harmon Creek
14	-	-	Harmon Creek
15	35	26	Raccoon Creek
A	-	36	Burgetts Fork
B	-	-	Burgetts Fork
C	-	25	Burgetts Fork
-	2	38	Raccoon Creek
-	42	1	Raccoon Creek
-	41	39	Raccoon Creek
-	10	30,31	Raccoon Creek
-	13	23	Raccoon Creek
-	33	20	Burgetts Fork
-	20	35	Burgetts Fork
-	15	9	Burgetts Fork
-	16	7	Burgetts Fork
-	18	19	Burgetts Fork

TABLE 3

REVISED RECOMMENDATION
AREAS TO BE RECLAIMED
PRELIMINARY COST ESTIMATES
STATE GAME LANDS NO. 117

DRAINAGE BASIN	AREAS NEEDING RECLAMATION	ACREAGE TO BE RECLAIMED	TOTAL ESTIMATED RECLAMATION COST	PERCENT TOTAL ACIDITY(1)	WATER QUALITY SAMPLING POINT	COST PER POUND PER DAY ACIDITY	RECOMMENDED RECLAMATION PRIORITY
C	3,4	42.0	$63,000-$126,000(2)	2.6	7	$1,016-$2,032	8
E	9,10,11,15	64.8	$97,200-$194,400(2)	12.7	8	$316-$631	3
F	16,17	51.9	$77,850-$155,700(2)	25.6	A	$125-$250	2
G	5,6,7	162.6	$243,900-$487,800(2)	12.6	6	$797-$1,594	5
G	5,6	(74.4)	($111,600-$223,200)(2)	-(3)	5	$210-$420	4
I	19	31.2	$31,200-$62,400(4)	43.2	9	$30-$59	1
J	21	16.8	$25,200-$50,400(2)	3.4	B	$307-$615	6
L	18	70.0	$70,000-$140,000(4)	-(5)	-	-	7
TOTALS		439.3	$608,350-$1,216,700	-	-	-	-

(1) Approximate percentages of total acidity contributed to Burgetts Fork or Raccoon Creek from State Game Lands No. 117. Based on acidity values from drainage basins C, E, F, G, I and J.

(2) Based on reclamation costs of $1,500-$3,000 per acre.

(3) The contribution to the total acidity cannot be assessed here because of the potential acid influx downstream from these areas and the natural amelioration which occurs.

(4) Based on reclamation costs of $1,000-$2,000 per acre.

(5) No analyses or discharge measurements were made for this region. pH measurements suggest relatively low acidity and discharge was observed to be small.