WILDLIFE HABITAT
MANAGEMENT PLAN

for the

HENRY M. JACKSON HYDROELECTRIC PROJECT
FEDERAL ENERGY REGULATORY COMMISSION
PROJECT NUMBER 2157

APPENDIX F
HEP DATA TABLES
AND
HSI MODELS

SNOHOMISH COUNTY PUBLIC UTILITY DISTRICT NO. 1

May 1988

HEP REPORT

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Black-tailed Deer

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: BLK-TAILED DEER AAHU's: 1302.75

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.71	1339.06
1	1886.00	0.71	1339.06
15	1886.00	0.70	1320.20
20	1886.00	0.71	1339.06
25	1886.00	0.71	1339.06
40	1886.00	0.70	1320.20
45	1886.00	0.70	1320.20
50	1886.00	0.70	1320.20
55	1886.00	0.68	1282.48
60	1881.00	0.67	1260.27
65	1886.00	0.68	1282.48
70	1886.00	0.68	1282.48
75	1886.00	0.67	1263.62
90	1886.00	0.67	1263.62
95	1886.00	0.68	1282.48

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: BLK-TAILED DEER AAHU's: 248.82

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.71	1339.06
1	1268.00	0.72	912.96
15	1268.00	0.71	900.28
20	0.00	0.00	0.00
25	211.00	0.55	116.05
50	211.00	0.55	116.05
55	211.00	0.55	116.05
60	211.00	0.55	116.05
65	211.00	0.55	116.05
70	211.00	0.55	116.05
75	211.00	0.55	116.05
80	211.00	0.55	116.05
85	177.00	0.65	115.05
90	211.00	0.55	116.05
95	211.00	0.55	116.05

Black-tailed Deer A

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: BLK-TAILED DEER A AAHU's: 186.71

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	258.00	0.70	180.60
1	265.00	0.70	185.50
15	289.00	0.70	202.30
20	296.00	0.70	207.20
25	304.00	0.70	212.80
40	315.00	0.70	220.50
45	316.00	0.70	221.20
50	316.00	0.70	221.20
55	66.00	0.70	46.20
60	53.00	0.70	37.10
65	279.00	0.70	195.30
70	281.00	0.70	196.70
75	277.00	0.70	193.90
90	278.00	0.70	194.60
95	281.00	0.70	196.70

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: BLK-TAILED DEER A AAHU's: 12.52

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	261.00	0.70	182.70
1	97.00	0.70	67.90
15	97.00	0.70	67.90
20	0.00	0.00	0.00
25	0.00	0.00	0.00
50	0.00	0.00	0.00
55	0.00	0.00	0.00
60	0.00	0.00	0.00
65	0.00	0.00	0.00
70	0.00	0.00	0.00
75	0.00	0.00	0.00
80	0.00	0.00	0.00
85	0.00	0.00	0.00
90	0.00	0.00	0.00
95	0.00	0.00	0.00

Ruffed Grouse

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: RUFFED GROUSE AAHU's: 859.40

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.44	829.84
1	1886.00	0.44	829.84
15	1886.00	0.45	848.70
20	1886.00	0.45	848.70
25	1886.00	0.45	848.70
40	1886.00	0.46	867.56
45	1886.00	0.46	867.56
50	1886.00	0.46	867.56
55	1886.00	0.47	886.42
60	1881.00	0.47	884.07
65	1886.00	0.46	867.56
70	1886.00	0.46	867.56
75	1886.00	0.45	848.70
90	1886.00	0.46	867.56
95	1886.00	0.46	867.56

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: RUFFED GROUSE AAHU's: 155.97

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.44	829.84
1	1268.00	0.43	545.24
15	1268.00	0.43	545.24
20	0.00	0.00	0.00
25	211.00	0.37	78.07
50	211.00	0.37	78.07
55	211.00	0.37	78.07
60	211.00	0.37	78.07
65	211.00	0.37	78.07
70	211.00	0.37	78.07
75	211.00	0.37	78.07
80	211.00	0.37	78.07
85	177.00	0.43	76.11
90	211.00	0.37	78.07
95	211.00	0.37	78.07

Ruffed Grouse A

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: RUFFED GROUSE A AAHU's: 54.02

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	88.00	0.70	61.60
1	81.00	0.70	56.70
15	55.00	0.70	38.50
20	48.00	0.70	33.60
25	40.00	0.70	28.00
40	29.00	0.70	20.30
45	28.00	0.70	19.60
50	28.00	0.70	19.60
55	278.00	0.70	194.60
60	286.00	0.70	200.20
65	65.00	0.70	45.50
70	63.00	0.70	44.10
75	67.00	0.70	46.90
90	66.00	0.70	46.20
95	63.00	0.70	44.10

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: RUFFED GROUSE A AAHU's: 1.15

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	85.00	0.70	59.50
1	7.00	0.70	4.90
15	7.00	0.70	4.90
20	0.00	0.00	0.00
25	0.00	0.00	0.00
50	0.00	0.00	0.00
55	0.00	0.00	0.00
60	0.00	0.00	0.00
65	0.00	0.00	0.00
70	0.00	0.00	0.00
75	0.00	0.00	0.00
80	0.00	0.00	0.00
85	0.00	0.00	0.00
90	0.00	0.00	0.00
95	0.00	0.00	0.00

Black-capped Chickadee

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: BLK CAPPED CHICKADEE AAHU's: 1053.03

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.65	1225.90
1	1886.00	0.63	1188.18
15	1886.00	0.60	1131.60
20	1886.00	0.58	1093.88
25	1886.00	0.57	1075.02
40	1886.00	0.53	999.58
45	1886.00	0.52	980.72
50	1886.00	0.52	980.72
55	1886.00	0.56	1056.16
60	1881.00	0.57	1072.17
65	1886.00	0.54	1018.44
70	1886.00	0.54	1018.44
75	1886.00	0.54	1018.44
90	1886.00	0.54	1018.44
95	1886.00	0.54	1018.44

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: BLK CAPPED CHICKADEE AAHU's: 192.03

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.65	1225.90
1	1268.00	0.63	798.84
15	1268.00	0.60	760.80
20	0.00	0.00	0.00
25	211.00	0.33	69.63
50	211.00	0.33	69.63
55	211.00	0.33	69.63
60	211.00	0.33	69.63
65	211.00	0.33	69.63
70	211.00	0.33	69.63
75	211.00	0.33	69.63
80	211.00	0.33	69.63
85	177.00	0.45	79.65
90	211.00	0.33	69.63
95	211.00	0.33	69.63

Pileated Woodpecker

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: PILEATED WOODPECKER AAHU's: 802.34

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.67	1263.62
1	1886.00	0.64	1207.04
15	1886.00	0.53	999.58
20	1886.00	0.50	943.00
25	1886.00	0.46	867.56
40	1886.00	0.36	678.96
45	1886.00	0.35	660.10
50	1886.00	0.35	660.10
55	1886.00	0.41	773.26
60	1881.00	0.42	790.02
65	1886.00	0.37	697.82
70	1886.00	0.37	697.82
75	1886.00	0.37	697.82
90	1886.00	0.36	678.96
95	1886.00	0.36	678.96

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: PILEATED WOODPECKER AAHU's: 156.41

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1886.00	0.67	1263.62
1	1268.00	0.66	836.88
15	1268.00	0.56	710.08
20	0.00	0.00	0.00
25	87.00	0.28	24.36
50	87.00	0.28	24.36
55	87.00	0.28	24.36
60	87.00	0.28	24.36
65	87.00	0.28	24.36
70	87.00	0.28	24.36
75	87.00	0.28	24.36
80	87.00	0.28	24.36
85	87.00	0.40	34.80
90	87.00	0.28	24.36
95	87.00	0.28	24.36

Pine Marten

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: PINE MARTEN AAHU's: 792.29

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1603.00	0.68	1090.04
1	1596.00	0.65	1037.40
15	1570.00	0.58	910.60
20	1563.00	0.55	859.65
25	1555.00	0.52	808.60
40	1544.00	0.44	679.36
45	1543.00	0.43	663.49
50	1543.00	0.43	663.49
55	1793.00	0.48	860.64
60	1801.00	0.49	882.49
65	1580.00	0.46	726.80
70	1578.00	0.46	725.88
75	1582.00	0.47	743.54
90	1581.00	0.46	727.26
95	1578.00	0.46	725.88

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: PINE MARTEN AAHU's: 151.73

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1600.00	0.68	1088.00
1	1122.00	0.66	740.52
15	1122.00	0.59	661.98
20	0.00	0.00	0.00
25	87.00	0.40	34.80
50	87.00	0.40	34.80
55	87.00	0.40	34.80
60	87.00	0.40	34.80
65	87.00	0.40	34.80
70	87.00	0.40	34.80
75	87.00	0.40	34.80
80	87.00	0.40	34.80
85	87.00	0.60	52.20
90	87.00	0.40	34.80
95	87.00	0.40	34.80

Pine Marten A

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: PINE MARTEN A AAHU's: 220.76

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1008.00	0.78	786.24
1	913.00	0.78	712.14
15	628.00	0.78	489.84
20	530.00	0.78	413.40
25	435.00	0.78	339.30
40	152.00	0.78	118.56
45	120.00	0.78	93.60
50	115.00	0.78	89.70
55	110.00	0.78	85.80
60	105.00	0.78	81.90
65	100.00	0.78	78.00
70	95.00	0.78	74.10
75	90.00	0.78	70.20
90	75.00	0.78	58.50
95	70.00	0.78	54.60

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: PINE MARTEN A AAHU's: 83.88

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1008.00	0.78	786.24
1	708.00	0.78	552.24
15	508.00	0.78	396.24
20	0.00	0.00	0.00
25	0.00	0.00	0.00
50	0.00	0.00	0.00
55	0.00	0.00	0.00
60	0.00	0.00	0.00
65	0.00	0.00	0.00
70	0.00	0.00	0.00
75	0.00	0.00	0.00
80	0.00	0.00	0.00
85	0.00	0.00	0.00
90	0.00	0.00	0.00
95	0.00	0.00	0.00

Pine Marten A

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: PINE MARTEN A AAHU's: 220.76

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1008.00	0.78	786.24
1	913.00	0.78	712.14
15	628.00	0.78	489.84
20	530.00	0.78	413.40
25	435.00	0.78	339.30
40	152.00	0.78	118.56
45	120.00	0.78	93.60
50	115.00	0.78	89.70
55	110.00	0.78	85.80
60	105.00	0.78	81.90
65	100.00	0.78	78.00
70	95.00	0.78	74.10
75	90.00	0.78	70.20
90	75.00	0.78	58.50
95	70.00	0.78	54.60

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: PINE MARTEN A AAHU's: 83.88

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1008.00	0.78	786.24
1	708.00	0.78	552.24
15	508.00	0.78	396.24
20	0.00	0.00	0.00
25	0.00	0.00	0.00
50	0.00	0.00	0.00
55	0.00	0.00	0.00
60	0.00	0.00	0.00
65	0.00	0.00	0.00
70	0.00	0.00	0.00
75	0.00	0.00	0.00
80	0.00	0.00	0.00
85	0.00	0.00	0.00
90	0.00	0.00	0.00
95	0.00	0.00	0.00

Douglas Squirrel

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: DOUGLAS SQUIRREL AAHU's: 650.48

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1603.00	0.67	1074.01
1	1596.00	0.64	1021.44
15	1570.00	0.53	832.10
20	1563.00	0.47	734.61
25	1555.00	0.42	653.10
40	1544.00	0.31	478.64
45	1543.00	0.30	462.90
50	1543.00	0.29	447.47
55	1793.00	0.36	645.48
60	1801.00	0.39	702.39
65	1580.00	0.37	584.60
70	1578.00	0.37	583.86
75	1582.00	0.39	616.98
90	1581.00	0.38	600.78
95	1578.00	0.36	568.08

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: DOUGLAS SQUIRREL AAHU's: 138.42

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	1600.00	0.67	1072.00
1	1122.00	0.65	729.30
15	1122.00	0.55	617.10
20	0.00	0.00	0.00
25	87.00	0.25	21.75
50	87.00	0.25	21.75
55	87.00	0.25	21.75
60	87.00	0.25	21.75
65	87.00	0.25	21.75
70	87.00	0.25	21.75
75	87.00	0.25	21.75
80	87.00	0.25	21.75
85	87.00	0.80	69.60
90	87.00	0.25	21.75
95	87.00	0.25	21.75

Common Merganser

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: COMMON MERGANSER AAHU's: 263.27

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	566.00	0.48	271.68
1	566.00	0.47	266.02
15	566.00	0.45	254.70
20	566.00	0.44	249.04
25	566.00	0.43	243.38
40	566.00	0.42	237.72
45	566.00	0.42	237.72
50	566.00	0.42	237.72
55	566.00	0.64	362.24
60	561.00	0.65	364.65
65	566.00	0.45	254.70
70	566.00	0.45	254.70
75	566.00	0.46	260.36
90	566.00	0.46	260.36
95	566.00	0.45	254.70

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: COMMON MERGANSER AAHU's: 679.00

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	566.00	0.47	266.02
1	966.00	0.39	376.74
15	966.00	0.39	376.74
20	1870.00	0.40	748.00
25	1870.00	0.40	748.00
50	1870.00	0.40	748.00
55	1870.00	0.40	748.00
60	1870.00	0.40	748.00
65	1870.00	0.40	748.00
70	1870.00	0.40	748.00
75	1870.00	0.40	748.00
80	1870.00	0.40	748.00
85	1870.00	0.40	748.00
90	1870.00	0.40	748.00
95	1870.00	0.40	748.00

Mallard

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: MALLARD AAHU's: 210.61

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	566.00	0.36	203.76
1	566.00	0.37	209.42
15	566.00	0.39	220.74
20	566.00	0.39	220.74
25	566.00	0.40	226.40
40	566.00	0.41	232.06
45	566.00	0.41	232.06
50	566.00	0.41	232.06
55	566.00	0.21	118.86
60	561.00	0.21	117.81
65	566.00	0.38	215.08
70	566.00	0.38	215.08
75	566.00	0.39	220.74
90	566.00	0.38	215.08
95	566.00	0.38	215.08

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: MALLARD AAHU's: 268.58

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	566.00	0.36	203.76
1	966.00	0.22	212.52
15	966.00	0.22	212.52
20	1870.00	0.15	280.50
25	1870.00	0.15	280.50
50	1870.00	0.15	280.50
55	1870.00	0.15	280.50
60	1870.00	0.15	280.50
65	1870.00	0.15	280.50
70	1870.00	0.15	280.50
75	1870.00	0.15	280.50
80	1870.00	0.15	280.50
85	1870.00	0.15	280.50
90	1870.00	0.15	280.50
95	1870.00	0.15	280.50

Beaver

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: BEAVER AAHU's: 319.60

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	566.00	0.56	316.96
1	566.00	0.56	316.96
15	566.00	0.58	328.28
20	566.00	0.58	328.28
25	566.00	0.58	328.28
40	566.00	0.59	333.94
45	566.00	0.59	333.94
50	566.00	0.59	333.94
55	566.00	0.47	266.02
60	561.00	0.46	258.06
65	566.00	0.57	322.62
70	566.00	0.57	322.62
75	566.00	0.57	322.62
90	566.00	0.57	322.62
95	566.00	0.57	322.62

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: BEAVER AAHU's: 399.52

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	566.00	0.56	316.96
1	892.00	0.38	338.96
15	892.00	0.38	338.96
20	1376.00	0.30	412.80
25	1376.00	0.30	412.80
50	1376.00	0.30	412.80
55	1376.00	0.30	412.80
60	1376.00	0.30	412.80
65	1376.00	0.30	412.80
70	1376.00	0.30	412.80
75	1376.00	0.30	412.80
80	1376.00	0.30	412.80
85	1376.00	0.30	412.80
90	1376.00	0.30	412.80
95	1376.00	0.30	412.80

Beaver A

Form C: Average Annual Habitat Units Date: 03/05/1987

Action: PA 1 (without project)
Period of Analysis: 95
Evaluation Species: BEAVER A AAHU's: 20.93

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	25.00	0.78	19.50
1	25.00	0.78	19.50
15	27.00	0.78	21.06
20	27.00	0.78	21.06
25	27.00	0.78	21.06
40	27.00	0.78	21.06
45	27.00	0.78	21.06
50	27.00	0.78	21.06
55	27.00	0.78	21.06
60	27.00	0.78	21.06
65	27.00	0.78	21.06
70	27.00	0.78	21.06
75	27.00	0.78	21.06
90	27.00	0.78	21.06
95	27.00	0.78	21.06

Action: PA 3 (with project)
Period of Analysis: 95
Evaluation Species: BEAVER A AAHU's: 6.61

Target Year	Area of Habitat	Habitat Suitability Index	Habitat Units
0	25.00	0.78	19.50
1	49.00	0.78	38.22
15	49.00	0.78	38.22
20	0.00	0.00	0.00
25	0.00	0.00	0.00
50	0.00	0.00	0.00
55	0.00	0.00	0.00
60	0.00	0.00	0.00
65	0.00	0.00	0.00
70	0.00	0.00	0.00
75	0.00	0.00	0.00
80	0.00	0.00	0.00
85	0.00	0.00	0.00
90	0.00	0.00	0.00
95	0.00	0.00	0.00

Form D: Net Change in AAHU's Date: 03/05/1987

Action: PA 3 (with project)
Compared To: PA 1 (without project)
Period of analysis: 95

Evaluation Species Name	AAHU's With Action	AAHU's Without Action	Net Change
MALLARD	268.58	210.61	57.98
COMMON MERGANSER	679.00	263.27	415.74
OSPREY	1250.58	397.39	853.19
RUFFED GROUSE	155.97	859.40	-703.43
RUFFED GROUSE A	1.15	54.02	-52.87
BLK CAPPED CHICKADEE	192.03	1053.03	-861.00
PILEATED WOODPECKER	156.41	802.34	-645.92
DOUGLAS SQUIRREL	138.42	650.48	-512.05
BEAVER	399.52	319.60	79.92
BEAVER A	6.61	20.93	-14.32
PINE MARTEN	151.73	792.29	-640.56
PINE MARTEN A	83.88	220.76	-136.88
BLK-TAILED DEER	248.82	1302.75	-1053.93
BLK-TAILED DEER A	12.52	186.71	-174.20

COVER TYPE ABBREVIATIONS

COVER TYPE	ABBREVIATION
Closed Sapling Pole	CS
Closed Sapling Pole (Newman Plan)	CSN
Residential Development	DEV
Deciduous Forest	DF
Early-Successional	ES
Early Successional (Newman Plan)	ESN
Grass/Meadow	GM
Grass/Shrub	GS
Lake	LAKE
Large Sawtimber Thinned	LST
Large Sawtimber Unthinned	LSU or LS
Mature Mixed Forest	MF
Mature Riparian Forest	MR
Old-Growth Forest	OG
Open Sapling Pole	OS or OSP
Open Sapling Pole (Newman Plan)	OSN
Pasture	PAS
Riparian Buffer	RB
Road	RD
Reservoir	RES
Mixed Shrub/Brush	SB
Small Sawtimber	SS
Small Sawtimber (Newman Plan)	SSN
Snag Zone	SZ
Wetland Buffer	WB
Woodlot	WDL
Wetland	WL
Young Mixed Forest	YM
Young Riparian Forest	YR

Distribution of cover types on the Lake Chaolain and Project Facility Lands Tracts without mitigation.

YEAR	ESN ACRES	OSN ACRES	CS ACRES	CSN ACRES	SS ACRES	SSN ACRES	LS ACRES	OG ACRES	MF ACRES	DF ACRES	MR ACRES	SB ACRES	GM ACRES	GS ACRES	YM ACRES	WL ACRES	RES ACRES	TOTAL ACRES	YEAR
1985	77.8	0.0	12.9	0.0	1438.4	0.0	9.9	54.5	244.5	48.1	23.8	33.5	24.7	66.0	8.0	70.0	441.0	2553.1	1985
1990	494.6	0.0	11.2	0.0	1062.4	0.0	36.4	54.5	203.5	32.5	14.8	33.5	24.7	66.0	8.0	70.0	441.0	2553.1	1990
1995	416.8	77.8	6.8	0.0	1020.4	0.0	82.8	54.5	203.5	32.5	14.8	33.5	24.7	66.0	8.0	70.0	441.0	2553.1	1995
2000	255.3	416.8	0.0	77.8	858.8	0.0	53.7	31.5	199.5	32.5	14.8	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2000
2005	454.1	0.0	0.0	494.6	729.0	0.0	53.7	31.5	130.5	32.5	14.8	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2005
2010	719.1	255.3	0.0	494.6	344.8	0.0	27.2	25.7	55.2	18.8	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2010
2015	753.9	198.8	0.0	672.1	134.9	77.8	20.3	25.7	38.4	18.8	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2015
2020	435.4	520.3	0.0	454.1	0.0	494.6	3.0	1.6	22.1	9.6	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2020
2025	214.4	233.6	0.0	974.4	0.0	494.6	0.0	0.0	17.3	6.4	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2025
2030	19.0	201.8	0.0	952.7	0.0	749.9	0.0	0.0	17.3	0.0	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2030
2035	93.5	12.6	0.0	955.7	0.0	870.9	0.0	0.0	8.0	0.0	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2035
2040	511.9	6.4	0.0	448.0	0.0	974.4	0.0	0.0	0.0	0.0	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2040
2045	424.8	87.1	0.0	220.8	0.0	1208.0	0.0	0.0	0.0	0.0	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2045
2050	255.3	424.8	0.0	106.1	0.0	1154.5	0.0	0.0	0.0	0.0	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2050
2055	454.1	0.0	0.0	518.3	0.0	968.3	0.0	0.0	0.0	0.0	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2055
2060	719.1	255.3	0.0	511.9	0.0	454.4	0.0	0.0	0.0	0.0	0.0	10.7	24.7	66.0	0.0	70.0	441.0	2553.1	2060

Distribution of cover types on the Lake Chaplain and Project Facility Lands Tracts with mitigation.

YEAR	ES ACRES	OS ACRES	CS ACRES	SS ACRES	LSU ACRES	LST ACRES	OG ACRES	MF ACRES	DF ACRES	MR ACRES	RB ACRES	SB ACRES	GM ACRES	GS ACRES	YM ACRES	WL ACRES	WB ACRES	RES ACRES	RD ACRES	TOTAL ACRES	YEAR
1985	0.0	0.0	8.5	1506.9	15.5	0.0	54.6	252.9	50.0	23.2	0.0	30.2	24.7	67.0	8.0	70.0	0.0	441.0	0.0	2552.5	1985
1990	126.7	0.0	8.5	1338.6	41.7	0.0	54.6	244.9	50.0	23.2	10.0	30.2	24.7	67.0	8.0	70.0	3.3	441.0	10.1	2552.5	1990
1995	223.6	0.0	8.5	1067.2	158.7	56.0	54.6	219.0	50.0	23.2	15.0	30.2	41.7	50.0	8.0	79.0	11.7	441.0	15.1	2552.5	1995
2000	198.4	126.7	0.0	928.4	132.7	124.5	54.6	226.4	47.0	23.2	28.5	10.7	41.7	50.0	0.0	79.0	12.6	441.0	27.1	2552.5	2000
2005	210.3	223.6	0.0	763.2	142.7	157.1	54.6	216.1	47.0	23.2	43.6	10.7	41.7	50.0	0.0	79.0	12.6	441.0	36.1	2552.5	2005
2010	223.6	198.4	126.7	569.8	248.4	138.1	54.6	200.2	47.0	23.2	48.4	10.7	41.7	50.0	0.0	79.0	12.6	441.0	39.1	2552.5	2010
2015	219.2	210.3	223.6	271.0	405.9	178.6	54.6	186.4	43.1	23.2	53.5	10.7	41.7	50.0	0.0	79.0	12.6	441.0	48.1	2552.5	2015
2020	205.3	223.6	198.4	386.1	424.3	96.9	54.6	167.8	43.1	23.2	57.6	10.7	41.7	50.0	0.0	79.0	18.6	441.0	50.6	2552.5	2020
2025	215.4	219.2	210.3	308.1	478.8	85.8	54.6	150.8	43.1	23.2	65.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	51.6	2552.5	2025
2030	252.5	205.3	223.6	326.8	401.2	113.5	54.6	145.5	43.1	23.2	65.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	51.6	2552.5	2030
2035	241.6	215.4	219.2	435.6	328.3	100.6	54.6	127.7	33.1	23.2	65.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	51.6	2552.5	2035
2040	218.9	252.5	205.3	423.7	276.0	171.4	54.6	126.1	33.1	23.2	68.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	53.1	2552.5	2040
2045	242.3	241.6	215.4	431.2	216.9	223.6	54.6	105.2	27.8	23.2	69.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	55.1	2552.5	2045
2050	253.7	218.9	252.5	430.6	228.0	187.3	54.6	105.2	27.8	23.2	69.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	55.1	2552.5	2050
2055	223.6	242.3	241.6	436.3	228.0	199.2	54.6	105.2	27.8	23.2	69.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	55.1	2552.5	2055
2060	198.4	253.7	218.9	459.5	216.9	223.6	54.6	105.2	27.8	23.2	69.6	10.7	41.7	50.0	0.0	79.0	23.6	441.0	55.1	2552.5	2060

Distribution of cover types on the Lost Lake Tract without mitigation.

YEAR	DSP ACRES	MF ACRES	WDL ACRES	DEV ACRES	PAS ACRES	WL ACRES	LAKE ACRES	TOTAL ACRES	YEAR
1985	77.5	99.5	0.0	0.0	0.0	14.0	14.0	205.0	1985
1990	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	1990
1995	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	1995
2000	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2000
2005	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2005
2010	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2010
2015	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2015
2020	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2020
2025	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2025
2030	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2030
2035	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2035
2040	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2040
2045	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2045
2050	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2050
2055	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2055
2060	0.0	0.0	78.5	20.0	78.5	14.0	14.0	205.0	2060

Distribution of cover types on the Lost Lake Tract with mitigation.

YEAR	ES ACRES	OS ACRES	CS ACRES	SS ACRES	LST ACRES	MF ACRES	WL ACRES	WB ACRES	LAKE ACRES	TOTAL ACRES	YEAR
1985	0.0	77.4	0.0	4.9	0.0	98.6	14.0	0.0	14.0	204.9	1985
1990	0.0	77.4	0.0	4.9	0.0	70.1	14.0	24.5	14.0	204.9	1990
1995	0.0	0.0	0.0	4.9	0.0	147.5	14.0	24.5	14.0	204.9	1995
2000	25.0	0.0	0.0	0.0	0.0	127.4	14.0	24.5	14.0	204.9	2000
2005	25.0	0.0	0.0	0.0	0.0	127.4	14.0	24.5	14.0	204.9	2005
2010	0.0	25.0	0.0	0.0	0.0	127.4	14.0	24.5	14.0	204.9	2010
2015	0.0	25.0	0.0	0.0	0.0	127.4	14.0	24.5	14.0	204.9	2015
2020	25.0	0.0	25.0	0.0	0.0	102.4	14.0	24.5	14.0	204.9	2020
2025	25.0	0.0	25.0	0.0	0.0	102.4	14.0	24.5	14.0	204.9	2025
2030	25.8	25.0	0.0	25.0	0.0	76.6	14.0	24.5	14.0	204.9	2030
2035	25.8	25.0	0.0	25.0	0.0	76.6	14.0	24.5	14.0	204.9	2035
2040	50.8	25.8	25.0	25.0	0.0	25.8	14.0	24.5	14.0	204.9	2040
2045	50.8	25.8	25.0	25.0	0.0	25.8	14.0	24.5	14.0	204.9	2045
2050	0.0	50.8	25.8	25.0	25.0	25.8	14.0	24.5	14.0	204.9	2050
2055	0.0	50.8	25.8	25.0	25.0	25.8	14.0	24.5	14.0	204.9	2055
2060	50.8	0.0	50.8	50.8	0.0	0.0	14.0	24.5	14.0	204.9	2060

Distribution of cover types on the Spada Lake Tract without mitigation.

YEAR	ES ACRES	OS ACRES	CS ACRES	SS ACRES	MF ACRES	OF ACRES	WL ACRES	RES ACRES	TOTAL ACRES	YEAR
1985	1.9	0.0	26.0	0.0	28.9	4.0	0.2	1870.0	1931.0	1985
1990	1.9	0.0	0.0	26.0	28.9	4.0	0.2	1870.0	1931.0	1990
1995	0.0	1.9	0.0	26.0	28.9	4.0	0.2	1870.0	1931.0	1995
2000	0.0	0.0	1.9	26.0	28.9	4.0	0.2	1870.0	1931.0	2000
2005	0.0	0.0	1.9	26.0	28.9	4.0	0.2	1870.0	1931.0	2005
2010	0.0	0.0	1.9	54.9	0.0	4.0	0.2	1870.0	1931.0	2010
2015	0.0	0.0	0.0	56.8	0.0	4.0	0.2	1870.0	1931.0	2015
2020	0.0	0.0	0.0	56.8	0.0	4.0	0.2	1870.0	1931.0	2020
2025	0.0	0.0	0.0	56.8	0.0	4.0	0.2	1870.0	1931.0	2025
2030	54.9	0.0	0.0	1.9	0.0	4.0	0.2	1870.0	1931.0	2030
2035	54.9	0.0	0.0	1.9	0.0	4.0	0.2	1870.0	1931.0	2035
2040	0.0	54.9	0.0	1.9	0.0	4.0	0.2	1870.0	1931.0	2040
2045	0.0	0.0	54.9	1.9	0.0	4.0	0.2	1870.0	1931.0	2045
2050	0.0	0.0	54.9	1.9	0.0	4.0	0.2	1870.0	1931.0	2050
2055	0.0	0.0	54.9	1.9	0.0	4.0	0.2	1870.0	1931.0	2055
2060	0.0	0.0	0.0	56.8	0.0	4.0	0.2	1870.0	1931.0	2060

Distribution of cover types on the Spada Lake Tract with mitigation.

YEAR	ES ACRES	OS ACRES	CS ACRES	SS ACRES	LSU ACRES	MF ACRES	OF ACRES	YR ACRES	SI ACRES	WL ACRES	RES ACRES	TOTAL ACRES	YEAR
1985	1.9	0.0	26.0	0.0	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	1985
1990	1.9	0.0	0.0	26.0	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	1990
1995	0.0	1.9	0.0	26.0	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	1995
2000	0.0	0.0	1.9	26.0	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2000
2005	0.0	0.0	1.9	26.0	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2005
2010	0.0	0.0	1.9	26.0	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2010
2015	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2015
2020	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2020
2025	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2025
2030	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2030
2035	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2035
2040	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2040
2045	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2045
2050	0.0	0.0	0.0	27.9	0.0	26.7	4.0	50.2	52.0	0.2	1770.0	1931.0	2050
2055	0.0	0.0	0.0	1.9	52.7	0.0	4.0	50.2	52.0	0.2	1770.0	1931.0	2055
2060	0.0	0.0	0.0	1.9	52.7	0.0	4.0	50.2	52.0	0.2	1770.0	1931.0	2060

Distribution of cover types on the Williamson Creek Tract without mitigation.

YEAR	ES ACRES	OS ACRES	CS ACRES	SS ACRES	MF ACRES	MR ACRES	SB ACRES	WL ACRES	TOTAL ACRES	YEAR
1985	286.1	0.0	0.0	0.0	23.8	34.8	1.9	3.5	350.1	1985
1990	286.1	0.0	0.0	0.0	23.8	34.8	1.9	3.5	350.1	1990
1995	34.8	286.1	0.0	0.0	23.8	0.0	1.9	3.5	350.1	1995
2000	34.8	0.0	286.1	0.0	25.7	0.0	0.0	3.5	350.1	2000
2005	0.0	34.8	286.1	0.0	25.7	0.0	0.0	3.5	350.1	2005
2010	0.0	0.0	320.9	0.0	25.7	0.0	0.0	3.5	350.1	2010
2015	0.0	0.0	34.8	286.1	25.7	0.0	0.0	3.5	350.1	2015
2020	23.8	0.0	34.8	286.1	1.9	0.0	0.0	3.5	350.1	2020
2025	23.8	0.0	0.0	320.9	1.9	0.0	0.0	3.5	350.1	2025
2030	0.0	23.8	0.0	320.9	1.9	0.0	0.0	3.5	350.1	2030
2035	0.0	0.0	23.8	320.9	1.9	0.0	0.0	3.5	350.1	2035
2040	1.9	0.0	23.8	320.9	0.0	0.0	0.0	3.5	350.1	2040
2045	288.0	0.0	23.8	34.8	0.0	0.0	0.0	3.5	350.1	2045
2050	286.1	1.9	0.0	58.6	0.0	0.0	0.0	3.5	350.1	2050
2055	34.8	286.1	1.9	23.8	0.0	0.0	0.0	3.5	350.1	2055
2060	34.8	0.0	288.0	23.8	0.0	0.0	0.0	3.5	350.1	2060

Distribution of cover types on the Williamson Creek Tract with mitigation.

YEAR	LS ACRES	DG ACRES	MF ACRES	MR ACRES	SB ACRES	WL ACRES	TOTAL ACRES	YEAR
1985	12.5	273.6	23.8	34.8	1.9	3.5	350.1	1985
1990	12.5	273.6	23.8	34.8	1.9	3.5	350.1	1990
1995	12.5	273.6	23.8	34.8	1.9	3.5	350.1	1995
2000	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2000
2005	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2005
2010	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2010
2015	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2015
2020	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2020
2025	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2025
2030	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2030
2035	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2035
2040	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2040
2045	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2045
2050	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2050
2055	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2055
2060	12.5	273.6	25.7	34.8	0.0	3.5	350.1	2060

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: BLACK-TAILED DEER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Large units, no enhancement for forage, low interspersion.															
OPEN SAPLING POLE (NEWMAN)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Hiding cover, some forage, difficult movement, large unit size.															
CLOSED SAPLING POLE	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Existing score.															
CLOSED SAPLING POLE (NEWMAN)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Score less than other closed sapling pole scores because of larger units, denser stocking and low interspersion.															
SMALL SAWTIMBER	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
	Existing score.															
SMALL SAWTIMBER (NEWMAN)	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	Some cover and some forage but the units are too large and interspersion is low.															
LARGE SAWTIMBER	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
	Existing score.															
OLD-GROWTH FOREST	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
	Existing score.															
MATURE MIXED FOREST	0.45	0.45	0.45	0.45	0.45	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Some small openings occur with age, increasing browse.															
DECIDUOUS FOREST	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Small openings created with age, increasing browse.															
MATURE RIPARIAN FOREST	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Existing score.															
MIXED SHRUB/BRUSH	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Existing score.															
GRASS/MEADOW	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
	Existing score.															
GRASS/SHRUB	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score.															
YOUNG MIXED FOREST	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	Existing score.															
WETLAND	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: BLACK-TAILED DEER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Encourage browse, plant, seed, fertilize. High stand interspersion, optimal unit size															
OPEN SAPLING POLE	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Good browse, high stand interspersion, optimal unit sizes.															
CLOSED SAPLING POLE	0.50	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	No understory in future stands, still good stand interspersion for hiding cover.															
SMALL SAWTIMBER	0.56	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Future stands will have optimal unit size and adjacent forage. Some stands will be thinned to 60 percent crown closure.															
LARGE SAWTIMBER NOT THINNED	0.56	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Openings, browse available (development of understory). Denser stand than thinned large saw. High stand interspersion in future.															
LARGE SAWTIMBER THINNED	0.56	0.56	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Thinned condition lasts for twenty years, with increased browse production during this period. High stand interspersion in future.															
OLD GROWTH	0.52	0.70	0.70	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Quality of cover and development of the shrub layer will increase over time. Presence of dead and down material will keep habitat less than optimal.															
MATURE MIXED FOREST	0.45	0.45	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Provides some cover. Create openings and allow to mature. Good interspersion with conifer forest.															
DECIDUOUS FOREST	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Increased stand interspersion, trees maturing over time. Good browse.															
MATURE RIPARIAN FOREST	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	No improvement.															
RIPARIAN BUFFER	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Comes from mature coniferous forest, mature riparian forest and deciduous forest. Close proximity to water.															
MIXED SHRUB/BRUSH	0.75	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Increase due to promotion of browse species and plantings.															
GRASS/MEADOW	0.53	0.60	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Seed, fertilize (except Lake Chaplain), plant browse species, hedgerows for visual screening.															
GRASS/SHRUB	0.30	0.50	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Increase due to planting hedgerows for visual screening, palatable grasses, forbs and shrubs.															
YOUNG MIXED FOREST	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	No improvement.															
WETLAND	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
WETLAND BUFFER	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Plant browse species, maintain young deciduous trees.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: RUFFED GROUSE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Large units, no dead and down, low interspersion.															
OPEN SAPLING POLE (NEWMAN)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Large units, no dead and down, low interspersion, some forage, no deciduous trees.															
CLOSED SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing condition. No change.															
CLOSED SAPLING POLE (NEWMAN)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Large units, some cover, no dead and down, no deciduous trees, no shrubs, low interspersion.															
SMALL SAWTIMBER	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
	Existing score. No change.															
SMALL SAWTIMBER (NEWMAN)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Large units, some cover, no dead and down, no deciduous trees, no shrubs, low interspersion.															
LARGE SAWTIMBER	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
	Existing score. No change.															
OLD-GROWTH FOREST	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
	Existing score. No change.															
MATURE MIXED FOREST	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
	Existing score. No change.															
DECIDUOUS FOREST	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Existing score. No change.															
MATURE RIPARIAN FOREST	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	Existing score. No change.															
MIXED SHRUB/BRUSH	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	Existing score. No change.															
GRASS/MEADOW	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score. No change.															
GRASS/SHRUB	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Values from impact HEP for baseline purposes.															
YOUNG MIXED FOREST	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Values from impact HEP for baseline purposes.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: RUFFED GROUSE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	26 acre cutting units provide less than optimal coniditions. Some units will be smaller. Leave young deciduous trees in some stands. Leave drumming logs.															
OPEN SAPLING POLE	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Same conidtions as early successional.															
CLOSED SAPLING POLE	0.20	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Little ground cover. Improve future stands by adding dead and down woody material.															
SMALL SAWTIMBER	0.26	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Future stands will have fewer hardwoods and less understory															
LARGE SAWTIMBER NOT THINNED	0.26	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Canopy openings, drumming logs, forage present but not as much as the thinned conidition.															
LARGE SAWTIMBER THINNED	0.26	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	More forage present, more openings, deciduous trees and shrubs.															
OLD GROWTH	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
	Increase forage but decrease deciduous tree component, therefore no change.															
MATURE MIXED FOREST	0.55	0.60	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Improved drumming, food and interspersion. Some areas will be thinned.															
DECIDUOUS FOREST	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Small improvement due to increased forage and drumming logs.															
MATURE RIPARIAN FOREST	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	Retain older deciduous trees, retain existing score.															
RIPARIAN BUFFER	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Comes from coniferous forest with some deciduous trees and shrubs.															
MIXED SHRUB/BRUSH	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	Existing score. No improvement.															
GRASS/MEADOW	0.20	0.30	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Increase grass/forb component.															
GRASS/SHRUB	0.10	0.40	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Fertilize and seed, plant shrubs and trees.															
YOUNG MIXED FOREST	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Existing score. No improvement.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND BUFFER	0.60	0.60	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Maintain young deciduous trees, encourage forage species, expand mixed forest type.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	No snags. No trees.															
OPEN SAPLING POLE (NEWMAN)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	No snags. Young coniferous trees.															
CLOSED SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score.															
CLOSED SAPLING POLE (NEWMAN)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Less than with mitigation because no snags are created. No deciduous trees.															
SMALL SAWTIMBER	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Existing score.															
SMALL SAWTIMBER (NEWMAN)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Less than with mitigation because no snags are created. No deciduous trees.															
LARGE SAWTIMBER	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Existing score.															
OLD-GROWTH FOREST	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
	Existing score.															
MATURE MIXED FOREST	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
	Existing score.															
DECIDUOUS FOREST	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score.															
MATURE RIPARIAN FOREST	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	Existing score.															
MIXED SHRUB/BRUSH	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Existing score.															
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
	Existing score from impact HEP.															
WETLAND	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	Existing score.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	[illegible]	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Leave snags and future snags (green trees) in clearcuts.															
OPEN SAPLING POLE	0.20	0.20	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Trees small, mostly conifers. Snags and some large trees also present.															
CLOSED SAPLING POLE	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Increase due to greater number of snags with some hardwoods in future stands (1990 and beyond).															
SMALL SAWTIMBER	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	Larger trees than closed sapling pole, future stands will have more snags than existing conidtions but smaller trees.															
LARGE SAWTIMBER NOT THINNED	0.43	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Multistoried canopy; some deciduous shrubs. Increase due to snag creation.															
LARGE SAWTIMBER THINNED	0.43	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Multistoried canopy; some deciduous shrubs. Increase due to snag creation.															
OLD GROWTH	0.42	0.42	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Increased snags and multistoried canopy.															
MATURE MIXED FOREST	0.73	0.73	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Create snags, maintain deciduous component.															
DECIDUOUS FOREST	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Greater canopy volume and increased snags over time.															
MATURE RIPARIAN FOREST	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	No improvement.															
RIPARIAN BUFFER	0.00	0.50	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Create snags, encourage deciduous trees, provide dead and down woody material.															
MIXED SHRUB/BRUSH	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	No improvement.															
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
	No improvement.															
WETLAND	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	No improvement.															
WETLAND BUFFER	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Maintaining deciduous trees; create snags. Maintain adequate canopy volume.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: PILEATED WOODPECKER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dense stands of young trees, no snags, no dead and down.															
OPEN SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dense stands of young trees, no snags, no dead and down.															
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score.															
CLOSED SAPLING POLE (NEWMAN)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Lower than closed sapling pole with mitigation because of dense stands, no snags and no dead and down.															
SMALL SAWTIMBER	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
	Existing score.															
SMALL SAWTIMBER (NEWMAN)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Lower than small saw with mitigation because of dense stands, no snags and no dead and down.															
LARGE SAWTIMBER	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
	Existing score.															
OLD-GROWTH FOREST	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Improvement with age, larger trees, more snags.															
MATURE MIXED FOREST	0.50	0.55	0.55	0.55	0.55	0.55	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65
	Improvement with age due to larger trees and more snags.															
DECIDUOUS FOREST	0.43	0.45	0.45	0.45	0.45	0.50	0.50	0.50	0.55	0.55	0.60	0.60	0.60	0.60	0.60	0.60
	Improvement with age due to larger trees and more snags.															
MATURE RIPARIAN FOREST	0.30	0.30	0.30	0.32	0.32	0.32	0.32	0.35	0.35	0.35	0.40	0.40	0.40	0.40	0.40	0.40
	Improvement with age due to larger trees and more snags.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
	Existing score.															
WETLAND	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: PILEATED WOODPECKER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Snags and dead and down woody material present, no large trees.															
OPEN SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Snags and dead and down woody material present, small trees.															
CLOSED SAPLING POLE	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Will use as forage area; snags and dead and down woody material present in future stands.															
SMALL SAWTIMBER	0.55	0.50	0.50	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Snags and dead and down woody material present in futures stands.															
LARGE SAWTIMBER NOT THINNED	0.55	0.70	0.70	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	All requirements met. Increase due to large snag creation and dead and down woody material.															
LARGE SAWTIMBER THINNED	0.55	0.70	0.70	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	All requirements met. Increase due to large snag creation and dead and down woody material.															
OLD GROWTH	0.74	0.74	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Large trees, create snags, provide dead and down woody material.															
MATURE MIXED FOREST	0.50	0.50	0.60	0.60	0.60	0.60	0.70	0.70	0.70	0.70	0.80	0.80	0.80	0.80	0.80	0.80
	Large trees, create snags, provide dead and down woody material.															
DECIDUOUS FOREST	0.43	0.43	0.50	0.50	0.50	0.60	0.60	0.60	0.65	0.65	0.75	0.75	0.75	0.75	0.75	0.75
	Large trees, create snags, provide dead and downwoody material. Increase over time as tree size increases.															
MATURE RIPARIAN FOREST	0.3	0.30	0.30	0.35	0.35	0.35	0.35	0.40	0.40	0.40	0.45	0.45	0.45	0.45	0.45	0.45
	Create snags and dead and down woody material. Increase size of trees as the stand matures.															
RIPARIAN BUFFER	0.00	0.50	0.50	0.50	0.50	0.70	0.70	0.70	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Create snags and dead and down woody material; increase size of trees as the stand matures.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
	No improvement.															
WETLAND	0.20	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Increase due to snag creation and providing dead and down woody material in forested wetlands.															
WETLAND BUFFER	0.00	0.30	0.50	0.50	0.50	0.70	0.70	0.70	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Create snags and dead and down woody material; increase size of trees as the stand matures.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: PINE MARTEN

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Large cutting units, no snags, no dead and down.															
OPEN SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Large cutting units, no snags, no dead and down, small trees.															
CLOSED SAPLING POLE	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	Existing score.															
CLOSED SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Large cutting units, no snags, no dead and down, small trees.															
SMALL SAWTIMBER	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
	Existing score.															
SMALL SAWTIMBER (NEWMAN)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Some trees, squirrels present.															
LARGE SAWTIMBER	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
	Existing score.															
OLD-GROWTH FOREST	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
	Existing score.															
MATURE MIXED FOREST	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.59	0.59	0.59	0.59	0.59	0.59
	Increase with stand age due to larger trees, more snags.															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.30	0.30	0.30	0.30	0.30	0.30
	Increase with stand age due to larger trees, more snags.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Existing score.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: PINE MARTEN

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Slash piles, down logs and snags will improve the cover type for marten.															
OPEN SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Some cover, slash piles, down logs and snags will improve the cover type.															
CLOSED SAPLING POLE	0.08	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Some cover, slash piles, down logs and snags will improve the cover type.															
SMALL SAWTIMBER	0.49	0.49	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Snags and dead and down woody material present in future.															
LARGE SAWTIMBER NOT THINNED	0.49	0.49	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Prey base (squirrels) present. Large trees, snags and dead and down woody material present in future.															
LARGE SAWTIMBER THINNED	0.49	0.49	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Large trees, snags and dead and down woody material present in future.															
OLD GROWTH	0.58	0.70	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Larger unit with mitigaton; snags, large trees and dead and down material present in future.															
MATURE MIXED FOREST	0.48	0.50	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.70	0.70	0.70	0.70	0.70	0.70
	Create snags, dead and down woody material, allow to mature.															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Converted to riparian buffer in 2000.															
RIPARIAN BUFFER	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
	Buffer created from mature conifer stands; with snags, and dead and down woody material.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	No improvement.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND BUFFER	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
	Buffer created from mature conifer stand with snags and dead and down woody material.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: DOUGLAS SQUIRREL

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Clearcuts too large, no trees, no snags.															
OPEN SAPLING POLE (NEWMAN)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Some forage, no snags, poor cover.															
CLOSED SAPLING POLE	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Existing score.															
CLOSED SAPLING POLE (NEWMAN)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Improved forage, fungi available, fair cover, no snags.															
SMALL SAWTIMBER	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
	Existing score.															
SMALL SAWTIMBER (NEWMAN)	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	All Douglas-fir, no snags but good cone source.															
LARGE SAWTIMBER	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
	Existing score.															
OLD-GROWTH FOREST	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Existing score.															
MATURE MIXED FOREST	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
	Existing score.															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Existing score.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: DOUGLAS SQUIRREL

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	[illegible]	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	No Douglas-fir cone production. Used as foraging area for fungus and cambium.															
CLOSED SAPLING POLE	0.40	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	No Douglas-fir cone production. Future stands are younger than existing conidtions and have lower value to squirrels. Snags and dead and down woody material present.															
SMALL SAWTIMBER	0.56	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Douglas-fir cone production. Snags and dead and down woody material present in future conidtions.															
LARGE SAWTIMBER NOT THINNED	0.56	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Douglas-fir cone production, snags and dead and down woody material present in future conditions. Unthinned stands are predominantly from existing forest with low percentages of Douglas-fir.															
LARGE SAWTIMBER THINNED	0.56	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	1.00	1.00	1.00	1.00
	Douglas-fir cone production, snags and dead and down woody material present in future conditions. Future stands will have more Douglas-fir.															
OLD GROWTH	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Create snags by year 2000; preserve dead and down woody material.															
MATURE MIXED FOREST	0.58	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Create snags and dead and down woody material in future stands.															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RIPARIAN BUFFER	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Buffer created from small saw and large sawtimber stands with snags and dead and down.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	No improvement.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND BUFFER	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Buffer created from existing mature conifer stands with snags and dead and down.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: COMMON MERGANSER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD-GROWTH FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	Weighted for 44% of total riparian forest (0.10 x 44% = 0.04).															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.30	0.30	0.30	0.30	0.30	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Wetland buffer cut under Newman plan, lowering the score wetland in 2010.															
RESERVOIR	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	No change until shoreline old-growth is logged.															

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: COMMON MERGANSER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER NOT THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD GROWTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	Existing score. No improvement. Score is weighted by available area (0.1 x 44% = 0.04).															
RIPARIAN BUFFER	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Score is weighted by available area (0.5 x 18% = 0.10).															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score. No improvement.															
WETLAND BUFFER	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Erect nest boxes and creat sangs.															
RESERVOIR	0.50	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Score increases as adjacent forests mature.															

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: MALLARD

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD-GROWTH FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
	Existing score. Weighted score for available area of cover type (0.7 x 44% = 0.31).															
MIXED SHRUB/BRUSH	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Weighted score for areas near water. Original HSI = 0.5, only 20% of mixed shrub brush area used by mallard, weighted HSI = 0.1.															
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.90	0.90	0.90	0.90	0.90	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score. Temporary reduction in 2010 due to adjacent logging.															
RESERVOIR	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Existing score.															

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: MALLARD

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER NOT THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD GROWTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
	Exisiting score. No improvement. Score is weighted to account for percent of cover type available for the mallard (0.7 x 41% = 0.31).															
RIPARIAN BUFFER	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
	Score is weighted to account for percent of cover type available for mallard (0.7 x 18% = 0.13).															
MIXED SHRUB/BRUSH	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score. No improvement for mallard on reservoir shoreline.															
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score. No improvements.															
WETLAND BUFFER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Buffer not rated for mallard. Benefit of buffer reflected in wetland scores.															
RESERVOIR	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Existing score. No improvements.															

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS — SPECIES: BEAVER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD-GROWTH FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
	Weighted score (0.85 x 44% = 0.38).															
MIXED SHRUB/BRUSH	0.06	0.06	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Weighted score with increasing amount available for beaver.															
	Existing score: 0.30 x 22% = 0.06. Future score: 0.30 x 50% = 0.15.															
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	No change.															
RESERVOIR	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	No change.															

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: BEAVER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER NOT THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD GROWTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
	Maintain deciduous and young trees. Score weighted by area (0.85 x 44% = 0.38). Converted to riparian buffer in 2000.															
RIPARIAN BUFFER	0.00	0.00	0.00	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
	Score weighted by area (0.85 x 18% = 0.16). Year 2000 is the median year of full buffer creation.															
MIXED SHRUB/BRUSH	0.06	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	No improvement. Weighted score (0.75 x 20% = 0.15). Increase due to greater percentage of available area with time. Initially 1/5 of the area; after 1995, 1/2 of the area is available.															
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Plant willows, cattails and water lillies where needed.															
WETLAND BUFFER	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Promote young trees on 15% of the area, maintain a buffer between logging and wetlands.															
RESERVOIR	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	No improvement.															

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: OSPREY

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Small trees, uniform canopy, no snags.															
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Small trees, uniform canopy, no snags.															
CLOSED SAPLING POLE (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Small trees, uniform canopy, no snags.															
SMALL SAWTIMBER	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score.															
SMALL SAWTIMBER (NEWMAN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Small trees, uniform canopy, no snags.															
LARGE SAWTIMBER	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score.															
OLD-GROWTH FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Existing score.															
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score. Limited by lack of open water and roost/nest sites.															
RESERVOIR	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Existing score. Decrease in 2020 when nest tree is cut.															

HABITAT SUITABILITY INDEX SCORES

AREA: LAKE CHAPLAIN AND PROJECT FACILITY LANDS TRACTS SPECIES: OSPREY

CONDITION: WITH MITIGATION

COVER TYPE	1985	[illegible]	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Increase by 2015 due to creation of snags and increase in size of trees.															
LARGE SAWTIMBER NOT THINNED	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Create snags to improve perching/nesting.															
LARGE SAWTIMBER THINNED	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Create snags to improve perching/nesting.															
OLD GROWTH	0.40	0.40	0.70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Snag creation will increase nesting and perching habitat. Maximum increase by year 2000.															
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RIPARIAN BUFFER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/MEADOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRASS/SHRUB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	No improvement foreseen.															
WETLAND BUFFER	0.00	0.10	0.10	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.30	0.30
	Create snags. Maximum increase reached by 2015; primarily due to perch sites but also nesting potential. Increased habitat improvement with age of timber.															
RESERVOIR	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Existing score. No improvement, but maintain existing old-growth. Score reflects presence of old-growth adjacent to the reservoir.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: BLACK-TAILED DEER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Existing score.																
MATURE MIXED FOREST	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Existing score.																
WOODLOT	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Understory browse available. Good habitat except for the presence of humans and pets.																
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Forage utilization around pasture - woodlot edge.																
WETLAND	0.60	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Decrease due to clearing and human/pet activity.																
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: BLACK-TAILED DEER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	High interspersion, edge browse, seeding and fertilizing. Habitat should be optimal.															
OPEN SAPLING POLE	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	All needs met. Forgae slightly limiting as trees grow.															
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Good thermal, hiding cover, no forage.															
SMALL SAWTIMBER	0.56	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Good thermal, hiding cover, adjacent forage. High interspersion.															
LARGE SAWTIMBER NOT THINNED	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Excellent cover, some forage, high interspersion (edge).															
LARGE SAWTIMBER THINNED	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Excellent cover, good forage, high interspersion (edge).															
MATURE MIXED FOREST	0.60	0.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	High interspersion, maintain quality forage.															
WETLAND	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Existing score.															
WETLAND BUFFER	0.60	0.60	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Good edge, provides forage and cover adjacent to the wetland. High interspersion.															
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: RUFFED GROUSE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
MATURE MIXED FOREST	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
WOODLOT	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Open canopy, understory development but human disturbance.															
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: RUFFED GROUSE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Small unit size, high interspersion (edge), good forage and drumming logs present.																
OPEN SAPLING POLE	0.35	0.35	0.35	0.35	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Small unit size, high interspersion (edge), good forage and drumming logs present.																
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Less forage, little ground cover available, few deciduous trees, high interspersion.																
SMALL SAWTIMBER	0.26	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Coniferous forest, little herbaceous cover or deciduous trees, high interspersion.																
LARGE SAWTIMBER NOT THINNED	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
More deciduous trees than small sawtimber, high interspersion.																
LARGE SAWTIMBER THINNED	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
More deciduous trees than small timber, more understory vegetation, high interspersion.																
MATURE MIXED FOREST	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Small unit size will create high interspersion and edge. Drumming logs will be present.																
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND BUFFER	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Both young and mature deciduous trees, high interspersion. Plant cottonwood.																
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
MATURE MIXED FOREST	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
WOODLOT	0.00	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Deciduous trees present. Shrub layer present. Small snags present.															
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Mimial landscaping. No trees. Paved areas and houses.															
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.80	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score. Decrease due to snag reduction with development.															
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Trees small, snags present.																
OPEN SAPLING POLE	0.35	0.35	0.35	0.35	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Trees are small, mostly conifers. Snags present. Decreasing score with increasing conifer component.																
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Few hardwoods, taller trees than open sapling pole, snags present.																
SMALL SAWTIMBER	0.43	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Future stands will have similar habitat qualities as closed sapling pole stage.																
LARGE SAWTIMBER NOT THINNED	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Snags and some deciduous trees present.																
LARGE SAWTIMBER THINNED	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
More deciduous trees and shrubs, large conifers and snags.																
MATURE MIXED FOREST	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Create snags, high interspersion, with small unit size.																
WETLAND	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Existing score.																
WETLAND BUFFER	0.87	0.87	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Increase due to snag creation.																
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: PILEATED WOODPECKER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
MATURE MIXED FOREST	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
WOODLOT	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Conifers present. No large snags. Human distrubance.															
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT — SPECIES: PILEATED WOODPECKER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Snags and dead and down woody material present.															
OPEN SAPLING POLE	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Trees are small, mostly conifers. Snags and dead and down material present.															
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Trees larger. More foraging. Snags and dead and down material still present.															
SMALL SAWTIMBER	0.55	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Maintain created snags and dead and down woody material. Good forage.															
LARGE SAWTIMBER NOT THINNED	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	All requirements are met but interspersion is high (no large stands).															
LARGE SAWTIMBER THINNED	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	All requirements are met but stand size is small.															
MATURE MIXED FOREST	0.33	0.33	0.33	0.33	0.33	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Create snags and dead and down woody material.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND BUFFER	0.33	0.33	0.33	0.33	0.33	0.33	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Increase due to the creation of snags, dead and down material, and natural aging.															
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: PINE MARTEN

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
MATURE MIXED FOREST	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
WOODLOT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: PINE MARTEN

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Some forage available.															
OPEN SAPLING POLE	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Some forage available. Increase due to snag creation and dead and down material in future stands.															
CLOSED SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Some forage available.															
SMALL SAWTIMBER	0.49	0.49	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	All requirements are met but stand size is small. Increase due to snag creation and dead and down material present.															
LARGE SAWTIMBER NOT THINNED	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Small stand size prevents the score from being higher.															
LARGE SAWTIMBER THINNED	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Small stand size prevents the score from being higher.															
MATURE MIXED FOREST	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Increase due to snag creation and dead and down woody material present.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND BUFFER	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Increase due to snag creation and dead and down woody material present.															
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: DOUGLAS SQUIRREL

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
MATURE MIXED FOREST	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score.															
WOODLOT	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Douglas-fir present. Few snags.															
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: DOUGLAS SQUIRREL

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.15	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Trees are small, no cones available. Increase due to the greater number of snags in the future stands.															
CLOSED SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Trees are small, few mature trees. Habitat value similar to open sapling pole.															
SMALL SAWTIMBER	0.56	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Future stands will be predominantly Douglas-fir of cone bearing age with snags and dead and down woody material.															
LARGE SAWTIMBER NOT THINNED	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	All requirements are met.															
LARGE SAWTIMBER THINNED	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	All requirements are met.															
MATURE MIXED FOREST	0.37	0.37	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Create snags and dead and down woody material.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND BUFFER	0.37	0.37	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Create snags and dead and down woody material.															
LAKE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT
CONDITION: WITHOUT MITIGATION

SPECIES: COMMON MERGANSER

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WOODLOT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Decrease due to residential development.															
LAKE	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Decrease due to residential development.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT
CONDITION: WITH MITIGATION

SPECIES: COMMON MERGANSER

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER NOT THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score.															
WETLAND BUFFER	0.20	0.20	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Provide nest boxes. Retain large trees for snag creation.															
LAKE	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT

SPECIES: MALLARD

CONDITION: WITHOUT MITGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WOODLOT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.90	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Decrease due to residential development, lack of nesting cover.															
LAKE	0.80	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Decrease due to residential development, lack of nesting cover, presence of boats.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: MALLARD

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER NOT THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score.															
WETLAND BUFFER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAKE	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Increase due to the addition of artificial nesting islands and loafing logs.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: BEAVER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Existing score weighted by available habitat.															
WOODLOT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.90	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Reduction due to shoreline clearing and human/boat activity.															
LAKE	0.90	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Reduction due to boating activity on the lake.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: BEAVER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER NOT THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	This area becomes wetland buffer in 1990.															
WETLAND	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score.															
WETLAND BUFFER	0.40	0.40	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Plant willow, increase forage.															
LAKE	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT

SPECIES: OSPREY

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WOODLOT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESIDENTIAL DEVELOPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PASTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Assume no utilization with residential development.															
LAKE	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Assume no utilization with residential development.															

HABITAT SUITABILITY INDEX SCORES

AREA: LOST LAKE TRACT SPECIES: OSPREY

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER NOT THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAWTIMBER THINNED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Nesting platforms provided, but score remains low because of the small size of the lake.															
WETLAND BUFFER	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Nesting platforms provided, but score remains low because of the small size of the lake.															
LAKE	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: BLACK-TAILED DEER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
OPEN SAPLING POLE	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
SMALL SAW	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
DECIDUOUS FOREST	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
MATURE MIXED FOREST	0.69	0.69	0.65	0.65	0.65	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Score from impact HEP. More conifers and less forage therefore the decreasing score.															
WETLAND	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	Score from impact HEP.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: BLACK-TAILED DEER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Existing score.																
OPEN SAPLING POLE	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Similar to Lake Chaplain without mitigation.																
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Existing score.																
SMALL SAW	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Similar to Lake Chaplain without mitigation.																
LARGE SAW	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Similar to existing condition at Lake Chaplain.																
DECIDUOUS FOREST	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Existing score.																
MATURE MIXED FOREST	0.69	0.69	0.65	0.65	0.65	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Score from impact HEP. More conifers as the stand matures and forage decreases..																
YOUNG RIPARIAN FOREST	0.10	0.30	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Plant willow, cottonwood, shrubs and other herbaceous species; good forage.																
SNAG ZONE	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Plant vegetation, but vegetation will not be available throughout the year due to inundation.																
WETLAND	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Score from impact HEP.																
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: RUFFED GROUSE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	No change.															
OPEN SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	No change.															
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
MATURE MIXED FOREST	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Score from impact HEP.															
WETLAND	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	No change. Score from impact HEP.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: RUFFED GROUSE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	No change.															
OPEN SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	No change.															
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAW	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
DECIDUOUS FOREST	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	No overall change.															
MATURE MIXED FOREST	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	No overall change. (Score from impact HEP)															
YOUNG RIPARIAN FOREST	0.10	0.30	0.40	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Plant willow, cottonwood and shrubs. Remove debris.															
SNAG ZONE	0.00	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Plant vegetation, but vegetation will not be available all year due to inundation.															
WETLAND	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	No change. (Score from impact HEP)															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
SMALL SAW	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Score from Lake Chaplain HEP.															
DECIDUOUS FOREST	0.60	0.60	0.60	0.60	0.60	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Score will increase due to increased supression - killed snags.															
MATURE MIXED FOREST	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
	Score from impact HEP.															
WETLAND	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
	No change. Score from impact HEP.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
CLOSED SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
SMALL SAW	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Score from Lake Chaplain HEP.																
LARGE SAW	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Score from Lake Chaplain HEP.																
DECIDUOUS FOREST	0.60	0.60	0.70	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
The number and snags will increase over time due to supression kills and snag creation.																
MATURE MIXED FOREST	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Score from impact HEP.																
YOUNG RIPARIAN FOREST	0.30	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Plant willow, cottonwood and shrubs.																
SNAG ZONE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Plant vegetation, but vegetation will not be available all year due to inundation.																
WETLAND	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
No change. (Score from impact HEP)																
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: PILEATED WOODPECKER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SMALL SAW	0.20	0.20	0.20	0.20	0.20	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Increase due to larger trees and snags over time.															
DECIDUOUS FOREST	0.10	0.10	0.15	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Snags will increase over time.															
MATURE MIXED FOREST	0.28	0.28	0.30	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Increase due to larger trees, snags and increase number of conifers over time.															
WETLAND	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
	No change. Score from impact HEP.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: PILATED WOODPECKER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Exisitng score. No improvement.															
SMALL SAW	0.20	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Increase due to snag creation and larger trees over time.															
LARGE SAW	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Create snags.															
DECIDUOUS FOREST	0.10	0.10	0.20	0.30	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Snags will increase.															
MATURE MIXED FOREST	0.28	0.28	0.30	0.30	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Score from impact HEP. Increase due to snag creation and larger tree and snag size over time.															
YOUNG RIPARIAN FOREST	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score. No improvement.															
SNAG ZONE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score. No improvement.															
WETLAND	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
	Existing score. No improvement.															
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: PINE MARTEN

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SMALL SAW	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	High conifer density. Increase due to stand aging.															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Score from impact HEP.															
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: PINE MARTEN

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SMALL SAW	0.20	0.20	0.20	0.20	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Good conifer stand. Increase score due to snag creation and larger tree size over time.															
LARGE SAW	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Adjacent forested habitat near water.															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.40	0.40	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	As the stand matures there will be more conifers and less deciduous trees. Score from impact HEP. Increased score includes snag creation.															
YOUNG RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SNAG ZONE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: DOUGLAS SQUIRREL

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SMALL SAW	0.20	0.20	0.20	0.20	0.20	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Mostly hemlock, therefore scores are not higher. Increase due to stand aging and increased cone production.																
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.25	0.30	0.30	0.30	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Score from impact HEP. Increases due to stand aging and increase seed and cone production.																
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: DOUGLAS SQUIRREL

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SMALL SAW	0.20	0.20	0.30	0.40	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Stands are mostly hemlock, therefore the scores are not higher. Increases are due to increased cone production with maturity, snag creation and larger tree size.																
LARGE SAW	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Stands are mostly hemlock. Score includes snag creation.																
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.25	0.30	0.30	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Score from impact HEP. Increases due to larger available trees, seed and cone production, and snag creation.																
YOUNG RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SNAG ZONE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESERVOIR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: COMMON MERGANSER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	No improvements. Score from impact HEP.															
RESERVOIR	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Score from impact HEP.															

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: COMMON MERGANSER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAW	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Snag creation.															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG RIPARIAN FOREST	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score. No improvement.															
SNAG ZONE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	No improvement.															
WETLAND	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	No improvements. (Score from impact HEP)															
RESERVOIR	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	No improvements. (Score from impact HEP)															

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: MALLARD

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score. No improvements.															
RESERVOIR	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	Existing score. No improvement.															

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: MALLARD

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG RIPARIAN FOREST	0.10	0.10	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Increase due to planting willows, cottonwood, etc.															
SNAG ZONE	0.10	0.10	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Increase due to planting willows, cottonwood, etc.															
WETLAND	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score. No improvement.															
RESERVOIR	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Add nest islands, but little increase due to the large size of the reservoir.															

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: BEAVER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Stands are close to water, hardwood present.																
OPEN SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
MATURE MIXED FOREST	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
WETLAND	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Score from impact HEP.																
RESERVOIR	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Score from impact HEP.																

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: BEAVER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score. No improvement. Stands are close to water and have hardwood; no conifer release.															
OPEN SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Stands are close to water and have hardwood; no conifer release.															
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LARGE SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Existing score. No improvement.															
MATURE MIXED FOREST	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score. No improvement.															
YOUNG RIPARIAN FOREST	0.20	0.30	0.30	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Plant willow and cottonwood.															
SNAG ZONE	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Cattails and other plantings.															
WETLAND	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	Existing score. No improvement.															
RESERVOIR	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score. No improvement.															

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: OSPREY

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score. No change.															
RESERVOIR	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score. No change.															

HABITAT SUITABILITY INDEX SCORES

AREA: SPADA LAKE SPECIES: OSPREY

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAW	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.30	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.40
	Snag creation at age 50, increase again at 75 years due to larger tree size.															
LARGE SAW	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	(Score from impact HEP)															
DECIDUOUS FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YOUNG RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SNAG ZONE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	No change. (Score from impact HEP)															
RESERVOIR	0.70	0.70	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Score from impact HEP. Increase due to snag creation and/or artificial nesting platforms.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: BLACK-TAILED DEER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Large units, low interspersion. Score the same as Lake Chaplian without mitigaton.																
OPEN SAPLING POLE	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Hiding cover, some forage, difficult movement, large units. Score the same as Lake Chaplain without mitigation.																
CLOSED SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Hiding cover, no forage, difficult movement, large units. Score the same as Lake Chaplain without mitigation.																
SMALL SAWTIMBER	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Hiding cover, some forage, large units. Score the same as Lake Chaplain without mitigation.																
MATURE MIXED FOREST	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Existing score.																
MATURE RIPARIAN FOREST	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Existing score.																
MIXED SHRUB/BRUSH	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Existing score.																
WETLAND	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
High quality due to presence of young deciduous trees and shrubs.																

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: BLACK-TAILED DEER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score. No improvement.															
OLD-GROWTH FOREST	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Existing score. No improvement.															
MATURE MIXED FOREST	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Existing score. No improvement.															
MATURE RIPARIAN FOREST	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Existing score. No improvement.															
MIXED SHRUB/BRUSH	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Existing score. No improvement.															
WETLAND	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score. No improvement.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: RUFFED GROUSE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
OPEN SAPLING POLE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
CLOSED SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
SMALL SAWTIMBER	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
MATURE MIXED FOREST	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Exsiting score.															
MATURE RIPARIAN FOREST	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score.															
MIXED SHRUB/BRUSH	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	Existing score.															
WETLAND	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Existing score.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: RUFFED GROUSE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Existing score. Increase due to snag creation; maintain and monitor snag densities and dead and down material.																
OLD-GROWTH FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Exisitng score. No improvement.																
MATURE MIXED FOREST	0.50	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Existing score. Increase due to snag creation; maintain and monitor snag densities and dead and down material.																
MATURE RIPARIAN FOREST	0.70	0.70	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Existing score. Increase due to snag creation; maintain and monitor snag densities and dead and down material.																
MIXED SHRUB/BRUSH	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Existing score. No improvement.																
WETLAND	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Exisitng score. No improvement.																

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
OPEN SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
CLOSED SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
SMALL SAWTIMBER	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Score the same as Lake Chaplain without mitigation. Based on similar management.															
MATURE MIXED FOREST	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score.															
MATURE RIPARIAN FOREST	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
	Existing score.															
MIXED SHRUB/BRUSH	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Existing score.															
WETLAND	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Existing score.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: BLACK-CAPPED CHICKADEE

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Existing score. No improvement.															
OLD-GROWTH FOREST	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Existing score. No improvement.															
MATURE MIXED FOREST	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Existing score. No improvement.															
MATURE RIPARIAN FOREST	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
	Existing score. No improvement.															
MIXED SHRUB/BRUSH	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Existing score. No improvement.															
WETLAND	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Existing score. No improvement.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: PILEATED WOODPECKER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Similar to Lake Chaplain wihout mitigation.															
SMALL SAWTIMBER	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Snags near creek, mature, some suppression killed snags.															
MATURE MIXED FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Existing score.															
MATURE RIPARIAN FOREST	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	Existing score.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	No mature trees.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: PILEATED WOODPECKER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.70	0.70	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Increase due to snag creation; monitor and maintain snag densities and dead and down material.															
OLD-GROWTH FOREST	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Exisitng score. No improvement.															
MATURE MIXED FOREST	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Increase due to snag creation; monitor and maintain snag densities and dead and down woody material.															
MATURE RIPARIAN FOREST	0.35	0.35	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	Increase due to snag creation; monitor and maintain snag densities and dead and down woody material.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: PINE MARTEN

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Some trees, squirrels present. Score the same as Lake Chaplain without mitigation.															
MATURE MIXED FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Exisiting score.															
MATURE RIPARIAN FOREST	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: PINE MARTEN

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.50	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Increase due to snag creation; monitor and maintain snag densities and dead and down material.															
OLD-GROWTH FOREST	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Existing score. No improvement.															
MATURE MIXED FOREST	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Increase due to snag creation; monitor and maintain snag densities and dead and down material.															
MATURE RIPARIAN FOREST	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Increase due to dnag creation; monitor and maintain snag densities and dead and down material.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: DOUGLAS SQUIRREL

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Some forage, no snags, poor cover. Score the same as Lake Chaplain without mitigation.															
CLOSED SAPLING POLE	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Better forage, more fungi, cover not good. Score the same as Lake Chaplain without mitigation.															
SMALL SAWTIMBER	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	Stands will be mostly hemlock, few Douglas-fir trees.															
MATURE MIXED FOREST	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Existing score.															
MATURE RIPARIAN FOREST	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: DOUGLAS SQUIRREL

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.50	0.50	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	Increase due to snag creation; monitor and maintain snag densities and dead and down material.															
OLD-GROWTH FOREST	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	Existing score. No improvement.															
MATURE MIXED FOREST	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Increase due to snag creation; monitor and maintain snag densities and dead and down material.															
MATURE RIPARIAN FOREST	0.20	0.20	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.230	0.30	0.30
	Increase due to snag creation; monitor and maintain snag densities and dead and down material.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: COMMON MERGANSER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Adjacent to flowing water but few large snags.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Low due to the lack to mature trees.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: COMMON MERGANSER

CONDITION: WTIH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD-GROWTH FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score. No improvement.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score. No improvement. Marginal habitat due to the lack of mature trees.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: MALLARD

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIXED SHRUB/BRUSH	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Limited area adjacent to wetlands.															
WETLAND	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Restricted open water.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: MALLARD

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD-GROWTH FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIXED SHRUB/BRUSH	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score. No improvement.															
WETLAND	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Existing score. No improvement.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: BEAVER

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Exisitng score.															
MIXED SHRUB/BRUSH	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score.															
WETLAND	0.80	0.80	0.70	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Decrease in 1995 due to logging of adjacent forest.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: BEAVER

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD-GROWTH FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score. No improvement.															
MIXED SHRUB/BRUSH	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	Existing score. No improvement.															
WETLAND	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Existing score. No improvement.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: OSPREY

CONDITION: WITHOUT MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EARLY SUCCESSIONAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CLOSED SAPLING POLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SMALL SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Some large snags and trees. Close to reservoir.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Little open water.															

HABITAT SUITABILITY INDEX SCORES

AREA: WILLIAMSON CREEK TRACT SPECIES: OSPREY

CONDITION: WITH MITIGATION

COVER TYPE	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
LARGE SAWTIMBER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OLD-GROWTH FOREST	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	Existing score. No improvement.															
MATURE MIXED FOREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATURE RIPARIAN FOREST	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Existing score. No improvement.															
MIXED SHRUB/BRUSH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WETLAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Annual Habitat Units available for the black-tailed deer without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESN HSI	ESN ACRES	ESN HU	OSN HSI	OSN ACRES	OSN HU	CS HSI	CS ACRES	CS HU	CSN HSI	CSN ACRES	CSN HU	SS HSI	SS ACRES	SS HU	SSN HSI	SSN ACRES	SSN HU	LS HSI	LS ACRES	LS HU	D6 HSI	D6 ACRES	D6 HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.50	77.8	38.9	0.40	0.0	0.0	0.50	12.9	6.5	0.20	0.0	0.0	0.56	1438.4	805.5	0.35	0.0	0.0	0.56	9.9	5.5	0.52	54.5	28.3	0.45	244.5	110.0	0.75	48.1	36.1
1990	0.50	494.6	247.3	0.40	0.0	0.0	0.50	11.2	5.6	0.20	0.0	0.0	0.56	1062.4	594.9	0.35	0.0	0.0	0.56	36.4	20.4	0.52	54.5	28.3	0.45	203.5	91.6	0.75	32.5	24.4
1995	0.50	416.8	208.4	0.40	77.8	31.1	0.50	6.8	3.4	0.20	0.0	0.0	0.56	1020.4	571.4	0.35	0.0	0.0	0.56	82.8	46.4	0.52	54.5	28.3	0.45	203.5	91.6	0.75	32.5	24.4
2000	0.50	255.3	127.7	0.40	416.8	166.7	0.50	0.0	0.0	0.20	77.8	15.6	0.56	858.8	480.9	0.35	0.0	0.0	0.56	53.7	30.1	0.52	31.5	16.4	0.45	199.5	89.8	0.75	32.5	24.4
2005	0.50	454.1	227.1	0.40	0.0	0.0	0.50	0.0	0.0	0.20	494.6	98.9	0.56	729.0	408.2	0.35	0.0	0.0	0.56	53.7	30.1	0.52	31.5	16.4	0.45	130.5	58.7	0.75	32.5	24.4
2010	0.50	719.1	359.6	0.40	255.3	102.1	0.50	0.0	0.0	0.20	494.6	98.9	0.56	344.8	193.1	0.35	0.0	0.0	0.56	27.2	15.2	0.52	25.7	13.4	0.50	55.2	27.6	0.80	18.8	15.0
2015	0.50	753.9	377.0	0.40	198.8	79.5	0.50	0.0	0.0	0.20	672.1	134.4	0.56	134.9	75.5	0.35	77.8	27.2	0.56	20.3	11.4	0.52	25.7	13.4	0.50	38.4	19.2	0.80	18.8	15.0
2020	0.50	435.4	217.7	0.40	520.3	208.1	0.50	0.0	0.0	0.20	454.1	90.8	0.56	0.0	0.0	0.35	494.6	173.1	0.56	3.0	1.7	0.52	1.6	0.8	0.50	22.1	11.1	0.80	9.6	7.7
2025	0.50	214.4	107.2	0.40	233.6	93.4	0.50	0.0	0.0	0.20	974.4	194.9	0.56	0.0	0.0	0.35	494.6	173.1	0.56	0.0	0.0	0.52	0.0	0.0	0.50	17.3	8.7	0.80	6.4	5.1
2030	0.50	19.0	9.5	0.40	201.8	80.7	0.50	0.0	0.0	0.20	952.7	190.5	0.56	0.0	0.0	0.35	749.9	262.5	0.56	0.0	0.0	0.52	0.0	0.0	0.50	17.3	8.7	0.80	0.0	0.0
2035	0.50	93.5	46.8	0.40	12.6	5.0	0.50	0.0	0.0	0.20	955.7	191.1	0.56	0.0	0.0	0.35	870.9	304.8	0.56	0.0	0.0	0.52	0.0	0.0	0.50	8.0	4.0	0.80	0.0	0.0
2040	0.50	511.9	256.0	0.40	6.4	2.6	0.50	0.0	0.0	0.20	448.0	89.6	0.56	0.0	0.0	0.35	974.4	341.0	0.56	0.0	0.0	0.52	0.0	0.0	0.50	0.0	0.0	0.80	0.0	0.0
2045	0.50	424.8	212.4	0.40	87.1	34.8	0.50	0.0	0.0	0.20	220.8	44.2	0.56	0.0	0.0	0.35	1208.0	422.8	0.56	0.0	0.0	0.52	0.0	0.0	0.50	0.0	0.0	0.80	0.0	0.0
2050	0.50	255.3	127.7	0.40	424.8	169.9	0.50	0.0	0.0	0.20	106.1	21.2	0.56	0.0	0.0	0.35	1154.5	404.1	0.56	0.0	0.0	0.52	0.0	0.0	0.50	0.0	0.0	0.80	0.0	0.0
2055	0.50	454.1	227.1	0.40	0.0	0.0	0.50	0.0	0.0	0.20	518.3	103.7	0.56	0.0	0.0	0.35	968.3	338.9	0.56	0.0	0.0	0.52	0.0	0.0	0.50	0.0	0.0	0.80	0.0	0.0
2060	0.50	719.1	359.6	0.40	255.3	102.1	0.50	0.0	0.0	0.20	511.9	102.4	0.56	0.0	0.0	0.35	454.4	159.0	0.56	0.0	0.0	0.52	0.0	0.0	0.50	0.0	0.0	0.80	0.0	0.0

MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	GM HSI	GM ACRES	GM HU	GS HSI	GS ACRES	GS HU	YM HSI	YM ACRES	YM HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
0.80	23.8	19.0	0.75	33.5	25.1	0.53	24.7	13.1	0.30	66.0	19.8	0.69	8.0	5.5	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	1134.4	0.54
0.80	14.8	11.8	0.75	33.5	25.1	0.53	24.7	13.1	0.30	66.0	19.8	0.69	8.0	5.5	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	1108.9	0.53
0.80	14.8	11.8	0.75	33.5	25.1	0.53	24.7	13.1	0.30	66.0	19.8	0.69	8.0	5.5	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	1101.4	0.52
0.80	14.8	11.8	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	1025.2	0.49
0.80	14.8	11.8	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	937.5	0.44
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	886.8	0.42
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	814.6	0.39
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	772.9	0.37
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	644.3	0.31
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	613.8	0.29
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	613.7	0.29
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	751.1	0.36
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	776.1	0.37
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	784.8	0.37
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	731.5	0.35
0.80	0.0	0.0	0.75	10.7	8.0	0.53	24.7	13.1	0.30	66.0	19.8	0.69	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	2112.1	785.0	0.37

YEAR	TY	DEER HUs BTW TYs
1960	0	
1965	1	1137.41
1985	20	21553.87
1990	25	5608.27
1995	30	5525.68
2000	35	5316.49
2005	40	4906.84
2010	45	4560.87
2015	50	4253.46
2020	55	3968.65
2025	60	3543.06
2030	65	3145.27
2035	70	3068.63
2040	75	3411.82
2045	80	3817.96
2050	85	3902.24
2055	90	3790.78
2060	95	3791.34
	TOTAL	85302.62

1965 W/ MIT. VALUE

EVALUATION SPECIES: BLACK-TAILED DEER
LIFE OF PROJECT 95 YRS. AAHU'S = 897.92

Average Annual Habitat Units available for the black-tailed deer with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			OS			CS			SS			LSU			LST			OG			MF			DF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	1.00	0.0	0.0	0.90	0.0	0.0	0.50	8.5	4.3	0.56	1508.9	845.0	0.56	13.5	7.6	0.56	0.0	0.0	0.52	54.6	28.4	0.45	252.9	113.8	0.75	50.0	37.5	0.80	23.2	18.6	0.80	0.0	0.0
1990	1.00	126.7	126.7	0.90	0.0	0.0	0.30	8.5	2.6	0.60	1340.6	804.4	0.70	39.7	27.8	0.56	0.0	0.0	0.70	54.6	38.2	0.45	244.9	110.2	0.75	50.0	37.5	0.80	23.2	18.6	0.80	10.0	8.0
1995	1.00	223.6	223.6	0.90	0.0	0.0	0.30	8.5	2.6	0.60	1067.2	640.3	0.70	158.7	111.1	0.80	56.0	44.8	0.70	54.6	38.2	0.70	219.0	153.3	0.80	50.0	40.0	0.80	23.2	18.6	0.80	15.0	12.0
2000	1.00	198.4	198.4	0.90	126.7	114.0	0.30	0.0	0.0	0.60	928.4	557.0	0.70	132.7	92.9	0.80	124.5	99.6	0.80	54.6	43.7	0.70	226.4	158.5	0.80	47.0	37.6	0.80	23.2	18.6	0.80	28.5	22.8
2005	1.00	210.3	210.3	0.90	223.6	201.2	0.30	0.0	0.0	0.60	763.2	457.9	0.70	142.7	99.9	0.80	157.1	125.7	0.90	54.6	49.1	0.70	216.1	151.3	0.80	47.0	37.6	0.80	23.2	18.6	0.80	43.6	34.9
2010	1.00	223.6	223.6	0.90	198.4	178.6	0.30	126.7	38.0	0.60	569.8	341.9	0.70	248.4	173.9	0.80	138.1	110.5	0.90	54.6	49.1	0.70	200.2	140.1	0.80	47.0	37.6	0.80	23.2	18.6	0.80	48.4	38.7
2015	1.00	219.2	219.2	0.90	210.3	189.3	0.30	223.6	67.1	0.60	271.0	162.6	0.70	405.9	284.1	0.80	178.6	142.9	0.90	54.6	49.1	0.70	186.4	130.5	0.80	43.1	34.5	0.80	23.2	18.6	0.80	53.5	42.8
2020	1.00	205.3	205.3	0.90	223.6	201.2	0.30	198.4	59.5	0.60	366.1	219.7	0.70	424.3	297.0	0.80	96.9	77.5	0.90	54.6	49.1	0.70	167.8	117.5	0.80	43.1	34.5	0.80	23.2	18.6	0.80	57.6	46.1
2025	1.00	215.4	215.4	0.90	219.2	197.3	0.30	210.3	63.1	0.60	308.1	184.9	0.70	478.8	335.2	0.80	85.8	68.6	0.90	54.6	49.1	0.70	150.8	105.6	0.80	43.1	34.5	0.80	23.2	18.6	0.80	65.6	52.5
2030	1.00	252.5	252.5	0.90	205.3	184.8	0.30	223.6	67.1	0.60	326.8	196.1	0.70	401.2	280.8	0.80	113.5	90.8	0.90	54.6	49.1	0.70	145.5	101.9	0.80	43.1	34.5	0.80	23.2	18.6	0.80	65.6	52.5
2035	1.00	241.6	241.6	0.90	215.4	193.9	0.30	219.2	65.8	0.60	435.6	261.4	0.70	328.3	229.8	0.80	100.6	80.5	0.90	54.6	49.1	0.70	137.7	96.4	0.80	33.1	26.5	0.80	23.2	18.6	0.80	65.6	52.5
2040	1.00	218.9	218.9	0.90	252.5	227.3	0.30	205.3	61.6	0.60	423.7	254.2	0.70	276.0	193.2	0.80	171.4	137.1	0.90	54.6	49.1	0.70	126.1	88.3	0.80	33.1	26.5	0.80	23.2	18.6	0.80	68.6	54.9
2045	1.00	242.3	242.3	0.90	241.6	217.4	0.30	215.4	64.6	0.60	431.2	258.7	0.70	216.9	151.8	0.80	223.6	178.9	0.90	54.6	49.1	0.70	105.2	73.6	0.80	27.8	22.2	0.80	23.2	18.6	0.80	69.6	55.7
2050	1.00	253.7	253.7	0.90	218.9	197.0	0.30	252.5	75.8	0.60	430.6	258.4	0.70	228.0	159.6	0.80	187.3	149.8	0.90	54.6	49.1	0.70	105.2	73.6	0.80	27.8	22.2	0.80	23.2	18.6	0.80	69.6	55.7
2055	1.00	223.6	223.6	0.90	242.3	218.1	0.30	241.6	72.5	0.60	436.3	261.8	0.70	228.0	159.6	0.80	199.2	159.4	0.90	54.6	49.1	0.70	105.2	73.6	0.80	27.8	22.2	0.80	23.2	18.6	0.80	69.6	55.7
2060	1.00	198.4	198.4	0.90	253.7	228.3	0.30	218.9	65.7	0.60	459.5	275.7	0.70	216.9	151.8	0.80	223.6	178.9	0.90	54.6	49.1	0.70	105.2	73.6	0.80	27.8	22.2	0.80	23.2	18.6	0.80	69.6	55.7

	SB			GM			BS			YM			ML			MB			RES			RD			TOTAL	TOTAL	MEAN	YEAR	TY	HUs BTW TYs
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI	1960	0	
																												1965	1	1137.41
	0.75	30.2	22.7	0.53	24.7	13.1	0.30	67.0	20.1	0.69	8.0	5.5	0.30	70.0	21.0	0.90	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2111.5	1137.4	0.54	1985	20	21610.93
	0.80	30.2	24.2	0.60	24.7	14.8	0.50	67.0	33.5	0.69	8.0	5.5	0.30	70.0	21.0	0.90	3.3	3.0	0.00	0.0	0.0	0.00	0.0	0.0	2101.4	1275.9	0.61	1990	25	6033.74
	0.90	30.2	27.2	0.80	41.7	33.4	0.80	50.0	40.0	0.69	8.0	5.5	0.30	79.0	23.7	0.90	11.7	10.5	0.00	0.0	0.0	0.00	0.0	0.0	2096.4	1424.7	0.68	1995	30	6751.76
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	12.6	11.3	0.00	0.0	0.0	0.00	0.0	0.0	2084.4	1461.1	0.70	2000	35	7214.61
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	12.6	11.3	0.00	0.0	0.0	0.00	0.0	0.0	2075.4	1504.5	0.72	2005	40	7414.23
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	12.6	11.3	0.00	0.0	0.0	0.00	0.0	0.0	2072.4	1468.6	0.71	2010	45	7432.73
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	12.6	11.3	0.00	0.0	0.0	0.00	0.0	0.0	2063.4	1458.7	0.71	2015	50	7318.11
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	18.6	16.7	0.00	0.0	0.0	0.00	0.0	0.0	2060.9	1449.4	0.70	2020	55	7270.12
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2059.9	1452.6	0.71	2025	60	7254.95
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2059.9	1456.5	0.71	2030	65	7272.73
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2059.9	1443.9	0.70	2035	70	7250.90
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2058.4	1457.5	0.71	2040	75	7253.48
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2056.4	1461.0	0.71	2045	80	7296.30
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2056.4	1441.5	0.70	2050	85	7256.08
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2056.4	1442.1	0.70	2055	90	7208.83
	0.90	10.7	9.6	0.80	41.7	33.4	0.80	50.0	40.0	0.69	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	2056.4	1446.0	0.70	2060	95	7220.20
																													TL:	130197.22

EVALUATION SPECIES: BLACK-TAILED DEER

LIFE OF PROJECT: 95 YRS AAHU'S = 1370.50

Average Annual Habitat Units available for the ruffed grouse without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESN HSI	ESN ACRES	ESN HU	OSN HSI	OSN ACRES	OSN HU	CS HSI	CS ACRES	CS HU	CSN HSI	CSN ACRES	CSN HU	SS HSI	SS ACRES	SS HU	SSN HSI	SSN ACRES	SSN HU	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.30	77.8	23.3	0.30	0.0	0.0	0.20	12.9	2.6	0.10	0.0	0.0	0.26	1438.4	374.0	0.10	0.0	0.0	0.26	9.9	2.6	0.24	54.5	13.1	0.55	244.5	134.5	0.75	48.1	36.1
1990	0.30	494.6	148.4	0.30	0.0	0.0	0.20	11.2	2.2	0.10	0.0	0.0	0.26	1062.4	276.2	0.10	0.0	0.0	0.26	36.4	9.5	0.24	54.5	13.1	0.55	203.5	111.9	0.75	32.5	24.4
1995	0.30	416.8	125.0	0.30	77.8	23.3	0.20	6.8	1.4	0.10	0.0	0.0	0.26	1020.4	265.3	0.10	0.0	0.0	0.26	82.8	21.5	0.24	54.5	13.1	0.55	203.5	111.9	0.75	32.5	24.4
2000	0.30	255.3	76.6	0.30	416.8	125.0	0.20	0.0	0.0	0.10	77.8	7.8	0.26	858.8	223.3	0.10	0.0	0.0	0.26	53.7	14.0	0.24	31.5	7.6	0.55	199.5	109.7	0.75	32.5	24.4
2005	0.30	454.1	136.2	0.30	0.0	0.0	0.20	0.0	0.0	0.10	494.6	49.5	0.26	729.0	189.5	0.10	0.0	0.0	0.26	53.7	14.0	0.24	31.5	7.6	0.55	130.5	71.8	0.75	32.5	24.4
2010	0.30	719.1	215.7	0.30	255.3	76.6	0.20	0.0	0.0	0.10	494.6	49.5	0.26	344.8	89.6	0.10	0.0	0.0	0.26	27.2	7.1	0.24	25.7	6.2	0.55	55.2	30.4	0.75	18.8	14.1
2015	0.30	753.9	226.2	0.30	198.8	59.6	0.20	0.0	0.0	0.10	672.1	67.2	0.26	134.9	35.1	0.10	77.8	7.8	0.26	20.3	5.3	0.24	25.7	6.2	0.55	38.4	21.1	0.75	18.8	14.1
2020	0.30	435.4	130.6	0.30	520.3	156.1	0.20	0.0	0.0	0.10	454.1	45.4	0.26	0.0	0.0	0.10	494.6	49.5	0.26	3.0	0.8	0.24	1.6	0.4	0.55	22.1	12.2	0.75	9.6	7.2
2025	0.30	214.4	64.3	0.30	233.6	70.1	0.20	0.0	0.0	0.10	974.4	97.4	0.26	0.0	0.0	0.10	494.6	49.5	0.26	0.0	0.0	0.24	0.0	0.0	0.55	17.3	9.5	0.75	6.4	4.8
2030	0.30	19.0	5.7	0.30	201.8	60.5	0.20	0.0	0.0	0.10	952.7	95.3	0.26	0.0	0.0	0.10	749.9	75.0	0.26	0.0	0.0	0.24	0.0	0.0	0.55	17.3	9.5	0.75	0.0	0.0
2035	0.30	93.5	28.1	0.30	12.6	3.8	0.20	0.0	0.0	0.10	955.7	95.6	0.26	0.0	0.0	0.10	870.9	87.1	0.26	0.0	0.0	0.24	0.0	0.0	0.55	8.0	4.4	0.75	0.0	0.0
2040	0.30	511.9	153.6	0.30	6.4	1.9	0.20	0.0	0.0	0.10	448.0	44.8	0.26	0.0	0.0	0.10	974.4	97.4	0.26	0.0	0.0	0.24	0.0	0.0	0.55	0.0	0.0	0.75	0.0	0.0
2045	0.30	424.8	127.4	0.30	87.1	26.1	0.20	0.0	0.0	0.10	220.8	22.1	0.26	0.0	0.0	0.10	1208.0	120.8	0.26	0.0	0.0	0.24	0.0	0.0	0.55	0.0	0.0	0.75	0.0	0.0
2050	0.30	255.3	76.6	0.30	424.8	127.4	0.20	0.0	0.0	0.10	106.1	10.6	0.26	0.0	0.0	0.10	1154.5	115.5	0.26	0.0	0.0	0.24	0.0	0.0	0.55	0.0	0.0	0.75	0.0	0.0
2055	0.30	454.1	136.2	0.30	0.0	0.0	0.20	0.0	0.0	0.10	518.3	51.8	0.26	0.0	0.0	0.10	968.3	96.8	0.26	0.0	0.0	0.24	0.0	0.0	0.55	0.0	0.0	0.75	0.0	0.0
2060	0.30	719.1	215.7	0.30	255.3	76.6	0.20	0.0	0.0	0.10	511.9	51.2	0.26	0.0	0.0	0.10	454.4	45.4	0.26	0.0	0.0	0.24	0.0	0.0	0.55	0.0	0.0	0.75	0.0	0.0

RUFFED GROUSE A

YEAR	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	GM HSI	GM ACRES	GM HU	GS HSI	GS ACRES	GS HU	YM HSI	YM ACRES	YM HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1960	0.78	23.8	18.6	0.45	33.5	15.1	0.20	24.7	4.9	0.10	66.0	6.6	0.43	8.0	3.4	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	634.7	0.31
1965	0.78	14.8	11.5	0.45	33.5	15.1	0.20	24.7	4.9	0.10	66.0	6.6	0.43	8.0	3.4	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	627.3	0.31
1985	0.78	14.8	11.5	0.45	33.5	15.1	0.20	24.7	4.9	0.10	66.0	6.6	0.43	8.0	3.4	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	627.6	0.31
1990	0.78	14.8	11.5	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	616.2	0.30
1995	0.78	14.8	11.5	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	520.8	0.26
2000	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	505.5	0.25
2005	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	458.9	0.22
2010	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	418.5	0.20
2015	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	312.0	0.15
2020	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	262.4	0.13
2025	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	235.2	0.12
2030	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	314.1	0.15
2035	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	312.8	0.15
2040	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	346.4	0.17
2045	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	301.2	0.15
2050	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	405.3	0.20
2055	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	378.2	0.18
2060	0.78	0.0	0.0	0.45	10.7	4.8	0.20	24.7	4.9	0.10	66.0	6.6	0.43	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2042.1	405.3	0.20

YEAR	TY	R.GROUSE HUs BTW TYs	R.GROUSE A HUs BTW TYs	
1960	0			
1965	1	633.99	18.10	1965 W/ MIT. VALUE
1985	20	12059.81	293.93	
1990	25	3155.04	75.27	
1995	30	3137.10	57.72	
2000	35	3109.43	57.72	
2005	40	2842.55	57.72	
2010	45	2565.71	28.86	
2015	50	2410.95	0.00	
2020	55	2193.37	0.00	
2025	60	1826.06	0.00	
2030	65	1435.85	0.00	
2035	70	1244.04	0.00	
2040	75	1373.33	0.00	
2045	80	1567.23	0.00	
2050	85	1648.13	0.00	
2055	90	1619.23	0.00	
2060	95	1766.38	0.00	
TOTAL		44588.16	589.32	

EVALUATION SPECIES: RUFFED GROUSE

LIFE OF PROJECT 95 YRS. AAHU'S = 469.35 6.20

Average Annual Habitat Units available for the ruffed grouse with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	LST HSI	LST ACRES	LST HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	OF HSI	OF ACRES	OF HU	RUFFED GROUSE A MR HSI	MR ACRES	MR HU	RE HSI	RE ACRES	RE HU
1985	0.70	0.0	0.0	0.70	0.0	0.0	0.20	8.5	1.7	0.26	1508.9	392.3	0.26	13.5	3.5	0.26	0.0	0.0	0.24	54.6	13.1	0.55	252.9	139.1	0.75	50.0	37.5	0.78	23.2	18.1	0.40	0.0	0.0
1990	0.70	126.7	88.7	0.70	0.0	0.0	0.20	8.5	1.7	0.20	1340.6	268.1	0.40	39.7	15.9	0.60	0.0	0.0	0.24	54.6	13.1	0.60	244.9	146.9	0.75	50.0	37.5	0.78	23.2	18.1	0.40	10.0	4.0
1995	0.70	223.6	156.5	0.70	0.0	0.0	0.20	8.5	1.7	0.20	1067.2	213.4	0.40	158.7	63.5	0.60	56.0	33.6	0.24	54.6	13.1	0.75	219.0	164.3	0.80	50.0	40.0	0.78	23.2	18.1	0.40	15.0	6.0
2000	0.70	198.4	138.9	0.70	126.7	88.7	0.30	0.0	0.0	0.20	928.4	185.7	0.40	132.7	53.1	0.60	124.5	74.7	0.24	54.6	13.1	0.75	226.4	169.8	0.80	47.0	37.6	0.78	23.2	18.1	0.40	28.5	11.4
2005	0.70	210.3	147.2	0.70	223.6	156.5	0.30	0.0	0.0	0.20	763.2	152.6	0.40	142.7	57.1	0.60	157.1	94.3	0.24	54.6	13.1	0.75	216.1	162.1	0.80	47.0	37.6	0.78	23.2	18.1	0.40	43.6	17.4
2010	0.70	223.6	156.5	0.70	198.4	138.9	0.30	126.7	38.0	0.20	569.8	114.0	0.40	248.4	99.4	0.60	138.1	82.9	0.24	54.6	13.1	0.75	200.2	150.2	0.80	47.0	37.6	0.78	23.2	18.1	0.40	48.4	19.4
2015	0.70	219.2	153.4	0.70	210.3	147.2	0.30	223.6	67.1	0.20	271.0	54.2	0.40	405.9	162.4	0.60	178.6	107.2	0.24	54.6	13.1	0.75	186.4	139.8	0.80	43.1	34.5	0.78	23.2	18.1	0.40	53.5	21.4
2020	0.70	205.3	143.7	0.70	223.6	156.5	0.30	198.4	59.5	0.20	366.1	73.2	0.40	424.3	169.7	0.60	96.9	58.1	0.24	54.6	13.1	0.75	167.8	125.9	0.80	43.1	34.5	0.78	23.2	18.1	0.40	57.6	23.0
2025	0.70	215.4	150.8	0.70	219.2	153.4	0.30	210.3	63.1	0.20	308.1	61.6	0.40	478.8	191.5	0.60	85.8	51.5	0.24	54.6	13.1	0.75	150.8	113.1	0.80	43.1	34.5	0.78	23.2	18.1	0.40	65.6	26.2
2030	0.70	252.5	176.8	0.70	205.3	143.7	0.30	223.6	67.1	0.20	326.8	65.4	0.40	401.2	160.5	0.60	113.5	68.1	0.24	54.6	13.1	0.75	145.5	109.1	0.80	43.1	34.5	0.78	23.2	18.1	0.40	65.6	26.2
2035	0.70	241.6	169.1	0.70	215.4	150.8	0.30	219.2	65.8	0.20	435.6	87.1	0.40	328.3	131.3	0.60	100.6	60.4	0.24	54.6	13.1	0.75	137.7	103.3	0.80	33.1	26.5	0.78	23.2	18.1	0.40	65.6	26.2
2040	0.70	218.9	153.2	0.70	252.5	176.8	0.30	205.3	61.6	0.20	423.7	84.7	0.40	276.0	110.4	0.60	171.4	102.8	0.24	54.6	13.1	0.75	126.1	94.6	0.80	33.1	26.5	0.78	23.2	18.1	0.40	68.6	27.4
2045	0.70	242.3	169.6	0.70	241.6	169.1	0.30	215.4	64.6	0.20	431.2	86.2	0.40	216.9	86.8	0.60	223.6	134.2	0.24	54.6	13.1	0.75	105.2	78.9	0.80	27.8	22.2	0.78	23.2	18.1	0.40	69.6	27.8
2050	0.70	253.7	177.6	0.70	218.9	153.2	0.30	252.5	75.8	0.20	430.6	86.1	0.40	228.0	91.2	0.60	187.3	112.4	0.24	54.6	13.1	0.75	105.2	78.9	0.80	27.8	22.2	0.78	23.2	18.1	0.40	69.6	27.8
2055	0.70	223.6	156.5	0.70	242.3	169.6	0.30	241.6	72.5	0.20	436.3	87.3	0.40	228.0	91.2	0.60	199.2	119.5	0.24	54.6	13.1	0.75	105.2	78.9	0.80	27.8	22.2	0.78	23.2	18.1	0.40	69.6	27.8
2060	0.70	198.4	138.9	0.70	253.7	177.6	0.30	218.9	65.7	0.20	459.5	91.9	0.40	216.9	86.8	0.60	223.6	134.2	0.24	54.6	13.1	0.75	105.2	78.9	0.80	27.8	22.2	0.78	23.2	18.1	0.40	69.6	27.8

YEAR	SB HSI	SB ACRES	SB HU	GM HSI	GM ACRES	GM HU	GS HSI	GS ACRES	GS HU	YM HSI	YM ACRES	YM HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	RES HSI	RES ACRES	RES HU	RD HSI	RD ACRES	RD HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1960	0.45	30.2	13.6	0.20	24.7	4.9	0.10	67.0	6.7	0.43	8.0	3.4	0.00	0.0	0.0	0.60	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2041.5	634.0	0.31
1965	0.45	30.2	13.6	0.30	24.7	7.4	0.40	67.0	26.8	0.43	8.0	3.4	0.00	0.0	0.0	0.60	3.3	2.0	0.00	0.0	0.0	0.00	0.0	0.0	2031.4	647.3	0.32
1990	0.45	30.2	13.6	0.40	41.7	16.7	0.70	50.0	35.0	0.43	8.0	3.4	0.00	0.0	0.0	0.80	11.7	9.4	0.00	0.0	0.0	0.00	0.0	0.0	2017.4	788.3	0.39
1995	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	12.6	10.1	0.00	0.0	0.0	0.00	0.0	0.0	2005.4	857.6	0.43
2000	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	12.6	10.1	0.00	0.0	0.0	0.00	0.0	0.0	1996.4	922.6	0.46
2005	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	12.6	10.1	0.00	0.0	0.0	0.00	0.0	0.0	1993.4	934.5	0.47
2010	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	12.6	10.1	0.00	0.0	0.0	0.00	0.0	0.0	1984.4	984.9	0.50
2015	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	18.6	14.9	0.00	0.0	0.0	0.00	0.0	0.0	1981.9	966.8	0.48
2020	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1980.9	952.3	0.48
2025	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1980.9	957.9	0.48
2030	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1980.9	927.0	0.47
2035	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1979.4	944.6	0.48
2040	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1977.4	946.1	0.48
2045	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1977.4	931.8	0.47
2050	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1977.4	932.1	0.47
2055	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1977.4	930.5	0.47
2060	0.45	10.7	4.8	0.40	41.7	16.7	0.70	50.0	35.0	0.43	0.0	0.0	0.00	0.0	0.0	0.80	23.6	18.9	0.00	0.0	0.0	0.00	0.0	0.0	1977.4	930.5	0.47

YEAR	TY	R. GROUSE HUs BTW TYs	R.GROUSE A: HUs BTW TYs
1960	0		
1965	1	633.99	18.10
1985	20	12045.79	343.82
1990	25	3203.17	90.48
1995	30	3589.62	90.48
2000	35	4115.03	90.48
2005	40	4450.77	90.48
2010	45	4642.70	90.48
2015	50	4798.66	90.48
2020	55	4829.16	90.48
2025	60	4747.75	90.48
2030	65	4775.56	90.48
2035	70	4712.33	90.48
2040	75	4679.14	90.48
2045	80	4726.71	90.48
2050	85	4694.73	90.48
2055	90	4659.93	90.48
2060	95	4656.65	90.48
TL:		79961.68	1719.12

EVALUATION SPECIES: RUFFED GROUSE

LIFE OF PROJECT: 95 YRS AAHU'S = 841.70 18.10

Average Annual Habitat Units available for the black-capped chickadee without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESN HSI	ESN ACRES	ESN HU	OSN HSI	OSN ACRES	OSN HU	CS HSI	CS ACRES	CS HU	CSN HSI	CSN ACRES	CSN HU	SS HSI	SS ACRES	SS HU	SSN HSI	SSN ACRES	SSN HU	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.10	77.8	7.8	0.20	0.0	0.0	0.20	12.9	2.6	0.20	0.0	0.0	0.43	1438.4	618.5	0.30	0.0	0.0	0.43	9.9	4.3	0.42	54.5	22.9	0.73	244.5	178.5	0.90	48.1	43.3
1990	0.10	494.6	49.5	0.20	0.0	0.0	0.20	11.2	2.2	0.20	0.0	0.0	0.43	1062.4	456.8	0.30	0.0	0.0	0.43	36.4	15.7	0.42	54.5	22.9	0.73	203.5	148.6	0.90	32.5	29.3
1995	0.10	416.8	41.7	0.20	77.8	15.6	0.20	6.8	1.4	0.20	0.0	0.0	0.43	1020.4	438.8	0.30	0.0	0.0	0.43	82.8	35.6	0.42	54.5	22.9	0.73	203.5	148.6	0.90	32.5	29.3
2000	0.10	255.3	25.5	0.20	416.8	83.4	0.20	0.0	0.0	0.20	77.8	15.6	0.43	858.8	369.3	0.30	0.0	0.0	0.43	53.7	23.1	0.42	31.5	13.2	0.73	199.5	145.6	0.90	32.5	29.3
2005	0.10	454.1	45.4	0.20	0.0	0.0	0.20	0.0	0.0	0.20	494.6	98.9	0.43	729.0	313.5	0.30	0.0	0.0	0.43	53.7	23.1	0.42	31.5	13.2	0.73	130.5	95.3	0.90	32.5	29.3
2010	0.10	719.1	71.9	0.20	255.3	51.1	0.20	0.0	0.0	0.20	494.6	98.9	0.43	344.9	148.3	0.30	0.0	0.0	0.43	27.2	11.7	0.42	25.7	10.8	0.73	55.2	40.3	0.90	18.8	16.9
2015	0.10	753.9	75.4	0.20	198.8	39.8	0.20	0.0	0.0	0.20	672.1	134.4	0.43	134.9	58.0	0.30	77.8	23.3	0.43	20.3	8.7	0.42	25.7	10.8	0.73	38.4	28.0	0.90	18.8	16.9
2020	0.10	435.4	43.5	0.20	520.3	104.1	0.20	0.0	0.0	0.20	454.1	90.8	0.43	0.0	0.0	0.30	494.6	148.4	0.43	3.0	1.3	0.42	1.6	0.7	0.73	22.1	16.1	0.90	9.6	8.6
2025	0.10	214.4	21.4	0.20	233.6	46.7	0.20	0.0	0.0	0.20	974.4	194.9	0.43	0.0	0.0	0.30	494.6	148.4	0.43	0.0	0.0	0.42	0.0	0.0	0.73	17.3	12.6	0.90	6.4	5.8
2030	0.10	19.0	1.9	0.20	201.8	40.4	0.20	0.0	0.0	0.20	952.7	190.5	0.43	0.0	0.0	0.30	749.9	225.0	0.43	0.0	0.0	0.42	0.0	0.0	0.73	17.3	12.6	0.90	0.0	0.0
2035	0.10	93.5	9.4	0.20	12.6	2.5	0.20	0.0	0.0	0.20	955.7	191.1	0.43	0.0	0.0	0.30	870.9	261.3	0.43	0.0	0.0	0.42	0.0	0.0	0.73	8.0	5.8	0.90	0.0	0.0
2040	0.10	511.9	51.2	0.20	6.4	1.3	0.20	0.0	0.0	0.20	448.0	89.6	0.43	0.0	0.0	0.30	974.4	292.3	0.43	0.0	0.0	0.42	0.0	0.0	0.73	0.0	0.0	0.90	0.0	0.0
2045	0.10	424.8	42.5	0.20	87.1	17.4	0.20	0.0	0.0	0.20	220.8	44.2	0.43	0.0	0.0	0.30	1208.0	362.4	0.43	0.0	0.0	0.42	0.0	0.0	0.73	0.0	0.0	0.90	0.0	0.0
2050	0.10	255.3	25.5	0.20	424.8	85.0	0.20	0.0	0.0	0.20	106.1	21.2	0.43	0.0	0.0	0.30	1154.5	346.4	0.43	0.0	0.0	0.42	0.0	0.0	0.73	0.0	0.0	0.90	0.0	0.0
2055	0.10	454.1	45.4	0.20	0.0	0.0	0.20	0.0	0.0	0.20	518.3	103.7	0.43	0.0	0.0	0.30	968.3	290.5	0.43	0.0	0.0	0.42	0.0	0.0	0.73	0.0	0.0	0.90	0.0	0.0
2060	0.10	719.1	71.9	0.20	255.3	51.1	0.20	0.0	0.0	0.20	511.9	102.4	0.43	0.0	0.0	0.30	454.4	136.3	0.43	0.0	0.0	0.42	0.0	0.0	0.73	0.0	0.0	0.90	0.0	0.0

MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	SM HSI	SM ACRES	SM HU	GS HSI	GS ACRES	GS HU	YM HSI	YM ACRES	YM HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
0.78	23.8	18.6	0.25	33.5	8.4	0.00	0.0	0.0	0.00	0.0	0.0	0.48	8.0	3.8	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	933.1	0.46
0.78	14.8	11.5	0.25	33.5	8.4	0.00	0.0	0.0	0.00	0.0	0.0	0.48	8.0	3.8	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	773.1	0.38
0.78	14.8	11.5	0.25	33.5	8.4	0.00	0.0	0.0	0.00	0.0	0.0	0.48	8.0	3.8	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	781.9	0.39
0.78	14.8	11.5	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	743.7	0.37
0.78	14.8	11.5	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	657.4	0.33
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	477.0	0.24
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	422.6	0.21
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	440.7	0.22
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	457.0	0.23
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	497.6	0.25
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	497.3	0.25
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	461.6	0.23
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	493.6	0.24
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	505.2	0.25
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	466.7	0.23
0.78	0.0	0.0	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	70.0	24.5	0.00	0.0	0.0	2021.4	388.8	0.19

YEAR	TY	HUs BTW TYs	
1960	0		
1965	1	962.78	1965 W/ MIT. VAL
1985	20	17728.39	
1990	25	4265.53	
1995	30	3887.67	
2000	35	3813.97	
2005	40	3502.54	
2010	45	2835.98	
2015	50	2249.01	
2020	55	2158.19	
2025	60	2244.24	
2030	65	2386.40	
2035	70	2487.17	
2040	75	2397.15	
2045	80	2388.00	
2050	85	2497.18	
2055	90	2429.93	
2060	95	2138.95	

TOTAL :60373.05

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE

LIFE OF PROJECT 95 YRS. AAHU'S = 635.51

Average Annual Habitat Units available for the black-capped chickadee with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			OS			CS			SS			LSU			LST			OG			MF			DF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.10	0.0	0.0	0.20	0.0	0.0	0.20	8.5	1.7	0.43	1508.9	648.8	0.43	13.5	5.8	0.43	0.0	0.0	0.42	54.6	22.9	0.73	252.9	184.6	0.90	50.0	45.0	0.78	23.2	18.1	0.00	0.0	0.0
1990	0.10	126.7	12.7	0.20	0.0	0.0	0.30	8.5	2.6	0.40	1340.6	536.2	0.50	39.7	19.9	0.50	0.0	0.0	0.42	54.6	22.9	0.73	244.9	178.8	0.90	50.0	45.0	0.78	23.2	18.1	0.50	10.0	5.0
1995	0.15	223.6	33.5	0.25	0.0	0.0	0.30	8.5	2.6	0.40	1067.2	426.9	0.50	158.7	79.4	0.50	56.0	28.0	0.50	54.6	27.3	0.80	219.0	175.2	0.90	50.0	45.0	0.78	23.2	18.1	0.80	15.0	12.0
2000	0.15	198.4	29.8	0.25	126.7	31.7	0.30	0.0	0.0	0.40	928.4	371.4	0.50	132.7	66.4	0.50	124.5	62.3	0.50	54.6	27.3	1.00	226.4	226.4	1.00	47.0	47.0	0.78	23.2	18.1	0.80	29.5	22.8
2005	0.15	210.3	31.5	0.25	223.6	55.9	0.30	0.0	0.0	0.40	763.2	305.3	0.50	142.7	71.4	0.50	157.1	78.6	0.50	54.6	27.3	1.00	216.1	216.1	1.00	47.0	47.0	0.78	23.2	18.1	0.80	43.6	34.9
2010	0.15	223.6	33.5	0.25	198.4	49.6	0.30	126.7	38.0	0.40	569.8	227.9	0.50	248.4	124.2	0.50	138.1	69.1	0.50	54.6	27.3	1.00	200.2	200.2	1.00	47.0	47.0	0.78	23.2	18.1	0.80	48.4	38.7
2015	0.15	219.2	32.9	0.25	210.3	52.6	0.30	223.6	67.1	0.40	271.0	108.4	0.50	405.9	203.0	0.50	178.6	89.3	0.50	54.6	27.3	1.00	186.4	186.4	1.00	43.1	43.1	0.78	23.2	18.1	0.80	53.5	42.8
2020	0.15	205.3	30.8	0.25	223.6	55.9	0.30	198.4	59.5	0.40	366.1	146.4	0.50	424.3	212.2	0.50	96.9	48.5	0.50	54.6	27.3	1.00	167.8	167.8	1.00	43.1	43.1	0.78	23.2	18.1	0.80	57.6	46.1
2025	0.15	215.4	32.3	0.25	219.2	54.8	0.30	210.3	63.1	0.40	308.1	123.2	0.50	478.8	239.4	0.50	85.8	42.9	0.50	54.6	27.3	1.00	150.8	150.8	1.00	43.1	43.1	0.78	23.2	18.1	0.80	65.6	52.5
2030	0.15	252.5	37.9	0.25	205.3	51.3	0.30	223.6	67.1	0.40	326.8	130.7	0.50	401.2	200.6	0.50	113.5	56.8	0.50	54.6	27.3	1.00	145.5	145.5	1.00	43.1	43.1	0.78	23.2	18.1	0.80	65.6	52.5
2035	0.15	241.6	36.2	0.25	215.4	53.9	0.30	219.2	65.8	0.40	435.6	174.2	0.50	328.3	164.2	0.50	100.6	50.3	0.50	54.6	27.3	1.00	137.7	137.7	1.00	33.1	33.1	0.78	23.2	18.1	0.80	65.6	52.5
2040	0.15	218.9	32.8	0.25	252.5	63.1	0.30	205.3	61.6	0.40	423.7	169.5	0.50	276.0	138.0	0.50	171.4	85.7	0.50	54.6	27.3	1.00	126.1	126.1	1.00	33.1	33.1	0.78	23.2	18.1	0.80	68.6	54.9
2045	0.15	242.3	36.3	0.25	241.6	60.4	0.30	215.4	64.6	0.40	431.2	172.5	0.50	216.9	108.5	0.50	223.6	111.8	0.50	54.6	27.3	1.00	105.2	105.2	1.00	27.8	27.8	0.78	23.2	18.1	0.80	69.6	55.7
2050	0.15	253.7	38.1	0.25	218.9	54.7	0.30	252.5	75.8	0.40	430.6	172.2	0.50	228.0	114.0	0.50	187.3	93.7	0.50	54.6	27.3	1.00	105.2	105.2	1.00	27.8	27.8	0.78	23.2	18.1	0.80	69.6	55.7
2055	0.15	223.6	33.5	0.25	242.3	60.6	0.30	241.6	72.5	0.40	436.3	174.5	0.50	228.0	114.0	0.50	199.2	99.6	0.50	54.6	27.3	1.00	105.2	105.2	1.00	27.8	27.8	0.78	23.2	18.1	0.80	69.6	55.7
2060	0.15	198.4	29.8	0.25	253.7	63.4	0.30	218.9	65.7	0.40	459.5	183.8	0.50	216.9	108.5	0.50	223.6	111.8	0.50	54.6	27.3	1.00	105.2	105.2	1.00	27.8	27.8	0.78	23.2	18.1	0.80	69.6	55.7

	SB			GM			GS			YM			WL			WB			RES			RD			TOTAL	TOTAL	MEAN
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI
1985	0.25	30.2	7.6	0.00	0.0	0.0	0.00	0.0	0.0	0.48	8.0	3.8	0.35	70.0	24.5	1.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	2019.8	962.9	0.48
1990	0.25	30.2	7.6	0.00	0.0	0.0	0.00	0.0	0.0	0.48	8.0	3.8	0.35	70.0	24.5	1.00	3.3	3.3	0.00	0.0	0.0	0.00	0.0	0.0	2009.7	880.3	0.44
1995	0.25	30.2	7.6	0.00	0.0	0.0	0.00	0.0	0.0	0.48	8.0	3.8	0.35	79.0	27.7	1.00	11.7	11.7	0.00	0.0	0.0	0.00	0.0	0.0	2004.7	898.7	0.45
2000	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	12.6	12.6	0.00	0.0	0.0	0.00	0.0	0.0	1992.7	945.9	0.47
2005	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	12.6	12.6	0.00	0.0	0.0	0.00	0.0	0.0	1983.7	928.9	0.47
2010	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	12.6	12.6	0.00	0.0	0.0	0.00	0.0	0.0	1980.7	916.6	0.46
2015	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	12.6	12.6	0.00	0.0	0.0	0.00	0.0	0.0	1971.7	913.8	0.46
2020	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	18.6	18.6	0.00	0.0	0.0	0.00	0.0	0.0	1969.2	904.6	0.46
2025	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1968.2	901.4	0.46
2030	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1968.2	884.8	0.45
2035	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1968.2	867.1	0.44
2040	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1966.7	864.1	0.44
2045	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1964.7	842.1	0.43
2050	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1964.7	836.4	0.43
2055	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1964.7	842.7	0.43
2060	0.25	10.7	2.7	0.00	0.0	0.0	0.00	0.0	0.0	0.48	0.0	0.0	0.35	79.0	27.7	1.00	23.6	23.6	0.00	0.0	0.0	0.00	0.0	0.0	1964.7	850.9	0.43

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	962.87
1985	20	18294.47
1990	25	4607.60
1995	30	4447.45
2000	35	4611.69
2005	40	4687.06
2010	45	4613.70
2015	50	4575.92
2020	55	4545.90
2025	60	4514.99
2030	65	4465.48
2035	70	4379.73
2040	75	4328.18
2045	80	4265.55
2050	85	4196.29
2055	90	4197.84
2060	95	4234.06
TL:		85928.78

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE
LIFE OF PROJECT: 95 YRS AAHU'S = 904.51

Average Annual Habitat Units available for the pileated woodpecker without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESM			OSM			CS			CSM			SS			SSM			LS			OG			MF			DF		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.10	12.9	1.3	0.05	0.0	0.0	0.55	1438.4	791.1	0.30	0.0	0.0	0.55	9.9	5.4	0.74	54.5	40.3	0.50	244.5	122.3	0.43	48.1	20.7
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.10	11.2	1.1	0.05	0.0	0.0	0.55	1062.4	584.3	0.30	0.0	0.0	0.55	36.4	20.0	0.74	54.5	40.3	0.55	203.5	111.9	0.45	32.5	14.6
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.10	6.8	0.7	0.05	0.0	0.0	0.55	1020.4	561.2	0.30	0.0	0.0	0.55	82.8	45.5	0.74	54.5	40.3	0.55	203.5	111.9	0.45	32.5	14.6
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	77.8	3.9	0.55	858.8	472.3	0.30	0.0	0.0	0.55	53.7	29.5	0.74	31.5	23.3	0.55	199.5	109.7	0.45	32.5	14.6
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	494.6	24.7	0.55	729.0	401.0	0.30	0.0	0.0	0.55	53.7	29.5	0.74	31.5	23.3	0.55	130.5	71.8	0.45	32.5	14.6
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	494.6	24.7	0.55	344.8	189.6	0.30	0.0	0.0	0.55	27.2	15.0	0.74	25.7	19.0	0.55	55.2	30.4	0.50	18.8	9.4
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	672.1	33.6	0.55	134.9	74.2	0.30	77.8	23.3	0.55	20.3	11.2	0.74	25.7	19.0	0.60	38.4	23.0	0.50	18.8	9.4
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	454.1	22.7	0.55	0.0	0.0	0.30	494.6	148.4	0.55	3.0	1.7	0.80	1.6	1.3	0.60	22.1	13.3	0.50	9.6	4.8
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	974.4	48.7	0.55	0.0	0.0	0.30	494.6	148.4	0.55	0.0	0.0	0.80	0.0	0.0	0.60	17.3	10.4	0.55	6.4	3.5
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	952.7	47.6	0.55	0.0	0.0	0.30	749.9	225.0	0.55	0.0	0.0	0.80	0.0	0.0	0.65	17.3	11.2	0.55	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	955.7	47.8	0.55	0.0	0.0	0.30	870.9	261.3	0.55	0.0	0.0	0.80	0.0	0.0	0.65	8.0	5.2	0.60	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	448.0	22.4	0.55	0.0	0.0	0.30	974.4	292.3	0.55	0.0	0.0	0.80	0.0	0.0	0.65	0.0	0.0	0.60	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	220.8	11.0	0.55	0.0	0.0	0.30	1208.0	362.4	0.55	0.0	0.0	0.80	0.0	0.0	0.65	0.0	0.0	0.60	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	106.1	5.3	0.55	0.0	0.0	0.30	1154.5	346.4	0.55	0.0	0.0	0.80	0.0	0.0	0.65	0.0	0.0	0.60	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	518.3	25.9	0.55	0.0	0.0	0.30	968.3	290.5	0.55	0.0	0.0	0.80	0.0	0.0	0.65	0.0	0.0	0.60	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.05	511.9	25.6	0.55	0.0	0.0	0.30	454.4	136.3	0.55	0.0	0.0	0.80	0.0	0.0	0.65	0.0	0.0	0.60	0.0	0.0

MR			SB			GM			GS			YM			WL			RES			TOTAL	TOTAL	MEAN
HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI
0.30	23.8	7.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	8.0	2.2	0.20	70.0	14.0	0.00	0.0	0.0	1910.1	1004.5	0.53
0.30	14.8	4.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	8.0	2.2	0.20	70.0	14.0	0.00	0.0	0.0	1493.3	793.0	0.53
0.30	14.8	4.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	8.0	2.2	0.20	70.0	14.0	0.00	0.0	0.0	1493.3	795.0	0.53
0.32	14.8	4.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1338.6	672.2	0.50
0.32	14.8	4.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1556.6	583.7	0.37
0.32	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1036.3	302.1	0.29
0.32	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1058.0	207.8	0.20
0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1055.0	206.1	0.20
0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1562.7	225.0	0.14
0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1789.9	297.9	0.17
0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1904.6	328.3	0.17
0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1492.4	328.7	0.22
0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1498.8	387.4	0.26
0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1330.6	365.7	0.27
0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1556.6	330.4	0.21
0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.20	70.0	14.0	0.00	0.0	0.0	1036.3	175.9	0.17

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	1049.72
1985	20	19085.46
1990	25	4495.59
1995	30	3970.05
2000	35	3684.00
2005	40	3162.66
2010	45	2178.25
2015	50	1276.40
2020	55	1034.59
2025	60	1099.41
2030	65	1302.88
2035	70	1564.69
2040	75	1658.90
2045	80	1790.20
2050	85	1885.02
2055	90	1751.93
2060	95	1247.37

1965 W/ MIT. VAL

TOTAL :52217.12

EVALUATION SPECIES: PILEATED WOODPECKER

LIFE OF PROJECT 95 YRS. AAHU'S = 549.65

Average Annual Habitat Units available for the pileated woodpecker with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			DS			CS			SS			LSU			LST			OG			MF			OF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.10	0.0	0.0	0.10	0.0	0.0	0.10	8.5	0.9	0.55	1508.9	829.9	0.55	13.5	7.4	0.55	0.0	0.0	0.74	54.6	40.4	0.50	252.9	126.5	0.43	50.0	21.5	0.30	23.2	7.0	0.00	0.0	0.0
1990	0.10	126.7	12.7	0.10	0.0	0.0	0.20	8.5	1.7	0.55	1340.6	737.3	0.70	39.7	27.8	0.70	0.0	0.0	0.74	54.6	40.4	0.50	244.9	122.5	0.43	50.0	21.5	0.30	23.2	7.0	0.50	10.0	5.0
1995	0.10	223.6	22.4	0.10	0.0	0.0	0.20	8.5	1.7	0.55	1067.2	587.0	0.70	158.7	111.1	0.70	56.0	39.2	0.80	54.6	43.7	0.60	219.0	131.4	0.50	50.0	25.0	0.30	23.2	7.0	0.50	15.0	7.5
2000	0.10	198.4	19.8	0.10	126.7	12.7	0.20	0.0	0.0	0.80	928.4	742.7	0.90	132.7	119.4	0.90	124.5	112.1	1.00	54.6	54.6	0.60	226.4	135.8	0.50	47.0	23.5	0.35	23.2	8.1	0.50	28.5	14.3
2005	0.10	210.3	21.0	0.10	223.6	22.4	0.20	0.0	0.0	0.80	763.2	610.6	0.90	142.7	128.4	0.90	157.1	141.4	1.00	54.6	54.6	0.60	216.1	129.7	0.50	47.0	23.5	0.35	23.2	8.1	0.50	43.6	21.8
2010	0.10	223.6	22.4	0.10	198.4	19.8	0.20	126.7	25.3	0.80	569.8	455.8	0.90	248.4	223.6	0.90	138.1	124.3	1.00	54.6	54.6	0.60	200.2	120.1	0.60	47.0	28.2	0.35	23.2	8.1	0.70	48.4	33.9
2015	0.10	219.2	21.9	0.10	210.3	21.0	0.20	223.6	44.7	0.80	271.0	216.8	0.90	405.9	365.3	0.90	178.6	160.7	1.00	54.6	54.6	0.70	186.4	130.5	0.60	43.1	25.9	0.35	23.2	8.1	0.70	53.5	37.5
2020	0.10	205.3	20.5	0.10	223.6	22.4	0.20	198.4	39.7	0.80	366.1	292.9	0.90	424.3	381.9	0.90	96.9	87.2	1.00	54.6	54.6	0.70	167.8	117.5	0.60	43.1	25.9	0.40	23.2	9.3	0.70	57.6	40.3
2025	0.10	215.4	21.5	0.10	219.2	21.9	0.20	210.3	42.1	0.80	308.1	246.5	0.90	478.8	430.9	0.90	85.8	77.2	1.00	54.6	54.6	0.70	150.8	105.6	0.65	43.1	28.0	0.40	23.2	9.3	0.90	65.6	59.0
2030	0.10	252.5	25.3	0.10	205.3	20.5	0.20	223.6	44.7	0.80	326.8	261.4	0.90	401.2	361.1	0.90	113.5	102.2	1.00	54.6	54.6	0.70	145.5	101.9	0.65	43.1	28.0	0.40	23.2	9.3	0.90	65.6	59.0
2035	0.10	241.6	24.2	0.10	215.4	21.5	0.20	219.2	43.8	0.80	435.6	348.5	0.90	328.3	295.5	0.90	100.6	90.5	1.00	54.6	54.6	0.80	137.7	110.2	0.75	33.1	24.8	0.45	23.2	10.4	0.90	65.6	59.0
2040	0.10	218.9	21.9	0.10	252.5	25.3	0.20	205.3	41.1	0.80	423.7	339.0	0.90	276.0	248.4	0.90	171.4	154.3	1.00	54.6	54.6	0.80	126.1	100.9	0.75	33.1	24.8	0.45	23.2	10.4	0.90	68.6	61.7
2045	0.10	242.3	24.2	0.10	241.6	24.2	0.20	215.4	43.1	0.80	431.2	345.0	0.90	216.9	195.2	0.90	223.6	201.2	1.00	54.6	54.6	0.80	105.2	84.2	0.75	27.8	20.9	0.45	23.2	10.4	0.90	69.6	62.6
2050	0.10	253.7	25.4	0.10	218.9	21.9	0.20	252.5	50.5	0.80	430.6	344.5	0.90	228.0	205.2	0.90	187.3	168.6	1.00	54.6	54.6	0.80	105.2	84.2	0.75	27.8	20.9	0.45	23.2	10.4	0.90	69.6	62.6
2055	0.10	223.6	22.4	0.10	242.3	24.2	0.20	241.6	48.3	0.80	436.3	349.0	0.90	228.0	205.2	0.90	199.2	179.3	1.00	54.6	54.6	0.80	105.2	84.2	0.75	27.8	20.9	0.45	23.2	10.4	0.90	69.6	62.6
2060	0.10	198.4	19.8	0.10	253.7	25.4	0.20	218.9	43.8	0.80	459.5	367.6	0.90	216.9	195.2	0.90	223.6	201.2	1.00	54.6	54.6	0.80	105.2	84.2	0.75	27.8	20.9	0.45	23.2	10.4	0.90	69.6	62.6

SB			GM			GS			YM			WL			WB			RES			RD			TOTAL	TOTAL	MEAN	YEAR	TY	HUs BTW TYs
HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI	1960		
																											1965	1	1049.72
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	8.0	2.2	0.20	70.0	14.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1989.6	1049.7	0.53	1985	20	19944.76
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	8.0	2.2	0.20	70.0	14.0	0.30	3.3	1.0	0.00	0.0	0.0	0.00	0.0	0.0	1979.5	993.0	0.50	1990	25	5106.68
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	8.0	2.2	0.20	79.0	15.8	0.50	11.7	5.9	0.00	0.0	0.0	0.00	0.0	0.0	1974.5	999.7	0.51	1995	30	4981.95
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.50	12.6	6.3	0.00	0.0	0.0	0.00	0.0	0.0	1982.0	1273.0	0.64	2000	35	5681.05
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.50	12.6	6.3	0.00	0.0	0.0	0.00	0.0	0.0	1973.0	1191.5	0.60	2005	40	6160.89
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.70	12.6	8.8	0.00	0.0	0.0	0.00	0.0	0.0	1970.0	1148.7	0.58	2010	45	5850.25
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.70	12.6	8.8	0.00	0.0	0.0	0.00	0.0	0.0	1961.0	1119.6	0.57	2015	50	5670.46
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.70	18.6	13.0	0.00	0.0	0.0	0.00	0.0	0.0	1958.5	1128.8	0.58	2020	55	5620.81
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1957.5	1141.6	0.58	2025	60	5675.87
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1957.5	1112.9	0.57	2030	65	5636.18
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1957.5	1128.0	0.58	2035	70	5602.33
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1956.0	1127.2	0.58	2040	75	5638.20
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1954.0	1110.5	0.57	2045	80	5594.37
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1954.0	1093.6	0.56	2050	85	5510.38
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1954.0	1106.1	0.57	2055	90	5499.25
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.28	0.0	0.0	0.30	79.0	23.7	0.90	23.6	21.2	0.00	0.0	0.0	0.00	0.0	0.0	1954.0	1130.7	0.58	2060	95	5591.82
																												TL:	104814.96

EVALUATION SPECIES: PILEATED WOODPECKER
LIFE OF PROJECT: 95 YRS AAHU'S = 1103.32

Average Annual Habitat Units available for the pine marten without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

PINE MARTEN A

YEAR	ESN HSI	ESN ACRES	ESN HU	OSN HSI	OSN ACRES	OSN HU	CS HSI	CS ACRES	CS HU	CSN HSI	CSN ACRES	CSN HU	SS HSI	SS ACRES	SS HU	SSN HSI	SSN ACRES	SSN HU	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.08	12.9	1.0	0.00	0.0	0.0	0.49	1438.4	704.8	0.40	0.0	0.0	0.49	9.9	4.9	0.58	54.5	31.6	0.48	244.5	117.4	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.08	11.2	0.9	0.00	0.0	0.0	0.49	1062.4	520.6	0.40	0.0	0.0	0.49	36.4	17.8	0.58	54.5	31.6	0.48	203.5	97.7	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.08	6.8	0.5	0.00	0.0	0.0	0.49	1020.4	500.0	0.40	0.0	0.0	0.49	82.8	40.6	0.58	54.5	31.6	0.48	203.5	97.7	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	858.8	420.8	0.40	0.0	0.0	0.49	53.7	26.3	0.58	31.5	18.3	0.48	199.5	95.8	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	729.0	357.2	0.40	0.0	0.0	0.49	53.7	26.3	0.58	31.5	18.3	0.48	130.5	62.6	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	344.8	169.0	0.40	0.0	0.0	0.49	27.2	13.3	0.58	25.7	14.9	0.48	55.2	26.5	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	134.9	66.1	0.40	77.8	31.1	0.49	20.3	9.9	0.58	25.7	14.9	0.48	38.4	18.4	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	494.6	197.8	0.49	3.0	1.5	0.58	1.6	0.9	0.48	22.1	10.6	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	494.6	197.8	0.49	0.0	0.0	0.58	0.0	0.0	0.48	17.3	8.3	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	749.9	300.0	0.49	0.0	0.0	0.58	0.0	0.0	0.48	17.3	8.3	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	870.9	348.4	0.49	0.0	0.0	0.58	0.0	0.0	0.59	8.0	4.7	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	974.4	389.8	0.49	0.0	0.0	0.58	0.0	0.0	0.59	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	1208.0	483.2	0.49	0.0	0.0	0.58	0.0	0.0	0.59	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	1154.5	461.8	0.49	0.0	0.0	0.58	0.0	0.0	0.59	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	968.3	387.3	0.49	0.0	0.0	0.58	0.0	0.0	0.59	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.00	0.0	0.0	0.49	0.0	0.0	0.40	454.4	181.8	0.49	0.0	0.0	0.58	0.0	0.0	0.59	0.0	0.0	0.00	0.0	0.0

YEAR	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	GM HSI	GM ACRES	GM HU	GS HSI	GS ACRES	GS HU	YM HSI	YM ACRES	YM HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	TY	P. MART HUs BTW TYs	P.MART A HUs BTW TYs	
1960																									0			
1965	0.15	23.8	3.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	8.0	3.2	0.00	0.0	0.0	0.00	0.0	0.0	1792.0	866.4	0.48	1	906.40	31.67	1965 W/ MIT. VALUE
1985	0.15	14.8	2.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	8.0	3.2	0.00	0.0	0.0	0.00	0.0	0.0	1390.8	674.0	0.48	20	16462.34	600.59	
1990	0.15	14.8	2.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	8.0	3.2	0.00	0.0	0.0	0.00	0.0	0.0	1390.8	675.8	0.49	25	3851.52	158.05	
1995	0.15	14.8	2.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1158.3	563.4	0.49	30	3374.60	158.05	
2000	0.15	14.8	2.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	959.5	466.7	0.49	35	3098.08	124.70	
2005	0.15	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	452.9	223.7	0.49	40	2575.06	91.35	
2010	0.15	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	297.1	140.5	0.47	45	1729.02	82.94	
2015	0.15	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	521.3	210.8	0.40	50	907.75	74.53	
2020	0.15	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	511.9	206.1	0.40	55	891.17	39.58	
2025	0.15	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	767.2	308.3	0.40	60	1042.46	2.32	
2030	0.15	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	878.9	353.1	0.40	65	1286.21	0.00	
2035	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	974.4	389.8	0.40	70	1653.37	0.00	
2040	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1208.0	483.2	0.40	75	1857.24	0.00	
2045	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1154.5	461.8	0.40	80	2182.40	0.00	
2050	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	968.3	387.3	0.40	85	2362.50	0.00	
2055	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	454.4	181.8	0.40	90	2122.80	0.00	
2060	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	454.4	181.8	0.40	95	1422.70	0.00	
																									TOTAL	47725.62	1363.79	

EVALUATION SPECIES: PINE MARTEN

LIFE OF PROJECT 95 YRS. AAHU'S = 502.37 14.36

Average Annual Habitat Units available for the pine marten with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

PINE MARTEN A

YEAR	ES			DS			CS			SS			LSU			LST			DB			MF			DF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.10	0.0	0.0	0.20	0.0	0.0	0.08	8.5	0.7	0.49	1508.9	739.4	0.49	13.5	6.6	0.49	0.0	0.0	0.58	54.6	31.7	0.48	252.9	121.4	0.00	0.0	0.0	0.15	23.2	3.5	0.68	0.0	0.0
1990	0.10	126.7	12.7	0.20	0.0	0.0	0.20	8.5	1.7	0.49	1340.6	656.9	0.49	39.7	19.5	0.49	0.0	0.0	0.70	54.6	38.2	0.50	244.9	122.5	0.00	0.0	0.0	0.15	23.2	3.5	0.68	10.0	6.8
1995	0.10	223.6	22.4	0.20	0.0	0.0	0.20	8.5	1.7	0.60	1067.2	640.3	0.80	158.7	127.0	0.80	56.0	44.8	0.90	54.6	49.1	0.50	219.0	109.5	0.00	0.0	0.0	0.15	23.2	3.5	0.68	15.0	10.2
2000	0.10	198.4	19.8	0.20	126.7	25.3	0.20	0.0	0.0	0.60	928.4	557.0	0.80	132.7	106.2	0.80	124.5	99.6	1.00	54.6	54.6	0.60	226.4	135.8	0.00	0.0	0.0	0.15	23.2	3.5	0.68	28.5	19.4
2005	0.10	210.2	21.0	0.20	223.6	44.7	0.20	0.0	0.0	0.60	763.2	457.9	0.80	142.7	114.2	0.80	157.1	125.7	1.00	54.6	54.6	0.60	216.1	129.7	0.00	0.0	0.0	0.15	23.2	3.5	0.68	43.6	29.6
2010	0.10	223.6	22.4	0.20	198.4	39.7	0.20	126.7	25.3	0.60	569.8	341.9	0.80	248.4	198.7	0.80	138.1	110.5	1.00	54.6	54.6	0.60	200.2	120.1	0.00	0.0	0.0	0.15	23.2	3.5	0.68	48.4	32.9
2015	0.10	219.2	21.9	0.20	210.3	42.1	0.20	223.6	44.7	0.60	271.0	162.6	0.80	405.9	324.7	0.80	178.6	142.9	1.00	54.6	54.6	0.60	186.4	111.8	0.00	0.0	0.0	0.15	23.2	3.5	0.68	53.5	36.4
2020	0.10	205.3	20.5	0.20	223.6	44.7	0.20	198.4	39.7	0.60	366.1	219.7	0.80	424.3	339.4	0.80	96.9	77.5	1.00	54.6	54.6	0.60	167.8	100.7	0.00	0.0	0.0	0.15	23.2	3.5	0.68	57.6	39.2
2025	0.10	215.4	21.5	0.20	219.2	43.8	0.20	210.3	42.1	0.60	308.1	184.9	0.80	478.8	383.0	0.80	85.8	68.6	1.00	54.6	54.6	0.60	150.8	90.5	0.00	0.0	0.0	0.15	23.2	3.5	0.68	65.6	44.6
2030	0.10	252.5	25.3	0.20	205.3	41.1	0.20	223.6	44.7	0.60	326.8	196.1	0.80	401.2	321.0	0.80	113.5	90.8	1.00	54.6	54.6	0.60	145.5	87.3	0.00	0.0	0.0	0.15	23.2	3.5	0.68	65.6	44.6
2035	0.10	241.6	24.2	0.20	215.4	43.1	0.20	219.2	43.8	0.60	435.6	261.4	0.80	328.3	262.6	0.80	100.6	80.5	1.00	54.6	54.6	0.70	137.7	96.4	0.00	0.0	0.0	0.15	23.2	3.5	0.68	68.6	46.6
2040	0.10	218.9	21.9	0.20	252.5	50.5	0.20	205.3	41.1	0.60	423.7	254.2	0.80	276.0	220.8	0.80	171.4	137.1	1.00	54.6	54.6	0.70	126.1	88.3	0.00	0.0	0.0	0.15	23.2	3.5	0.68	69.6	47.3
2045	0.10	242.3	24.2	0.20	241.6	48.3	0.20	215.4	43.1	0.60	431.2	258.7	0.80	216.9	173.5	0.80	223.6	178.9	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.15	23.2	3.5	0.68	69.6	47.3
2050	0.10	253.7	25.4	0.20	218.9	43.8	0.20	252.5	50.5	0.60	430.6	258.4	0.80	228.0	182.4	0.80	187.3	149.8	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.15	23.2	3.5	0.68	69.6	47.3
2055	0.10	223.6	22.4	0.20	242.3	48.5	0.20	241.6	48.3	0.60	436.3	261.8	0.80	228.0	182.4	0.80	199.2	159.4	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.15	23.2	3.5	0.68	69.6	47.3
2060	0.10	198.4	19.8	0.20	253.7	50.7	0.20	218.9	43.8	0.60	459.5	275.7	0.80	216.9	173.5	0.80	223.6	178.9	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.15	23.2	3.5	0.68	69.6	47.3

SB			GM			GS			YM			ML			WB			RES			RD			TOTAL	TOTAL	MEAN
HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	8.0	3.2	0.00	0.0	0.0	0.68	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1869.6	906.4	0.48
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	8.0	3.2	0.00	0.0	0.0	0.68	3.3	2.2	0.00	0.0	0.0	0.00	0.0	0.0	1859.5	867.1	0.47
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	8.0	3.2	0.00	0.0	0.0	0.68	11.7	8.0	0.00	0.0	0.0	0.00	0.0	0.0	1845.5	1019.6	0.55
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	12.6	8.6	0.00	0.0	0.0	0.00	0.0	0.0	1856.0	1029.8	0.55
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	12.6	8.6	0.00	0.0	0.0	0.00	0.0	0.0	1847.0	989.5	0.54
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	12.6	8.6	0.00	0.0	0.0	0.00	0.0	0.0	1844.0	958.1	0.52
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	12.6	8.6	0.00	0.0	0.0	0.00	0.0	0.0	1838.9	953.8	0.52
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	18.6	12.6	0.00	0.0	0.0	0.00	0.0	0.0	1836.4	952.1	0.52
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1835.4	953.2	0.52
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1835.4	924.9	0.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1845.4	930.7	0.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1843.9	934.6	0.51
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1847.2	921.8	0.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1847.2	905.3	0.49
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1847.2	917.8	0.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.68	23.6	16.0	0.00	0.0	0.0	0.00	0.0	0.0	1847.2	937.6	0.51

YEAR	TY	P.MART. HUs BTW TYs	P.MART. A HUs BTW TYs
1960	0		
1965	1	906.40	31.67
1985	20	17221.52	601.69
1990	25	4433.61	174.72
1995	30	4717.82	218.40
2000	35	5123.64	259.35
2005	40	5048.14	273.00
2010	45	4868.97	273.00
2015	50	4779.77	273.00
2020	55	4764.72	273.00
2025	60	4763.31	273.00
2030	65	4695.26	273.00
2035	70	4638.98	273.00
2040	75	4663.31	273.00
2045	80	4641.23	273.00
2050	85	4567.98	273.00
2055	90	4557.80	273.00
2060	95	4638.33	273.00
	TL:	89030.80	4561.83

EVALUATION SPECIES: PINE MARTEN
LIFE OF PROJECT: 95 YRS AAHU'S = 937.17 48.02

Average Annual Habitat Units for the douglas squirrel without mitigation on the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESM			OSM			CS			CSM			SS			SSN			LS			OG			MF			DF		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.10	0.0	0.0	0.40	12.9	5.2	0.20	0.0	0.0	0.56	1438.4	805.5	0.60	0.0	0.0	0.56	9.9	5.5	0.82	54.5	44.7	0.58	244.5	141.8	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.10	0.0	0.0	0.40	11.2	4.5	0.20	0.0	0.0	0.56	1062.4	594.9	0.60	0.0	0.0	0.56	36.4	20.4	0.82	54.5	44.7	0.58	203.5	118.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.10	77.8	7.8	0.40	6.8	2.7	0.20	0.0	0.0	0.56	1020.4	571.4	0.60	0.0	0.0	0.56	82.8	46.4	0.82	54.5	44.7	0.58	203.5	118.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.10	416.8	41.7	0.40	0.0	0.0	0.20	77.8	15.6	0.56	858.8	480.9	0.60	0.0	0.0	0.56	53.7	30.1	0.82	31.5	25.8	0.58	199.5	115.7	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.20	494.6	98.9	0.56	729.0	408.2	0.60	0.0	0.0	0.56	53.7	30.1	0.82	31.5	25.8	0.58	130.5	75.7	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.10	255.3	25.5	0.40	0.0	0.0	0.20	494.6	98.9	0.56	344.8	193.1	0.60	0.0	0.0	0.56	27.2	15.2	0.82	25.7	21.1	0.58	55.2	32.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.10	198.8	19.9	0.40	0.0	0.0	0.20	672.1	134.4	0.56	134.9	75.5	0.60	77.8	46.7	0.56	20.3	11.4	0.82	25.7	21.1	0.58	38.4	22.3	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.10	520.3	52.0	0.40	0.0	0.0	0.20	454.1	90.8	0.56	0.0	0.0	0.60	494.6	296.8	0.56	3.0	1.7	0.82	1.6	1.3	0.58	22.1	12.8	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.10	233.6	23.4	0.40	0.0	0.0	0.20	974.4	194.9	0.56	0.0	0.0	0.60	494.6	296.8	0.56	0.0	0.0	0.82	0.0	0.0	0.58	17.3	10.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.10	201.8	20.2	0.40	0.0	0.0	0.20	952.7	190.5	0.56	0.0	0.0	0.60	749.9	449.9	0.56	0.0	0.0	0.82	0.0	0.0	0.58	17.3	10.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.10	12.6	1.3	0.40	0.0	0.0	0.20	955.7	191.1	0.56	0.0	0.0	0.60	870.9	522.5	0.56	0.0	0.0	0.82	0.0	0.0	0.58	8.0	4.6	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.10	6.4	0.6	0.40	0.0	0.0	0.20	448.0	89.6	0.56	0.0	0.0	0.60	974.4	584.6	0.56	0.0	0.0	0.82	0.0	0.0	0.58	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.10	87.1	8.7	0.40	0.0	0.0	0.20	220.8	44.2	0.56	0.0	0.0	0.60	1208.0	724.8	0.56	0.0	0.0	0.82	0.0	0.0	0.58	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.10	424.8	42.5	0.40	0.0	0.0	0.20	106.1	21.2	0.56	0.0	0.0	0.60	1154.5	692.7	0.56	0.0	0.0	0.82	0.0	0.0	0.58	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.20	518.3	103.7	0.56	0.0	0.0	0.60	968.3	581.0	0.56	0.0	0.0	0.82	0.0	0.0	0.58	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.10	255.3	25.5	0.40	0.0	0.0	0.20	511.9	102.4	0.56	0.0	0.0	0.60	454.4	272.6	0.56	0.0	0.0	0.82	0.0	0.0	0.58	0.0	0.0	0.00	0.0	0.0

YEAR	MR			SB			GM			GS			YM			WL			RES			TOTAL	TOTAL	MEAN
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI
1960	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	8.0	2.0	0.00	0.0	0.0	0.00	0.0	0.0	1768.2	1004.7	0.57
1965	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	8.0	2.0	0.00	0.0	0.0	0.00	0.0	0.0	1376.0	784.5	0.57
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	8.0	2.0	0.00	0.0	0.0	0.00	0.0	0.0	1453.8	793.0	0.55
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1638.1	709.8	0.43
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1439.3	638.8	0.44
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1202.8	385.9	0.32
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1168.0	331.2	0.28
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1495.7	455.4	0.30
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1719.9	525.0	0.31
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1921.7	670.7	0.35
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1847.2	719.6	0.39
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1428.8	674.9	0.47
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1515.9	777.7	0.51
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1685.4	756.4	0.45
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1486.6	684.6	0.46
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1221.6	400.6	0.33
2060																								

YEAR	TY	HUs BTN TYs	
1965	1	1049.40	1965 W/ MIT. VALUE
1985	20	19089.45	
1990	25	4473.72	
1995	30	3945.45	
2000	35	3774.21	
2005	40	3373.07	
2010	45	2537.29	
2015	50	1791.67	
2020	55	1960.94	
2025	60	2450.99	
2030	65	2981.96	
2035	70	3478.20	
2040	75	3515.02	
2045	80	3628.42	
2050	85	3844.25	
2055	90	3604.55	
2060	95	2683.68	
	TOTAL	68182.27	

EVALUATION SPECIES: DOUGLAS SQUIRREL
LIFE OF PROJECT 95 YRS. AAHU'S = 717.71

Average Annual Habitat Units available for the douglas squirrel with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			DS			CS			SS			LSU			LST			OS			MF			DF			MR			RP		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.20	0.0	0.0	0.40	8.5	3.4	0.56	1508.9	845.0	0.56	13.5	7.6	0.56	0.0	0.0	0.82	54.6	44.8	0.58	252.9	146.7	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.0	0.0
1990	0.00	0.0	0.0	0.20	0.0	0.0	0.30	8.5	2.6	1.00	1340.6	1340.6	0.90	39.7	35.7	0.90	0.0	0.0	0.82	54.6	44.8	0.70	244.9	171.4	0.00	0.0	0.0	0.00	0.0	0.0	0.70	10.0	7.0
1995	0.00	0.0	0.0	0.20	0.0	0.0	0.30	8.5	2.6	1.00	1067.2	1067.2	0.90	158.7	142.8	0.90	56.0	50.4	0.82	54.6	44.8	0.70	219.0	153.3	0.00	0.0	0.0	0.00	0.0	0.0	0.70	15.0	10.5
2000	0.00	0.0	0.0	0.20	126.7	25.3	0.30	0.0	0.0	1.00	928.4	928.4	0.90	132.7	119.4	0.90	124.5	112.1	1.00	54.6	54.6	0.70	226.4	158.5	0.00	0.0	0.0	0.00	0.0	0.0	0.70	28.5	20.0
2005	0.00	0.0	0.0	0.20	223.6	44.7	0.30	0.0	0.0	1.00	763.2	763.2	0.90	142.7	128.4	0.90	157.1	141.4	1.00	54.6	54.6	0.70	216.1	151.3	0.00	0.0	0.0	0.00	0.0	0.0	0.70	43.6	30.5
2010	0.00	0.0	0.0	0.20	198.4	39.7	0.30	126.7	38.0	1.00	569.8	569.8	0.90	248.4	223.6	0.90	138.1	124.3	1.00	54.6	54.6	0.70	200.2	140.1	0.00	0.0	0.0	0.00	0.0	0.0	0.70	48.4	33.9
2015	0.00	0.0	0.0	0.20	210.3	42.1	0.30	223.6	67.1	1.00	271.0	271.0	0.90	405.9	365.3	0.90	178.6	160.7	1.00	54.6	54.6	0.70	186.4	130.5	0.00	0.0	0.0	0.00	0.0	0.0	0.70	53.5	37.5
2020	0.00	0.0	0.0	0.20	223.6	44.7	0.30	198.4	59.5	1.00	366.1	366.1	0.90	424.3	381.9	0.90	96.9	87.2	1.00	54.6	54.6	0.70	167.8	117.5	0.00	0.0	0.0	0.00	0.0	0.0	0.70	57.6	40.3
2025	0.00	0.0	0.0	0.20	219.2	43.8	0.30	210.3	63.1	1.00	308.1	308.1	0.90	478.8	430.9	0.90	85.8	77.2	1.00	54.6	54.6	0.70	150.8	105.6	0.00	0.0	0.0	0.00	0.0	0.0	0.70	65.6	45.9
2030	0.00	0.0	0.0	0.20	205.3	41.1	0.30	223.6	67.1	1.00	326.8	326.8	0.90	401.2	361.1	0.90	113.5	102.2	1.00	54.6	54.6	0.70	145.5	101.9	0.00	0.0	0.0	0.00	0.0	0.0	0.70	65.6	45.9
2035	0.00	0.0	0.0	0.20	215.4	43.1	0.30	219.2	65.8	1.00	435.6	435.6	0.90	328.3	295.5	0.90	100.6	90.5	1.00	54.6	54.6	0.70	137.7	96.4	0.00	0.0	0.0	0.00	0.0	0.0	0.70	65.6	45.9
2040	0.00	0.0	0.0	0.20	252.5	50.5	0.30	205.3	61.6	1.00	423.7	423.7	0.90	276.0	248.4	0.95	171.4	162.8	1.00	54.6	54.6	0.70	126.1	88.3	0.00	0.0	0.0	0.00	0.0	0.0	0.70	68.6	48.0
2045	0.00	0.0	0.0	0.20	241.6	48.3	0.30	215.4	64.6	1.00	431.2	431.2	0.90	216.9	195.2	1.00	223.6	223.6	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.00	0.0	0.0	0.70	69.6	48.7
2050	0.00	0.0	0.0	0.20	218.9	43.8	0.30	252.5	75.8	1.00	430.6	430.6	0.90	228.0	205.2	1.00	187.3	187.3	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.00	0.0	0.0	0.70	69.6	48.7
2055	0.00	0.0	0.0	0.20	242.3	48.5	0.30	241.6	72.5	1.00	436.3	436.3	0.90	228.0	205.2	1.00	199.2	199.2	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.00	0.0	0.0	0.70	69.6	48.7
2060	0.00	0.0	0.0	0.20	253.7	50.7	0.30	218.9	65.7	1.00	459.5	459.5	0.90	216.9	195.2	1.00	223.6	223.6	1.00	54.6	54.6	0.70	105.2	73.6	0.00	0.0	0.0	0.00	0.0	0.0	0.70	69.6	48.7

YEAR	SB			GM			GS			YM			WL			WB			REE			RD			TOTAL	TOTAL	MEAN	TY	HUs BTW TYs
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI		
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	8.0	2.0	0.00	0.0	0.0	0.70	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1846.4	1049.4	0.57	1960	0	
																												1965	1	1049.40
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	8.0	2.0	0.00	0.0	0.0	0.70	3.3	2.3	0.00	0.0	0.0	0.00	0.0	0.0	1709.6	1606.4	0.94	1990	20	19938.56
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	8.0	2.0	0.00	0.0	0.0	0.70	11.7	8.2	0.00	0.0	0.0	0.00	0.0	0.0	1598.7	1481.7	0.93	1995	30	7719.15
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	12.6	8.8	0.00	0.0	0.0	0.00	0.0	0.0	1634.4	1427.1	0.87	2000	35	7272.62
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	12.6	8.8	0.00	0.0	0.0	0.00	0.0	0.0	1613.5	1323.0	0.82	2005	40	6874.12
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	12.6	8.8	0.00	0.0	0.0	0.00	0.0	0.0	1597.2	1232.8	0.77	2010	45	6388.67
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	12.6	8.8	0.00	0.0	0.0	0.00	0.0	0.0	1596.5	1137.5	0.71	2015	50	5925.77
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	18.6	13.0	0.00	0.0	0.0	0.00	0.0	0.0	1607.9	1164.8	0.72	2020	55	5755.79
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1596.8	1145.8	0.72	2025	60	5776.41
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1559.7	1117.1	0.72	2030	65	5657.03
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1580.6	1143.9	0.72	2035	70	5652.22
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1601.8	1154.4	0.72	2040	75	5745.83
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1581.7	1156.4	0.73	2045	80	5777.32
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1570.3	1136.1	0.72	2050	85	5731.28
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1600.4	1155.1	0.72	2055	90	5728.12
	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.25	0.0	0.0	0.00	0.0	0.0	0.70	23.6	16.5	0.00	0.0	0.0	0.00	0.0	0.0	1625.6	1188.2	0.73	2060	95	5858.11
																													TL:	113533.21

EVALUATION SPECIES: DOUGLAS SQUIRREL
LIFE OF PROJECT: 95 YRS AAHU'S = 1195.09

Average Annual Habitat Units available for the common merganser without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESN HSI	ESN ACRES	ESN HU	OSN HSI	OSN ACRES	OSN HU	CS HSI	CS ACRES	CS HU	CSN HSI	CSN ACRES	CSN HU	SS HSI	SS ACRES	SS HU	SSN HSI	SSN ACRES	SSN HU	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0

YEAR	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	GM HSI	GM ACRES	GM HU	GS HSI	GS ACRES	GS HU	YM HSI	YM ACRES	YM HU	ML HSI	ML ACRES	ML HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	TY	HUs BTW TYs
1960																									0	
1965																									1	250.78
1985	0.04	23.8	1.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	534.8	242.5	0.45	20	4606.59
1990	0.04	14.8	0.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	525.8	242.1	0.46	25	1211.41
1990	0.04	14.8	0.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	525.8	242.1	0.46	30	1210.46
1995	0.04	14.8	0.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	525.8	242.1	0.46	35	1210.46
2000	0.04	14.8	0.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	525.8	242.1	0.46	40	1210.46
2005	0.04	14.8	0.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	525.8	242.1	0.46	45	1210.46
2010	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.50	441.0	220.5	511.0	234.5	0.46	50	1191.46
2015	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.50	441.0	220.5	511.0	234.5	0.46	55	1172.50
2020	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	60	1062.25
2025	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	65	952.00
2030	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	70	952.00
2035	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	75	952.00
2040	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	80	952.00
2045	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	85	952.00
2050	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	90	952.00
2055	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37	95	952.00
2060	0.04	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	70.0	14.0	0.40	441.0	176.4	511.0	190.4	0.37		

1965 W/ MIT. VAL

TOTAL :20742.37

EVALUATION SPECIES: COMMON MERGANSER
LIFE OF PROJECT 95 YRS. AAHU'S = 218.34

Average Annual Habitat Units available for the common merganser with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			DS			CS			SS			LSU			LST			DG			MF			DF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	28.5	2.9
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	43.6	4.4
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	48.4	4.8
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	53.5	5.4
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	57.6	5.8
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	65.6	6.6
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	65.6	6.6
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	65.6	6.6
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	68.6	6.9
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	69.6	7.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	69.6	7.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	69.6	7.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	23.2	0.9	0.10	69.6	7.0

YEAR	SB			GM			GS			YM			WL			WB			RES			RD			TOTAL	TOTAL	MEAN	HUs BTW
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI	TYs
1960																												
1965	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.10	0.0	0.0	0.50	441.0	220.5	0.00	0.0	0.0	534.2	242.4	0.45	242.43
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.20	3.3	0.7	0.50	441.0	220.5	0.00	0.0	0.0	537.5	243.1	0.45	4606.13
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	11.7	2.3	0.60	441.0	264.6	0.00	0.0	0.0	554.9	291.6	0.53	1213.79
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	12.6	2.5	0.60	441.0	264.6	0.00	0.0	0.0	584.3	294.6	0.50	1335.58
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	12.6	2.5	0.60	441.0	264.6	0.00	0.0	0.0	599.4	296.1	0.49	1465.94
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	12.6	2.5	0.60	441.0	264.6	0.00	0.0	0.0	599.4	296.1	0.49	1476.89
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	12.6	2.5	0.60	441.0	264.6	0.00	0.0	0.0	604.2	296.6	0.49	1481.75
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	12.6	2.5	0.60	441.0	264.6	0.00	0.0	0.0	609.3	297.1	0.49	1484.23
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	18.6	3.7	0.60	441.0	264.6	0.00	0.0	0.0	619.4	298.7	0.48	1489.56
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	632.4	300.5	0.48	1498.12
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	632.4	300.5	0.48	1502.54
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	632.4	300.5	0.48	1502.54
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	635.4	300.8	0.47	1503.29
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	636.4	300.9	0.47	1504.29
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	636.4	300.9	0.47	1504.54
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	636.4	300.9	0.47	1504.54
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.60	441.0	264.6	0.00	0.0	0.0	636.4	300.9	0.47	1504.54

	TY	TYs
	0	
	1	242.43
	20	4606.13
	25	1213.79
	30	1335.58
	35	1465.94
	40	1476.89
	45	1481.75
	50	1484.23
	55	1489.56
	60	1498.12
	65	1502.54
	70	1502.54
	75	1503.29
	80	1504.29
	85	1504.54
	90	1504.54
	95	1504.54
TL:		26820.70

EVALUATION SPECIES: COMMON MERGANSER
LIFE OF PROJECT: 95 YRS AAHU'S = 282.32

Average Annual Habitat units available for the mallard without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESN			DSN			CS			CSN			SS			SSN			LS			OG			MF			DF		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0

YEAR	MR			SB			GM			GS			YM			WL			RES			TOTAL	TOTAL	MEAN	HUs BTW TYs		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI		TY	
1960																										1	183.46	1965 W/ MIT. VAL
1965	0.31	23.8	7.4	0.10	33.5	3.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	568.3	184.0	0.32	1985	20	3495.58
1990	0.31	14.8	4.6	0.10	33.5	3.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	559.3	181.2	0.32	1990	25	912.92
1995	0.31	14.8	4.6	0.10	33.5	3.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	559.3	181.2	0.32	1995	30	905.94
2000	0.31	14.8	4.6	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	536.5	178.9	0.33	2000	35	900.42
2005	0.31	14.8	4.6	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	536.5	178.9	0.33	2005	40	894.54
2010	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.80	70.0	56.0	0.25	441.0	110.3	521.7	167.3	0.32	2010	45	865.41
2015	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2015	50	854.10
2020	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2020	55	871.60
2025	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2025	60	871.60
2030	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2030	65	871.60
2035	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2035	70	871.60
2040	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2040	75	871.60
2045	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2045	80	871.60
2050	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2050	85	871.60
2055	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2055	90	871.60
2060	0.31	0.0	0.0	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.3	0.33	2060	95	871.60
																										TOTAL	16856.77

EVALUATION SPECIES: MALLARD
LIFE OF PROJECT 95 YRS. AAHU'S = 177.44

Average Annual Habitat Units available for the mallard with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			OS			CS			SS			LSU			LST			OB			MF			DF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	28.5	3.7
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	43.6	5.7
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	48.4	6.3
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	53.5	7.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	57.6	7.5
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	65.6	8.5
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	65.6	8.5
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	65.6	8.5
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	68.6	8.9
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	69.6	9.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	69.6	9.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	69.6	9.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.31	23.2	7.2	0.13	69.6	9.0

YEAR	SB			GM			GS			YM			WL			WB			RES			RD			TOTAL	TOTAL	MEAN	TY	HUs BTW TYs
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI		
1960																												0	
1965																												1	183.46
1985	0.10	30.2	3.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	564.4	183.5	0.33	1985	20	3485.78
1990	0.10	30.2	3.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	564.4	183.5	0.33	1990	25	917.31
1995	0.10	30.2	3.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	573.4	191.6	0.33	1995	30	937.49
2000	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	582.4	193.3	0.33	2000	35	962.21
2005	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	597.5	195.3	0.33	2005	40	971.56
2010	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	602.3	195.9	0.33	2010	45	977.97
2015	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	607.4	196.6	0.32	2015	50	981.18
2020	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	611.5	197.1	0.32	2020	55	984.17
2025	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	619.5	198.1	0.32	2025	60	988.12
2030	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	619.5	198.1	0.32	2030	65	990.70
2035	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	619.5	198.1	0.32	2035	70	990.70
2040	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	622.5	198.5	0.32	2040	75	991.68
2045	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	623.5	198.7	0.32	2045	80	992.98
2050	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	623.5	198.7	0.32	2050	85	993.30
2055	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	623.5	198.7	0.32	2055	90	993.30
2060	0.10	10.7	1.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	79.0	71.1	0.00	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	623.5	198.7	0.32	2060	95	993.30
																													TL:	18335.20

EVALUATION SPECIES: MALLARD
LIFE OF PROJECT: 95 YRS AAHU'S = 193.00

Average Annual Habitat Units available for the beaver without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESN HSI	ESN ACRES	ESN HU	OSN HSI	OSN ACRES	OSN HU	CS HSI	CS ACRES	CS HU	CSN HSI	CSN ACRES	CSN HU	SS HSI	SS ACRES	SS HU	SSN HSI	SSN ACRES	SSN HU	LS HSI	LS ACRES	LS HU	DB HSI	DB ACRES	DB HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0

	MR			SB			GM			GS			YM			BEAVER A WL			BEAVER A RES			TOTAL	TOTAL	MEAN	YEAR	TY	BEAVER HUs BTW TYs	BEAVER A HUs BTW TYs	
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI	1960				
																									1965	0			
	0.38	23.8	9.0	0.06	33.5	2.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	568.3	184.3	0.32	1985	20	3501.78	1197.00	
	0.38	14.8	5.6	0.06	33.5	2.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	559.3	180.9	0.32	1990	25	912.96	315.00	
	0.38	14.8	5.6	0.15	33.5	5.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	559.3	183.9	0.33	1995	30	911.96	315.00	
	0.38	14.8	5.6	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	536.5	180.5	0.34	2000	35	911.09	315.00	
	0.38	14.8	5.6	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	536.5	180.5	0.34	2005	40	902.40	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2010	45	888.32	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2015	50	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2020	55	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2025	60	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2030	65	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2035	70	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2040	75	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2045	80	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2050	85	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2055	90	874.28	315.00	
	0.38	0.0	0.0	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.25	441.0	110.3	521.7	174.9	0.34	2060	95	874.28	315.00	
																									TOTAL		16955.13	5985.00	

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT 95 YRS. AAHU'S = 178.48 63.00

1965 W/ MIT. VALUE

Average Annual Habitat Units available for the beaver with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			OS			CS			SS			LSU			LST			DB			MF			DF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	28.5	4.6
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	43.6	7.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	48.4	7.7
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	53.5	8.6
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	57.6	9.2
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	65.6	10.5
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	65.6	10.5
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	65.6	10.5
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	68.6	11.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	69.6	11.1
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	69.6	11.1
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	69.6	11.1
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.38	23.2	8.8	0.16	69.6	11.1

YEAR	SB			GM			GS			YM			BEAVER A WL			WB			RES			RD			TOTAL ACRES	TOTAL HU	MEAN HSI
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU			
1960	0.06	30.2	1.8	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	70.0	63.0	0.60	0.0	0.0	0.25	441.0	110.3	0.00	0.0	0.0	564.4	183.9	0.33
1965	0.15	30.2	4.5	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	70.0	70.0	0.60	3.3	2.0	0.25	441.0	110.3	0.00	0.0	0.0	567.7	195.6	0.34
1970	0.15	30.2	4.5	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	11.7	7.0	0.25	441.0	110.3	0.00	0.0	0.0	585.1	209.6	0.36
1975	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	12.6	7.6	0.25	441.0	110.3	0.00	0.0	0.0	595.0	211.8	0.36
1980	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	12.6	7.6	0.25	441.0	110.3	0.00	0.0	0.0	610.1	214.2	0.35
1985	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	12.6	7.6	0.25	441.0	110.3	0.00	0.0	0.0	614.9	215.0	0.35
1990	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	12.6	7.6	0.25	441.0	110.3	0.00	0.0	0.0	620.0	215.8	0.35
1995	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	18.6	11.2	0.25	441.0	110.3	0.00	0.0	0.0	630.1	220.0	0.35
2000	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	643.1	224.3	0.35
2005	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	643.1	224.3	0.35
2010	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	643.1	224.3	0.35
2015	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	643.1	224.3	0.35
2020	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	646.1	224.8	0.35
2025	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35
2030	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35
2035	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35
2040	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35
2045	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35
2050	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35
2055	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35
2060	0.15	10.7	1.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.00	79.0	79.0	0.60	23.6	14.2	0.25	441.0	110.3	0.00	0.0	0.0	647.1	225.0	0.35

YEAR	TY	BEAVER HUs BTW TYs	BEAVER A HUs BTW TYs
1960	0		
1965	1	183.88	63.00
1985	20	3493.68	1197.00
1990	25	948.58	332.50
1995	30	1012.78	372.50
2000	35	1053.54	395.00
2005	40	1065.06	395.00
2010	45	1072.96	395.00
2015	50	1076.92	395.00
2020	55	1089.59	395.00
2025	60	1110.94	395.00
2030	65	1121.64	395.00
2035	70	1121.64	395.00
2040	75	1122.84	395.00
2045	80	1124.44	395.00
2050	85	1124.83	395.00
2055	90	1124.83	395.00
2060	95	1124.83	395.00
TL:		19972.97	7100.00

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT: 95 YRS AAHU'S = 210.24 74.74

Average Annual Habitat Units available for the osprey without mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ESN			OSN			CS			CSN			SS			SSN			LS			OG			MF			DF		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1438.4	143.8	0.00	0.0	0.0	0.10	9.9	1.0	0.40	54.5	21.8	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1062.4	106.2	0.00	0.0	0.0	0.10	36.4	3.6	0.40	54.5	21.8	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1020.4	102.0	0.00	0.0	0.0	0.10	82.8	8.3	0.40	54.5	21.8	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	858.8	85.9	0.00	0.0	0.0	0.10	53.7	5.4	0.40	31.5	12.6	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	729.0	72.9	0.00	0.0	0.0	0.10	53.7	5.4	0.40	31.5	12.6	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	344.8	34.5	0.00	0.0	0.0	0.10	27.2	2.7	0.40	25.7	10.3	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	134.9	13.5	0.00	0.0	0.0	0.10	20.3	2.0	0.40	25.7	10.3	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	3.0	0.3	0.40	1.6	0.6	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0

YEAR	MR			SB			GM			GS			YM			WL			RES			TOTAL	TOTAL	MEAN
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI
1965	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.80	441.0	352.8	2013.8	540.4	0.27
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.80	441.0	352.8	1664.3	505.5	0.30
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.80	441.0	352.8	1668.7	505.9	0.30
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.80	441.0	352.8	1455.0	477.7	0.33
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.80	441.0	352.8	1325.2	464.7	0.35
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.80	441.0	352.8	908.7	421.3	0.46
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.80	441.0	352.8	691.9	399.6	0.58
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	515.6	242.4	0.47
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.50	441.0	220.5	511.0	241.5	0.47

YEAR	TY	HUs BTW TYs	
1960	0		
1965	1	547.88	1965 W/ MIT. VALUE
1985	20	10268.17	
1990	25	2625.07	
1995	30	2528.50	
2000	35	2463.39	
2005	40	2358.22	
2010	45	2254.08	
2015	50	2072.78	
2020	55	1589.33	
2025	60	1209.86	
2030	65	1207.50	
2035	70	1207.50	
2040	75	1207.50	
2045	80	1207.50	
2050	85	1207.50	
2055	90	1207.50	
2060	95	1207.50	
	TOTAL	36369.80	

EVALUATION SPECIES: OSPREY
LIFE OF PROJECT 95 YRS. AAHU'S = 382.84

Average Annual Habitat Units available for the osprey with mitigation in the Lake Chaplain and Project Facility Lands Tracts.

YEAR	ES			OS			CS			SS			LSU			LST			DG			MF			DF			MR			RB		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1508.9	150.9	0.10	13.5	1.4	0.10	0.0	0.0	0.40	54.6	21.8	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1340.6	134.1	0.10	39.7	4.0	0.10	0.0	0.0	0.40	54.6	21.8	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1067.2	106.7	0.10	158.7	15.9	0.10	56.0	5.6	0.70	54.6	38.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	928.4	92.8	0.20	132.7	26.5	0.20	124.5	24.9	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	763.2	76.3	0.20	142.7	28.5	0.20	157.1	31.4	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	569.8	57.0	0.20	248.4	49.7	0.20	138.1	27.6	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	271.0	54.2	0.20	405.9	81.2	0.20	178.6	35.7	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	366.1	73.2	0.20	424.3	84.9	0.20	96.9	19.4	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	308.1	61.6	0.20	478.8	95.8	0.20	85.8	17.2	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	326.8	65.4	0.20	401.2	80.2	0.20	113.5	22.7	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	435.6	87.1	0.20	328.3	65.7	0.20	100.6	20.1	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	423.7	84.7	0.20	276.0	55.2	0.20	171.4	34.3	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	431.2	86.2	0.20	216.9	43.4	0.20	223.6	44.7	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	430.6	86.1	0.20	228.0	45.6	0.20	187.3	37.5	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	436.3	87.3	0.20	228.0	45.6	0.20	199.2	39.8	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	459.5	91.9	0.20	216.9	43.4	0.20	223.6	44.7	1.00	54.6	54.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0

SB			GM			GS			YM			WL			WB			RES			RD			TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU				1960	0	
																											1965	1	547.88
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.00	0.0	0.0	0.80	441.0	352.8	0.00	0.0	0.0	2088.0	547.9	0.26	1985	20	10409.72
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	70.0	21.0	0.10	3.3	0.3	0.80	441.0	352.8	0.00	0.0	0.0	1949.2	534.0	0.27	1990	25	2706.04
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.10	11.7	1.2	0.80	441.0	352.8	0.00	0.0	0.0	1868.2	544.1	0.29	1995	30	2696.37
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.15	12.6	1.9	0.80	441.0	352.8	0.00	0.0	0.0	1772.8	577.3	0.33	2000	35	2806.11
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.15	12.6	1.9	0.80	441.0	352.8	0.00	0.0	0.0	1650.2	569.3	0.34	2005	40	2868.33
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.15	12.6	1.9	0.80	441.0	352.8	0.00	0.0	0.0	1543.5	567.3	0.37	2010	45	2843.36
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	12.6	2.5	0.80	441.0	352.8	0.00	0.0	0.0	1442.7	604.7	0.42	2015	50	2934.31
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	18.6	3.7	0.80	441.0	352.8	0.00	0.0	0.0	1480.5	612.3	0.41	2020	55	3042.68
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.80	441.0	352.8	0.00	0.0	0.0	1470.9	610.4	0.41	2025	60	3056.61
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.80	441.0	352.8	0.00	0.0	0.0	1439.7	604.1	0.42	2030	65	3036.32
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.20	23.6	4.7	0.80	441.0	352.8	0.00	0.0	0.0	1462.7	608.7	0.42	2035	70	3032.17
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.30	23.6	7.1	0.80	441.0	352.8	0.00	0.0	0.0	1469.3	612.4	0.42	2040	75	3052.80
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.30	23.6	7.1	0.80	441.0	352.8	0.00	0.0	0.0	1469.9	612.5	0.42	2045	80	3062.30
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.30	23.6	7.1	0.80	441.0	352.8	0.00	0.0	0.0	1444.1	607.4	0.42	2050	85	3049.78
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.30	23.6	7.1	0.80	441.0	352.8	0.00	0.0	0.0	1461.7	610.9	0.42	2055	90	3045.64
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	79.0	23.7	0.30	23.6	7.1	0.80	441.0	352.8	0.00	0.0	0.0	1498.2	618.2	0.41	2060	95	3072.81
																												TL:	55263.21

EVALUATION SPECIES: OSPREY

LIFE OF PROJECT: 95 YRS AAHU'S = 581.72

Average Annual Habitat Units available for the black-tailed deer without mitigation in the Lost Lake Tract.

YEAR	DSP HSI	DSP ACRES	DSP HU	MF HSI	MF ACRES	MF HU	MDL HSI	MDL ACRES	MDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.90	77.5	69.8	0.60	99.5	59.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.60	14.0	8.4	0.00	0.0	0.0	191.0	137.9	0.72
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.20	78.5	15.7	0.20	14.0	2.8	0.00	0.0	0.0	171.0	34.2	0.20

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	137.85
1985	20	2619.15
1990	25	421.43
1995	30	171.00
2000	35	171.00
2005	40	171.00
2010	45	171.00
2015	50	171.00
2020	55	171.00
2025	60	171.00
2030	65	171.00
2035	70	171.00
2040	75	171.00
2045	80	171.00
2050	85	171.00
2055	90	171.00
2060	95	171.00
	TL:	5572.43

EVALUATION SPECIES: BLACK-TAILED DEER
LIFE OF PROJECT: 95 YRS. AAHU'S = 58.66

Average Annual Habitat Units available for the black-tailed deer with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	ML HSI	ML ACRES	ML HU	MB HSI	MB ACRES	MB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	1.00	0.0	0.0	0.90	77.4	69.7	0.30	0.0	0.0	0.56	4.9	2.7	0.80	0.0	0.0	0.60	94.6	56.8	0.60	14.0	8.4	0.60	0.0	0.0	0.00	0.0	0.0	190.9	137.6	0.72
1990	1.00	0.0	0.0	0.90	77.4	69.7	0.30	0.0	0.0	0.60	4.9	2.9	0.80	0.0	0.0	0.60	70.1	42.1	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	137.8	0.72
1995	1.00	0.0	0.0	0.90	0.0	0.0	0.30	0.0	0.0	0.60	4.9	2.9	0.80	0.0	0.0	1.00	147.5	147.5	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	173.5	0.91
2000	1.00	25.0	25.0	0.90	0.0	0.0	0.30	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	1.00	127.4	127.4	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	175.5	0.92
2005	1.00	25.0	25.0	0.90	0.0	0.0	0.30	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	1.00	127.4	127.4	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	175.5	0.92
2010	1.00	0.0	0.0	0.90	25.0	22.5	0.30	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	1.00	127.4	127.4	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	173.0	0.91
2015	1.00	0.0	0.0	0.90	25.0	22.5	0.30	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	1.00	127.4	127.4	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	173.0	0.91
2020	1.00	25.0	25.0	0.90	0.0	0.0	0.30	25.0	7.5	0.60	0.0	0.0	0.80	0.0	0.0	1.00	102.4	102.4	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	158.0	0.83
2025	1.00	25.0	25.0	0.90	0.0	0.0	0.30	25.0	7.5	0.60	0.0	0.0	0.80	0.0	0.0	1.00	102.4	102.4	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	158.0	0.83
2030	1.00	25.8	25.8	0.90	25.0	22.5	0.30	0.0	0.0	0.60	25.0	15.0	0.80	0.0	0.0	1.00	76.6	76.6	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	163.0	0.85
2035	1.00	25.8	25.8	0.90	25.0	22.5	0.30	0.0	0.0	0.60	25.0	15.0	0.80	0.0	0.0	1.00	76.6	76.6	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	163.0	0.85
2040	1.00	50.8	50.8	0.90	25.8	23.2	0.30	25.0	7.5	0.60	25.0	15.0	0.80	0.0	0.0	1.00	25.8	25.8	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	145.4	0.76
2045	1.00	50.8	50.8	0.90	25.8	23.2	0.30	25.0	7.5	0.60	25.0	15.0	0.80	0.0	0.0	1.00	25.8	25.8	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	145.4	0.76
2050	1.00	0.0	0.0	0.90	50.8	45.7	0.30	25.8	7.7	0.60	25.0	15.0	0.80	25.0	20.0	1.00	25.8	25.8	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	137.4	0.72
2055	1.00	0.0	0.0	0.90	50.8	45.7	0.30	25.8	7.7	0.60	25.0	15.0	0.80	25.0	20.0	1.00	25.8	25.8	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	137.4	0.72
2060	1.00	50.8	50.8	0.90	0.0	0.0	0.30	50.8	15.2	0.60	50.8	30.5	0.80	0.0	0.0	1.00	0.0	0.0	0.60	14.0	8.4	0.60	24.5	14.7	0.00	0.0	0.0	190.9	119.6	0.63

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	137.56
1985	20	2613.72
1990	25	688.31
1995	30	778.25
2000	35	872.60
2005	40	877.50
2010	45	871.25
2015	50	865.00
2020	55	827.50
2025	60	790.00
2030	65	802.50
2035	70	815.00
2040	75	771.05
2045	80	727.10
2050	85	706.95
2055	90	686.80
2060	95	642.45

TL: 14473.54

EVALUATION SPECIES: BLACK-TAILED DEER

LIFE OF PROJECT 95 YRS. AAHU= 152.35

Average Annual Habitat Units available for the ruffed grouse without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	WDL HSI	WDL ACRES	WDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.35	77.5	27.1	0.77	99.5	76.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	177.0	103.7	0.59
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	103.74
1985	20	1971.06
1990	25	266.91
1995	30	78.50
2000	35	78.50
2005	40	78.50
2010	45	78.50
2015	50	78.50
2020	55	78.50
2025	60	78.50
2030	65	78.50
2035	70	78.50
2040	75	78.50
2045	80	78.50
2050	85	78.50
2055	90	78.50
2060	95	78.50
	TL:	3440.71

EVALUATION SPECIES: RUFFED GROUSE
LIFE OF PROJECT: 95 YRS. AAHU'S = 36.22

Average Annual Habitat Units available for the ruffed grouse with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.70	0.0	0.0	0.35	77.4	27.1	0.30	0.0	0.0	0.26	4.9	1.3	0.60	0.0	0.0	0.77	94.6	72.8	0.00	0.0	0.0	0.90	0.0	0.0	0.00	0.0	0.0	176.9	101.2	0.57
1990	0.70	0.0	0.0	0.35	77.4	27.1	0.30	0.0	0.0	0.30	4.9	1.5	0.60	0.0	0.0	0.77	70.1	54.0	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	104.6	0.59
1995	0.70	0.0	0.0	0.35	0.0	0.0	0.30	0.0	0.0	0.30	4.9	1.5	0.60	0.0	0.0	1.00	147.5	147.5	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	171.0	0.97
2000	0.70	25.0	17.5	0.35	0.0	0.0	0.30	0.0	0.0	0.30	0.0	0.0	0.60	0.0	0.0	1.00	127.4	127.4	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	167.0	0.94
2005	0.70	25.0	17.5	0.60	0.0	0.0	0.30	0.0	0.0	0.30	0.0	0.0	0.60	0.0	0.0	1.00	127.4	127.4	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	167.0	0.94
2010	0.70	0.0	0.0	0.60	25.0	15.0	0.30	0.0	0.0	0.30	0.0	0.0	0.60	0.0	0.0	1.00	127.4	127.4	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	164.5	0.93
2015	0.70	0.0	0.0	0.60	25.0	15.0	0.30	0.0	0.0	0.30	0.0	0.0	0.60	0.0	0.0	1.00	127.4	127.4	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	164.5	0.93
2020	0.70	25.0	17.5	0.60	0.0	0.0	0.30	25.0	7.5	0.30	0.0	0.0	0.60	0.0	0.0	1.00	102.4	102.4	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	149.5	0.84
2025	0.70	25.0	17.5	0.60	0.0	0.0	0.30	25.0	7.5	0.30	0.0	0.0	0.60	0.0	0.0	1.00	102.4	102.4	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	149.5	0.84
2030	0.70	25.8	18.1	0.60	25.0	15.0	0.30	0.0	0.0	0.30	25.0	7.5	0.60	0.0	0.0	1.00	76.6	76.6	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	139.2	0.79
2035	0.70	25.8	18.1	0.60	25.0	15.0	0.30	0.0	0.0	0.30	25.0	7.5	0.60	0.0	0.0	1.00	76.6	76.6	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	139.2	0.79
2040	0.70	50.8	35.6	0.60	25.8	15.5	0.30	25.0	7.5	0.30	25.0	7.5	0.60	0.0	0.0	1.00	25.8	25.8	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	113.9	0.64
2045	0.70	50.8	35.6	0.60	25.8	15.5	0.30	25.0	7.5	0.30	25.0	7.5	0.60	0.0	0.0	1.00	25.8	25.8	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	113.9	0.64
2050	0.70	0.0	0.0	0.60	50.8	30.5	0.30	25.8	7.7	0.30	25.0	7.5	0.60	25.0	15.0	1.00	25.8	25.8	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	108.6	0.61
2055	0.70	0.0	0.0	0.60	50.8	30.5	0.30	25.8	7.7	0.30	25.0	7.5	0.60	25.0	15.0	1.00	25.8	25.8	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	108.6	0.61
2060	0.70	50.8	35.6	0.60	0.0	0.0	0.30	50.8	15.2	0.30	50.8	15.2	0.60	0.0	0.0	1.00	0.0	0.0	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	88.1	0.50

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	101.21
1985	20	1922.99
1990	25	514.48
1995	30	689.02
2000	35	844.93
2005	40	834.75
2010	45	828.50
2015	50	822.25
2020	55	784.75
2025	60	747.25
2030	65	721.65
2035	70	696.05
2040	75	632.75
2045	80	569.45
2050	85	556.15
2055	90	542.85
2060	95	491.65

TL: 12300.60

EVALUATION SPECIES: RUFFED GROUSE

LIFE OF PROJECT 95 YRS. AAHU= 129.48

Average Annual Habitat Units available for the black-capped chickadee without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	WDL HSI	WDL ACRES	WDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.35	77.5	27.1	0.87	99.5	86.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.80	14.0	11.2	0.00	0.0	0.0	191.0	124.9	0.65
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.80	78.5	62.8	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.00	0.0	0.0	92.5	72.6	0.78

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	124.89
1985	20	2372.91
1990	25	504.48
1995	30	363.00
2000	35	363.00
2005	40	363.00
2010	45	363.00
2015	50	363.00
2020	55	363.00
2025	60	363.00
2030	65	363.00
2035	70	363.00
2040	75	363.00
2045	80	363.00
2050	85	363.00
2055	90	363.00
2060	95	363.00
TL:		8084.28

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE

LIFE OF PROJECT: 95 YRS. AAHU'S = 85.10

Average Annual Habitat Units available for the black-capped chickadee with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.20	0.0	0.0	0.35	77.4	27.1	0.30	0.0	0.0	0.43	4.9	2.1	0.50	0.0	0.0	0.87	94.6	82.3	0.80	14.0	11.2	0.87	0.0	0.0	0.00	0.0	0.0	190.9	122.7	0.64
1990	0.20	0.0	0.0	0.35	77.4	27.1	0.30	0.0	0.0	0.30	4.9	1.5	0.50	0.0	0.0	0.87	70.1	61.0	0.80	14.0	11.2	0.87	24.5	21.3	0.00	0.0	0.0	190.9	122.1	0.64
1995	0.20	0.0	0.0	0.35	0.0	0.0	0.30	0.0	0.0	0.30	4.9	1.5	0.50	0.0	0.0	1.00	147.5	147.5	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	182.2	0.95
2000	0.20	25.0	5.0	0.35	0.0	0.0	0.30	0.0	0.0	0.30	0.0	0.0	0.50	0.0	0.0	1.00	127.4	127.4	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	165.7	0.87
2005	0.20	25.0	5.0	0.30	0.0	0.0	0.30	0.0	0.0	0.30	0.0	0.0	0.50	0.0	0.0	1.00	127.4	127.4	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	165.7	0.87
2010	0.20	0.0	0.0	0.30	25.0	7.5	0.30	0.0	0.0	0.30	0.0	0.0	0.50	0.0	0.0	1.00	127.4	127.4	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	168.2	0.88
2015	0.20	0.0	0.0	0.30	25.0	7.5	0.30	0.0	0.0	0.30	0.0	0.0	0.50	0.0	0.0	1.00	127.4	127.4	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	168.2	0.88
2020	0.20	25.0	5.0	0.30	0.0	0.0	0.30	25.0	7.5	0.30	0.0	0.0	0.50	0.0	0.0	1.00	102.4	102.4	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	148.2	0.78
2025	0.20	25.0	5.0	0.30	0.0	0.0	0.30	25.0	7.5	0.30	0.0	0.0	0.50	0.0	0.0	1.00	102.4	102.4	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	148.2	0.78
2030	0.20	25.8	5.2	0.30	25.0	7.5	0.30	0.0	0.0	0.30	25.0	7.5	0.50	0.0	0.0	1.00	76.6	76.6	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	130.0	0.68
2035	0.20	25.8	5.2	0.30	25.0	7.5	0.30	0.0	0.0	0.30	25.0	7.5	0.50	0.0	0.0	1.00	76.6	76.6	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	130.0	0.68
2040	0.20	50.8	10.2	0.30	25.8	7.7	0.30	25.0	7.5	0.30	25.0	7.5	0.50	0.0	0.0	1.00	25.8	25.8	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	92.0	0.48
2045	0.20	50.8	10.2	0.30	25.8	7.7	0.30	25.0	7.5	0.30	25.0	7.5	0.50	0.0	0.0	1.00	25.8	25.8	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	92.0	0.48
2050	0.20	0.0	0.0	0.30	50.8	15.2	0.30	25.8	7.7	0.30	25.0	7.5	0.50	25.0	12.5	1.00	25.8	25.8	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	102.0	0.53
2055	0.20	0.0	0.0	0.30	50.8	15.2	0.30	25.8	7.7	0.30	25.0	7.5	0.50	25.0	12.5	1.00	25.8	25.8	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	102.0	0.53
2060	0.20	50.8	10.2	0.30	0.0	0.0	0.30	50.8	15.2	0.30	50.8	15.2	0.50	0.0	0.0	1.00	0.0	0.0	0.80	14.0	11.2	0.90	24.5	22.1	0.00	0.0	0.0	190.9	73.9	0.39

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	122.70
1985	20	2331.28
1990	25	611.90
1995	30	760.71
2000	35	869.68
2005	40	828.25
2010	45	834.50
2015	50	840.75
2020	55	790.75
2025	60	740.75
2030	65	695.40
2035	70	650.05
2040	75	554.90
2045	80	459.75
2050	85	484.95
2055	90	510.15
2060	95	439.80

TL: 12526.28

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE

LIFE OF PROJECT 95 YRS. AAHU= 131.86

Average Annual Habitat Units available for the pileated woodpecker without mitigation in the Lost Lake Tract.

YEAR	DSP HSI	DSP ACRES	DSP HU	MF HSI	MF ACRES	MF HU	WDL HSI	WDL ACRES	WDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.10	77.5	7.8	0.33	99.5	32.8	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	177.0	40.6	0.23
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	40.59
1985	20	771.12
1990	25	138.31
1995	30	78.50
2000	35	78.50
2005	40	78.50
2010	45	78.50
2015	50	78.50
2020	55	78.50
2025	60	78.50
2030	65	78.50
2035	70	78.50
2040	75	78.50
2045	80	78.50
2050	85	78.50
2055	90	78.50
2060	95	78.50
	TL:	2049.01

EVALUATION SPECIES: PILEATED WOODPECKER
LIFE OF PROJECT: 95 YRS. AAHU'S = 21.57

Average Annual Habitat Units available for the pileated woodpecker with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.10	0.0	0.0	0.10	77.4	7.7	0.30	0.0	0.0	0.55	4.9	2.7	0.90	0.0	0.0	0.33	94.6	31.2	0.00	0.0	0.0	0.33	0.0	0.0	0.00	0.0	0.0	176.9	41.7	0.24
1990	0.10	0.0	0.0	0.10	77.4	7.7	0.30	0.0	0.0	0.80	4.9	3.9	0.90	0.0	0.0	0.33	70.1	23.1	0.00	0.0	0.0	0.33	24.5	8.1	0.00	0.0	0.0	176.9	42.9	0.24
1995	0.10	0.0	0.0	0.10	0.0	0.0	0.30	0.0	0.0	0.80	4.9	3.9	0.90	0.0	0.0	0.33	147.5	48.7	0.00	0.0	0.0	0.33	24.5	8.1	0.00	0.0	0.0	176.9	60.7	0.34
2000	0.10	25.0	2.5	0.10	0.0	0.0	0.30	0.0	0.0	0.80	0.0	0.0	0.90	0.0	0.0	0.33	127.4	42.0	0.00	0.0	0.0	0.33	24.5	8.1	0.00	0.0	0.0	176.9	52.6	0.30
2005	0.10	25.0	2.5	0.20	0.0	0.0	0.30	0.0	0.0	0.80	0.0	0.0	0.90	0.0	0.0	0.33	127.4	42.0	0.00	0.0	0.0	0.33	24.5	8.1	0.00	0.0	0.0	176.9	52.6	0.30
2010	0.10	0.0	0.0	0.20	25.0	5.0	0.30	0.0	0.0	0.80	0.0	0.0	0.90	0.0	0.0	0.80	127.4	101.9	0.00	0.0	0.0	0.33	24.5	8.1	0.00	0.0	0.0	176.9	115.0	0.65
2015	0.10	0.0	0.0	0.20	25.0	5.0	0.30	0.0	0.0	0.80	0.0	0.0	0.90	0.0	0.0	0.80	127.4	101.9	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	129.0	0.73
2020	0.10	25.0	2.5	0.20	0.0	0.0	0.30	25.0	7.5	0.80	0.0	0.0	0.90	0.0	0.0	0.80	102.4	81.9	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	114.0	0.64
2025	0.10	25.0	2.5	0.20	0.0	0.0	0.30	25.0	7.5	0.80	0.0	0.0	0.90	0.0	0.0	0.80	102.4	81.9	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	114.0	0.64
2030	0.10	25.8	2.6	0.20	25.0	5.0	0.30	0.0	0.0	0.80	25.0	20.0	0.90	0.0	0.0	0.80	76.6	61.3	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	110.9	0.63
2035	0.10	25.8	2.6	0.20	25.0	5.0	0.30	0.0	0.0	0.80	25.0	20.0	0.90	0.0	0.0	0.80	76.6	61.3	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	110.9	0.63
2040	0.10	50.8	5.1	0.20	25.8	5.2	0.30	25.0	7.5	0.80	25.0	20.0	0.90	0.0	0.0	0.80	25.8	20.6	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	80.4	0.45
2045	0.10	50.8	5.1	0.20	25.8	5.2	0.30	25.0	7.5	0.80	25.0	20.0	0.90	0.0	0.0	0.80	25.8	20.6	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	80.4	0.45
2050	0.10	0.0	0.0	0.20	50.8	10.2	0.30	25.8	7.7	0.80	25.0	20.0	0.90	25.0	22.5	0.80	25.8	20.6	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	103.1	0.58
2055	0.10	0.0	0.0	0.20	50.8	10.2	0.30	25.8	7.7	0.80	25.0	20.0	0.90	25.0	22.5	0.80	25.8	20.6	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	103.1	0.58
2060	0.10	50.8	5.1	0.20	0.0	0.0	0.30	50.8	15.2	0.80	50.8	40.6	0.90	0.0	0.0	0.80	0.0	0.0	0.00	0.0	0.0	0.90	24.5	22.1	0.00	0.0	0.0	176.9	83.0	0.47

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	41.65
1985	20	791.41
1990	25	211.33
1995	30	258.90
2000	35	283.27
2005	40	263.14
2010	45	419.08
2015	50	609.94
2020	55	607.35
2025	60	569.85
2030	65	562.20
2035	70	554.55
2040	75	478.35
2045	80	402.15
2050	85	458.80
2055	90	515.45
2060	95	465.25
	TL:	7492.65

EVALUATION SPECIES: PILEATED WOODPECKER
LIFE OF PROJECT 95 YRS. AAHU= 78.87

Average Annual Habitat Units available for the pine marten without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	MDL HSI	MDL ACRES	MDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.10	77.5	7.8	0.20	99.5	19.9	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	177.0	27.7	0.16
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	27.65
1985	20	525.35
1990	25	46.08
1995	30	0.00
2000	35	0.00
2005	40	0.00
2010	45	0.00
2015	50	0.00
2020	55	0.00
2025	60	0.00
2030	65	0.00
2035	70	0.00
2040	75	0.00
2045	80	0.00
2050	85	0.00
2055	90	0.00
2060	95	0.00
	TL:	599.08

EVALUATION SPECIES: PINE MARTEN

LIFE OF PROJECT: 95 YRS. AAHU'S = 6.31

Average Annual Habitat Units available for the pine marten with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.10	0.0	0.0	0.10	77.4	7.7	0.20	0.0	0.0	0.49	4.9	2.4	0.80	0.0	0.0	0.20	94.6	18.9	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	176.9	29.1	0.16
1990	0.10	0.0	0.0	0.10	77.4	7.7	0.20	0.0	0.0	0.49	4.9	2.4	0.80	0.0	0.0	0.20	70.1	14.0	0.00	0.0	0.0	0.20	24.5	4.9	0.00	0.0	0.0	176.9	29.1	0.16
1995	0.10	0.0	0.0	0.10	0.0	0.0	0.20	0.0	0.0	0.60	4.9	2.9	0.80	0.0	0.0	0.30	147.5	44.3	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	54.5	0.31
2000	0.10	25.0	2.5	0.10	0.0	0.0	0.20	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	0.30	127.4	38.2	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	48.1	0.27
2005	0.10	25.0	2.5	0.20	0.0	0.0	0.20	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	0.30	127.4	38.2	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	48.1	0.27
2010	0.10	0.0	0.0	0.20	25.0	5.0	0.20	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	0.30	127.4	38.2	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	50.6	0.29
2015	0.10	0.0	0.0	0.20	25.0	5.0	0.20	0.0	0.0	0.60	0.0	0.0	0.80	0.0	0.0	0.30	127.4	38.2	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	50.6	0.29
2020	0.10	25.0	2.5	0.20	0.0	0.0	0.20	25.0	5.0	0.60	0.0	0.0	0.80	0.0	0.0	0.30	102.4	30.7	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	45.6	0.26
2025	0.10	25.0	2.5	0.20	0.0	0.0	0.20	25.0	5.0	0.60	0.0	0.0	0.80	0.0	0.0	0.30	102.4	30.7	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	45.6	0.26
2030	0.10	25.8	2.6	0.20	25.0	5.0	0.20	0.0	0.0	0.60	25.0	15.0	0.80	0.0	0.0	0.30	76.6	23.0	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	52.9	0.30
2035	0.10	25.8	2.6	0.20	25.0	5.0	0.20	0.0	0.0	0.60	25.0	15.0	0.80	0.0	0.0	0.30	76.6	23.0	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	52.9	0.30
2040	0.10	50.8	5.1	0.20	25.8	5.2	0.20	25.0	5.0	0.60	25.0	15.0	0.80	0.0	0.0	0.30	25.8	7.7	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	45.3	0.26
2045	0.10	50.8	5.1	0.20	25.8	5.2	0.20	25.0	5.0	0.60	25.0	15.0	0.80	0.0	0.0	0.30	25.8	7.7	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	45.3	0.26
2050	0.10	0.0	0.0	0.20	50.8	10.2	0.20	25.8	5.2	0.60	25.0	15.0	0.80	25.0	20.0	0.30	25.8	7.7	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	65.4	0.37
2055	0.10	0.0	0.0	0.20	50.8	10.2	0.20	25.8	5.2	0.60	25.0	15.0	0.80	25.0	20.0	0.30	25.8	7.7	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	65.4	0.37
2060	0.10	50.8	5.1	0.20	0.0	0.0	0.20	50.8	10.2	0.60	50.8	30.5	0.80	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.30	24.5	7.4	0.00	0.0	0.0	176.9	53.1	0.30

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	29.06
1985	20	552.16
1990	25	145.31
1995	30	209.00
2000	35	256.53
2005	40	240.35
2010	45	246.60
2015	50	252.85
2020	55	240.35
2025	60	227.85
2030	65	246.20
2035	70	264.55
2040	75	245.60
2045	80	226.65
2050	85	276.85
2055	90	327.05
2060	95	296.20
	TL:	4283.15

EVALUATION SPECIES: PINE MARTEN
LIFE OF PROJECT 95 YRS. AAHU= 45.09

Average Annual Habitat Units available for the douglas squirrel without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	MDL HSI	MDL ACRES	MDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.15	77.5	11.6	0.37	99.5	36.8	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	177.0	48.4	0.27
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.20	78.5	15.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	78.5	15.7	0.20

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	48.44
1985	20	920.36
1990	25	154.30
1995	30	78.50
2000	35	78.50
2005	40	78.50
2010	45	78.50
2015	50	78.50
2020	55	78.50
2025	60	78.50
2030	65	78.50
2035	70	78.50
2040	75	78.50
2045	80	78.50
2050	85	78.50
2055	90	78.50
2060	95	78.50
TL:		2222.10

EVALUATION SPECIES: DOUGLAS SQUIRREL

LIFE OF PROJECT: 95 YRS. AAHU'S = 23.39

Average Annual Habitat Units available for the douglas squirrel with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	ML HSI	ML ACRES	ML HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.15	77.4	11.6	0.20	0.0	0.0	0.56	4.9	2.7	1.00	0.0	0.0	0.37	94.6	35.0	0.00	0.0	0.0	0.37	0.0	0.0	0.00	0.0	0.0	176.9	49.4	0.28
1990	0.00	0.0	0.0	0.15	77.4	11.6	0.20	0.0	0.0	0.90	4.9	4.4	1.00	0.0	0.0	0.37	70.1	25.9	0.00	0.0	0.0	0.37	24.5	9.1	0.00	0.0	0.0	176.9	51.0	0.29
1995	0.00	0.0	0.0	0.15	0.0	0.0	0.20	0.0	0.0	0.90	4.9	4.4	1.00	0.0	0.0	0.50	147.5	73.8	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	176.9	88.0	0.50
2000	0.00	0.0	0.0	0.15	0.0	0.0	0.20	0.0	0.0	0.90	0.0	0.0	1.00	0.0	0.0	0.50	127.4	63.7	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	151.9	73.5	0.48
2005	0.00	0.0	0.0	0.20	0.0	0.0	0.20	0.0	0.0	0.90	0.0	0.0	1.00	0.0	0.0	0.50	127.4	63.7	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	151.9	73.5	0.48
2010	0.00	0.0	0.0	0.20	25.0	5.0	0.20	0.0	0.0	0.90	0.0	0.0	1.00	0.0	0.0	0.50	127.4	63.7	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	176.9	78.5	0.44
2015	0.00	0.0	0.0	0.20	25.0	5.0	0.20	0.0	0.0	0.90	0.0	0.0	1.00	0.0	0.0	0.50	127.4	63.7	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	176.9	78.5	0.44
2020	0.00	0.0	0.0	0.20	0.0	0.0	0.20	25.0	5.0	0.90	0.0	0.0	1.00	0.0	0.0	0.50	102.4	51.2	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	151.9	66.0	0.43
2025	0.00	0.0	0.0	0.20	0.0	0.0	0.20	25.0	5.0	0.90	0.0	0.0	1.00	0.0	0.0	0.50	102.4	51.2	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	151.9	66.0	0.43
2030	0.00	0.0	0.0	0.20	25.0	5.0	0.20	0.0	0.0	0.90	25.0	22.5	1.00	0.0	0.0	0.50	76.6	38.3	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	151.1	75.6	0.50
2035	0.00	0.0	0.0	0.20	25.0	5.0	0.20	0.0	0.0	0.90	25.0	22.5	1.00	0.0	0.0	0.50	76.6	38.3	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	151.1	75.6	0.50
2040	0.00	0.0	0.0	0.20	25.8	5.2	0.20	25.0	5.0	0.90	25.0	22.5	1.00	0.0	0.0	0.50	25.8	12.9	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	126.1	55.4	0.44
2045	0.00	0.0	0.0	0.20	25.8	5.2	0.20	25.0	5.0	0.90	25.0	22.5	1.00	0.0	0.0	0.50	25.8	12.9	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	126.1	55.4	0.44
2050	0.00	0.0	0.0	0.20	50.8	10.2	0.20	25.8	5.2	0.90	25.0	22.5	1.00	25.0	25.0	0.50	25.8	12.9	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	176.9	85.5	0.48
2055	0.00	0.0	0.0	0.20	50.8	10.2	0.20	25.8	5.2	0.90	25.0	22.5	1.00	25.0	25.0	0.50	25.8	12.9	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	176.9	85.5	0.48
2060	0.00	0.0	0.0	0.20	0.0	0.0	0.20	50.8	10.2	0.90	50.8	45.7	1.00	0.0	0.0	0.50	0.0	0.0	0.00	0.0	0.0	0.40	24.5	9.8	0.00	0.0	0.0	126.1	65.7	0.52

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	49.36
1985	20	937.76
1990	25	250.95
1995	30	347.46
2000	35	403.37
2005	40	367.50
2010	45	380.84
2015	50	392.50
2020	55	361.06
2025	60	330.00
2030	65	354.04
2035	70	378.00
2040	75	326.12
2045	80	276.80
2050	85	350.32
2055	90	427.60
2060	95	379.58
	TL:	6313.25

EVALUATION SPECIES: DOUGLAS SQUIRREL

LIFE OF PROJECT 95 YRS. AAHU= 66.46

Average Annual Habitat Units available for the common merganser without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	WDL HSI	WDL ACRES	WDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	ML HSI	ML ACRES	ML HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	14.0	2.8	0.70	14.0	9.8	28.0	12.6	0.45
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00

YEAR	TY	HUs BTN TYs
1960	0	
1961	1	12.60
1985	20	239.40
1990	25	21.00
1995	30	0.00
2000	35	0.00
2005	40	0.00
2010	45	0.00
2015	50	0.00
2020	55	0.00
2025	60	0.00
2030	65	0.00
2035	70	0.00
2040	75	0.00
2045	80	0.00
2050	85	0.00
2055	90	0.00
2060	95	0.00
TL:		273.00

EVALUATION SPECIES: COMMON MERGANSER

LIFE OF PROJECT: 95 YRS. AAHU'S = 2.87

Average Annual Habitat Units available for the common merganser with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
																															1960	0	
																															1961	1	19.60
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	0.0	0.0	0.70	14.0	9.8	28.0	19.6	0.70	1985	20	372.40
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	1990	25	115.00
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	1995	30	122.50
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2000	35	122.50
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2005	40	122.50
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2010	45	122.50
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2015	50	122.50
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2020	55	122.50
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2025	60	122.50
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2030	65	122.50
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2035	70	122.50
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2040	75	122.50
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2045	80	122.50
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2050	85	122.50
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2055	90	122.50
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	14.0	9.8	0.20	24.5	4.9	0.70	14.0	9.8	52.5	24.5	0.47	2060	95	122.50
																															TL:		2222.01

EVALUATION SPECIES: COMMON MERGANSER

LIFE OF PROJECT 95 YRS. AAHU= 23.39

Average Annual Habitat Units available for the mallard without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	WDL HSI	WDL ACRES	WDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
																									1960	0	
																									1961	1	23.80
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	14.0	11.2	28.0	23.8	0.85	1985	20	452.20
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	1990	25	80.50
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	1995	30	42.00
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2000	35	42.00
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2005	40	42.00
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2010	45	42.00
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2015	50	42.00
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2020	55	42.00
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2025	60	42.00
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2030	65	42.00
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2035	70	42.00
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2040	75	42.00
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2045	80	42.00
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2050	85	42.00
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2055	90	42.00
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.50	14.0	7.0	0.10	14.0	1.4	28.0	8.4	0.30	2060	95	42.00
																										TL:	1144.50

EVALUATION SPECIES: MALLARD

LIFE OF PROJECT: 95 YRS. AAHU'S = 12.05

Average Annual Habitat Units available for the mallard with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.80	14.0	11.2	28.0	23.8	0.85
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.00	0.0	0.0	0.90	14.0	12.6	28.0	25.2	0.90

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	22.80
1985	20	452.20
1990	25	122.50
1995	30	126.00
2000	35	126.00
2005	40	126.00
2010	45	126.00
2015	50	126.00
2020	55	126.00
2025	60	126.00
2030	65	126.00
2035	70	126.00
2040	75	126.00
2045	80	126.00
2050	85	126.00
2055	90	126.00
2060	95	126.00
	TL:	2362.50

EVALUATION SPECIES: MALLARD

LIFE OF PROJECT 95 YRS. AAHU= 24.87

Average Annual Habitat Units available for the beaver without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	MDL HSI	MDL ACRES	MDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	BEAVER A WL HSI	BEAVER A WL ACRES	BEAVER A WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.21	99.5	20.9	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.90	14.0	12.6	127.5	46.1	0.36
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	14.0	1.4	0.10	14.0	1.4	28.0	2.8	0.10

YEAR	TY	BEAVER HUs BTW TYs	BEAVER A HUs BTW TYs
1960	0		
1961	1	46.10	12.60
1985	20	875.81	239.40
1990	25	100.55	35.00
1995	30	14.00	7.00
2000	35	14.00	7.00
2005	40	14.00	7.00
2010	45	14.00	7.00
2015	50	14.00	7.00
2020	55	14.00	7.00
2025	60	14.00	7.00
2030	65	14.00	7.00
2035	70	14.00	7.00
2040	75	14.00	7.00
2045	80	14.00	7.00
2050	85	14.00	7.00
2055	90	14.00	7.00
2060	95	14.00	7.00
TL:		1218.45	385.00

EVALUATION SPECIES: BEAVER

LIFE OF PROJECT: 95 YRS. AAHU'S = 12.83 4.05

Average Annual Habitat Units available for the beaver with mitigation in the Lost Lake Tract.

BEAVER A

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	ML HSI	ML ACRES	ML HU	MB HSI	MB ACRES	MB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.21	94.6	19.9	0.90	14.0	12.6	0.40	0.0	0.0	0.90	14.0	12.6	122.6	45.1	0.37
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.40	24.5	9.8	0.90	14.0	12.6	52.5	35.0	0.67
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.90	14.0	12.6	0.80	24.5	19.6	0.90	14.0	12.6	52.5	44.8	0.85

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	45.07
1985	20	856.25
1990	25	217.64
1995	30	199.50
2000	35	224.00
2005	40	224.00
2010	45	224.00
2015	50	224.00
2020	55	224.00
2025	60	224.00
2030	65	224.00
2035	70	224.00
2040	75	224.00
2045	80	224.00
2050	85	224.00
2055	90	224.00
2060	95	224.00
	TL:	4230.46

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT 95 YRS. AAHU= 44.53

EVALUATION SPECIES: BEAVER A
LIFE OF PROJECT 95 YRS. AAHU= 12.60

Average Annual Habitat Units available for the osprey without mitigation in the Lost Lake Tract.

YEAR	OSP HSI	OSP ACRES	OSP HU	MF HSI	MF ACRES	MF HU	WDL HSI	WDL ACRES	WDL HU	DEV HSI	DEV ACRES	DEV HU	PAS HSI	PAS ACRES	PAS HU	WL HSI	WL ACRES	WL HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	14.0	2.8	0.60	14.0	8.4	28.0	11.2	0.40
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	11.20
1985	20	212.80
1990	25	18.67
1995	30	0.00
2000	35	0.00
2005	40	0.00
2010	45	0.00
2015	50	0.00
2020	55	0.00
2025	60	0.00
2030	65	0.00
2035	70	0.00
2040	75	0.00
2045	80	0.00
2050	85	0.00
2055	90	0.00
2060	95	0.00
TL:		242.67

EVALUATION SPECIES: OSPREY
LIFE OF PROJECT: 95 YRS. AAHU'S = 2.55

Average Annual Habitat Units available for the osprey with mitigation in the Lost Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LST HSI	LST ACRES	LST HU	MF HSI	MF ACRES	MF HU	WL HSI	WL ACRES	WL HU	WB HSI	WB ACRES	WB HU	LAKE HSI	LAKE ACRES	LAKE HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	14.0	2.8	0.30	0.0	0.0	0.60	14.0	8.4	28.0	11.2	0.40
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	14.0	4.2	0.30	24.5	7.4	0.60	14.0	8.4	52.5	20.0	0.38

YEAR	TY	HUs BTW TYs
1960	0	
1961	1	11.20
1985	20	212.80
1990	25	78.28
1995	30	99.75
2000	35	99.75
2005	40	99.75
2010	45	99.75
2015	50	99.75
2020	55	99.75
2025	60	99.75
2030	65	99.75
2035	70	99.75
2040	75	99.75
2045	80	99.75
2050	85	99.75
2055	90	99.75
2060	95	99.75
	TL:	1698.78

EVALUATION SPECIES: OSPREY
LIFE OF PROJECT 95 YRS. AAHU= 17.88

Average Annual Habitat Units available for the black-tailed deer without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.60	1.9	1.1	0.40	0.0	0.0	0.30	26.0	7.8	0.40	0.0	0.0	0.69	28.9	19.9	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	32.2	0.53
1990	0.60	1.9	1.1	0.40	0.0	0.0	0.30	0.0	0.0	0.40	26.0	10.4	0.69	28.9	19.9	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	34.8	0.57
1995	0.60	0.0	0.0	0.40	1.9	0.8	0.30	0.0	0.0	0.40	26.0	10.4	0.65	28.9	18.8	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	33.3	0.55
2000	0.60	0.0	0.0	0.40	0.0	0.0	0.30	1.9	0.6	0.40	26.0	10.4	0.65	28.9	18.8	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	33.1	0.54
2005	0.60	0.0	0.0	0.40	0.0	0.0	0.30	1.9	0.6	0.40	26.0	10.4	0.65	28.9	18.8	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	33.1	0.54
2010	0.60	0.0	0.0	0.40	0.0	0.0	0.30	1.9	0.6	0.40	54.9	22.0	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	25.9	0.42
2015	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	56.8	22.7	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	26.1	0.43
2020	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	56.8	22.7	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	26.1	0.43
2025	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	56.8	22.7	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	26.1	0.43
2030	0.60	54.9	32.9	0.40	0.0	0.0	0.30	0.0	0.0	0.40	1.9	0.8	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	37.1	0.61
2035	0.60	54.9	32.9	0.40	0.0	0.0	0.30	0.0	0.0	0.40	1.9	0.8	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	37.1	0.61
2040	0.60	0.0	0.0	0.40	54.9	22.0	0.30	0.0	0.0	0.40	1.9	0.8	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	26.1	0.43
2045	0.60	0.0	0.0	0.40	0.0	0.0	0.30	54.9	16.5	0.40	1.9	0.8	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	20.6	0.34
2050	0.60	0.0	0.0	0.40	0.0	0.0	0.30	54.9	16.5	0.40	1.9	0.8	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	20.6	0.34
2055	0.60	0.0	0.0	0.40	0.0	0.0	0.30	54.9	16.5	0.40	1.9	0.8	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	20.6	0.34
2060	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	56.8	22.7	0.60	0.0	0.0	0.80	4.0	3.2	0.78	0.2	0.16	0.00	0.0	0.0	61.0	26.1	0.43

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	32.24
1985	20	612.50
1990	25	167.69
1995	30	170.35
2000	35	166.03
2005	40	165.56
2010	45	147.49
2015	50	129.91
2020	55	130.38
2025	60	130.38
2030	65	157.83
2035	70	185.28
2040	75	157.83
2045	80	116.66
2050	85	102.93
2055	90	102.93
2060	95	116.66

TL: 2792.62

EVALUATION SPECIES: BLACK-TAILED DEER

LIFE OF PROJECT: 100 YRS. AAHU'S = 27.93

Average Annual Habitat Units available for the black-tailed deer with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.60	1.9	1.1	0.40	0.0	0.0	0.30	26.0	7.8	0.40	0.0	0.0	0.50	0.0	0.0	0.69	26.7	18.4	0.80	4.0	3.2
1990	0.60	1.9	1.1	0.40	0.0	0.0	0.30	0.0	0.0	0.40	26.0	10.4	0.50	0.0	0.0	0.69	26.7	18.4	0.80	4.0	3.2
1995	0.60	0.0	0.0	0.40	1.9	0.8	0.30	0.0	0.0	0.40	26.0	10.4	0.50	0.0	0.0	0.65	26.7	17.4	0.80	4.0	3.2
2000	0.60	0.0	0.0	0.40	0.0	0.0	0.30	1.9	0.6	0.40	26.0	10.4	0.50	0.0	0.0	0.65	26.7	17.4	0.80	4.0	3.2
2005	0.60	0.0	0.0	0.40	0.0	0.0	0.30	1.9	0.6	0.40	26.0	10.4	0.50	0.0	0.0	0.65	26.7	17.4	0.80	4.0	3.2
2010	0.60	0.0	0.0	0.40	0.0	0.0	0.30	1.9	0.6	0.40	26.0	10.4	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2015	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2020	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2025	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2030	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2035	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2040	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2045	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2050	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.60	26.7	16.0	0.80	4.0	3.2
2055	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	1.9	0.8	0.50	52.7	26.4	0.60	0.0	0.0	0.80	4.0	3.2
2060	0.60	0.0	0.0	0.40	0.0	0.0	0.30	0.0	0.0	0.40	1.9	0.8	0.50	52.7	26.4	0.60	0.0	0.0	0.80	4.0	3.2

BL-TAILED DEER A YR HSI	YR ACRES	YR HU	SI HSI	SI ACRES	SI HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	B.T.DEER HUs BTW TYs	B.T.DEER A HUs BTW TYs
															1960	0		
															1965	1	40.94	5.02
0.10	50.2	5.0	0.10	52.0	5.2	0.78	0.2	0.2	0.00	0.0	0.0	161.0	40.9	0.25	1985	20	777.84	95.38
0.30	50.2	15.1	0.10	52.0	5.2	0.78	0.2	0.2	0.00	0.0	0.0	161.0	53.6	0.33	1990	25	236.30	50.20
0.50	50.2	25.1	0.10	52.0	5.2	0.78	0.2	0.2	0.00	0.0	0.0	161.0	62.2	0.39	1995	30	289.38	100.40
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	72.2	0.45	2000	35	335.93	138.05
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	72.2	0.45	2005	40	361.01	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	70.9	0.44	2010	45	357.67	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2015	50	354.81	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2020	55	355.28	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2025	60	355.28	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2030	65	355.28	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2035	70	355.28	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2040	75	355.28	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2045	80	355.28	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.1	0.44	2050	85	355.28	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.0	0.44	2055	90	355.11	150.60
0.60	50.2	30.1	0.20	52.0	10.4	0.78	0.2	0.2	0.00	0.0	0.0	161.0	71.0	0.44	2060	95	354.93	150.60
												TL: 1082.4					TL: 5950.85	2196.25

EVALUATION SPECIES: BLACK-TAILED DEER
LIFE OF PROJECT 95 YRS. AAHU'S = 62.64 23.12

Average Annual Habitat Units available for the ruffed grouse without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.30	1.9	0.6	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	28.9	12.4	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	35.0	15.9	0.45
1990	0.30	1.9	0.6	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	28.9	12.4	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	35.0	15.9	0.45
1995	0.30	0.0	0.0	0.30	1.9	0.6	0.00	0.0	0.0	0.00	0.0	0.0	0.43	28.9	12.4	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	35.0	15.9	0.45
2000	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	28.9	12.4	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	33.1	15.3	0.46
2005	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	28.9	12.4	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	33.1	15.3	0.46
2010	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69
2015	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69
2020	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69
2025	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69
2030	0.30	54.9	16.5	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	59.1	19.4	0.33
2035	0.30	54.9	16.5	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	59.1	19.4	0.33
2040	0.30	0.0	0.0	0.30	54.9	16.5	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	59.1	19.4	0.33
2045	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69
2050	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69
2055	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69
2060	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.43	0.0	0.0	0.70	4.0	2.8	0.50	0.2	0.1	0.00	0.0	0.0	4.2	2.9	0.69

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	15.90
1985	20	302.04
1990	25	79.49
1995	30	79.49
2000	35	78.07
2005	40	76.64
2010	45	51.04
2015	50	14.50
2020	55	14.50
2025	60	14.50
2030	65	72.27
2035	70	96.85
2040	75	96.85
2045	80	72.27
2050	85	14.50
2055	90	14.50
2060	95	14.50
	TL:	1107.90

EVALUATION SPECIES: RUFFED GROUSE

LIFE OF PROJECT: 95 YRS. AAHU'S = 11.66

Average Annual Habitat Units available for the ruffed grouse with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.30	1.9	0.6	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
1990	0.30	1.9	0.6	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
1995	0.30	0.0	0.0	0.30	1.9	0.6	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2000	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2005	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2010	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2015	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2020	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2025	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2030	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2035	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2040	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2045	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2050	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.43	26.7	11.5	0.70	4.0	2.8
2055	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	52.7	10.5	0.43	0.0	0.0	0.70	4.0	2.8
2060	0.30	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	52.7	10.5	0.43	0.0	0.0	0.70	4.0	2.8

YR HSI	YR ACRES	YR HU	SI HSI	SI ACRES	SI HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
															1960	0	
															1965	1	19.97
0.10	50.2	5.0	0.00	0.0	0.0	0.50	0.2	0.1	0.00	0.0	0.0	83.0	20.0	0.24	1985	20	379.45
0.30	50.2	15.1	0.00	0.0	0.0	0.50	0.2	0.1	0.00	0.0	0.0	83.0	30.0	0.36	1990	25	124.96
0.40	50.2	20.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	135.0	40.2	0.30	1995	30	178.36
0.50	50.2	25.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	44.7	0.34	2000	35	212.34
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2005	40	235.96
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2010	45	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2015	50	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2020	55	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2025	60	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2030	65	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2035	70	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2040	75	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2045	80	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	133.1	49.7	0.37	2050	85	248.51
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	159.1	48.8	0.31	2055	90	247.60
0.60	50.2	30.1	0.10	52.0	5.2	0.50	0.2	0.1	0.00	0.0	0.0	159.1	48.8	0.31	2060	95	243.80
												TL: 729.4				TL:	3878.98

EVALUATION SPECIES: RUFFED GROUSE
LIFE OF PROJECT 95 YRS. AAHU'S = 40.83

Average Annual Habitat Units available for the black-capped chickadee without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.20	0.0	0.0	0.30	26.0	7.8	0.43	0.0	0.0	0.48	28.9	13.9	0.60	4.0	2.4	0.62	0.2	0.1	0.00	0.0	0.0	59.1	24.2	0.41
1990	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	26.0	11.2	0.48	28.9	13.9	0.60	4.0	2.4	0.62	0.2	0.1	0.00	0.0	0.0	59.1	27.6	0.47
1995	0.00	0.0	0.0	0.20	1.9	0.4	0.30	0.0	0.0	0.43	26.0	11.2	0.48	28.9	13.9	0.60	4.0	2.4	0.62	0.2	0.1	0.00	0.0	0.0	61.0	28.0	0.46
2000	0.00	0.0	0.0	0.20	0.0	0.0	0.30	1.9	0.6	0.43	26.0	11.2	0.48	28.9	13.9	0.60	4.0	2.4	0.62	0.2	0.1	0.00	0.0	0.0	61.0	28.1	0.46
2005	0.00	0.0	0.0	0.20	0.0	0.0	0.30	1.9	0.6	0.43	26.0	11.2	0.48	28.9	13.9	0.60	4.0	2.4	0.62	0.2	0.1	0.00	0.0	0.0	61.0	28.1	0.46
2010	0.00	0.0	0.0	0.20	0.0	0.0	0.30	1.9	0.6	0.43	54.9	23.6	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	27.3	0.45
2015	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	56.8	24.4	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	27.5	0.45
2020	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	56.8	24.4	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	27.5	0.45
2025	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	56.8	24.4	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	27.5	0.45
2030	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	1.9	0.8	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	6.1	3.9	0.65
2035	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	1.9	0.8	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	6.1	3.9	0.65
2040	0.00	0.0	0.0	0.20	54.9	11.0	0.30	0.0	0.0	0.43	1.9	0.8	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	14.9	0.24
2045	0.00	0.0	0.0	0.20	0.0	0.0	0.30	54.9	16.5	0.43	1.9	0.8	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	20.4	0.33
2050	0.00	0.0	0.0	0.20	0.0	0.0	0.30	54.9	16.5	0.43	1.9	0.8	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	20.4	0.33
2055	0.00	0.0	0.0	0.20	0.0	0.0	0.30	54.9	16.5	0.43	1.9	0.8	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	20.4	0.33
2060	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	56.8	24.4	0.48	0.0	0.0	0.75	4.0	3.0	0.62	0.2	0.1	0.00	0.0	0.0	61.0	27.5	0.45

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	24.20
1985	20	459.72
1990	25	129.43
1995	30	138.84
2000	35	140.26
2005	40	140.73
2010	45	138.62
2015	50	137.12
2020	55	137.74
2025	60	137.74
2030	65	87.62
2035	70	19.71
2040	75	65.52
2045	80	88.33
2050	85	102.06
2055	90	102.06
2060	95	119.90

TL: 2169.58

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE

LIFE OF PROJECT: 95 YRS. AAHU'S = 22.84

Average Annual Habitat Units available for the black-capped chickadee with mitigation in the Spada Lake Tract.

YEAR	ES			OS			CS			SS			LSU			MF			DF		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.20	0.0	0.0	0.30	26.0	7.8	0.43	0.0	0.0	0.43	0.0	0.0	0.48	26.7	12.8	0.60	4.0	2.4
1990	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	26.0	11.2	0.43	0.0	0.0	0.48	26.7	12.8	0.60	4.0	2.4
1995	0.00	0.0	0.0	0.20	1.9	0.4	0.30	0.0	0.0	0.43	26.0	11.2	0.43	0.0	0.0	0.48	26.7	12.8	0.70	4.0	2.8
2000	0.00	0.0	0.0	0.20	0.0	0.0	0.30	1.9	0.6	0.43	26.0	11.2	0.43	0.0	0.0	0.48	26.7	12.8	0.80	4.0	3.2
2005	0.00	0.0	0.0	0.20	0.0	0.0	0.30	1.9	0.6	0.43	26.0	11.2	0.43	0.0	0.0	0.48	26.7	12.8	0.80	4.0	3.2
2010	0.00	0.0	0.0	0.20	0.0	0.0	0.30	1.9	0.6	0.43	26.0	11.2	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2015	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2020	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2025	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2030	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2035	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2040	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2045	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2050	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	27.9	12.0	0.43	0.0	0.0	0.48	26.7	12.8	0.90	4.0	3.6
2055	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	1.9	0.8	0.43	52.7	22.7	0.48	0.0	0.0	0.90	4.0	3.6
2060	0.00	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.43	1.9	0.8	0.43	52.7	22.7	0.48	0.0	0.0	0.90	4.0	3.6

YR			SZ			ML			RES			TOTAL	TOTAL	MEAN	YEAR	TY	HUs BTW TYs
HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI			
															1960	0	
															1965	1	43.40
0.30	50.2	15.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	159.1	43.4	0.27	1985	20	824.60
0.30	50.2	15.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	159.1	46.8	0.29	1990	25	225.45
0.30	50.2	15.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	47.6	0.30	1995	30	235.85
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.2	0.33	2000	35	251.83
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.2	0.33	2005	40	265.85
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.6	0.33	2010	45	266.85
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2015	50	268.47
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2020	55	269.09
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2025	60	269.09
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2030	65	269.09
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2035	70	269.09
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2040	75	269.09
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2045	80	269.09
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	53.8	0.33	2050	85	269.09
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	52.5	0.33	2055	90	265.75
0.40	50.2	20.1	0.10	52.0	5.2	0.62	0.2	0.1	0.00	0.0	0.0	161.0	52.5	0.33	2060	95	262.41
												TL: 833.2				TL:	4794.04

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE
LIFE OF PROJECT 95 YRS. AAHU'S = 50.46

Average Annual Habitat Units available for the pileated woodpecker without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.10	26.0	2.6	0.20	0.0	0.0	0.28	28.9	8.1	0.10	4.0	0.4	0.53	0.2	0.1	0.00	0.0	0.0	59.1	11.2	0.19
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.28	28.9	8.1	0.10	4.0	0.4	0.53	0.2	0.1	0.00	0.0	0.0	59.1	13.8	0.23
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.30	28.9	8.7	0.15	4.0	0.6	0.53	0.2	0.1	0.00	0.0	0.0	59.1	14.6	0.25
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.30	28.9	8.7	0.20	4.0	0.8	0.53	0.2	0.1	0.00	0.0	0.0	61.0	15.0	0.25
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.30	28.9	8.7	0.20	4.0	0.8	0.53	0.2	0.1	0.00	0.0	0.0	61.0	15.0	0.25
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.25	54.9	13.7	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	15.2	0.25
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.25	56.8	14.2	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	15.5	0.25
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.25	56.8	14.2	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	15.5	0.25
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.25	56.8	14.2	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	15.5	0.25
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.25	1.9	0.5	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	6.1	1.8	0.29
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.25	1.9	0.5	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	6.1	1.8	0.29
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.25	1.9	0.5	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	6.1	1.8	0.29
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.25	1.9	0.5	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	7.3	0.12
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.25	1.9	0.5	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	7.3	0.12
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.25	1.9	0.5	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	7.3	0.12
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.25	56.8	14.2	0.40	0.0	0.0	0.30	4.0	1.2	0.53	0.2	0.1	0.00	0.0	0.0	61.0	15.5	0.25

YEAR	TY	HUs BTW TYs
1960		
1965	1	11.20
	20	212.76
	25	62.49
	30	70.94
	35	73.86
	40	74.83
	45	75.47
	50	76.82
	55	77.53
	60	77.53
	65	44.95
	70	8.91
	75	8.91
	80	30.53
	85	36.36
	90	36.36
2060	95	56.94

TL: 1036.36

EVALUATION SPECIES: PILEATED WOODPECKER

LIFE OF PROJECT: 95 YRS. AAHU'S = 10.91

Average Annual Habitat Units available for the pileated woodpecker with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.10	26.0	2.6	0.20	0.0	0.0	0.80	0.0	0.0	0.28	26.7	7.5	0.10	4.0	0.4
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.80	0.0	0.0	0.28	26.7	7.5	0.10	4.0	0.4
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.80	0.0	0.0	0.30	26.7	8.0	0.20	4.0	0.8
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.80	0.0	0.0	0.30	26.7	8.0	0.30	4.0	1.2
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.80	0.0	0.0	0.40	26.7	10.7	0.40	4.0	1.6
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.30	26.0	7.8	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	27.9	8.4	0.80	0.0	0.0	0.50	26.7	13.4	0.50	4.0	2.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	1.9	0.6	0.80	52.7	42.2	0.50	0.0	0.0	0.50	4.0	2.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	1.9	0.6	0.80	52.7	42.2	0.50	0.0	0.0	0.50	4.0	2.0

YR HSI	YR ACRES	YR HU	SI HSI	SI ACRES	SI HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
															1960	0	
															1965	1	20.80
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	159.1	20.8	0.13	1985	20	395.24
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	159.1	23.4	0.15	1990	25	110.51
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	159.1	24.3	0.15	1995	30	119.35
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	24.9	0.15	2000	35	123.15
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	28.0	0.17	2005	40	132.31
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	33.7	0.21	2010	45	154.16
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2015	50	169.28
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2020	55	170.23
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2025	60	170.23
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2030	65	170.23
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2035	70	170.23
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2040	75	170.23
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2045	80	170.23
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	34.0	0.21	2050	85	170.23
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	55.1	0.34	2055	90	222.76
0.10	50.2	5.0	0.10	52.0	5.2	0.53	0.2	0.1	0.00	0.0	0.0	161.0	55.1	0.34	2060	95	275.28
												TL: 537.6				TL:	2914.43

EVALUATION SPECIES: PILEATED WOODPECKER

LIFE OF PROJECT 95 YRS. AAHU'S = 30.68

Average Annual Habitat Units available for the pine marten without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.10	26.0	2.6	0.20	0.0	0.0	0.40	28.9	11.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.9	14.2	0.26
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.40	28.9	11.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.9	16.8	0.31
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.40	28.9	11.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.9	16.8	0.31
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.40	28.9	11.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	17.0	0.30
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.40	28.9	11.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	17.0	0.30
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.30	54.9	16.5	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	16.7	0.29
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	56.8	17.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	17.0	0.30
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	56.8	17.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	17.0	0.30
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	56.8	17.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	17.0	0.30
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	1.9	0.6	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.9	0.6	0.30
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	1.9	0.6	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.9	0.6	0.30
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	1.9	0.6	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.9	0.6	0.30
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.30	1.9	0.6	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	6.1	0.11
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.30	1.9	0.6	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	6.1	0.11
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.30	1.9	0.6	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	6.1	0.11
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	56.8	17.0	0.40	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	17.0	0.30

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	14.16
1985	20	269.04
1990	25	77.30
1995	30	83.80
2000	35	84.29
2005	40	84.75
2010	45	84.03
2015	50	84.25
2020	55	85.20
2025	60	85.20
2030	65	44.03
2035	70	2.85
2040	75	2.85
2045	80	25.42
2050	85	30.30
2055	90	30.30
2060	95	57.75
	TL:	1145.50

EVALUATION SPECIES: PINE MARTEN

LIFE OF PROJECT: 95 YRS. AAHU'S = 12.06

Average Annual Habitat Units available for the pine marten with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.10	26.0	2.6	0.20	0.0	0.0	0.60	0.0	0.0	0.40	26.7	10.7	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	0.0	0.0	0.60	0.0	0.0	0.40	26.7	10.7	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	0.0	0.0	0.60	0.0	0.0	0.40	26.7	10.7	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	0.0	0.0	0.60	0.0	0.0	0.40	26.7	10.7	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	26.0	13.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	26.0	13.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	27.9	14.0	0.60	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	1.9	1.0	0.60	52.7	31.6	0.50	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	1.9	1.0	0.60	52.7	31.6	0.50	0.0	0.0	0.00	0.0	0.0

YR HSI	YR ACRES	YR HU	SZ HSI	SZ ACRES	SZ HU	ML HSI	ML ACRES	ML HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
															1960	0	
															1965	1	13.28
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	52.7	13.3	0.25	1985	20	252.32
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	26.7	10.7	0.40	1990	25	63.11
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	26.7	10.7	0.40	1995	30	53.40
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	28.6	10.9	0.38	2000	35	53.91
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	26.5	0.49	2005	40	91.23
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	26.5	0.49	2010	45	132.70
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2015	50	134.60
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2020	55	136.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2025	60	136.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2030	65	136.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2035	70	136.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2040	75	136.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2045	80	136.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	27.3	0.50	2050	85	136.50
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	32.6	0.60	2055	90	149.68
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	32.6	0.60	2060	95	162.85
												TL: 382.1				TL:	2062.57

EVALUATION SPECIES: PINE MARTEN

LIFE OF PROJECT 95 YRS. AAHU'S = 21.71

Average Annual Habitat Units available for the douglas squirrel without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.10	26.0	2.6	0.20	0.0	0.0	0.25	28.9	7.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.9	9.8	0.18
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.30	28.9	8.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.9	13.9	0.25
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.30	28.9	8.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.9	13.9	0.25
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.30	28.9	8.7	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	14.1	0.25
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.20	26.0	5.2	0.35	28.9	10.1	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	15.5	0.27
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.40	54.9	22.0	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	22.2	0.39
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	56.8	22.7	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	22.7	0.40
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	56.8	22.7	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	22.7	0.40
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	56.8	22.7	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	22.7	0.40
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.9	0.8	0.40
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.9	0.8	0.40
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	1.9	0.8	0.40
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	6.3	0.11
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	6.3	0.11
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.10	54.9	5.5	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	6.3	0.11
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.40	56.8	22.7	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	56.8	22.7	0.40

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	9.83
1985	20	186.68
1990	25	59.24
1995	30	69.35
2000	35	69.83
2005	40	73.91
2010	45	94.14
2015	50	112.18
2020	55	113.60
2025	60	113.60
2030	65	58.70
2035	70	3.80
2040	75	3.80
2045	80	30.79
2050	85	31.25
2055	90	31.25
2060	95	72.43

TL: 1134.36

EVALUATION SPECIES: DOUGLAS SQUIRREL

LIFE OF PROJECT: 95 YRS. AAHU'S = 11.94

Average Annual Habitat Units available for the douglas squirrel with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	MF HSI	MF ACRES	MF HU	OF HSI	OF ACRES	OF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.10	26.0	2.6	0.20	0.0	0.0	0.80	0.0	0.0	0.25	26.7	6.7	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.20	26.0	5.2	0.80	0.0	0.0	0.30	26.7	8.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.30	26.0	7.8	0.80	0.0	0.0	0.30	26.7	8.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.40	26.0	10.4	0.80	0.0	0.0	0.40	26.7	10.7	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	26.0	13.0	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.60	26.0	15.6	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	27.9	16.7	0.80	0.0	0.0	0.50	26.7	13.4	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	1.9	1.1	0.80	52.7	42.2	0.50	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.60	1.9	1.1	0.80	52.7	42.2	0.50	0.0	0.0	0.00	0.0	0.0

YR HSI	YR ACRES	YR HU	SZ HSI	SZ ACRES	SZ HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
															1960	0	
															1965	1	9.28
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	52.7	9.3	0.18	1985	20	176.23
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	52.7	13.2	0.25	1990	25	56.21
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	52.7	15.8	0.30	1995	30	72.55
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	21.3	0.39	2000	35	92.56
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	26.5	0.49	2005	40	119.53
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	29.1	0.53	2010	45	139.20
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2015	50	148.08
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2020	55	150.45
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2025	60	150.45
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2030	65	150.45
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2035	70	150.45
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2040	75	150.45
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2045	80	150.45
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	30.1	0.55	2050	85	150.45
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	43.3	0.79	2055	90	183.48
0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	54.6	43.3	0.79	2060	95	216.50
												TL: 442.6				TL:	2266.75

EVALUATION SPECIES: DOUGLAS SQUIRREL
LIFE OF PROJECT 95 YRS. AAHU'S = 23.86

Average Annual Habitat Units available for the common merganser without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.2	0.02	0.40	1870.0	748.0	1870.2	748.0	0.40
TL:																									11968.3		

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	748.02
1985	20	14212.38
1990	25	3740.10
1995	30	3740.10
2000	35	3740.10
2005	40	3740.10
2010	45	3740.10
2015	50	3740.10
2020	55	3740.10
2025	60	3740.10
2030	65	3740.10
2035	70	3740.10
2040	75	3740.10
2045	80	3740.10
2050	85	3740.10
2055	90	3740.10
2060	95	3740.10
TL:		71061.90

EVALUATION SPECIES: COMMON MERGANSER

LIFE OF PROJECT: 95 YRS. AAHU'S = 748.02

Average Annual Habitat Units available for the common merganser with mitigation in the Spada Lake Tract.

YEAR	ES			DS			CS			SS			LSU			MF			DF		
	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	52.7	10.5	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	52.7	10.5	0.00	0.0	0.0	0.00	0.0	0.0

YR			SZ			WL			RES			TOTAL	TOTAL	MEAN	YEAR	TY	HUs BTW TYs
HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI			
															1960	0	
															1965	1	728.46
0.20	50.2	10.0	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	728.5	0.39	1985	20	13840.74
0.20	50.2	10.0	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	728.5	0.39	1990	25	3642.30
0.20	50.2	10.0	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	728.5	0.39	1995	30	3642.30
0.20	50.2	10.0	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	728.5	0.39	2000	35	3642.30
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2005	40	3654.85
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2010	45	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2015	50	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2020	55	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2025	60	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2030	65	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2035	70	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2040	75	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2045	80	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1872.4	733.5	0.39	2050	85	3667.40
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1925.1	744.0	0.39	2055	90	3693.98
0.30	50.2	15.1	0.20	52.0	10.4	0.10	0.2	0.02	0.40	1770.0	708.0	1925.1	744.0	0.39	2060	95	3720.10

TL: 11736.7 TL: 69571.63

EVALUATION SPECIES: COMMON MERGANSER

LIFE OF PROJECT: 95 YRS. AAHU'S = 732.33

Average Annual Habitat Units available for the mallard without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.70	0.2	0.1	0.15	1870.0	280.5	1870.2	280.6	0.15
TL:		4490.2																									

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	280.64
1985	20	5332.16
1990	25	1403.20
1995	30	1403.20
2000	35	1403.20
2005	40	1403.20
2010	45	1403.20
2015	50	1403.20
2020	55	1403.20
2025	60	1403.20
2030	65	1403.20
2035	70	1403.20
2040	75	1403.20
2045	80	1403.20
2050	85	1403.20
2055	90	1403.20
2060	95	1403.20
TL:		26660.80

EVALUATION SPECIES: MALLARD

LIFE OF PROJECT: 95 YRS. AAHU'S = 280.64

Average Annual Habitat Units available for the mallard with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0

YR HSI	YR ACRES	YR HU	SZ HSI	SZ ACRES	SZ HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
															1960	0	
															1965	1	275.86
0.10	50.2	5.0	0.10	52.0	5.2	0.70	0.2	0.14	0.15	1770.0	265.5	1872.4	275.9	0.15	1985	20	5241.34
0.10	50.2	5.0	0.10	52.0	5.2	0.70	0.2	0.14	0.15	1770.0	265.5	1872.4	275.9	0.15	1990	25	1379.30
0.20	50.2	10.0	0.15	52.0	7.8	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	372.0	0.20	1995	30	1619.60
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2000	35	1898.95
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2005	40	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2010	45	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2015	50	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2020	55	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2025	60	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2030	65	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2035	70	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2040	75	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2045	80	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2050	85	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2055	90	1898.00
0.30	50.2	15.1	0.20	52.0	10.4	0.70	0.2	0.14	0.20	1770.0	354.0	1872.4	379.6	0.20	2060	95	1898.00
												TL: 5858.5				TL:	33171.05

EVALUATION SPECIES: MALLARD

LIFE OF PROJECT: 95 YRS. AAHU'S = 349.17

Average Annual Habitat Units available for the beaver without mitigation in the Spada Lake Tract.

BEAVER A

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.10	1.9	0.2	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	28.9	5.8	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1905.0	568.7	0.30
1990	0.10	1.9	0.2	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	28.9	5.8	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1905.0	568.7	0.30
1995	0.10	0.0	0.0	0.10	1.9	0.2	0.00	0.0	0.0	0.00	0.0	0.0	0.20	28.9	5.8	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1905.0	568.7	0.30
2000	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	28.9	5.8	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1903.1	568.5	0.30
2005	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	28.9	5.8	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1903.1	568.5	0.30
2010	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30
2015	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30
2020	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30
2025	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30
2030	0.10	54.9	5.5	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1929.1	568.2	0.29
2035	0.10	54.9	5.5	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1929.1	568.2	0.29
2040	0.10	0.0	0.0	0.10	54.9	5.5	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1929.1	568.2	0.29
2045	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30
2050	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30
2055	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30
2060	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6	0.78	0.2	0.16	0.30	1870.0	561.0	1874.2	562.8	0.30

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	568.73
1985	20	10805.79
1990	25	2843.63
1995	30	2843.63
2000	35	2843.16
2005	40	2842.68
2010	45	2828.27
2015	50	2813.78
2020	55	2813.78
2025	60	2813.78
2030	65	2827.77
2035	70	2841.23
2040	75	2841.23
2045	80	2827.77
2050	85	2813.78
2055	90	2813.78
2060	95	2813.78
TL:	9050.0	TL: 53796.55

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT: 95 YRS. AAHU'S = 566.28

EVALUATION SPECIES: BEAVER A
LIFE OF PROJECT: 95 YRS. AAHU'S = 0.16

Average Annual Habitat Units available for the beaver with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU
1985	0.10	1.9	0.2	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
1990	0.10	1.9	0.2	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
1995	0.10	0.0	0.0	0.10	1.9	0.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2000	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2005	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2010	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2015	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2020	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2025	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2030	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2035	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2040	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2045	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2050	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	26.7	5.3	0.40	4.0	1.6
2055	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6
2060	0.10	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.40	4.0	1.6

BEAVER A

YR HSI	YR ACRES	YR HU	SZ HSI	SZ ACRES	SZ HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
															1960	0	
															1965	1	558.73
0.20	50.2	10.0	0.20	52.0	10.4	0.78	0.2	0.16	0.30	1770.0	531.0	1905.0	558.7	0.29	1985	20	10615.79
0.30	50.2	15.1	0.20	52.0	10.4	0.78	0.2	0.16	0.30	1770.0	531.0	1905.0	563.7	0.30	1990	25	2806.18
0.30	50.2	15.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1905.0	568.9	0.30	1995	30	2831.73
0.40	50.2	20.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	573.9	0.30	2000	35	2856.81
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2005	40	2881.43
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2010	45	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2015	50	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2020	55	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2025	60	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2030	65	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2035	70	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2040	75	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2045	80	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1903.1	578.8	0.30	2050	85	2893.98
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1876.4	573.5	0.31	2055	90	2880.66
0.50	50.2	25.1	0.30	52.0	15.6	0.78	0.2	0.16	0.30	1770.0	531.0	1876.4	573.5	0.31	2060	95	2867.28
												TL: 9200.1				TL:	54344.43

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT 95 YRS. AAHU'S = 572.05

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT 95 YRS. AAHU'S = 0.16

Average Annual Habitat Units available for the osprey without mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	DF HSI	DF ACRES	DF HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1870.0	1309.0	1870.2	1309.0	0.70

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	1309.04
1985	20	24871.76
1990	25	6545.20
1995	30	6545.20
2000	35	6545.20
2005	40	6545.20
2010	45	6545.20
2015	50	6545.20
2020	55	6545.20
2025	60	6545.20
2030	65	6545.20
2035	70	6545.20
2040	75	6545.20
2045	80	6545.20
2050	85	6545.20
2055	90	6545.20
2060	95	6545.20
	TL:	124358.80

EVALUATION SPECIES: OSPREY

LIFE OF PROJECT: 95 YRS. AAHU'S = 1309.04

Average Annual Habitat Units available for the osprey with mitigation in the Spada Lake Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	LSU HSI	LSU ACRES	LSU HU	YR HSI	YR ACRES	YR HU	OF HSI	OF ACRES	OF HU
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	26.0	7.8	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	27.9	8.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	27.9	8.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	27.9	8.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	27.9	8.4	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	27.9	11.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	27.9	11.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	27.9	11.2	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	27.9	11.2	0.50	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	1.9	0.8	0.50	52.7	26.4	0.00	0.0	0.0	0.00	0.0	0.0
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	1.9	0.8	0.50	52.7	26.4	0.00	0.0	0.0	0.00	0.0	0.0

RF HSI	RF ACRES	RF HU	SI HSI	SI ACRES	SI HU	WL HSI	WL ACRES	WL HU	RES HSI	RES ACRES	RES HU	TOTAL ACRES	TOTAL HU	MEAN HSI	YEAR	TY	HUs BTW TYs
															1960	0	
															1965	1	1309.04
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1770.0	1239.0	1770.2	1239.0	0.70	1985	20	23541.76
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.70	1770.0	1239.0	1770.2	1239.0	0.70	1990	25	6195.20
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.80	1770.0	1416.0	1770.2	1416.0	0.80	1995	30	6637.70
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.80	1770.0	1416.0	1770.2	1416.0	0.80	2000	35	7080.20
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1770.2	1593.0	0.90	2005	40	7522.70
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1796.2	1600.8	0.89	2010	45	7984.89
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1601.4	0.89	2015	50	8005.63
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1601.4	0.89	2020	55	8007.05
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1601.4	0.89	2025	60	8007.05
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1601.4	0.89	2030	65	8007.05
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1604.2	0.89	2035	70	8014.03
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1604.2	0.89	2040	75	8021.00
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1604.2	0.89	2045	80	8021.00
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1798.1	1604.2	0.89	2050	85	8021.00
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1824.8	1620.2	0.89	2055	90	8060.97
0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.2	0.04	0.90	1770.0	1593.0	1824.8	1620.2	0.89	2060	95	8100.75
																TL:	140537.01

EVALUATION SPECIES: OSPREY
LIFE OF PROJECT: 95 YRS. AAHU'S = 1479.34

Average Annual Habitat Units available for the black-tailed deer without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.50	286.1	143.1	0.40	0.0	0.0	0.20	0.0	0.0	0.35	0.0	0.0	0.80	23.8	19.0	0.75	34.8	26.1	0.75	1.9	1.4	0.90	3.5	3.2	350.1	192.8	0.55
1990	0.50	286.1	143.1	0.40	0.0	0.0	0.20	0.0	0.0	0.35	0.0	0.0	0.80	23.8	19.0	0.75	34.8	26.1	0.75	1.9	1.4	0.90	3.5	3.2	350.1	192.8	0.55
1995	0.50	34.8	17.4	0.40	286.1	114.4	0.20	0.0	0.0	0.35	0.0	0.0	0.80	23.8	19.0	0.75	0.0	0.0	0.75	1.9	1.4	0.90	3.5	3.2	350.1	155.5	0.44
2000	0.50	34.8	17.4	0.40	0.0	0.0	0.20	286.1	57.2	0.35	0.0	0.0	0.80	25.7	20.6	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	98.3	0.28
2005	0.50	0.0	0.0	0.40	34.8	13.9	0.20	286.1	57.2	0.35	0.0	0.0	0.80	25.7	20.6	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	94.9	0.27
2010	0.50	0.0	0.0	0.40	0.0	0.0	0.20	320.9	64.2	0.35	0.0	0.0	0.80	25.7	20.6	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	87.9	0.25
2015	0.50	0.0	0.0	0.40	0.0	0.0	0.20	34.8	7.0	0.35	286.1	100.1	0.80	25.7	20.6	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	130.8	0.37
2020	0.50	23.8	11.9	0.40	0.0	0.0	0.20	34.8	7.0	0.35	286.1	100.1	0.80	1.9	1.5	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	123.7	0.35
2025	0.50	23.8	11.9	0.40	0.0	0.0	0.20	0.0	0.0	0.35	320.9	112.3	0.80	1.9	1.5	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	128.9	0.37
2030	0.50	0.0	0.0	0.40	23.8	9.5	0.20	0.0	0.0	0.35	320.9	112.3	0.80	1.9	1.5	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	126.5	0.36
2035	0.50	0.0	0.0	0.40	0.0	0.0	0.20	23.8	4.8	0.35	320.9	112.3	0.80	1.9	1.5	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	121.7	0.35
2040	0.50	1.9	1.0	0.40	0.0	0.0	0.20	23.8	4.8	0.35	320.9	112.3	0.80	0.0	0.0	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	121.2	0.35
2045	0.50	288.0	144.0	0.40	0.0	0.0	0.20	23.8	4.8	0.35	34.8	12.2	0.80	0.0	0.0	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	164.1	0.47
2050	0.50	286.1	143.1	0.40	1.9	0.8	0.20	0.0	0.0	0.35	58.6	20.5	0.80	0.0	0.0	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	167.5	0.48
2055	0.50	34.8	17.4	0.40	286.1	114.4	0.20	1.9	0.4	0.35	23.8	8.3	0.80	0.0	0.0	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	143.7	0.41
2060	0.50	34.8	17.4	0.40	0.0	0.0	0.20	288.0	57.6	0.35	23.8	8.3	0.80	0.0	0.0	0.75	0.0	0.0	0.75	0.0	0.0	0.90	3.5	3.2	350.1	86.5	0.25

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	277.35
1985	20	3662.54
1990	25	963.83
1995	30	870.55
2000	35	634.46
2005	40	482.95
2010	45	456.85
2015	50	546.74
2020	55	636.18
2025	60	631.38
2030	65	638.47
2035	70	620.62
2040	75	607.30
2045	80	713.16
2050	85	828.90
2055	90	777.93
2060	95	575.45
TOTAL		13924.65

1965 W/ MIT VAL

EVALUATION SPECIES: BLACK-TAILED DEER

LIFE OF PROJECT 95.0 YRS AAHU'S = 146.58

Average Annual Habitat Units available for the black-tailed deer with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.70	12.5	8.8	0.80	273.6	218.9	0.80	23.8	19.0	0.75	34.8	26.1	0.75	1.9	1.4	0.90	3.5	3.2	350.1	277.3	0.79
1990	0.70	12.5	8.8	0.80	273.6	218.9	0.80	23.8	19.0	0.75	34.8	26.1	0.75	1.9	1.4	0.90	3.5	3.2	350.1	277.3	0.79
1995	0.70	12.5	8.8	0.80	273.6	218.9	0.80	23.8	19.0	0.75	34.8	26.1	0.75	1.9	1.4	0.90	3.5	3.2	350.1	277.3	0.79
2000	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2005	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2010	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2015	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2020	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2025	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2030	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2035	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2040	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2045	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2050	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2055	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79
2060	0.70	12.5	8.8	0.80	273.6	218.9	0.80	25.7	20.6	0.75	34.8	26.1	0.75	0.0	0.0	0.90	3.5	3.2	350.1	277.4	0.79

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	277.35
1985	20	5269.56
1990	25	1386.73
1995	30	1386.73
2000	35	1386.96
2005	40	1387.20
2010	45	1387.20
2015	50	1387.20
2020	55	1387.20
2025	60	1387.20
2030	65	1387.20
2035	70	1387.20
2040	75	1387.20
2045	80	1387.20
2050	85	1387.20
2055	90	1387.20
2060	95	1387.20

TL: 26353.71

EVALUATION SPECIES: BLACK-TAILED DEER

LIFE OF PROJECT 95 YRS. AAHU'S = 277.41

Average Annual Habitat Units available for the ruffed grouse without mitigation in the Williamson Creek Tract.

RUFFED GROUSE A

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.30	286.1	85.8	0.30	0.0	0.0	0.10	0.0	0.0	0.10	0.0	0.0	0.50	23.8	11.9	0.70	34.8	24.4	0.45	1.9	0.9	0.40	3.5	1.4	350.1	124.3	0.36
1990	0.30	286.1	85.8	0.30	0.0	0.0	0.10	0.0	0.0	0.10	0.0	0.0	0.50	23.8	11.9	0.70	34.8	24.4	0.45	1.9	0.9	0.40	3.5	1.4	350.1	124.3	0.36
1995	0.30	34.8	10.4	0.30	286.1	85.8	0.10	0.0	0.0	0.10	0.0	0.0	0.50	23.8	11.9	0.70	0.0	0.0	0.45	1.9	0.9	0.40	3.5	1.4	350.1	110.4	0.32
2000	0.30	34.8	10.4	0.30	0.0	0.0	0.10	286.1	28.6	0.10	0.0	0.0	0.50	25.7	12.9	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	53.3	0.15
2005	0.30	0.0	0.0	0.30	34.8	10.4	0.10	286.1	28.6	0.10	0.0	0.0	0.50	25.7	12.9	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	53.3	0.15
2010	0.30	0.0	0.0	0.30	0.0	0.0	0.10	320.9	32.1	0.10	0.0	0.0	0.50	25.7	12.9	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	46.3	0.13
2015	0.30	0.0	0.0	0.30	0.0	0.0	0.10	34.8	3.5	0.10	286.1	28.6	0.50	25.7	12.9	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	46.3	0.13
2020	0.30	23.8	7.1	0.30	0.0	0.0	0.10	34.8	3.5	0.10	286.1	28.6	0.50	1.9	1.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	41.6	0.12
2025	0.30	23.8	7.1	0.30	0.0	0.0	0.10	0.0	0.0	0.10	320.9	32.1	0.50	1.9	1.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	41.6	0.12
2030	0.30	0.0	0.0	0.30	23.8	7.1	0.10	0.0	0.0	0.10	320.9	32.1	0.50	1.9	1.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	41.6	0.12
2035	0.30	0.0	0.0	0.30	0.0	0.0	0.10	23.8	2.4	0.10	320.9	32.1	0.50	1.9	1.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	36.8	0.11
2040	0.30	1.9	0.6	0.30	0.0	0.0	0.10	23.8	2.4	0.10	320.9	32.1	0.50	0.0	0.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	36.4	0.10
2045	0.30	288.0	86.4	0.30	0.0	0.0	0.10	23.8	2.4	0.10	34.8	3.5	0.50	0.0	0.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	93.7	0.27
2050	0.30	286.1	85.8	0.30	1.9	0.6	0.10	0.0	0.0	0.10	58.6	5.9	0.50	0.0	0.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	93.7	0.27
2055	0.30	34.8	10.4	0.30	286.1	85.8	0.10	1.9	0.2	0.10	23.8	2.4	0.50	0.0	0.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	100.2	0.29
2060	0.30	34.8	10.4	0.30	0.0	0.0	0.10	288.0	28.8	0.10	23.8	2.4	0.50	0.0	0.0	0.70	0.0	0.0	0.45	0.0	0.0	0.40	3.5	1.4	350.1	43.0	0.12

YEAR	TY	R.GROUSE HUs BTW TYs	R.GROUSE A HUs BTW TYs
1960	0		
1965	1	152.96	24.40
1985	20	2362.56	462.84
1990	25	621.73	121.80
1995	30	586.93	60.90
2000	35	409.31	0.00
2005	40	266.50	0.00
2010	45	249.10	0.00
2015	50	231.70	0.00
2020	55	219.80	0.00
2025	60	207.90	0.00
2030	65	207.90	0.00
2035	70	196.00	0.00
2040	75	183.15	0.00
2045	80	325.25	0.00
2050	85	468.30	0.00
2055	90	484.75	0.00
2060	95	358.15	0.00
	TOTAL :	7531.98	669.94

EVALUATION SPECIES: RUFFED GROUSE

LIFE OF PROJECT 95 YRS. AAHU'S = 79.28 7.05

Average Annual Habitat Units available for the ruffed grouse with mitigation in the Williamson Creek Tract.

	RUFFED GROUSE A																				R.GROUSE HUs BTW	R.GROUSE A HUs BTW
	LS			DG			MF			MR			SB			WL			TOTAL	TOTAL	MEAN	YEAR	TY	TYs	TYs
YEAR	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	HSI	ACRES	HU	ACRES	HU	HSI					
1985	0.40	12.5	5.0	0.40	273.6	109.4	0.50	23.8	11.9	0.70	34.8	24.4	0.45	1.9	0.9	0.40	3.5	1.4	350.1	153.0	0.44	1960	0		
1990	0.40	12.5	5.0	0.40	273.6	109.4	0.50	23.8	11.9	0.70	34.8	24.4	0.45	1.9	0.9	0.40	3.5	1.4	350.1	153.0	0.44	1965	1	152.96	24.36
1995	0.50	12.5	6.3	0.40	273.6	109.4	0.60	23.8	14.3	0.80	34.8	27.8	0.45	1.9	0.9	0.40	3.5	1.4	350.1	160.1	0.46	1985	20	2906.15	462.84
2000	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	1990	25	764.78	121.80
2005	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	1995	30	782.55	130.50
2010	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2000	35	801.04	139.20
2015	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2005	40	801.75	139.20
2020	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2010	45	801.75	139.20
2025	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2015	50	801.75	139.20
2030	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2020	55	801.75	139.20
2035	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2025	60	801.75	139.20
2040	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2030	65	801.75	139.20
2045	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2035	70	801.75	139.20
2050	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2040	75	801.75	139.20
2055	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2045	80	801.75	139.20
2060	0.50	12.5	6.3	0.40	273.6	109.4	0.60	25.7	15.4	0.80	34.8	27.8	0.45	0.0	0.0	0.40	3.5	1.4	350.1	160.4	0.46	2050	85	801.75	139.20
																						2055	90	801.75	139.20
																						2060	95	801.75	139.20
																						TL:		15028.46	2549.10

EVALUATION SPECIES: RUFFED GROUSE

LIFE OF PROJECT 95 YRS. AAHU'S = 158.19 26.83

Average Annual Habitat Units available for the black-capped chickadee without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.10	286.1	28.6	0.20	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.70	23.8	16.7	0.95	34.8	33.1	0.25	1.9	0.5	0.80	3.5	2.8	350.1	81.6	0.23
1990	0.10	286.1	28.6	0.20	0.0	0.0	0.20	0.0	0.0	0.30	0.0	0.0	0.70	23.8	16.7	0.95	34.8	33.1	0.25	1.9	0.5	0.80	3.5	2.8	350.1	81.6	0.23
1995	0.10	34.8	3.5	0.20	286.1	57.2	0.20	0.0	0.0	0.30	0.0	0.0	0.70	23.8	16.7	0.95	0.0	0.0	0.25	1.9	0.5	0.80	3.5	2.8	350.1	80.6	0.23
2000	0.10	34.8	3.5	0.20	0.0	0.0	0.20	286.1	57.2	0.30	0.0	0.0	0.70	25.7	18.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	81.5	0.23
2005	0.10	0.0	0.0	0.20	34.8	7.0	0.20	286.1	57.2	0.30	0.0	0.0	0.70	25.7	18.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	85.0	0.24
2010	0.10	0.0	0.0	0.20	0.0	0.0	0.20	320.9	64.2	0.30	0.0	0.0	0.70	25.7	18.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	85.0	0.24
2015	0.10	0.0	0.0	0.20	0.0	0.0	0.20	34.8	7.0	0.30	286.1	85.8	0.70	25.7	18.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	113.6	0.32
2020	0.10	23.8	2.4	0.20	0.0	0.0	0.20	34.8	7.0	0.30	286.1	85.8	0.70	1.9	1.3	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	99.3	0.28
2025	0.10	23.8	2.4	0.20	0.0	0.0	0.20	0.0	0.0	0.30	320.9	96.3	0.70	1.9	1.3	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	102.8	0.29
2030	0.10	0.0	0.0	0.20	23.8	4.8	0.20	0.0	0.0	0.30	320.9	96.3	0.70	1.9	1.3	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	105.2	0.30
2035	0.10	0.0	0.0	0.20	0.0	0.0	0.20	23.8	4.8	0.30	320.9	96.3	0.70	1.9	1.3	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	105.2	0.30
2040	0.10	1.9	0.2	0.20	0.0	0.0	0.20	23.8	4.8	0.30	320.9	96.3	0.70	0.0	0.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	104.0	0.30
2045	0.10	288.0	28.8	0.20	0.0	0.0	0.20	23.8	4.8	0.30	34.8	10.4	0.70	0.0	0.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	46.8	0.13
2050	0.10	286.1	28.6	0.20	1.9	0.4	0.20	0.0	0.0	0.30	58.6	17.6	0.70	0.0	0.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	49.4	0.14
2055	0.10	34.8	3.5	0.20	286.1	57.2	0.20	1.9	0.4	0.30	23.8	7.1	0.70	0.0	0.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	71.0	0.20
2060	0.10	34.8	3.5	0.20	0.0	0.0	0.20	288.0	57.6	0.30	23.8	7.1	0.70	0.0	0.0	0.95	0.0	0.0	0.25	0.0	0.0	0.80	3.5	2.8	350.1	71.0	0.20

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	223.41
1985	20	1550.50
1990	25	408.03
1995	30	405.60
2000	35	405.31
2005	40	416.15
2010	45	424.85
2015	50	496.38
2020	55	532.20
2025	60	505.20
2030	65	519.85
2035	70	525.80
2040	75	522.95
2045	80	377.05
2050	85	240.43
2055	90	300.98
2060	95	355.10
TL		8209.77

1965 W/ MIT VALUE

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE

LIFE OF PROJECT 95 YRS AAHU'S = 86.42

Average Annual Habitats available for the black-capped chickadee with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	OS HSI	OS ACRES	OS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.50	12.5	6.3	0.60	273.6	164.2	0.70	23.8	16.7	0.95	34.8	33.1	0.25	1.9	0.5	0.80	3.5	2.8	350.1	223.4	0.64
1990	0.50	12.5	6.3	0.60	273.6	164.2	0.70	23.8	16.7	0.95	34.8	33.1	0.25	1.9	0.5	0.80	3.5	2.8	350.1	223.4	0.64
1995	0.50	12.5	6.3	0.60	273.6	164.2	0.70	23.8	16.7	0.95	34.8	33.1	0.25	1.9	0.5	0.80	3.5	2.8	350.1	223.4	0.64
2000	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2005	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2010	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2015	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2020	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2025	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2030	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2035	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2040	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2045	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2050	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2055	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64
2060	0.50	12.5	6.3	0.60	273.6	164.2	0.70	25.7	18.0	0.95	34.8	33.1	0.25	0.0	0.0	0.80	3.5	2.8	350.1	224.3	0.64

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	223.41
1985	20	4244.70
1990	25	1117.03
1995	30	1117.03
2000	35	1119.16
2005	40	1121.30
2010	45	1121.30
2015	50	1121.30
2020	55	1121.30
2025	60	1121.30
2030	65	1121.30
2035	70	1121.30
2040	75	1121.30
2045	80	1121.30
2050	85	1121.30
2055	90	1121.30
2060	95	1121.30

TL: 21276.91

EVALUATION SPECIES: BLACK-CAPPED CHICKADEE

LIFE OF PROJECT: 95 YRS. AAHU'S = 223.97

Average Annual Habitat Units available for the pileated woodpecker without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	DS HSI	DS ACRES	DS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	ML HSI	ML ACRES	ML HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.05	0.0	0.0	0.30	0.0	0.0	0.40	23.8	9.5	0.35	34.8	12.2	0.00	0.0	0.0	0.00	0.0	0.0	58.6	21.7	0.37
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.05	0.0	0.0	0.30	0.0	0.0	0.40	23.8	9.5	0.35	34.8	12.2	0.00	0.0	0.0	0.00	0.0	0.0	58.6	21.7	0.37
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.05	0.0	0.0	0.30	0.0	0.0	0.40	23.8	9.5	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	23.8	9.5	0.40
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.05	286.1	14.3	0.30	0.0	0.0	0.40	25.7	10.3	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	311.8	24.6	0.08
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.05	286.1	14.3	0.30	0.0	0.0	0.40	25.7	10.3	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	311.8	24.6	0.08
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.05	320.9	16.0	0.30	0.0	0.0	0.40	25.7	10.3	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	26.3	0.08
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.05	34.8	1.7	0.30	286.1	85.8	0.40	25.7	10.3	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	97.9	0.28
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.05	34.8	1.7	0.30	286.1	85.8	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	88.3	0.27
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.05	0.0	0.0	0.30	320.9	96.3	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	97.0	0.30
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.05	0.0	0.0	0.30	320.9	96.3	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	97.0	0.30
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.05	23.8	1.2	0.30	320.9	96.3	0.40	1.9	0.8	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	98.2	0.28
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.05	23.8	1.2	0.30	320.9	96.3	0.40	0.0	0.0	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	344.7	97.5	0.28
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.05	23.8	1.2	0.30	34.8	10.4	0.40	0.0	0.0	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	58.6	11.6	0.20
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.05	0.0	0.0	0.30	58.6	17.6	0.40	0.0	0.0	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	58.6	17.6	0.30
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.05	1.9	0.1	0.30	23.8	7.1	0.40	0.0	0.0	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	25.7	7.2	0.28
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.05	288.0	14.4	0.30	23.8	7.1	0.40	0.0	0.0	0.35	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	311.8	21.5	0.07

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	304.05
1985	20	412.30
1990	25	108.50
1995	30	78.91
2000	35	162.34
2005	40	122.93
2010	45	127.36
2015	50	310.44
2020	55	465.28
2025	60	463.40
2030	65	485.15
2035	70	488.47
2040	75	489.20
2045	80	252.63
2050	85	73.03
2055	90	61.53
2060	95	122.59

1965 W/ MIT VAL

TOTAL : 4528.09

EVALUATION SPECIES: PILEATED WOODPECKER

LIFE OF PROJECT 95 YRS. AAHU'S = 47.66

Average Annual Habitat Units available for the pileated woodpecker with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.70	12.5	8.8	1.00	273.6	273.6	0.40	23.8	9.5	0.35	34.8	12.2	0.00	0.0	0.0	0.00	0.0	0.0	344.7	304.1	0.88
1990	0.70	12.5	8.8	1.00	273.6	273.6	0.40	23.8	9.5	0.35	34.8	12.2	0.00	0.0	0.0	0.00	0.0	0.0	344.7	304.1	0.88
1995	0.80	12.5	10.0	1.00	273.6	273.6	0.50	23.8	11.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	344.7	311.2	0.90
2000	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2005	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2010	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2015	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2020	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2025	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2030	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2035	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2040	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2045	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2050	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2055	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90
2060	0.80	12.5	10.0	1.00	273.6	273.6	0.50	25.7	12.9	0.45	34.8	15.7	0.00	0.0	0.0	0.00	0.0	0.0	346.6	312.1	0.90

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	304.05
1985	20	5776.95
1990	25	1520.25
1995	30	1538.03
2000	35	1558.18
2005	40	1560.55
2010	45	1560.55
2015	50	1560.55
2020	55	1560.55
2025	60	1560.55
2030	65	1560.55
2035	70	1560.55
2040	75	1560.55
2045	80	1560.55
2050	85	1560.55
2055	90	1560.55
2060	95	1560.55

TL: 29424.05

EVALUATION SPECIES: PILEATED WOODPECKER

LIFE OF PROJECT 95 YRS. AAHU'S = 309.73

Average Annual Habitat Units available for the pine marten without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.40	23.8	9.5	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	58.6	20.0	0.34
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.40	23.8	9.5	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	58.6	20.0	0.34
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.40	23.8	9.5	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	23.8	9.5	0.40
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.40	25.7	10.3	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	25.7	10.3	0.40
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.40	25.7	10.3	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	25.7	10.3	0.40
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	0.0	0.0	0.40	25.7	10.3	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	25.7	10.3	0.40
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	286.1	114.4	0.40	25.7	10.3	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	311.8	124.7	0.40
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	286.1	114.4	0.40	1.9	0.8	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	288.0	115.2	0.40
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	320.9	128.4	0.40	1.9	0.8	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	129.1	0.40
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	320.9	128.4	0.40	1.9	0.8	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	129.1	0.40
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	320.9	128.4	0.40	1.9	0.8	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	129.1	0.40
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	320.9	128.4	0.40	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	320.9	128.4	0.40
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	34.8	13.9	0.40	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	34.8	13.9	0.40
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	58.6	23.4	0.40	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	58.6	23.4	0.40
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	23.8	9.5	0.40	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	23.8	9.5	0.40
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.40	23.8	9.5	0.40	0.0	0.0	0.30	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	23.8	9.5	0.40

YEAR	TY	HUs BTW TYs
1960		
1965	1	272.45
1985	20	379.24
1990	25	99.80
1995	30	75.42
2000	35	49.50
2005	40	51.40
2010	45	51.40
2015	50	337.50
2020	55	599.80
2025	60	610.80
2030	65	645.60
2035	70	645.60
2040	75	643.70
2045	80	355.70
2050	85	93.40
2055	90	82.40
2060	95	47.60
TOTAL		5041.31

1965 W/MIT VAL

EVALUATION SPECIES: PINE MARTEN

LIFE OF PROJECT 95 YRS. AAHU'S = 53.07

Average Annual Habitat Units available for the douglas squirrel with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.50	12.5	6.3	0.45	273.6	123.1	0.40	23.8	9.5	0.20	34.8	7.0	0.00	0.0	0.0	0.00	0.0	0.0	344.7	145.9	0.42
1990	0.50	12.5	6.3	0.45	273.6	123.1	0.40	23.8	9.5	0.20	34.8	7.0	0.00	0.0	0.0	0.00	0.0	0.0	344.7	145.9	0.42
1995	0.60	12.5	7.5	0.45	273.6	123.1	0.50	23.8	11.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	344.7	153.0	0.44
2000	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2005	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2010	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2015	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2020	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2025	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2030	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2035	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2040	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2045	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2050	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2055	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44
2060	0.60	12.5	7.5	0.45	273.6	123.1	0.50	25.7	12.9	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	346.6	153.9	0.44

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	145.85
1985	20	2771.15
1990	25	729.25
1995	30	747.03
2000	35	767.17
2005	40	769.55
2010	45	769.55
2015	50	769.55
2020	55	769.55
2025	60	769.55
2030	65	769.55
2035	70	769.55
2040	75	769.55
2045	80	769.55
2050	85	769.55
2055	90	769.55
2060	95	769.55
	TL:	14395.05

EVALUATION SPECIES: DOUGLAS SQUIRREL

LIFE OF PROJECT 95 YRS. AAHU'S = 151.53

Average Annual Habitat Units available for the pine marten with mitigation in the Williamson Creek Tract.

PINE MARTEN A

YEAR	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.50	12.5	6.3	0.90	273.6	246.2	0.40	23.8	9.5	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	344.7	272.5	0.79
1990	0.50	12.5	6.3	0.90	273.6	246.2	0.40	23.8	9.5	0.30	34.8	10.4	0.00	0.0	0.0	0.00	0.0	0.0	344.7	272.5	0.79
1995	0.60	12.5	7.5	0.90	273.6	246.2	0.50	23.8	11.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	344.7	279.6	0.81
2000	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2005	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2010	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2015	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2020	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2025	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2030	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2035	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2040	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2045	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2050	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2055	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81
2060	0.60	12.5	7.5	0.90	273.6	246.2	0.50	25.7	12.9	0.40	34.8	13.9	0.00	0.0	0.0	0.00	0.0	0.0	346.6	280.5	0.81

YEAR	TY	P. MART HUs BTW TYs	P.MART A HUs BTW TYs
1960	0		
1965	1	272.45	246.24
1985	20	5176.55	4678.56
1990	25	1362.25	1231.20
1995	30	1380.03	1231.20
2000	35	1400.18	1231.20
2005	40	1402.55	1231.20
2010	45	1402.55	1231.20
2015	50	1402.55	1231.20
2020	55	1402.55	1231.20
2025	60	1402.55	1231.20
2030	65	1402.55	1231.20
2035	70	1402.55	1231.20
2040	75	1402.55	1231.20
2045	80	1402.55	1231.20
2050	85	1402.55	1231.20
2055	90	1402.55	1231.20
2060	95	1402.55	1231.20
TL:		26422.05	23392.80

EVALUATION SPECIES: PINE MARTEN
LIFE OF PROJECT 95 YRS. AAHU'S = 278.13 246.24

Average Annual Habitat Units available for the douglas squirrel without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.10	0.0	0.0	0.20	0.0	0.0	0.45	0.0	0.0	0.40	23.8	9.5	0.20	34.8	7.0	0.00	0.0	0.0	0.00	0.0	0.0	58.6	16.5	0.28
1990	0.00	0.0	0.0	0.10	0.0	0.0	0.20	0.0	0.0	0.45	0.0	0.0	0.40	23.8	9.5	0.20	34.8	7.0	0.00	0.0	0.0	0.00	0.0	0.0	58.6	16.5	0.28
1995	0.00	0.0	0.0	0.10	286.1	28.6	0.20	0.0	0.0	0.45	0.0	0.0	0.40	23.8	9.5	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	309.9	38.1	0.12
2000	0.00	0.0	0.0	0.10	0.0	0.0	0.20	286.1	57.2	0.45	0.0	0.0	0.40	25.7	10.3	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	311.8	67.5	0.22
2005	0.00	0.0	0.0	0.10	34.8	3.5	0.20	286.1	57.2	0.45	0.0	0.0	0.40	25.7	10.3	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	71.0	0.20
2010	0.00	0.0	0.0	0.10	0.0	0.0	0.20	320.9	64.2	0.45	0.0	0.0	0.40	25.7	10.3	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	74.5	0.21
2015	0.00	0.0	0.0	0.10	0.0	0.0	0.20	34.8	7.0	0.45	286.1	128.7	0.40	25.7	10.3	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	146.0	0.42
2020	0.00	0.0	0.0	0.10	0.0	0.0	0.20	34.8	7.0	0.45	286.1	128.7	0.40	1.9	0.8	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	136.5	0.42
2025	0.00	0.0	0.0	0.10	0.0	0.0	0.20	0.0	0.0	0.45	320.9	144.4	0.40	1.9	0.8	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	322.8	145.2	0.45
2030	0.00	0.0	0.0	0.10	23.8	2.4	0.20	0.0	0.0	0.45	320.9	144.4	0.40	1.9	0.8	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	147.5	0.43
2035	0.00	0.0	0.0	0.10	0.0	0.0	0.20	23.8	4.8	0.45	320.9	144.4	0.40	1.9	0.8	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	346.6	149.9	0.43
2040	0.00	0.0	0.0	0.10	0.0	0.0	0.20	23.8	4.8	0.45	320.9	144.4	0.40	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	344.7	149.2	0.43
2045	0.00	0.0	0.0	0.10	0.0	0.0	0.20	23.8	4.8	0.45	34.8	15.7	0.40	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	58.6	20.4	0.35
2050	0.00	0.0	0.0	0.10	1.9	0.2	0.20	0.0	0.0	0.45	58.6	26.4	0.40	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	60.5	26.6	0.44
2055	0.00	0.0	0.0	0.10	286.1	28.6	0.20	1.9	0.4	0.45	23.8	10.7	0.40	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	311.8	39.7	0.13
2060	0.00	0.0	0.0	0.10	0.0	0.0	0.20	288.0	57.6	0.45	23.8	10.7	0.40	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	311.8	68.3	0.22

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	145.85
1985	20	313.12
1990	25	82.40
1995	30	169.65
2000	35	263.93
2005	40	346.54
2010	45	363.60
2015	50	551.11
2020	55	706.16
2025	60	704.08
2030	65	732.25
2035	70	743.68
2040	75	747.73
2045	80	403.87
2050	85	117.31
2055	90	230.92
2060	95	270.03
TOTAL		6892.21

1965 W/ MIT VAL

EVALUATION SPECIES: DOUGLAS SQUIRREL

LIFE OF PROJECT 95 YRS. AAHU'S = 72.55

Average Annual Habitat Units available for the common merganser without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.0	0.00	0.0	0.0	0.20	3.5	0.7	3.5	0.7	0.20

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	7.68
1985	20	145.54
1990	25	38.30
1995	30	20.90
2000	35	3.50
2005	40	3.50
2010	45	3.50
2015	50	3.50
2020	55	3.50
2025	60	3.50
2030	65	3.50
2035	70	3.50
2040	75	3.50
2045	80	3.50
2050	85	3.50
2055	90	3.50
2060	95	3.50

1985 WI
MIT VAL

TOTAL : 257.90

EVALUATION SPECIES: COMMON MERGANSER

LIFE OF PROJECT 95 YRS. AAHU'S = 2.71

Average Annual Habitat Units available for the common merganser with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	OG HSI	OG ACRES	OG HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.20	34.8	7.0	0.00	0.0	0.0	0.20	3.5	0.7	38.3	7.7	0.20

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	7.66
1985	20	145.54
1990	25	38.30
1995	30	38.30
2000	35	38.30
2005	40	38.30
2010	45	38.30
2015	50	38.30
2020	55	38.30
2025	60	38.30
2030	65	38.30
2035	70	38.30
2040	75	38.30
2045	80	38.30
2050	85	38.30
2055	90	38.30
2060	95	38.30
	TL:	727.70

EVALUATION SPECIES: COMMON MERGANSER

LIFE OF PROJECT 95 YRS. AAHU'S = 7.66

Average Annual Habitat Units available for the mallard without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	3.5	1.8	5.4	1.9	0.36
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	3.5	1.8	5.4	1.9	0.36
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	3.5	1.8	5.4	1.9	0.36
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50

YEAR	TY	HUs BTW TYs	
1960			
1965	1	1.94	1965 W/MIT VAL
1985	20	36.86	
1990	25	9.70	
1995	30	9.70	
2000	35	9.45	
2005	40	8.75	
2010	45	8.75	
2015	50	8.75	
2020	55	8.75	
2025	60	8.75	
2030	65	8.75	
2035	70	8.75	
2040	75	8.75	
2045	80	8.75	
2050	85	8.75	
2055	90	8.75	
2060	95	8.75	
TOTAL		172.65	

EVALUATION SPECIES: MALLARD

LIFE OF PROJECT 95 YRS. AAHU'S = 1.82

Average Annual Habitat Units available for the mallard with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	OB HSI	OB ACRES	OB HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	ML HSI	ML ACRES	ML HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	3.5	1.8	5.4	1.9	0.36
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	3.5	1.8	5.4	1.9	0.36
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	1.9	0.2	0.50	3.5	1.8	5.4	1.9	0.36
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.50	3.5	1.8	3.5	1.8	0.50

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	1.94
1985	20	36.86
1990	25	9.70
1995	30	9.70
2000	35	9.45
2005	40	8.75
2010	45	8.75
2015	50	8.75
2020	55	8.75
2025	60	8.75
2030	65	8.75
2035	70	8.75
2040	75	8.75
2045	80	8.75
2050	85	8.75
2055	90	8.75
2060	95	8.75
	TL:	172.65

EVALUATION SPECIES: MALLARD

LIFE OF PROJECT 95 YRS. AAHU'S = 1.82

Average Annual Habitat Units available for the beaver without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	BEAVER A WL HSI	BEAVER A WL ACRES	BEAVER A WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	1.9	0.4	0.80	3.5	2.8	40.2	13.6	0.34
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	1.9	0.4	0.80	3.5	2.8	40.2	13.6	0.34
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	1.9	0.4	0.70	3.5	2.5	5.4	2.8	0.52
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	0.0	0.0	0.20	0.0	0.0	0.80	3.5	2.8	3.5	2.8	0.80

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	13.62
1985	20	258.78
1990	25	68.10
1995	30	46.50
2000	35	14.51
2005	40	14.00
2010	45	14.00
2015	50	14.00
2020	55	14.00
2025	60	14.00
2030	65	14.00
2035	70	14.00
2040	75	14.00
2045	80	14.00
2050	85	14.00
2055	90	14.00
2060	95	14.00
TOTAL		569.51

1965 W/ MIT VAL

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT 95 YRS. AAHU'S = 5.99

EVALUATION SPECIES: BEAVER A
LIFE OF PROJECT 95 YRS. AAHU'S = 2.80

Average Annual Habitat Units available for the beaver with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	OS HSI	OS ACRES	OS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	BEAVER A WL HSI	BEAVER A WL ACRES	BEAVER A WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	1.9	0.4	0.80	3.5	2.8	40.2	13.6	0.34
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	1.9	0.4	0.80	3.5	2.8	40.2	13.6	0.34
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	1.9	0.4	0.80	3.5	2.8	40.2	13.6	0.34
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.30	34.8	10.4	0.20	0.0	0.0	0.80	3.5	2.8	38.3	13.2	0.35

YEAR	TY	BEAVER HUs BTW TYs	BEAVER A HUs BTW TYs
1960	0		
1965	1	13.62	2.80
1985	20	258.78	53.20
1990	25	68.10	14.00
1995	30	68.10	14.00
2000	35	67.16	14.00
2005	40	66.20	14.00
2010	45	66.20	14.00
2015	50	66.20	14.00
2020	55	66.20	14.00
2025	60	66.20	14.00
2030	65	66.20	14.00
2035	70	66.20	14.00
2040	75	66.20	14.00
2045	80	66.20	14.00
2050	85	66.20	14.00
2055	90	66.20	14.00
2060	95	66.20	14.00
TL:		1270.16	266.00

EVALUATION SPECIES: BEAVER
LIFE OF PROJECT 95 YRS. AAHU'S = 13.37 2.80

Average Annual Habitat Units available for the osprey without mitigation in the Williamson Creek Tract.

YEAR	ES HSI	ES ACRES	ES HU	OS HSI	OS ACRES	OS HU	CS HSI	CS ACRES	CS HU	SS HSI	SS ACRES	SS HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	34.8	3.5	0.10
1990	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	34.8	3.5	0.10
1995	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2000	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2005	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2010	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2015	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2020	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2025	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2030	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2035	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2040	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2045	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2050	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2055	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00
2060	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.10	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	85.86
1985	20	66.12
1990	25	17.40
1995	30	5.80
2000	35	0.00
2005	40	0.00
2010	45	0.00
2015	50	0.00
2020	55	0.00
2025	60	0.00
2030	65	0.00
2035	70	0.00
2040	75	0.00
2045	80	0.00
2050	85	0.00
2055	90	0.00
2060	95	0.00

1985 W/MIT VAL

TOTAL : 175.18

EVALUATION SPECIES: OSPREY

LIFE OF PROJECT 95 YRS. AAHU'S = 1.84

Average Annual Habitat Units available for the osprey with mitigation in the Williamson Creek Tract.

YEAR	LS HSI	LS ACRES	LS HU	DG HSI	DG ACRES	DG HU	MF HSI	MF ACRES	MF HU	MR HSI	MR ACRES	MR HU	SB HSI	SB ACRES	SB HU	WL HSI	WL ACRES	WL HU	TOTAL ACRES	TOTAL HU	MEAN HSI
1985	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
1990	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
1995	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2000	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2005	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2010	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2015	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2020	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2025	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2030	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2035	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2040	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2045	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2050	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2055	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28
2060	0.00	0.0	0.0	0.30	273.6	82.1	0.00	0.0	0.0	0.10	34.8	3.5	0.00	0.0	0.0	0.00	0.0	0.0	308.4	85.6	0.28

YEAR	TY	HUs BTW TYs
1960	0	
1965	1	85.56
1985	20	1625.64
1990	25	427.80
1995	30	427.80
2000	35	427.80
2005	40	427.80
2010	45	427.80
2015	50	427.80
2020	55	427.80
2025	60	427.80
2030	65	427.80
2035	70	427.80
2040	75	427.80
2045	80	427.80
2050	85	427.80
2055	90	427.80
2060	95	427.80
	TL:	8128.20

EVALUATION SPECIES: OSPREY
LIFE OF PROJECT 95 YRS. AAHU'S = 85.56

Average Annual Habitat Unit Summary.

SPECIES	LAKE CHAPLAIN AND PROJECT FACILITY LANDS AAHU's W/ MIT.	W/O MIT.	NET CHANGE	LOST LAKE AAHU's W/ MIT.	W/O MIT.	NET CHANGE	SPADA LAKE AAHU's W/ MIT.	W/O MIT.	NET CHANGE	WILLIAMSON CREEK AAHU's W/ MIT.	W/O MIT.	NET CHANGE	TOTALS TL NET CHANGE	AAHU's IMPACT HEP
BL-TAILED DEER	1370.0	898.0	472.0	152.0	59.0	93.0	63.0	28.0	35.0	277.0	147.0	130.0	730	-1054
BL-TAILED DEER A	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	23.0	0.0	0.0	0.0	23	-174
RUFFED GROUSE	842.0	469.0	373.0	129.0	36.0	93.0	41.0	12.0	29.0	158.0	79.0	79.0	574	-303
RUFFED GROUSE A	18.0	6.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	7.0	20.0	32	-53
BCAP CHICKADEE	904.0	636.0	268.0	132.0	85.0	47.0	50.0	23.0	27.0	224.0	86.0	138.0	480	-361
PILEATED WOODPECKER	1103.0	550.0	553.0	79.0	22.0	57.0	31.0	11.0	20.0	310.0	48.0	262.0	892	-646
PINE MARTEN	937.0	502.0	435.0	45.0	6.0	39.0	22.0	12.0	10.0	278.0	53.0	225.0	709	-640
PINE MARTEN A	48.0	14.0	34.0	0.0	0.0	0.0	0.0	0.0	0.0	246.0	0.0	246.0	280	-137
DOUGLAS SQUIRREL	1195.0	718.0	477.0	66.0	23.0	43.0	24.0	12.0	12.0	151.0	73.0	78.0	610	-512
COMMON MERGANSER	282.0	218.0	64.0	23.0	3.0	20.0	732.0	748.0	-16.0	8.0	3.0	5.0	73	416
MALLARD	193.0	177.0	16.0	25.0	12.0	13.0	349.0	281.0	68.0	2.0	2.0	0.0	97	58
BEAVER	210.0	178.0	32.0	45.0	13.0	32.0	572.0	566.0	6.0	13.0	6.0	7.0	77	80
BEAVER A	74.0	63.0	11.0	13.0	4.0	9.0	0.2	0.2	0.0	3.0	3.0	0.0	20	-14
OSPREY	582.0	382.0	200.0	18.0	3.0	15.0	1479.0	1309.0	170.0	86.0	2.0	84.0	469	854