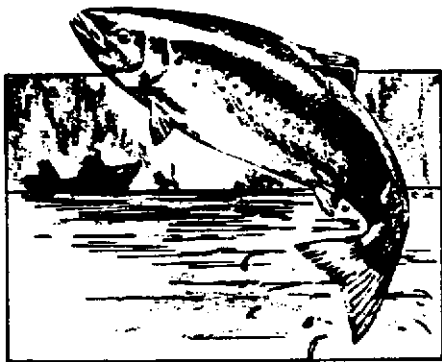


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APPENDICES VOLUME 2

STUDY OF SKAGIT DAMS
ORIGINAL IMPACTS
ON WILDLIFE AND FISH
HABITATS AND POPULATIONS

SEATTLE CITY LIGHT



envirosphere company

A Division of EBASCO SERVICES INCORPORATED

F-fish 363c



**STUDY OF SKAGIT DAMS
ORIGINAL IMPACTS
ON
WILDLIFE AND FISH
HABITAT AND POPULATIONS**

**FINAL REPORT
APPENDICES VOLUME 2**

Prepared By



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MAY 1988

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APPENDIX E

PILEATED WOODPECKER
PINE MARTEN
RUFFED GROUSE
BLACK-CAPPED CHICKADEE

Library: C:SCL.HLB
11-18-1987

Model # 6 Single covertime model.

Model name: PILEATED WOODPECKER (western)

Verification level: EXPERT REVIEW

Creation/modification date: 10-16-1987

SCHROEDER, R. L. 1982. HABITAT SUITABILITY INDEX MODELS: PILEATED WOODPECKER. U.S. FISH WILD. SERV. BIOL. REP. FWS/OBS-82/10.39. 15 pp.

Range: applies throughout the western portion of the species' range.

Covertypes:

COG : old growth conifer
CC : mature closed canopy conifer
OC : mature open canopy conifer
B : mature broadleaf
M : mixed conifer/broadleaf
rCOG : riparian old growth conifer
rCC : riparian mature closed canopy conifer
rB : riparian broadleaf
rM : riparian mixed conifer/broadleaf

	Lev 4	Lev 3	Lev 2	Lev 1
VCVTR01	grf	---	usf	min-HSI
VDNDB04	grf	---	I	I
X39V3	grf	---	^	I
VDNSN05	grf	---	gem	^
VDBSN01	grf	---	^	

Habitat variables:

VCVTR01 : Percent canopy cover of trees (%)
VDBSN01 : Mean DBH of snags that have >51cm DBH (cm)
VDNDB04 : Density of trees >51cm DBH (#/ha)
VDNSN05 : Density of snags that have >51cm DBH (#/ha)
X39V3 : Density of tree stump >0.3m high & 18cm dia. & logs >18cm dia. (#/ha)

GRAPH FUNCTION at level 3, position 1

Title: % TREE CANOPY CLOSURE

X:	0.000,	Y:	0.000
X:	25.000,	Y:	0.000
X:	75.000,	Y:	1.000
X:	100.000,	Y:	1.000

GRAPH FUNCTION at level 3, position 2

Title: # OF TREES / >51 CM DBH / HA

X:	0.000,	Y:	0.000
X:	7.500,	Y:	0.000
X:	75.000,	Y:	1.000

X: 100.000, Y: 1.000

GRAPH FUNCTION at level 3, position 3

Title: # OF STUMPS AND/OR LOGS / HA

X: 0.000, Y: 0.300

X: 25.000, Y: 1.000

X: 37.500, Y: 1.000

GRAPH FUNCTION at level 3, position 4

Title: # SNAGS > 31 CM DBH / HA

X: 0.000, Y: 0.000

X: 0.425, Y: 1.000

X: 0.500, Y: 1.000

GRAPH FUNCTION at level 3, position 5

Title: AVERAGE DBH OF SNAGS > 51 CM DBH

X: 0.000, Y: 0.000

X: 50.900, Y: 0.000

X: 51.000, Y: 0.250

X: 75.000, Y: 1.000

X: 80.000, Y: 1.000

USER-SPECIFIED FUNCTION at level 2, position 1

USUB = (X(1)*X(2)*X(3))^1.5

Comments:

Densities rescaled from /.4ha to /ha.

changed snag variables to fit western model

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Single covertime model.

ALLEN, A. W. 1982. HABITAT SUITABILITY INDEX MODELS: MARTEN.
U.S. FISH WILD. SERV. BIOL. REP. FWS/OBS-82/10.11. 9 PP.
Applies to boreal coniferous forest as winter habitat.
Range: Western US.

```
COG      : old growth conifer
CC       : mature closed canopy conifer
OC       : mature open canopy conifer
LP       : mature lodgepole pine
M        : mixed conifer/broadleaf
rCOG     : riparian old growth conifer
rCC      : riparian mature closed canopy conifer
rM       : riparian mixed conifer/broadleaf
```

Habitat variables:

GRAPH FUNCTION at level 2, position 1

X:	0.000,	Y:	0.000
X:	25.000,	Y:	0.000
X:	50.000,	Y:	1.000
X:	100.000,	Y:	1.000

Title: * OVERSTORY CANOPY CLOSURE-FIR OR SPRUCE

X:	0.000,	Y:	0.100
X:	40.000,	Y:	1.000
X:	100.000,	Y:	1.000

MENU FUNCTION at level 2, position 3

Menu choice:	2	Output value:	0.000
Menu choice:	3	Output value:	0.250
Menu choice:	4	Output value:	0.750
Menu choice:	5	Output value:	1.000
Menu choice:	6	Output value:	1.000

GRAPH FUNCTION at level 2, position 4

Title: % GR. SURFACE COVERED BY DOWNFALL)=7.6CM

X:	0.000,	Y:	0.500
X:	20.000,	Y:	1.000
X:	50.000,	Y:	1.000
X:	100.000,	Y:	0.500

USER-SPECIFIED FUNCTION at level 1, position 1

USUB = (X(1)*X(2)*X(3)*X(4))^0.5

Comments:

Successional stage (V3) revised to use new classes.

Library: C:SCL.HLB
11-7-1987

Model # 4 Single coverytype model.

Model name: RUFFED GROUSE

Verification level: EXPERT REVIEW

Creation/modification date: 10-16-1987

CADE B. S., AND P. J. SOUSA. 1985. HABITAT SUITABILITY INDEX MODELS:
RUFFED GROUSE. U.S. FISH WILDL. SERV. BIOL. REP. FWS/OBS-82(10.86). 31 PP.
Applies where aspen is a predominate component of the vegetation.
Range: throughout the range of the species.

Covertypes:

COG : old growth conifer
CC : mature closed canopy conifer
OC : mature open canopy conifer
LP : mature lodgepole pine
RC : regenerative conifer
RM : regenerative mixed
B : mature broadleaf
M : mixed conifer/broadleaf
rCOG : riparian old growth conifer
rCC : riparian mature closed canopy conifer
rB : riparian broadleaf
rM : riparian mixed conifer/broadleaf

Lev 4	Lev 3	Lev 2	Lev 1
X86V2	---usf	---grf	---prd---HSI
VDNNL01	---		
VDNDE01	---		
VDNSH01	---^		
VHTNL01	---grf	---usf	---
VHTDE01	---grf	---	
VHTSH04	---grf	---	
X86V2	---usf	---	
VDNNL01	---	---	
	VDNDE01	---	
	VDNSH01	---usf	---

Habitat variables:

VDNDE01 : Density of deciduous trees (#/ha)
VDNNL01 : Density of coniferous woody plant > .9m tall (#/ha)
VDNSH01 : Density of deciduous shrub stems >= .9m and < 6m tall (#/ha)
VHTDE01 : Mean height of deciduous trees (m)
VHTNL01 : Mean height of coniferous trees (m)
VHTSH04 : Mean height of deciduous shrubs (i.e., woody plants < 6m tall) (m)
X86V2 : Avg. lowest-branch height of conifers (m)

USER-SPECIFIED FUNCTION at level 3, position 1

IF X(1) >= 0 AND X(1) <= .9 THEN USUB = 4 * X(2) + X(3) + .25 * X(4)

IF X(1) <= .9 OR X(1) >= 4.6 THEN GOTO 4

USUB=((((4.6-X(1))/1.2333)+1)*X(2)+X(3)+.25*X(4) ; RETURN

IF X(1) >= 4.6 THEN USUB = X(2) + X(3) + .25 * X(4)

GRAPH FUNCTION at level 3, position 2

Title: AVERAGE HEIGHT OF WOODY STEMS

X:	0.000,	Y:	0.000
X:	1.500,	Y:	0.000
X:	4.600,	Y:	1.000
X:	6.100,	Y:	1.000

GRAPH FUNCTION at level 3, position 3

Title: AVERAGE HEIGHT OF WOODY STEMS

X:	0.000,	Y:	0.000
X:	1.500,	Y:	0.000
X:	4.600,	Y:	1.000
X:	6.100,	Y:	1.000

GRAPH FUNCTION at level 3, position 4

Title: AVERAGE HEIGHT OF WOODY STEMS

X:	0.000,	Y:	0.000
X:	1.500,	Y:	0.000
X:	4.600,	Y:	1.000
X:	6.100,	Y:	1.000

USER-SPECIFIED FUNCTION at level 3, position 5

IF X(1) = 0 AND X(1) < .9 THEN USUB = 4 * X(2) ; RETURN

IF X(1) > 4.6 THEN USUB = 1 * X(2) ; RETURN

USUB=((4.6 - X(1))/1.2333)+1)*X(2)

USER-SPECIFIED FUNCTION at level 3, position 7

USUB = X(1) * .25

GRAPH FUNCTION at level 2, position 1

Title: TOTAL EQUIVALENT STEM DENSITY

X:	0.000,	Y:	0.000
X:	4400.000,	Y:	0.000
X:	4900.000,	Y:	1.000
X:	14800.000,	Y:	1.000
X:	21000.000,	Y:	0.000
X:	25000.000,	Y:	0.000

```

USER-SPECIFIED FUNCTION at level 2, position 2
IF X(1) < X(2) THEN SWAP X(1),X(2) : SWAP X(4),X(5)
IF X(1) < X(3) THEN SWAP X(1),X(3) : SWAP X(4),X(6)
IF X(2) < X(3) THEN SWAP X(2),X(3) : SWAP X(5),X(6)
IF X(4) > 4900 THEN X(4) = 4900 : USUB = (X(4)/4900)*X(1) : RETURN
Q = X(4) + X(5)
IF Q > 4900 THEN X(5) = X(5) - (Q - 4900) :
USUB = (X(4) / 4900 * X(1)) + ((X(5) / 4900) * X(2)) : RETURN
Q = Q + X(6)
IF Q > 4900 THEN X(6) = X(6) - (Q - 4900)
USUB = (X(4) / 4900*X(1)) + (X(5) / 4900*X(2)) + (X(6) / 4900 * X(3))

```

Comments:

L2P1 = winter food

L2P2 = fall & spring cover

L3P2 = SIV3, suit. of total equiv. stem dens.

L3P3 = weighted SIV4, weighted suit. of heights of woody stems.

L3P4 = SIV5, suit. of % of trees that are conifers (conifer penalty).

winter food life requisite removed from the model—not needed for the Skagit area due to low snowfall

conifer penalty deleted due to few predators in the Skagit area

Library: C:SCL.HLB
10-16-1987

Model # 2 Single covertype model.

Model name: BLACK-CAPPED CHICKADEE (1)

Verification level: EXPERT REVIEW

Creation/modification date: 10-16-1987

SCHROEDER, R. L. 1982. HABITAT SUITABILITY INDEX MODELS:
BLACK-CAPPED CHICKADEE. U. S. FISH WILDL. SERV. BIOL. REP.
FWS/OBS-82/10.37. 12 PP.

Uses tree height & canopy cover option.

Applies to breeding habitats.

Range: throughout the breeding range of the species.

Covertypes:

COG : old growth conifer
CC : mature closed canopy conifer
OC : mature open canopy conifer
LP : mature lodgepole pine
RC : regenerative conifer
RM : regenerative mixed
B : mature broadleaf
M : mixed conifer/broadleaf
rCOG : riparian old growth conifer
rCC : riparian mature closed canopy conifer
rB : riparian broadleaf
rM : riparian mixed conifer/broadleaf
PMF : palustrine mixed forest
PBF : palustrine broadleaf forest

Lev 4 Lev 3 Lev 2 Lev 1
VCVTR01--grf-----gem-----min--HSI
VHTTR01--grf-----^-----|
VDNSN02--grf-----^-----

Habitat variables:

VCVTR01 : Percent canopy cover of trees (%)

VDNSN02 : Density of snags that have 10-25cm DBH (#/ha)

VHTTR01 : Mean height of overstory trees (i.e., >80% as tall as tallest tree)(m)

GRAPH FUNCTION at level 3, position 1

Title: % TREE CANOPY CLOSURE

X:	0.000,	Y:	0.000
X:	50.000,	Y:	1.000
X:	75.000,	Y:	1.000
X:	100.000,	Y:	0.600

GRAPH FUNCTION at level 3, position 2

Title: AVERAGE HEIGHT OF OVERSTORY TREES (M)

X: 0.000, Y: 0.000
X: 15.000, Y: 1.000
X: 16.000, Y: 1.000

GRAPH FUNCTION at level 2, position 2

Title: NUMBER OF SNAGS 10 TO 25 CM DBH/HA

X: 0.000, Y: 0.000
X: 5.000, Y: 1.000
X: 7.500, Y: 1.000

Comments:

Density of snags has been rescaled to #/ha.

L2P1 = food

L2P2 = reproduction

BLACK-CAPPED CHICKADEE
FOOD AND REPRODUCTION HSI VALUES BY HABITAT TYPE¹⁾

		Food ₃ HSI	Reproduction ₂ HSI
Old Growth Conifer	Diablo	0.83	0.37
	Ross	0.78	0.94
Closed Canopy Conifer	Gorge	0.78	1.00
	Diablo	0.77	1.00
	Ross	0.88	0.58
Open Canopy Conifer	Gorge	1.0	1.0
	Diablo	0.90	0.28
	Ross	0.58	1.00
Mixed	Gorge	0.78	1.00
	Diablo	0.80	1.00
	Ross	0.92	1.00
Broadleaf	Diablo	0.81	1.00
	Ross	0.87	0.86
Reg. Conifer	All	0.84	0.22
Reg. Mixed	All	0.87	0.53
Lodgepole	Diablo	0.88	0.39
	Ross	0.84	0.73
Riparian Old Growth	Diablo	1.00	0.0
	Ross-pre	0.95	0.16
	Ross-post	0.77	0.0
Riparian Closed Canopy	All	1.0	1.0
Riparian Mixed	Ross	0.95	1.0
	Diablo	1.0	1.0
Riparian Broadleaf	Diablo	0.78	1.00
	Ross	0.84	1.00
Palustrine Mixed	Ross	1.00	0.13
Palustrine Broadleaf	Ross-pre	0.84	0.07
	Ross-post	0.84	0.07

- 1) These values were calculated by hand using the average SIs generated by the HSI software. The HSI software does not calculate average HSI values by life requisite; it simply calculates the lowest overall HSI based on the average SIs for all parameters. The lowest overall HSI for a cover-type in which multiple sites were sampled and zero values for some parameters at some sites will not match the HSI calculated using the life requisite approach.

DIABCOG HABITAT DATA

11-23-1987

DIABLO, PRE & POST PROJECT

HABITAT: CONIFER OLD GROWTH

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

	COG	COG
VARIABLE:	R10	R11
TSS01	6.000	6.000
VCVTR01	83.000	99.000
VCVWD01	19.733	1.100
VDBSN01	74.000	51.000
VDNDB04	69.333	112.000
VDNDE01	21.333	816.000
VDNNL01	912.000	192.000
VDNSH01	2058.667	3456.000
VDNSN02	26.667	0.000
VDNSN05	8.000	0.000
VHTDE01	3.582	6.296
VHTNL01	6.402	45.732
VHTSH04	1.912	2.067
VHTTR01	15.244	45.732
VRCEV01	100.000	100.000
X39V3	416.000	64.000
X86V2	4.600	4.600

Study: DIABCOG Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
COG	R10	33.5	0.934
COG	R11	56.2	0.000
Overall:		89.7	0.348

Study: DIABCOG Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
COG	R10	33.5	0.997
COG	R11	56.2	0.726
Overall:		89.7	0.827

Study: DIABCOG Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
COG	R10	33.5	0.000
COG	R11	56.2	0.000
Overall:		89.7	0.000

Study: DIABCOG Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
COG	R10	33.5	0.957
COG	R11	56.2	0.000
Overall:		89.7	0.357

Study name: DIABCOG 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	89.7	0.348
MARTEN	89.7	0.827
RUFFED GROUSE	89.7	0.000
PILEATED WOODPECKER (western)	89.7	0.357

Study: DIABCOG

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: COG SubArea: R10

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
83.00		0.87	0.93	0.934
VHTTR01	grf	^		
15.24		1.00		
		VDNSN02	grf	^
		26.67	1.00	

Study: DIABCOG

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: COG SubArea: R11

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
99.00		0.62	0.78	0.000
VHTTR01	grf	^		
45.73		1.00		
		VDNSN02	grf	^
		0.00	0.00	

Study: DIABCOG

11-23-1987

Model: MARTEN

CoverType: COG SubArea: R10

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf--HS1
83.00	1.00	0.997
VRCEV01	grf	
100.00	1.00	
TSS01	mnu	
6.00	1.00	
VCVWD01	grf	
19.73	0.99	

Study: DIABCOG

11-23-1987

Model: MARTEN

CoverType: COG SubArea: R11

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf--HS1
99.00	1.00	0.726
VRCEV01	grf	
100.00	1.00	
TSS01	mnu	
6.00	1.00	
VCVWD01	grf	
1.10	0.53	

Study: DIABCOG

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: COG SubArea: R10

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
83.00	1.00	0.96	0.957	
VDNDB04	grf			
69.33	0.92			
X39V3	grf			
416.00	1.00			
VDNSN05	grf	gem		
8.00	1.00	0.97		
VDBSN01	grf			
74.00	0.94			

Study: DIABCOG

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: COG SubArea: R11

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
99.00	1.00	1.00	0.000	
VDNDB04	grf			
112.00	1.00			
X39V3	grf			
64.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

DIABLOCC HABITAT DATA

10-20-1987

Model: RUFFED GROUSE

CoverType: COS SubArea: R10

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc--HSI			
4.60	1.E+03	0.00	0.000
VDNML01----			
912.00			
VDNDE01----			
21.33			
VDNSH01---^			
2058.67			
VHTNL01---grf-----usf-----			
6.40	1.00	0.19	
VHTDE01---grf-----			
3.58	0.67		
VHTSH04---grf-----			
1.91	0.13		
X86V2-----usf-----			
4.60	912.00		
VDNML01---^			
912.00			
VDNDE01----			
21.33			
VDNSH01---usf-----^			
2058.67	514.67		

Model: RUFFED GROUSE

CoverType: C06 SubArea: R11

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
4.60	2.E+03	0.00	0.000
VDNNL01			
192.00			
VDNDE01			
816.00			
VDNSH01			
3456.00			
VHTNL01	grf	usf	
45.73	1.00	0.21	
VHTDE01	grf		
6.30	1.00		
VHTSH04	grf		
2.07	0.19		
X86V2	usf		
4.60	192.00		
VDNNL01			
192.00			
VDNDE01			
816.00			
VDNSH01	usf		
3456.00	864.00		

Pileated Woodpecker, Marten, Ruffed Grouse, and Black-capped Chickadee
data for Old Growth Coniferous Forests on Ross (*Pre + Post Project*)

	COVER TYPE / SUB-AREA:			
VARIABLE:	COG P05	COG P17A	COG P31	COG P59
TSS01	6.000	6.000	6.000	6.000
VCVTR01	99.667	100.000	85.400	99.667
VCVMD01	7.367	4.900	6.300	10.200
VDBSN01	71.125	51.000	63.000	104.370
VDNDB04	149.330	96.000	176.000	298.667
VNDDE01	250.667	64.000	569.000	325.333
VNNL01	592.000	1616.000	624.000	3061.330
VNSH01	421.333	960.000	560.000	325.333
VNSN02	53.330	48.000	0.000	229.330
VNSN05	26.667	0.000	16.000	80.000
VHTDE01	7.209	4.650	6.098	15.471
VHTNL01	6.098	6.098	6.098	16.591
VHTSH04	1.996	1.845	1.955	1.512
VHTTR01	15.244	15.244	22.866	33.569
VRCEV01	98.700	100.000	100.000	92.700
X39V3	187.000	192.000	240.000	410.000
X86V2	4.600	4.600	4.600	4.600

Study: ROSSRM Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
COG	P05	80.2	0.778
COG	P17A	1.0	0.775
COG	P31	4.7	0.000
COG	P59	7.9	0.778

Overall: 93.8 0.739

Study: ROSSRM Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
COG	P05	80.2	0.827
COG	P17A	1.0	0.789
COG	P31	4.7	0.811
COG	P59	7.9	0.869

Overall: 93.8 0.829

Study: ROSSRM Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
COG	P05	80.2	0.000
COG	P17A	1.0	0.000
COG	P31	4.7	0.000
COG	P59	7.9	0.000

Overall: 93.8 0.000

Study: ROSSRM Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
COG	P05	80.2	0.924
COG	P17A	1.0	0.000
COG	P31	4.7	0.781
COG	P59	7.9	1.000

Overall: 93.8 0.913

Study name: ROSSRM 11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	93.8	0.739
MARTEN	93.8	0.829
RUFFED GROUSE	93.8	0.000
PILEATED WOODPECKER (western)	93.8	0.913

Study: ROSSCO6

10-18-1987

Model: PILEATED WOODPECKER (western)

CoverType: C06 SubArea: P05

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min HSI
99.67	1.00	1.00	0.924
VDNDB04	grf		
149.33	1.00		
X39V3	grf		
187.00	1.00		
VDNSN05	grf	gem	
26.67	1.00	0.92	
VDBSN01	grf		
71.13	0.85		

Study: ROSSCO6

10-18-1987

Model: PILEATED WOODPECKER (western)

CoverType: C06 SubArea: P17A

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min HSI
100.00	1.00	1.00	0.000
VDNDB04	grf		
96.00	1.00		
X39V3	grf		
192.00	1.00		
VDNSN05	grf	gem	
0.00	0.00	0.00	
VDBSN01	grf		
51.00	0.25		

Study: ROSSCO6

10-18-1987

Model: PILEATED WOODPECKER (western)

CoverType: C06 SubArea: P59

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
99.67	1.00	1.00	1.00	
VDNDB04	grf			
298.67	1.00			
X39V3	grf			
410.00	1.00			
VDNSN05	grf	gem		
80.00	1.00	1.00		
VDBSN01	grf			
104.37	1.00			

Study: ROSSCO6

10-18-1987

Model: PILEATED WOODPECKER (western)

CoverType: C06 SubArea: P31

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
85.40	1.00	1.00	0.781	
VDNDB04	grf			
176.00	1.00			
X39V3	grf			
240.00	1.00			
VDNSN05	grf	gem		
16.00	1.00	0.78		
VDBSN01	grf			
63.00	0.61			

Study: ROSSC06

10-18-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: C06 SubArea: P05

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
99.67	0.61	0.78	0.778
VHTTR01	grf		
15.24	1.00		
	VDNSN02	grf	
	53.33	1.00	

Study: ROSSC06

10-18-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: C06 SubArea: P17A

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
100.00	0.60	0.77	0.775
VHTTR01	grf		
15.24	1.00		
	VDNSN02	grf	
	48.00	1.00	

Study: ROSSC06

10-18-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: C06 SubArea: P31

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
85.40	0.83	0.91	0.000
VHTTR01	grf		
22.87	1.00		
	VDNSN02	grf	
	0.00	0.00	

Study: ROSSCOG

10-18-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: C06 SubArea: P59

[illegible]

Study: ROSSCOG

10-18-1987

Model: MARTEN

CoverType: COG SubArea: P05

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
99.67	1.00	0.827
VRCEV01	grf	
98.70	1.00	
TSS01	anu	
6.00	1.00	
VCVMD01	grf	^
7.37	0.68	

Study: ROSSCOG

10-18-1987

Model: MARTEN

CoverType: COG SubArea: P17A

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
100.00	1.00	0.789
VRCEV01	grf	
100.00	1.00	
TSS01	anu	
6.00	1.00	
VCVMD01	grf	^
4.90	0.62	

Study: ROSSCOG

10-18-1987

Model: MARTEN

CoverType: COG SubArea: P31

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
85.40	1.00	0.811
VRCEV01	grf	
100.00	1.00	
TSS01	anu	
6.00	1.00	
VCVMD01	grf	^
6.30	0.66	

Study: ROSSCO6

10-18-1987

Model: MARTEN

CoverType: COG SubArea: P59

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
99.67	1.00	0.869
VRCEV01	grf	
92.70	1.00	
TSS01	mu	
6.00	1.00	
VCVMD01	grf	^
10.20	0.76	

Model: RUFFED GROUSE

CoverType: COG SubArea: P05

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc-HSI			
4.60	948.00	0.00	0.000
VDNNL01---			
592.00			
VDNDE01---			
250.67			
VDNSH01---^			
421.33			
VHTNL01---grf-----usf-----^			
6.10	1.00	0.17	
VHTDE01---grf-----			
7.21	1.00		
VHTSH04---grf-----			
2.00	0.16		
X86V2-----usf-----			
4.60	592.00		
VDNNL01---^			
592.00			
VDNDE01---			
250.67			
VDNSH01---usf-----^			
421.33	105.33		

Model: RUFFED GROUSE

CoverType: C06 SubArea: P17A

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----	grf-----	prd--HSI	
4.60	2.E+03	0.00	0.000
VDNNL01---			
1616.00			
VDNDE01---			
64.00			
VDNSH01--^			
960.00			
VHTNL01--grf-----	usf-----		
6.10	1.00	0.34	
VHTDE01--grf-----			
4.55	1.00		
VHTSH04--grf-----			
1.85	0.11		
X86V2-----usf-----			
4.60	2.E+03		
VDNNL01--^			
1616.00			
VDNDE01---			
64.00			
VDNSH01--usf-----			
960.00	240.00		

Model: RUFFED GROUSE

CoverType: CGG SubArea: P31

LEV 4	LEV 3	LEV 2	LEV 1
X8SV2----	usf-----	grf-----	prd--hSI
4.50	1.E+03	0.00	0.000
VDNML01---			
624.00			
VDNDE01---			
569.00			
VDNSH01---			
560.00			
VHTML01---	grf-----	usf-----	
6.10	1.00	0.24	
VHTDE01---	grf-----		
6.10	1.00		
VHTSH04---	grf-----		
1.96	0.15		
X8SV2----	usf-----		
4.50	624.00		
VDNML01---			
624.00			
VDNDE01---			
569.00			
VDNSH01---	usf-----		
560.00	140.00		

Model: RUFFED GROUSE

CoverType: COG SubArea: P59

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd--HS1			
4.60	3.E+02	0.00	0.000
VDNRL01---			
3061.33			
VDNDE01---			
325.33			
VDNSH01---			
325.33			
VHTNL01---grf-----usf-----			
16.59	1.00	0.69	
VHTDE01---grf-----			
15.47	1.00		
VHTSH04---grf-----			
1.51	0.00		
X86V2-----usf-----			
4.60	3.E+03		
VDNRL01---			
3061.33			
VDNDE01---			
325.33			
VDNSH01---usf-----			
325.33	81.33		

GORGECC HABITAT DATA

11-23-1987

GORGE, PRE & POST PROJECT

HABITAT: CLOSED CANOPY CONIFER

SPECIES: BLACK-CAPPED CHICKADEE, MARTEN, PILEATED WOODPECKER, RUFFED GROUSE

COVER TYPE / SUB-AREA:

VARIABLE:	CC D21	CC D27	CC D34
TSS01	5.000	5.000	5.000
VCVTR01	96.000	92.600	88.800
VCVWD01	5.400	0.600	10.000
VDBSN01	51.000	51.000	51.000
VDNDB04	96.000	80.000	176.000
VDNDE01	416.000	320.000	352.000
VDNNL01	560.000	400.000	1312.000
VDNSH01	1936.000	1440.000	672.000
VDNSN02	96.000	16.000	32.000
VDNSN05	0.000	0.000	0.000
VHTDE01	8.292	10.366	6.098
VHTNL01	6.098	29.775	6.098
VHTSH04	1.480	2.210	1.935
VHTTR01	15.244	15.244	6.098
VRCEV01	100.000	93.305	94.820
X39V3	400.000	128.000	432.000
X86V2	4.600	4.600	4.600

Study: GORGECC Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
CC	D21	14.1	0.815
CC	D27	11.2	0.848
CC	D34	5.8	0.563

Overall: 31.2 0.779

Study: GORGECC Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
CC	D21	14.1	0.797
CC	D27	11.2	0.718
CC	D34	5.8	0.866

Overall: 31.2 0.781

Study: GORGECC Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
CC	D21	14.1	0.000
CC	D27	11.2	0.000
CC	D34	5.8	0.000

Overall: 31.2 0.000

Study: GORGECC Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
CC	D21	14.1	0.000
CC	D27	11.2	0.000
CC	D34	5.8	0.000

Overall: 31.2 0.000

Study name: GORGECC 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	31.2	0.779
MARTEN	31.2	0.781
RUFFED GROUSE	31.2	0.000
PILEATED WOODPECKER (western)	31.2	0.000

Study: GORGECC

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: D21

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
96.00	1.00	1.00	0.00	
VDNDB04	grf			
96.00	1.00			
X39V3	grf			
400.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: GORGECC

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: D27

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
92.60	1.00	1.00	0.00	
VDNDB04	grf			
80.00	1.00			
X39V3	grf			
128.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: GORGECC

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: D34

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
88.80	1.00	1.00	0.00	
VDNDB04	grf			
176.00	1.00			
X39V3	grf			
432.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: GORGECC

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: D21

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
96.00	0.66	0.81	0.815	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	96.00	1.00		

Study: GORGECC

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: D27

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
92.60	0.72	0.85	0.848	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	16.00	1.00		

Study: GORGECC

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: D34

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
88.80	0.78	0.56	0.563	
VHTTR01	grf			
6.10	0.41			
	VDNSN02	grf		
	32.00	1.00		

Study: GORGECC

11-23-1987

Model: MARTEN

CoverType: CC SubArea: D21

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
96.00	1.00	0.797
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
5.40	0.64	

Study: GORGECC

11-23-1987

Model: MARTEN

CoverType: CC SubArea: D27

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
92.60	1.00	0.718
VRCEV01---grf-----		
93.31	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
0.60	0.52	

Study: GORGECC

11-23-1987

Model: MARTEN

CoverType: CC SubArea: D34

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
88.80	1.00	0.866
VRCEV01---grf-----		
94.82	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
10.00	0.75	

Model: RUFFED GROUSE

CoverType: CC SubArea: D27

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
4.60	1.E+03	0.00	0.000
VDNNL01			
400.00			
VDNDE01			
320.00			
VDNSH01			
1440.00			
VHTNL01	grf	usf	
29.78	1.00	0.15	
VHTDE01	grf		
10.37	1.00		
VHTSH04	grf		
2.21	0.23		
X86V2	usf		
4.60	400.00		
VDNNL01			
400.00			
VDNDE01			
320.00			
VDNSH01	usf		
1440.00	360.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: D21

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
4.60	1.E+03	0.00	0.000
VDNML01			
560.00			
VDNDE01			
416.00			
VDNSH01			
1936.00			
VHTNL01	grf	usf	
6.10	1.00	0.20	
VHTDE01	grf		
8.29	1.00		
VHTSH04	grf		
1.48	0.00		
X86V2	usf		
4.60	560.00		
VDNML01			
560.00			
VDNDE01			
416.00			
VDNSH01	usf		
1936.00	484.00		

Study: GORBECC

11-17-1987

Model: RUFFED GROUSE

CoverType: CC SubArea: D34

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc-----HSI			
4.60	2.E+03	0.00	0.000
VDNML01-----			
1312.00			
VDNDE01-----			
352.00			
VDNSH01-----^			
672.00			
VHTNL01-----grf-----usf-----^			
6.10	1.00		0.34
VHTDE01-----grf-----			
6.10	1.00		
VHTSH04-----grf-----			
1.94	0.14		
X86V2-----usf-----			
4.60	1.E+03		
VDNML01-----^			
1312.00			
VDNDE01-----			
352.00			
VDNSH01-----usf-----^			
672.00	168.00		

DIABLO, PRE & POST PROJECT

HABITAT: CLOSED CANOPY CONIFER

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	CC R15	CC R16	CC R50
TSS01	5.000	5.000	5.000
VCVTR01	100.000	100.000	95.400
VCVWD01	7.650	4.300	5.600
VDBSN01	75.000	51.000	51.000
VDNDB04	135.000	64.000	144.000
VDNDE01	352.000	16.000	112.000
VDNHL01	512.000	1312.000	672.000
VDNSH01	1424.000	768.000	96.000
VDNSN02	40.000	144.000	48.000
VDNSN05	24.000	0.000	0.000
VHTDE01	11.826	3.049	10.264
VHTNL01	6.098	30.488	34.299
VHTSH04	2.768	1.470	1.180
VHTTR01	15.244	30.488	15.244
VRCEV01	99.000	100.000	100.000
X39V3	208.000	272.000	176.000
X86V2	4.600	3.235	4.600

Study: DIABLOCC Model: BLACK-CAPPED CHICKADEE (1)

11-23-1987

CoverType	SubArea	Area	HSI
CC	R15	55.6	0.775
CC	R16	29.0	0.775
CC	R50	4.6	0.821

Overall: 89.3 0.777

Study: DIABLOCC Model: MARTEN

11-23-1987

CoverType	SubArea	Area	HSI
CC	R15	55.6	0.831
CC	R16	29.0	0.779
CC	R50	4.6	0.800

Overall: 89.3 0.813

Study: DIABLOCC Model: RUFFED GROUSE

11-23-1987

CoverType	SubArea	Area	HSI
CC	R15	55.6	0.000
CC	R16	29.0	0.000
CC	R50	4.6	0.000

Overall: 89.3 0.000

Study: DIABLOCC Model: PILEATED WOODPECKER (western)

11-23-1987

CoverType	SubArea	Area	HSI
CC	R15	55.6	0.985
CC	R16	29.0	0.000
CC	R50	4.6	0.000

Overall: 89.3 0.614

Study name: DIABLOCC

11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	89.3	0.777
MARTEN	89.3	0.813
RUFFED GROUSE	89.3	0.000
PILEATED WOODPECKER (western)	89.3	0.614

Study: DIABLOCC

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: R15

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTRO1	grf	gem	min	HSI
100.00	0.60	0.77	0.775	
VHTTRO1	grf			
15.24	1.00			
	VDNSNO2	grf		
	40.00	1.00		

Study: DIABLOCC

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: R16

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTRO1	grf	gem	min	HSI
100.00	0.60	0.77	0.775	
VHTTRO1	grf			
30.49	1.00			
	VDNSNO2	grf		
	144.00	1.00		

Study: DIABLOCC

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: R50

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTRO1	grf	gem	min	HSI
95.40	0.67	0.82	0.821	
VHTTRO1	grf			
15.24	1.00			
	VDNSNO2	grf		
	41.00	1.00		

Study: DIABLOCC

11-23-1987

Model: MARTEN

CoverType: CC SubArea: R15

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
100.00	1.00	0.831
VRCEV01	grf	
99.00	1.00	
TSS01	nu	
5.00	1.00	
VCVWD01	grf	^
7.65	0.69	

Study: DIABLOCC

11-23-1987

Model: MARTEN

CoverType: CC SubArea: R16

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
100.00	1.00	0.779
VRCEV01	grf	
100.00	1.00	
TSS01	nu	
5.00	1.00	
VCVWD01	grf	^
4.30	0.61	

Study: DIABLOCC

11-23-1987

Model: MARTEN

CoverType: CC SubArea: R50

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
95.40	1.00	0.800
VRCEV01	grf	
100.00	1.00	
TSS01	nu	
5.00	1.00	
VCVWD01	grf	^
5.60	0.64	

Study: DIABLOCC

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: R15

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
100.00	1.00	1.00	0.985	
VDNDB04	grf			
136.00	1.00			
X39V3	grf			
208.00	1.00			
VDNSN05	grf	gem		
24.00	1.00	0.98		
VDBSN01	grf			
75.00	0.97			

Study: DIABLOCC

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: R16

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
100.00	1.00	0.91	0.000	
VDNDB04	grf			
64.00	0.84			
X39V3	grf			
272.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: DIABLOCC

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: R50

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
95.40	1.00	1.00	0.000	
VDNDB04	grf			
144.00	1.00			
X39V3	grf			
176.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Model: RUFFED GROUSE

CoverType: CC SubArea: R15

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
4.60	1.E+03	0.00	0.000
VDNML01			
512.00			
VDNDE01			
352.00			
VDNSH01			
1424.00			
VHTNL01	grf	usf	
5.10	1.00	0.18	
VHTDE01	grf		
11.83	1.00		
VHTSH04	grf		
2.77	0.41		
X86V2	usf		
4.60	512.00		
VDNML01			
512.00			
VDNDE01			
352.00			
VDNSH01	usf		
1424.00	352.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: R16

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
3.24	3.E+03	0.00	0.000
VDNML01----			
1312.00			
VDNDE01----			
16.00			
VDNSH01-----^			
768.00			
VHTNL01-----grf-----usf-----^			
30.49	1.00		0.57
VHTDE01-----grf-----			
3.05	0.50		
VHTSH04-----grf-----			
1.47	0.00		
X86V2-----usf-----			
3.24	3.E+03		
VDNML01-----^			
1312.00			
VDNDE01----			
16.00			
VDNSH01-----usf-----^			
768.00	192.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: R50

LEV 4	LEV 3	LEV 2	LEV 1	
X86V2	usf	grf	prd	HSI
4.60	808.00	0.00	0.000	
VDNML01				
672.00				
VDNDE01				
112.00				
VDNSH01				
96.00				
VHTNL01	grf	usf		
34.30	1.00	0.16		
VHTDE01	grf			
10.26	1.00			
VHTSH04	grf			
1.18	0.00			
X86V2	usf			
4.60	672.00			
VDNML01				
672.00				
VDNDE01				
112.00				
VDNSH01	usf			
96.00	24.00			

ROSSCC HABITAT DATA

10-19-1987

Pre-Post Project - Raas

habitat: Mature Closed Canopy Conifer

Species: marlin, pileated woodpecker, rufled grouse, black-capped chickadee

VARIABLE:	COVER TYPE / SUB-AREA:					
	CC H32	CC H60	CC H74	CC P17	CC P44	CC P49
TSS01	5.000	5.000	5.000	5.000	5.000	5.000
VCVTR01	79.800	52.000	95.733	100.000	82.000	78.200
VCVWD01	1.900	0.000	12.267	8.200	1.000	1.400
VDNSN01	51.000	51.000	51.000	51.000	51.000	51.000
VDNDB04	80.000	0.000	10.667	128.000	0.000	0.000
VDNDE01	608.000	720.000	325.333	0.000	80.000	144.000
VDNNL01	544.000	224.000	3447.330	896.000	1184.000	1296.000
VDNSH01	3632.000	3392.000	32.000	32.000	1328.000	1312.000
VDNSN02	16.000	0.000	80.000	0.000	32.000	48.000
VDNSN05	0.000	0.000	0.000	0.000	0.000	0.000
VHTDE01	9.273	7.165	5.590	0.000	7.571	6.436
VHTNL01	6.100	10.173	6.098	6.098	6.098	6.098
VHTSH04	3.045	2.220	2.324	1.690	2.325	2.340
VHTTR01	15.244	13.052	15.244	15.244	15.244	15.976
VRCEV01	100.000	92.700	100.000	100.000	100.000	100.000
X39V3	32.000	448.000	314.000	96.000	32.000	0.000
X86V2	4.600	0.560	4.103	4.600	4.600	4.600

VARIABLE:	COVER TYPE / SUB-AREA:		
	CC P52	CC P65	CC R94
TSS01	5.000	5.000	5.000
VCVTR01	100.000	89.500	95.800
VCVWD01	19.900	9.367	2.800
VDNSN01	81.333	51.000	51.000
VDNDB04	640.000	42.667	80.000
VDNDE01	336.000	853.333	256.000
VDNNL01	3072.000	1317.333	720.000
VDNSH01	304.000	4640.000	608.000
VDNSN02	352.000	128.000	80.000
VDNSN05	48.000	0.000	0.000
VHTDE01	9.272	13.320	6.098
VHTNL01	17.470	26.000	6.098
VHTSH04	2.171	2.098	2.165
VHTTR01	17.470	15.244	15.244
VRCEV01	98.000	82.400	97.500
X39V3	240.000	251.000	160.000
X86V2	4.600	3.587	4.600

Study: ROSSCC Model: BLACK-CAPPED CHICKADEE (1)

11-17-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	0.961
CC	H60	53.4	0.000
CC	H74	21.9	0.817
CC	P17	44.7	0.000
CC	P44	54.6	0.942
CC	P49	10.4	0.974
CC	P52	3.9	0.775
CC	P65	10.4	0.876
CC	R94	24.3	0.817

Overall: 233.8 0.519

Study: ROSSCC Model: MARTEN

11-17-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	0.740
CC	H60	53.4	0.707
CC	H74	21.9	0.898
CC	P17	44.7	0.840
CC	P44	54.6	0.725
CC	P49	10.4	0.731
CC	P52	3.9	0.999
CC	P65	10.4	0.857
CC	R94	24.3	0.755

Overall: 233.8 0.773

Study: ROSSCC Model: RUFFED GROUSE

11-17-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	0.000
CC	H60	53.4	0.000
CC	H74	21.9	1.000
CC	P17	44.7	0.000
CC	P44	54.6	0.000
CC	P49	10.4	0.000
CC	P52	3.9	0.000
CC	P65	10.4	0.017
CC	R94	24.3	0.000

Overall: 233.8 0.094

Study: ROSSDC Model: PILEATED WOODPECKER (western)

11-17-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	0.000
CC	H60	53.4	0.000
CC	H74	21.9	0.000
CC	P17	44.7	0.000
CC	P44	54.6	0.000
CC	P49	10.4	0.000
CC	P52	3.9	1.000
CC	P65	10.4	0.000
CC	R94	24.3	0.000

Overall: 233.8 0.017

Study name: ROSSDC

11-17-1987

HSI values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	233.8	0.519
MARTEN	233.8	0.773
RUFFED GROUSE	233.8	0.094
PILEATED WOODPECKER (western)	233.8	0.017

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: H32

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
79.80	0.92	0.96	0.961	
VHTTR01	grf			
15.24	1.00			
	VDNSNO2	grf		
	16.00	1.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: H60

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
52.00	1.00	0.93	0.000	
VHTTR01	grf			
13.05	0.87			
	VDNSNO2	grf		
	0.00	0.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: H74

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
95.73	0.67	0.82	0.817	
VHTTR01	grf			
15.24	1.00			
	VDNSNO2	grf		
	80.00	1.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: P17

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTRO1	grf	gem	min	HSI
100.00	0.60	0.77	0.000	
VHTTRO1	grf			
15.24	1.00			
	VDNSNO2	grf		
	0.00	0.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: P44

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTRO1	grf	gem	min	HSI
82.00	0.89	0.94	0.942	
VHTTRO1	grf			
15.24	1.00			
	VDNSNO2	grf		
	32.00	1.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: P49

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTRO1	grf	gem	min	HSI
78.20	0.95	0.97	0.974	
VHTTRO1	grf			
15.98	1.00			
	VDNSNO2	grf		
	48.00	1.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: P52

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
100.00	0.60	0.77	0.775	
VHTTR01	grf			
17.47	1.00			
	VDNSN02	grf		
	352.00	1.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: P65

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
89.50	0.77	0.88	0.876	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	128.00	1.00		

Study: ROSSCC

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: CC SubArea: R94

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
95.80	0.67	0.82	0.817	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	80.00	1.00		

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: H32

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
79.80	1.00	0.740
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
1.90	0.55	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: H60

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
52.00	1.00	0.707
VRCEV01---grf-----		
92.70	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
0.00	0.50	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: H74

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
95.73	1.00	0.898
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
12.27	0.81	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: P17

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
100.00	1.00	0.840
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
8.20	0.71	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: P44

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
82.00	1.00	0.725
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
1.00	0.53	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: P49

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
78.20	1.00	0.731
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
1.40	0.54	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: P52

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
100.00	1.00	0.999
VRCEV01---grf-----		
98.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
19.90	1.00	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: P65

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
89.50	1.00	0.857
VRCEV01---grf-----		
82.40	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
9.37	0.73	

Study: ROSSCC

10-19-1987

Model: MARTEN

CoverType: CC SubArea: R94

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
95.80	1.00	0.755
VRCEV01---grf-----		
97.50	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
2.80	0.57	

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: H32

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
79.80	1.00	1.00	0.00	
VDNDB04	grf			
80.00	1.00			
X39V3	grf			
32.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: H60

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
52.00	0.54	0.00	0.00	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
448.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: H74

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
95.73	1.00	0.22	0.00	
VDNDB04	grf			
10.67	0.05			
X39V3	grf			
314.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: P17

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
100.00	1.00	1.00	0.000	
VDNDB04	grf			
128.00	1.00			
X39V3	grf			
96.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: P44

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
82.00	1.00	0.00	0.000	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
32.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: P49

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
78.20	1.00	0.00	0.000	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
0.00	0.30			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: P52

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
100.00	1.00	1.00	1.000	
VDNDB04	grf			
640.00	1.00			
X39V3	grf			
240.00	1.00			
VDNSN05	grf	gem		
48.00	1.00	1.00		
VDBSN01	grf			
81.33	1.00			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: P65

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
89.50	1.00		0.72	0.000
VDNDB04	grf			
42.67	0.52			
X39V3	grf			
251.00	1.00			
VDNSN05	grf	gem		
0.00	0.00		0.00	
VDBSN01	grf			
51.00	0.25			

Study: ROSSCC

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: CC SubArea: R94

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
95.80	1.00		1.00	0.000
VDNDB04	grf			
80.00	1.00			
X39V3	grf			
160.00	1.00			
VDNSN05	grf	gem		
0.00	0.00		0.00	
VDBSN01	grf			
51.00	0.25			

Model: RUFFED GROUSE

CoverType: CC SubArea: H32

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-HSI			
4.60	2.E+03	0.00	0.000
VDNML01---			
544.00			
VDNDE01---			
608.00			
VDNSH01---^			
3632.00			
VHTNL01---grf-----usf-----^			
6.10	1.00	0.24	
VHTDE01---grf-----			
9.27	1.00		
VHTSH04---grf-----			
3.05	0.50		
X86V2-----usf-----			
4.50	544.00		
VDNML01---^			
544.00			
VDNDE01---			
608.00			
VDNSH01---usf-----^			
3632.00	908.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: H60

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
0.56	2.E+03	0.00	0.000
VDNML01			
224.00			
VDNDE01			
720.00			
VDNSH01			
3392.00			
VHTNL01	grf	usf	
10.17	1.00	0.33	
VHTDE01	grf		
7.62	1.00		
VHTSH04	grf		
2.22	0.23		
X86V2	usf		
0.56	896.00		
VDNML01			
224.00			
VDNDE01			
720.00			
VDNSH01	usf		
3392.00	848.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: H74

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-HSI			
4.10	5.E+03	1.00	1.000
	1.		
VDNML01---			
3447.33			
VDNDE01---			
325.33			
VDNSH01--^			
32.00			
VHTNL01--grf-----usf-----^			
6.10	1.00	1.00	
VHTDE01--grf-----			
5.59	1.00		
VHTSH04--grf-----			
2.32	0.27		
X86V2-----usf-----			
4.10	5.E+03		
VDNML01--^			
3447.33			
VDNDE01---			
325.33			
VDNSH01--usf-----^			
32.00	8.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: P17

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----	grf-----	prd-----	HSI
4.60	904.00	0.00	0.000
VDNML01-----			
896.00			
VDNDE01-----			
0.00			
VDNSH01-----^			
32.00			
VHTNL01-----grf-----	usf-----		
6.10	1.00	0.18	
VHTDE01-----grf-----			
0.00	0.00		
VHTSH04-----grf-----			
1.69	0.06		
X86V2-----usf-----			
4.60	896.00		
VDNML01-----^			
896.00			
VDNDE01-----			
0.00			
VDNSH01-----usf-----			
32.00	8.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: P44

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd
4.60	2.E+03	0.00	0.000
VDNML01			
1184.00			
VDNDE01			
80.00			
VDNSH01			
1328.00			
VHTNL01	grf	usf	
6.10	1.00	0.25	
VHTDE01	grf		
7.57	1.00		
VHTSH04	grf		
2.33	0.27		
X86V2	usf		
4.60	1.E+03		
VDNML01			
1184.00			
VDNDE01			
80.00			
VDNSH01	usf		
1328.00	332.00		

Model: RUFFED GROUSE

CoverType: CC SubArea: P49

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd--HSI			
4.60	2.E+03	0.00	0.000
VDNNL01----			
1296.00			
VDNDE01----			
144.00			
VDNSH01----			
1312.00			
VHTNL01---grf-----usf-----			
6.10	1.00	0.29	
VHTDE01---grf-----			
6.44	1.00		
VHTSH04---grf-----			
2.34	0.27		
X86V2-----usf-----			
4.60	1.E+03		
VDNNL01----			
1296.00			
VDNDE01----			
144.00			
VDNSH01---usf-----			
1312.00	328.00		

Model: RUFFED GROUSE

CoverType: CD SubArea: P52

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc-----HSI			
4.60	3.E+03	0.00	0.000
VDNML01----			
3072.00			
VDNDE01----			
336.00			
VDNSH01-----^			
304.00			
VHTNL01-----grf-----usf-----			
17.47	1.00	0.70	
VHTDE01-----grf-----			
9.27	1.00		
VHTSH04-----grf-----			
2.17	0.22		
X86V2-----usf-----			
4.60	3.E+03		
VDNML01-----^			
3072.00			
VDNDE01----			
336.00			
VDNSH01-----usf-----			
304.00	76.00		

Model: RUFFED GROUSE

CoverType: DC SubArea: P65

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
3.59	4.E+03	0.03	0.017
VDNNL01----			
1317.33			
VDNDE01----			
853.33			
VDNSH01----			
4540.00			
VHTNL01-----grf-----usf-----			
26.00	1.00	0.56	
VHTDE01-----grf-----			
13.32	1.00		
VHTSH04-----grf-----			
2.10	0.19		
X86V2-----usf-----			
3.59	2.E+03		
VDNNL01----			
1317.33			
VDNDE01----			
853.33			
VDNSH01-----usf-----			
4540.00	1.E+03		

Model: RUFFED GROUSE

CoverType: CC SubArea: R94

LEV 4	LEV 3	LEV 2	LEV 1
X86V2----	usf-----	grf-----	prd-----HSI
4.60	1.E+03	0.00	0.000
VDNNL01----			
720.00			
VDNDE01----			
256.00			
VDNSH01----			
608.00			
VHTNL01----	grf-----	usf-----	
6.10	1.00	0.20	
VHTDE01----	grf-----		
6.10	1.00		
VHTSH04----	grf-----		
2.17	0.21		
X86V2----	usf-----		
4.60	720.00		
VDNNL01----			
720.00			
	VDNDE01----		
	256.00		
	VDNSH01----	usf-----	
	608.00	152.00	

DIABLOOC HABITAT DATA

11-23-1987

DIABLO, PRE & POST PROJECT

HABITAT: OPEN CANOPY CONIFER

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	DC D43	DC R49	DC R71
TSS01	5.000	5.000	5.000
VCVTR01	40.800	55.500	36.000
VCVWD01	1.800	0.000	1.000
VDBSN01	51.000	51.000	51.000
VDNDB04	0.000	16.000	48.000
VDNDE01	160.000	128.000	0.000
VDNHL01	128.000	16.000	96.000
VDNSH01	112.000	752.000	352.000
VDNSN02	0.000	16.000	0.000
VDNSN05	0.000	0.000	0.000
VHTDE01	6.098	11.303	0.000
VHTNL01	6.098	6.098	6.098
VHTSH04	1.667	1.837	1.885
VHTTR01	15.244	15.244	15.244
VACEV01	100.000	85.045	100.000
X39V3	32.000	0.000	0.000
X86V2	0.733	3.756	2.595

Study: DIABLOOC Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
OC	D43	1.9	0.000
OC	R49	2.2	1.000
OC	R71	3.9	0.000

Overall: 8.0 0.279

Study: DIABLOOC Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
OC	D43	1.9	0.587
OC	R49	2.2	0.707
OC	R71	3.9	0.481

Overall: 8.0 0.569

Study: DIABLOOC Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
OC	D43	1.9	0.000
OC	R49	2.2	0.000
OC	R71	3.9	0.000

Overall: 8.0 0.000

Study: DIABLOOC Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
OC	D43	1.9	0.000
OC	R49	2.2	0.000
OC	R71	3.9	0.000

Overall: 8.0 0.000

Study name: DIABLOOC 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	8.0	0.279
MARTEN	8.0	0.569
RUFFED GROUSE	8.0	0.000
PILEATED WOODPECKER (western)	8.0	0.000

Study: DIABLOOC

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: OC SubArea: D43

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
40.80	0.82	0.90	0.000	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	0.00	0.00		

Study: DIABLOOC

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: OC SubArea: R49

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
55.50	1.00	1.00	1.000	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	16.00	1.00		

Study: DIABLOOC

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: OC SubArea: R71

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
36.00	0.72	0.85	0.000	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	0.00	0.00		

Study: DIABLOOC

11-23-1987

Model: MARTEN

CoverType: OC SubArea: D43

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf---HSI		
40.80	0.63	0.587
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVMD01---grf-----^		
1.80	0.55	

Study: DIABLOOC

11-23-1987

Model: MARTEN

CoverType: OC SubArea: R49

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf---HSI		
55.50	1.00	0.707
VRCEV01---grf-----		
85.05	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVMD01---grf-----^		
0.00	0.50	

Study: DIABLOOC

11-23-1987

Model: MARTEN

CoverType: OC SubArea: R71

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf---HSI		
36.00	0.44	0.481
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVMD01---grf-----^		
1.00	0.53	

Study: DIABLOOC

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: OC SubArea: D43

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
40.80	0.32	0.00	0.00	0.000
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
32.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: DIABLOOC

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: OC SubArea: R49

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
55.50	0.61	0.15	0.00	0.000
VDNDB04	grf			
16.00	0.13			
X39V3	grf			
0.00	0.30			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: DIABLOOC

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: OC SubArea: R71

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
36.00	0.22	0.20	0.00	0.000
VDNDB04	grf			
48.00	0.60			
X39V3	grf			
0.00	0.30			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Model: RUFFED GROUSE

CoverType: CC SubArea: D43

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prf-----HSI			
0.73	700.00	0.00	0.000
VDNML01---			
128.00			
VDNDE01---			
160.00			
VDNSH01---			
112.00			
VHTNL01---grf-----usf-----			
6.10	1.00	0.14	
VHTDE01---grf-----			
6.10	1.00		
VHTSH04---grf-----			
1.67	0.05		
X86V2-----usf-----			
0.73	512.00		
VDNML01---			
128.00			
VDNDE01---			
160.00			
VDNSH01---usf-----			
112.00	28.00		

Model: RUFFED GROUSE

CoverType: DC SubArea: R49

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
3.76	342.95	0.00	0.000
VDNML01			
16.00			
VDNDE01			
128.00			
VDNSH01			
752.00			
VHTNL01	grf	usf	
6.10	1.00	0.03	
VHTDE01	grf		
11.30	1.00		
VHTSH04	grf		
1.84	0.11		
X86V2	usf		
3.76	26.95		
VDNML01			
16.00			
VDNDE01			
128.00			
VDNSH01	usf		
752.00	188.00		

Model: RUFFED GROUSE

CoverType: DC SubArea: R71

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prf-----HSI			
2.60	340.07	0.00	0.000
VDNML01---			
96.00			
VDNDE01---			
0.00			
VDNSH01---^			
352.00			
VHTNL01---grf-----usf-----			
6.10	1.00	0.05	
VHTDE01---grf-----			
0.00	0.00		
VHTSH04---grf-----			
1.89	0.12		
X86V2-----usf-----			
2.60	252.07		
VDNML01---^			
96.00			
VDNDE01---			
0.00			
VDNSH01---usf-----			
352.00	88.00		

BORGEDC HABITAT DATA

11-23-1987

BORGE, PRE & POST PROJECT

HABITAT: OPEN CANOPY CONIFER

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

OC

VARIABLE:	D29
TSS01	5.000
VCVTR01	59.000
VCVWD01	0.300
VDBSN01	51.000
VDNDB04	0.000
VDNDE01	144.000
VDNHL01	144.000
VDNSH01	2304.000
VDNSN02	16.000
VDNSN05	0.000
VHTDE01	9.450
VHTNL01	17.356
VHTSH04	2.185
VHTTR01	18.764
VRDEV01	100.000
X39V3	0.000
X86V2	0.895

Study: GORGE DC Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
DC	D29	6.4	1.000

Overall: 6.4 1.000

Study: GORGE DC Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
DC	D29	6.4	0.712

Overall: 6.4 0.712

Study: GORGE DC Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
DC	D29	6.4	0.000

Overall: 6.4 0.000

Study: GORGE DC Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
DC	D29	6.4	0.000

Overall: 6.4 0.000

Study name: GORGE DC 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	6.4	1.000
MARTEN	6.4	0.712
RUFFED GROUSE	6.4	0.000
PILEATED WOODPECKER (western)	6.4	0.000

Study: GORGE0C

11-22-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: 0C SubArea: D29

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
59.00	1.00	1.00	1.000
VHTTR01	grf		
18.75	1.00		
VDNSN02	grf		
15.00	1.00		

Study: GORGE0C

11-23-1987

Model: MARTEN

CoverType: 0C SubArea: D29

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
59.00	1.00	0.712
VRCEV01	grf	
100.00	1.00	
TSS01	anu	
5.00	1.00	
VCWMD01	grf	
0.30	0.51	

Model: RUFFED GROUSE

CoverType: DC SubArea: D29

	LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prf	HSI
	0.90	1.E+03	0.00	0.000
VDNML01	144.00			
VDNDE01	144.00			
VDNSH01	2304.00			
VHTNL01	grf	usf		
	17.35	1.00	0.15	
VHTDE01	grf			
	9.45	1.00		
VHTSH04	grf			
	2.19	0.22		
X86V2	usf			
	0.90	576.00		
VDNML01	144.00			
VDNDE01	144.00			
VDNSH01	usf			
	2304.00	576.00		

Study: GORGEOC

11-22-1987

Model: PILEATED WOODPECKER (western)

CoverType: DC SubArea: D29

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min HSI
59.00	0.68	0.00	0.000
VDNDB04	grf		
0.00	0.00		
X39V3	grf		
0.00	0.30		
VDNSN05	grf	gem	
0.00	0.00	0.00	
VDBSN01	grf		
51.00	0.25		

ROSS, POST PROJECT + *PRE PROJECT*HABITAT: *Open Canopy Conifer*

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	OC H25	OC H30	OC P68
TSS01	5.000	5.000	5.000
VCVTR01	78.000	5.400	31.200
VCVWD01	2.550	0.333	0.000
VDBSN01	51.000	51.000	51.000
VDNDB04	48.000	5.330	0.000
VDNDE01	3672.000	1573.330	28800.000
VDNML01	448.000	69.333	208.000
VDNSH01	1096.000	10.667	64.000
VDNSN02	16.000	5.333	32.000
VDNSN05	0.000	0.000	0.000
VHTDE01	4.029	6.098	10.777
VHTNL01	12.386	6.098	10.777
VHTSH04	1.553	1.460	1.570
VHTTR01	19.245	15.244	12.835
VRCEV01	100.000	66.667	58.333
X39V3	216.000	16.000	0.000
X86V2	4.600	2.372	0.800

Study: ROSS OC Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	0.976
OC	H30	7.0	0.329
OC	P68	1.1	0.731

Overall: 12.1 0.582

Study: ROSS OC Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	0.751
OC	H30	7.0	0.000
OC	P68	1.1	0.352

Overall: 12.1 0.283

Study: ROSS OC Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	0.000
OC	H30	7.0	0.000
OC	P68	1.1	0.000

Overall: 12.1 0.000

Study: ROSS OC Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	0.000
OC	H30	7.0	0.000
OC	P68	1.1	0.000

Overall: 12.1 0.000

Study name: ROSS OC 11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	12.1	0.582
MARTEN	12.1	0.283
RUFFED GROUSE	12.1	0.000
PILEATED WOODPECKER (western)	12.1	0.000

Study: ROSS DC

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: DC SubArea: H25

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
78.00	0.95	0.98	0.976	
VHTTR01	grf			
19.25	1.00			
VDNSN02	grf			
16.00	1.00			

Study: ROSS DC

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: DC SubArea: H30

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
5.40	0.11	0.33	0.329	
VHTTR01	grf			
15.24	1.00			
VDNSN02	grf			
5.33	1.00			

Study: ROSS DC

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: DC SubArea: P68

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
31.20	0.62	0.73	0.731	
VHTTR01	grf			
12.84	0.86			
VDNSN02	grf			
32.00	1.00			

Study: ROSS OC

11-10-1987

Model: MARTEN

CoverType: OC SubArea: H25

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
78.00	1.00	0.751
VRCEV01	grf	
100.00	1.00	
TSS01	anu	
5.00	1.00	
VCVMD01	grf	
2.55	0.56	

Study: ROSS OC

11-10-1987

Model: MARTEN

CoverType: OC SubArea: H30

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
5.40	0.00	0.000
VRCEV01	grf	
66.67	1.00	
TSS01	anu	
5.00	1.00	
VCVMD01	grf	
0.33	0.51	

Study: ROSS OC

11-10-1987

Model: MARTEN

CoverType: OC SubArea: P68

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
31.20	0.25	0.352
VRCEV01	grf	
58.33	1.00	
TSS01	anu	
5.00	1.00	
VCVMD01	grf	
0.00	0.50	

Study: ROSS DC

11-10-1987

Model: PILEATED WOODPECKER (western)

CoverType: DC SubArea: H25

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
78.00	1.00	0.77	0.00	
VDNDB04	grf			
48.00	0.60			
X39V3	grf			
216.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSS DC

11-10-1987

Model: PILEATED WOODPECKER (western)

CoverType: DC SubArea: H30

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
5.40	0.00	0.00	0.00	
VDNDB04	grf			
5.33	0.00			
X39V3	grf			
16.00	0.75			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSS DC

11-10-1987

Model: PILEATED WOODPECKER (western)

CoverType: DC SubArea: P68

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
31.20	0.12	0.00	0.00	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
0.00	0.30			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Model: RUFFED GROUSE

CoverType: OC SubArea: H25

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc-----HS1			
4.60	4.E+03	0.00	0.000
VDNML01-----			
448.00			
VDNDE01-----			
3672.00			
VDNSH01-----^			
1096.00			
VHTNL01-----grf-----usf-----^			
12.39	1.00	0.70	
VHTDE01-----grf-----			
4.03	0.82		
VHTSH04-----grf-----			
1.55	0.02		
X86V2-----usf-----			
4.60	448.00		
VDNML01-----^			
448.00			
VDNDE01-----			
3672.00			
VDNSH01-----usf-----^			
1096.00	274.00		

Model: RUFFED GROUSE

CoverType: DC SubArea: H30

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
2.37	2.E+03	0.00	0.000
VDNML01----			
69.33			
VDNDE01----			
1573.33			
VDNSH01-----^			
10.67			
VHTNL01-----grf-----usf-----^			
6.10	1.00	0.36	
VHTDE01-----grf-----			
6.10	1.00		
VHTSH04-----grf-----			
1.46	0.00		
X86V2-----usf-----			
2.37	194.59		
VDNML01-----^			
69.33			
VDNDE01-----			
1573.33			
VDNSH01-----usf-----^			
10.67	2.67		

Study: ROSS DC

11-10-1987

Model: RUFFED GROUSE

CoverType: DC SubArea: P68

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
0.80	3. E+04	0.00	0.000
VDNML01---			
208.00			
VDNDE01---			
28800.00			
VDNSH01---^			
64.00			
VHTNL01---grf-----usf-----^			
10.78	1.00	1.00	
VHTDE01---grf-----			
10.78	1.00		
VHTSH04---grf-----			
1.57	0.02		
X86V2-----usf-----			
0.80	832.00		
VDNML01---^			
208.00			
VDNDE01---			
28800.00			
VDNSH01---usf-----^			
64.00	16.00		

RC
ROSSOC HABITAT DATA

10-19-1987

ROSS POST-PROJECT & PRE-PROJECT + DIABLO PRE- & POST PROJECT + GORGE PRE-PROJECT
COVER TYPE: Regenerative Conifer
SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE

	COVER TYPE / SUB-AREA:			
VARIABLE:	RC H22	RC H39	RC H53	RC H64A
TSS01	*****	*****	*****	*****
VCVTR01	34.600	81.800	92.267	96.200
VCVWD01	*****	*****	*****	*****
VDBSN01	*****	*****	*****	*****
VDNDB04	*****	*****	*****	*****
VDNDE01	80.000	1504.000	768.000	576.000
VDNNL01	624.000	992.000	1360.000	5712.000
VDNSH01	2432.000	8800.000	645.333	10000.000
VDNSN02	0.000	0.000	10.667	0.000
VDNSN05	*****	*****	*****	*****
VHTDE01	3.150	8.783	5.170	6.640
VHTNL01	6.098	8.544	7.254	8.918
VHTSH04	2.095	2.165	1.129	1.625
VHTTR01	9.858	14.869	12.226	10.283
VRCEV01	*****	*****	*****	*****
X39V3	*****	*****	*****	*****
X86V2	0.710	0.964	2.069	1.440

Study: ROSSRC Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
RC	H22	3.1	0.000
RC	H39	27.8	0.000
RC	H53	14.4	0.768
RC	H64A	6.3	0.000

Overall: 51.6 0.215

Study: ROSSRC Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: ROSSRC Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
RC	H22	3.1	0.000
RC	H39	27.8	1.000
RC	H53	14.4	1.000
RC	H64A	6.3	0.000

Overall: 51.6 0.818

Study: ROSSRC Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: ROSSRC 11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	51.6	0.215
MARTEN	0.0	0.000
RUFFED GROUSE	51.6	0.818
PILEATED WOODPECKER (western)	0.0	0.000

Study: ROSSRC

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: RC SubArea: H22

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
34.60	0.69	1	0.67	1
				0.000
VHTTR01	grf			
9.86	0.66			
VDNSN02	grf			
0.00	0.00			

Study: ROSSRC

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: RC SubArea: H39

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
81.80	0.89	1	0.94	1
				0.000
VHTTR01	grf			
14.87	0.99			
VDNSN02	grf			
0.00	0.00			

Study: ROSSRC

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: RC SubArea: H53

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
92.27	0.72	1	0.77	1
				0.768
VHTTR01	grf			
12.23	0.82			
VDNSN02	grf			
10.67	1.00			

Study: ROSSRC

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: RC SubArea: H64A

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gas	min HSI
96.20	0.66	0.67	0.000
VHTTR01	grf		
10.28	0.69		
VDNSN02	grf		
0.00	0.00		

Study: ROSSRC

11-10-1987

Model: RUFFED GROUSE

CoverType: RC SubArea: H22

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
0.71	3.E+03	0.00	0.000
VNNL01			
624.00			
VNDE01			
80.00			
VNSH01			
2432.00			
WITNL01	grf	usf	
6.10	1.00	0.52	
WITDE01	grf		
3.15	0.53		
WITSH04	grf		
2.10	0.19		
X86V2	usf		
0.71	2.E+03		
VNNL01			
624.00			
VNDE01			
80.00			
VNSH01	usf		
2432.00	608.00		

Model: RUFFED GROUSE

CoverType: RC SubArea: H39

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HS1
0.96	8.E+03	1.00	1.000
VDNML01			
992.00			
VDNDE01			
1504.00			
VDNSH01			
8800.00			
VHTNL01	grf	usf	
8.54	1.00	1.00	
VHTDE01	grf		
8.78	1.00		
VHTSH04	grf		
2.17	0.21		
X86V2	usf		
0.96	4.E+03		
VDNML01			
992.00			
VDNDE01			
1504.00			
VDNSH01	usf		
8800.00	2.E+03		

Study: ROSSRC

11-10-1987

Model: RUFFED GROUSE

CoverType: RC SubArea: H53

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prnd--HSI			
2.07	5.E+03	1.00	1.000
VDNML01---			
1360.00			
VDNDE01---			
768.00			
VDNSH01---^			
645.33			
VHTNL01---grf-----usf-----^			
7.25	1.00	1.00	
VHTDE01---grf-----			
5.17	1.00		
VHTSH04---grf-----			
1.13	0.00		
X86V2-----usf-----			
2.07	4.E+03		
VDNML01---^			
1360.00			
VDNDE01---			
768.00			
VDNSH01---usf-----^			
645.33	161.33		

Model: RUFFED GROUSE

CoverType: RC SubArea: H64A

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prf-----HSI			
1.44	2.E+04	0.00	0.000
VDNML01----			
5712.00			
VDNDE01----			
576.00			
VDNSH01-----^			
10000.00			
VHTNL01-----grf-----usf-----^			
8.92	1.00	1.00	
VHTDE01-----grf-----			
6.64	1.00		
VHTSH04-----grf-----			
1.63	0.04		
X86V2-----usf-----			
1.44	2.E+04		
VDNML01-----^			
5712.00			
VDNDE01----			
576.00			
VDNSH01-----usf-----^			
10000.00	3.E+03		

ROSS, PRE & POST PROJECT

HABITAT: *Lodgepole Pine*

SPECIES: BLACK-CAPPED CHICKADEE, MARTEN, RUFFED GROUSE

COVER TYPE / SUB-AREA:

VARIABLE:	LP P33	LP P84	LP P98
TSS01	5.000	5.000	5.000
VDNTR01	70.800	74.000	42.900
VCVWD01	0.600	3.400	0.333
VDNSN01	*****	*****	*****
VDNDB04	*****	*****	*****
VDNDE01	45.000	704.000	10.667
VDNNL01	2384.000	5760.000	2171.667
VDNSH01	48.000	704.000	10.667
VDNSN02	0.000	0.000	181.333
VDNSN05	*****	*****	*****
VHTDE01	0.000	11.715	0.000
VHTNL01	6.098	6.098	6.098
VHTSH04	0.000	1.653	1.013
VHTTR01	15.244	25.148	10.941
VRDEV01	100.000	96.200	100.000
X39V3	*****	*****	*****
X86V2	4.600	4.600	4.600

Study: ROSSrM Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
LP	P33	7.9	0.000
LP	P84	2.6	0.000
LP	R98	28.6	0.791

Overall: 39.1 0.579

Study: ROSSrM Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
LP	P33	7.9	0.718
LP	P84	2.6	0.765
LP	R98	28.6	0.603

Overall: 39.1 0.637

Study: ROSSrM Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
LP	P33	7.9	0.000
LP	P84	2.6	1.000
LP	R98	28.6	0.000

Overall: 39.1 0.066

Study: ROSSrM Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: ROSSrM 11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	39.1	0.579
MARTEN	39.1	0.637
RUFFED GROUSE	39.1	0.066
PILEATED WOODPECKER (western)	0.0	0.000

Study: ROSSLP

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: LP SubArea: P33

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
70.80	1.00	1.00	0.000	
VHTTR01	grf			
15.24	1.00			
VDNSN02	grf			
0.00	0.00			

Study: ROSSLP

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: LP SubArea: P84

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
74.00	1.00	1.00	0.000	
VHTTR01	grf			
25.15	1.00			
VDNSN02	grf			
0.00	0.00			

Study: ROSSLP

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: LP SubArea: R98

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
42.90	0.86	0.79	0.791	
VHTTR01	grf			
10.94	0.73			
VDNSN02	grf			
181.33	1.00			

Study: ROSSLP

10-19-1987

Model: MARTEN

CoverType: LP

SubArea: P33

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
70.80	1.00	0.718
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
0.60	0.52	

Study: ROSSLP

10-19-1987

Model: MARTEN

CoverType: LP

SubArea: P84

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
74.00	1.00	0.765
VRCEV01---grf-----		
96.20	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
3.40	0.59	

Study: ROSSLP

10-19-1987

Model: MARTEN

CoverType: LP

SubArea: R98

LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf--HSI		
42.90	0.72	0.603
VRCEV01---grf-----		
100.00	1.00	
TSS01-----mnu-----		
5.00	1.00	
VCVWD01---grf-----^		
0.33	0.51	

Model: RUFFED GROUSE

CoverType: LP SubArea: P33

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prf-----HSI			
4.60	2.E+03	0.00	0.000
VDNNL01---			
2384.00			
VDNDE01---			
48.00			
VDNSH01---			
48.00			
VHTNL01---grf-----usf-----			
6.10	1.00	0.49	
VHTDE01---grf-----			
0.00	0.00		
VHTSH04---grf-----			
0.00	0.00		
X86V2-----usf-----			
4.60	2.E+03		
VDNNL01---			
2384.00			
VDNDE01---			
48.00			
VDNSH01---usf-----			
48.00	12.00		

Model: RUFFED GROUSE

CoverType: LP SubArea: P84

LEV 4	LEV 3	LEV 2	LEV 1
X86V2----	usf-----	grf-----	prd--HSI
4.60	7.E+03	1.00	1.000
VDNNL01---			
5760.00			
VDNDE01---			
704.00			
VDNSH01---	^		
704.00			
VHTNL01---	grf-----	usf-----	^
6.10	1.00	1.00	
VHTDE01---	grf-----		
11.72	1.00		
VHTSH04---	grf-----		
1.96	0.11		
X86V2----	usf-----		
4.60	6.E+03		
VDNNL01---	^		
5760.00			
	VDNDE01---		
	704.00		
VDNSH01---	usf-----		
704.00	176.00		

Model: RUFFED GROUSE

CoverType: LP SubArea: R98

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
4.60	2.E+03	0.00	0.000
VDNML01			
2170.67			
VDNDE01			
10.67			
VDNSH01			
10.67			
VHTNL01	grf	usf	
5.10	1.00	0.44	
VHTDE01	grf		
0.00	0.00		
VHTSH04	grf		
1.02	0.00		
X86V2	usf		
4.60	2.E+03		
VDNML01			
2170.67			
VDNDE01			
10.67			
VDNSH01	usf		
10.67	2.67		

GORGEM HABITAT DATA

11-23-1987

GORGE, POST PROJECT

HABITAT: MIXED CONIFER/BROADLEAF

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

M

VARIABLE:

D17

TSS01	4.000
VCVTR01	99.400
VCVMD01	3.800
VDBSN01	51.000
VDNDB04	8.000
VDNDE01	1184.000
VDNNL01	568.000
VDNSH01	848.000
VDNSN02	24.000
VDNSN05	0.000
VHTDE01	6.098
VHTNL01	6.098
VHTSH04	2.458
VHTTR01	25.104
VRCEV01	67.268
X39V3	168.000
X86V2	3.348

Study: GORGEM Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
M	D17	8.6	0.781

Overall:		8.6	0.781
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Study: GORGEM Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
M	D17	8.6	0.668

Overall:		8.6	0.668
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Study: GORGEM Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
M	D17	8.6	0.000

Overall:		8.6	0.000
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Study: GORGEM Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
M	D17	8.6	0.000

Overall:		8.6	0.000
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Study name: GORGEM 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	8.6	0.781
MARTEN	8.6	0.668
RUFFED GROUSE	8.6	0.000
PILEATED WOODPECKER (western)	8.6	0.000

Study: GORGEM

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: M SubArea: D17

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
99.40	0.61	0.78	0.78	
VHTTR01	grf			
25.10	1.00			
	VDNSNO2	grf		
	24.00	1.00		

Study: GORGEM

11-23-1987

Model: MARTEN

CoverType: M SubArea: D17

LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	HSI
99.40	1.00	0.668	
VRCEV01	grf		
67.27	1.00		
TSS01	anu		
4.00	0.75		
VCVMD01	grf		
3.80	0.60		

Study: GORGEM

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: M SubArea: D17

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
99.40	1.00	0.09	0.000	
VDNDB04	grf			
8.00	0.01			
X39V3	grf			
168.00	1.00			
VDNSNO5	grf	gem		
0.00	0.00	0.00		
VDBSNO1	grf			
51.00	0.25			

Study: GORDEM

11-17-1987

Model: RUFFED GROUSE

CoverType: M SubArea: D17

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HS1			
3.35	3.E+03	0.00	0.000
VDNML01----			
568.00			
VDNDE01----			
1184.00			
VDNSH01----			
848.00			
VHTNL01---grf-----usf-----			
6.10	1.00		0.48
VHTDE01---grf-----			
6.10	1.00		
VHTSH04---grf-----			
2.46	0.31		
X86V2-----usf-----			
3.35	1.E+03		
VDNML01----			
568.00			
VDNDE01----			
1184.00			
VDNSH01---usf-----			
848.00	212.00		

ROSSM HABITAT DATA

11-24-1987

ROSS, POST PROJECT

HABITAT: MIXED FOREST

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	M H24	M P42	M R83
TSS01	5.000	5.000	5.000
VCVTR01	81.100	86.200	85.067
VCVWD01	9.700	5.200	0.333
VDBSN01	51.000	51.000	51.000
VDNDB04	0.000	384.000	0.000
VDNDE01	1504.000	1392.000	506.667
VDNNL01	512.000	704.000	645.333
VDNSH01	3760.000	2240.000	874.667
VDNSN02	32.000	128.000	10.667
VDNSN05	0.000	48.000	0.000
VHTDE01	6.098	12.185	16.709
VHTNL01	6.098	16.833	6.098
VHTSH04	1.965	2.105	2.530
VHTTR01	15.244	38.835	15.244
VRCEV01	92.602	89.327	77.149
X39V3	224.000	496.000	74.667
X86V2	3.000	3.995	2.987

Study: ROSSM Model: BLACK-CAPPED CHICKADEE (1) 11-24-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	0.950
M	P42	6.4	0.906
M	R83	4.7	0.916

Overall: 13.8 0.918

Study: ROSSM Model: MARTEN 11-24-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	0.862
M	P42	6.4	0.794
M	R83	4.7	0.713

Overall: 13.8 0.779

Study: ROSSM Model: RUFFED GROUSE 11-24-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	0.000
M	P42	6.4	0.000
M	R83	4.7	0.000

Overall: 13.8 0.000

Study: ROSSM Model: PILEATED WOODPECKER (western) 11-24-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	0.000
M	P42	6.4	0.500
M	R83	4.7	0.000

Overall: 13.8 0.232

Study name: ROSSM 11-24-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	13.8	0.918
MARTEN	13.8	0.779
RUFFED GROUSE	13.8	0.000
PILEATED WOODPECKER (western)	13.8	0.232

Study: ROSSM

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: M SubArea: H24

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
81.10	1.00	0.00	0.000	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
224.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSM

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: M SubArea: P42

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
86.20	1.00	1.00	0.500	
VDNDB04	grf			
384.00	1.00			
X39V3	grf			
496.00	1.00			
VDNSN05	grf	gem		
48.00	1.00	0.50		
VDBSN01	grf			
51.00	0.25			

Study: ROSSM

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: M SubArea: R83

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
85.07	1.00	0.00	0.000	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
74.67	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSM

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: M SubArea: H24

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
81.10	0.90	0.95	0.950	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	32.00	1.00		

Study: ROSSM

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: M SubArea: P42

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
86.20	0.82	0.91	0.906	
VHTTR01	grf			
38.84	1.00			
	VDNSN02	grf		
	128.00	1.00		

Study: ROSSM

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: M SubArea: R83

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
85.07	0.84	0.92	0.916	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	10.67	1.00		

Study: ROSSM

11-24-1987

Model: MARTEN

CoverType: M SubArea: H24

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
81.10	1.00	0.862
VRCEV01	grf	
92.60	1.00	
TSS01	nu	
5.00	1.00	
VCVWD01	grf	
9.70	0.74	

Study: ROSSM

11-24-1987

Model: MARTEN

CoverType: M SubArea: P42

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
86.20	1.00	0.794
VRCEV01	grf	
89.33	1.00	
TSS01	nu	
5.00	1.00	
VCVWD01	grf	
5.20	0.63	

Study: ROSSM

11-24-1987

Model: MARTEN

CoverType: M SubArea: RB3

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
85.07	1.00	0.713
VRCEV01	grf	
77.15	1.00	
TSS01	nu	
5.00	1.00	
VCVWD01	grf	
0.33	0.51	

Model: RUFFED GROUSE

CoverType: M SubArea: H24

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----	grf-----	prd-----	HSI
3.00	4.E+03	0.00	0.000
VDNML01---			
512.00			
VDNDE01---			
1504.00			
VDNSH01---			
3760.00			
VHTNL01---	grf-----	usf-----	
6.10	1.00	0.55	
VHTDE01---	grf-----		
6.10	1.00		
VHTSH04---	grf-----		
1.97	0.15		
X86V2-----usf-----			
3.00	1.E+03		
VDNML01---			
512.00			
VDNDE01---			
1504.00			
VDNSH01---	usf-----		
3760.00	940.00		

Study: ROSSM

11-17-1987

Model: RUFFED GROUSE

CoverType: M SubArea: P42

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-HS1			
4.00	3.E+03	0.00	0.000
VDNML01---			
704.00			
VDNDE01---			
1392.00			
VDNSH01---			
2240.00			
VHTNL01---grf-----usf-----^			
16.83	1.00	0.50	
VHTDE01---grf-----			
12.19	1.00		
VHTSH04---grf-----			
2.11	0.20		
X86V2-----usf-----			
4.00	1.E+03		
VDNML01---			
704.00			
VDNDE01---			
1392.00			
VDNSH01---usf-----^			
2240.00	560.00		

Model: RUFFED GROUSE

CoverType: M SubArea: R83

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
2.99	2.E+03	0.00	0.000
VDNNL01---			
645.33			
VDNDE01---			
506.67			
VDNSH01---^			
874.67			
VHTNL01---grf-----usf-----			
5.10	1.00	0.41	
VHTDE01---grf-----			
16.71	1.00		
VHTSH04---grf-----			
2.53	0.33		
X86V2-----usf-----			
2.99	1.E+03		
VDNNL01---^			
645.33			
VDNDE01---			
506.67			
VDNSH01---usf-----			
874.67	218.67		

DIABLOM HABITAT DATA

11-23-1987

DIABLO, POST PROJECT

HABITAT: MIXED

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	M
TSS01	5.000
VCVTR01	97.333
VCVMD01	4.700
VDBSN01	58.000
VDNDB04	48.000
VDNDE01	597.333
VDNML01	154.667
VDNSH01	298.667
VDNSN02	175.000
VDNSN05	5.333
VHTDE01	6.098
VHTNL01	6.098
VHTSH04	2.267
VHTTR01	15.244
VRCEV01	45.944
X39V3	138.667
X86V2	4.600

Study: DIABLOM Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
M	R67	5.1	0.802

Overall: 5.1 0.802

Study: DIABLOM Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
M	R67	5.1	0.786

Overall: 5.1 0.786

Study: DIABLOM Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
M	R67	5.1	0.000

Overall: 5.1 0.000

Study: DIABLOM Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
M	R67	5.1	0.678

Overall: 5.1 0.678

Study name: DIABLOM 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	5.1	0.802
MARTEN	5.1	0.786
RUFFED GROUSE	5.1	0.000
PILEATED WOODPECKER (western)	5.1	0.678

Study: DIABLOM

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: M SubArea: R67

	LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min	HSI
	97.33	1.00	0.77	0.678
VDNDB04	grf			
	48.00	0.60		
X39V3	grf			
	138.67	1.00		
VDNSN05	grf	gem		
	5.33	1.00	0.68	
VDBSN01	grf			
	58.00	0.46		

Study: DIABLOM

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: M SubArea: R67

	LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min	HSI
	97.33	0.64	0.80	0.802
VHTTR01	grf			
	15.24	1.00		
VDNSN02	grf			
	175.00	1.00		

Study: DIABLOM

11-23-1987

Model: MARTEN

CoverType: M SubArea: R67

	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	HSI
	97.33	1.00	0.786
VACEV01	grf		
	45.94	1.00	
TSS01	anu		
	5.00	1.00	
VCVMD01	grf		
	4.70	0.62	

Model: RUFFED GROUSE

CoverType: M SubArea: R67

LEV 4	LEV 3	LEV 2	LEV 1
X86V2----	usf-----	grf-----	prd-----HS1
4.60	826.67	0.00	0.000
VDNNL01---			
154.67			
VDNDE01---			
597.33			
VDNSH01---	^		
298.67			
VHTNL01---	grf-----	usf-----	
5.10	1.00	0.15	
VHTDE01---	grf-----		
6.10	1.00		
VHTSH04---	grf-----		
2.27	0.25		
X86V2----	usf-----		
4.60	154.67		
VDNNL01---	^		
154.67			
	VDNDE01---		
	597.33		
VDNSH01---	usf-----		
298.67	74.67		

ROSS, PRE & POST

HABITAT: *Regenerative Mixed*

SPECIES: BLACK-CAPPED CHICKADEE, MARTEN, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	RM H15	RM H64	RM P80
TSS01	*****	*****	*****
VCVTR01	73.500	89.400	57.600
VCVWD01	*****	*****	*****
VDBSN01	*****	*****	*****
VDNDB04	*****	*****	*****
VDNDE01	1296.000	6282.667	3520.000
VDNNL01	176.000	469.333	16.000
VDNSH01	41200.000	11000.000	43200.000
VDNSN02	0.000	21.333	0.000
VDNSN05	*****	*****	*****
VHTDE01	5.163	7.571	6.098
VHTNL01	9.553	7.945	4.268
VHTSH04	2.091	2.797	3.275
VHTTR01	11.003	14.277	10.671
VRCEV01	*****	*****	*****
X39V3	*****	*****	*****
X86V2	0.856	0.893	0.800

Study: ROSSRM Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
RM	H15	4.3	0.000
RM	H64	16.2	0.856
RM	P80	10.0	0.000

Overall: 30.5 0.455

Study: ROSSRM Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: ROSSRM Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
RM	H15	4.3	0.408
RM	H64	16.2	1.000
RM	P80	10.0	0.730

Overall: 30.5 0.828

Study: ROSSRM Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: ROSSRM 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	30.5	0.455
MARTEN	0.0	0.000
RUFFED GROUSE	30.5	0.828
PILEATED WOODPECKER (western)	0.0	0.000

Study: ROSSRM

11-23-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: RM SubArea: H15

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
73.50	1.00	0.86	0.000	
VHTTR01	grf			
11.00	0.73			
VDNSN02	grf			
0.00	0.00			

Study: ROSSRM

11-23-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: RM SubArea: H64

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
89.40	0.77	0.86	0.856	
VHTTR01	grf			
14.28	0.95			
VDNSN02	grf			
21.33	1.00			

Study: ROSSRM

11-23-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: RM SubArea: P80

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
57.60	1.00	0.84	0.000	
VHTTR01	grf			
10.67	0.71			
VDNSN02	grf			
0.00	0.00			

Study: ROSSRM

11-17-1987

Model: RUFFED GROUSE

CoverType: RM SubArea: H15

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd--HSI			
0.86	1.E+04	1.00	0.408
VDNML01----			
176.00			
VDNDE01----			
1296.00			
VDNSH01-----^			
41200.00			
VHTNL01-----grf-----usf-----^			
9.55	1.00		0.41
VHTDE01-----grf-----			
5.16	1.00		
VHTSH04-----grf-----			
2.09	0.19		
X86V2-----usf-----			
0.86	704.00		
VDNML01-----^			
176.00			
VDNDE01----			
1296.00			
VDNSH01-----usf-----^			
41200.00	1.E+04		

Model: RUFFED GROUSE

CoverType: RM SubArea: H64

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prnd-HSI			
0.89	1.E+04	1.00	1.000
VDNML01---			
469.33			
VDNDE01---			
6282.67			
VDNSH01---			
11000.00			
VHTNL01---grf-----usf-----			
7.95	1.00	1.00	
VH7DE01---grf-----			
7.57	1.00		
VHTSH04---grf-----			
2.80	0.42		
X86V2-----usf-----			
0.89	2.E+03		
VDNML01---			
469.33			
VDNDE01---			
6282.67			
VDNSH01---usf-----			
11000.00	3.E+03		

Model: RUFFED GROUSE

CoverType: RM SubArea: P80

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd
0.80	1.E+04	1.00	0.730
VDNML01			
16.00			
VDNDE01			
3520.00			
VDNSH01			
43200.00			
VHTNL01	grf	usf	
4.27	0.89	0.73	
VHTDE01	grf		
6.10	1.00		
VHTSH04	grf		
3.28	0.57		
X86V2	usf		
0.80	64.00		
VDNML01			
16.00			
VDNDE01			
3520.00			
VDNSH01	usf		
43200.00	1.E+04		

DIABLO HABITAT DATA

10-21-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Broadleaf*

SPECIES: RUFFED GROUSE, BLACKED-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	B R31	B R60
TSS01	*****	*****
VCVTR01	96.400	96.000
VCVMD01	*****	*****
VDBSN01	51.000	51.000
VINDB04	40.000	16.000
VINDE01	1256.000	960.000
VINDL01	184.000	192.000
VINSH01	728.000	112.000
VINSH02	8.000	112.000
VINSH05	0.000	0.000
VHTDE01	6.098	6.098
VHTNL01	6.098	6.098
VHTSH04	2.463	2.153
VHTTR01	15.244	15.244
VACEV01	*****	*****
X39V3	352.000	384.000
X86V2	4.600	3.725

Study: ROSSRM Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
B	R51	9.2	0.811
B	R60	3.8	0.815
Overall:		13.0	0.812

Study: ROSSRM Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: ROSSRM Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
B	R51	9.2	0.000
B	R60	3.8	0.000
Overall:		13.0	0.000

Study: ROSSRM Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
B	R51	9.2	0.000
B	R60	3.8	0.000
Overall:		13.0	0.000

Study name: ROSSRM 11-10-1987

HSI Values For The Entire Study Area:

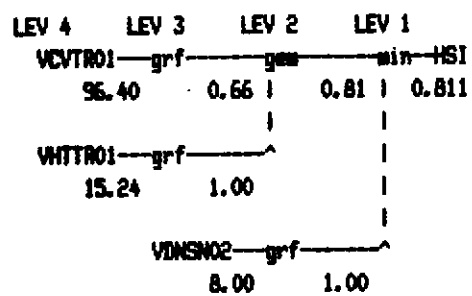
	Area	HSI
BLACK-CAPPED CHICKADEE (1)	13.0	0.812
MARTEN	0.0	0.000
RUFFED GROUSE	13.0	0.000
PILEATED WOODPECKER (western)	13.0	0.000

Study: DIABLOB

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: B SubArea: R51

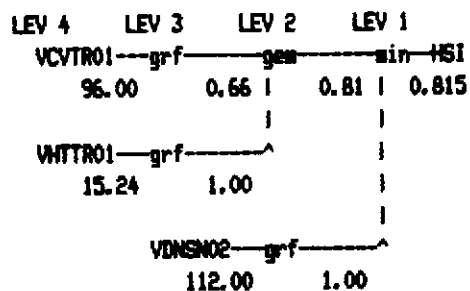


Study: DIABLOB

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: B SubArea: R60



Study: DIABLOB

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: B SubArea: R51

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
96.40	1.00	0.69	0.000	
VDNDB04	grf			
40.00	0.48			
X39V3	grf			
352.00	1.00			
VDNSN05	grf	gas		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: DIABLOB

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: B SubArea: R60

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
96.00	1.00	0.35	0.000	
VDNDB04	grf			
16.00	0.13			
X39V3	grf			
384.00	1.00			
VDNSN05	grf	gas		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: DIABLOE

11-17-1987

Model: RUFFED GROUSE

CoverType: B SubArea: R51

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc-HSI			
4.60	2.E+03	0.00	0.000
VDNML01---			
184.00			
VDNDE01---			
1256.00			
VDNSH01---^			
728.00			
VHTNL01---grf-----usf-----^			
6.10	1.00	0.29	
VHTDE01---grf-----			
6.10	1.00		
VHTSH04---grf-----			
2.46	0.31		
X86V2-----usf-----			
4.60	184.00		
VDNML01---^			
184.00			
VDNDE01---			
1256.00			
VDNSH01---usf-----^			
728.00	182.00		

Model: RUFFED GROUSE

CoverType: B SubArea: R60

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prnd-HSI			
3.73	1.E+03	0.00	0.000
VDNNL01----			
192.00			
VDNDE01----			
360.00			
VDNSH01----			
112.00			
VHTNL01----grf-----usf-----^			
6.10	1.00	0.26	
VHTDE01----grf-----			
6.10	1.00		
VHTSH04----grf-----			
2.15	0.21		
X86V2-----usf-----			
3.73	328.22		
VDNNL01----			
192.00			
VDNDE01----			
360.00			
VDNSH01----usf-----			
112.00	28.00		

ROSS, POST-PROJECT + PRE-PROJECT

HABITAT: Broadleaf

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER

COVER TYPE / SUB-AREA:

VARIABLE:	B H44	B H54	B P55
TSS01	*****	*****	*****
VCVTR01	100.000	90.800	42.200
VCVWD01	*****	*****	*****
VDBSN01	51.000	51.000	51.000
VDNDB04	0.000	10.667	16.000
VDNDE01	6592.000	1818.667	1216.000
VDNNL01	48.000	96.000	384.000
VDNSH01	1184.000	12133.330	960.000
VDNSN02	0.000	117.333	16.000
VDNSN05	0.000	0.000	0.000
VHTDE01	20.171	12.364	6.098
VHTNL01	7.361	8.027	6.098
VHTSH04	1.375	1.653	2.365
VHTTR01	33.840	19.478	15.244
VRCEV01	*****	*****	*****
X39V3	480.000	512.000	304.000
X86V2	1.015	1.145	2.585

Study: ROSSB Model: BLACK-CAPPED CHICKADEE (1) 10-19-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.000
B	H54	10.7	0.864
B	P55	5.6	0.919

Overall: 18.9 0.757

Study: ROSSB Model: MARTEN 10-19-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.000
B	H54	10.7	0.000
B	P55	5.6	0.000

Overall: 0.0 0.000

Study: ROSSB Model: RUFFED GROUSE 10-19-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.979
B	H54	10.7	0.387
B	P55	5.6	0.000

Overall: 18.9 0.357

Study: ROSSB Model: PILEATED WOODPECKER (western) 10-19-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.000
B	H54	10.7	0.000
B	P55	5.6	0.000

Overall: 18.9 0.000

Study name: ROSSB 10-19-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	18.9	0.757
MARTEN	0.0	0.000
RUFFED GROUSE	18.9	0.357
PILEATED WOODPECKER (western)	18.9	0.000

Study: ROSSB

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: B SubArea: H44

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
100.00	0.60	0.77	0.000	
VHTTR01	grf			
33.84	1.00			
VDNSN02	grf			
0.00	0.00			

Study: ROSSB

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: B SubArea: H54

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
90.80	0.75	0.86	0.864	
VHTTR01	grf			
19.48	1.00			
VDNSN02	grf			
117.33	1.00			

Study: ROSSB

10-19-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: B SubArea: P55

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
42.20	0.84	0.92	0.919	
VHTTR01	grf			
15.24	1.00			
VDNSN02	grf			
16.00	1.00			

Study: ROSSE

11-17-1987

Model: RUFFED GROUSE

CoverType: B SubArea: H44

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
1.02	7.E+03	1.00	1.000
VDNML01----			
48.00			
VDNDE01----			
6592.00			
VDNSH01----			
1184.00			
VHTNL01---grf-----usf-----			
7.35	1.00	1.00	
VHTDE01---grf-----			
20.17	1.00		
VHTSH04---grf-----			
1.38	0.00		
X86V2-----usf-----			
1.02	187.53		
VDNML01----			
48.00			
VDNDE01----			
6592.00			
VDNSH01---usf-----			
1184.00	296.00		

Model: RUFFED GROUSE

CoverType: B SubArea: H54

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prnd-----HSI			
1.15	5.E+03	1.00	0.446
VDNML01----			
96.00			
VDNDE01----			
1818.67			
VDNSH01-----^			
12133.33			
VHTNL01-----grf-----usf-----^			
8.03	1.00	0.45	
VHTDE01-----grf-----			
12.36	1.00		
VHTSH04-----grf-----			
1.65	0.05		
X86V2-----usf-----			
1.15	364.94		
VDNML01-----^			
96.00			
VDNDE01-----			
1818.67			
VDNSH01-----usf-----^			
12133.33	3.E+03		

Study: ROSSB

11-17-1987

Model: RUFFED GROUSE

CoverType: B SubArea: P55

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
2.59	2.E+03	0.00	0.000
VDNML01----			
384.00			
VDNDE01----			
1216.00			
VDNSH01----			
960.00			
VHTNL01-----grf-----usf-----			
6.10	1.00	0.45	
VHTDE01-----grf-----			
6.10	1.00		
VHTSH01-----grf-----			
2.37	0.28		
X86V2-----usf-----			
2.59	1.E+03		
VDNML01----			
384.00			
VDNDE01----			
1216.00			
VDNSH01-----usf-----			
960.00	240.00		

Study: ROSSB

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: B SubArea: H44

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
100.00	1.00	0.00	0.00	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
480.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSB

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: B SubArea: H54

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
90.80	1.00	0.22	0.00	
VDNDB04	grf			
10.67	0.05			
X39V3	grf			
512.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSB

10-19-1987

Model: PILEATED WOODPECKER (western)

CoverType: B SubArea: P55

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
42.20	0.34	0.21	0.00	
VDNDB04	grf			
16.00	0.13			
X39V3	grf			
304.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

ROSSRGS HABITAT DATA

11-23-1987

ROSS, PRE & POST PROJECT

HABITAT: SHRUBLANDS

SPECIES: RUFFED GROUSE

COVER TYPE / SUB-AREA:

VARIABLE:	S LC1	S LC2
VDNDE01	40.000	72.000
VDNML01	40.000	40.000
VDNSH01	50800.000	26200.000
VHTDE01	3.659	4.535
VHTML01	9.242	5.793
VHTSH04	1.503	1.942
X86V2	1.250	1.663

Study: ROSSR6S Model: RUFFED GROUSE

11-23-1987

CoverType	SubArea	Area	HSI
S	LC1	1.0	0.036
S	LC2	1.0	0.042
Overall:		2.0	0.039

Study name: ROSSR6S

11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
RUFFED GROUSE	2.0	0.039

Study: ROSSRGS

11-23-1987

Model: RUFFED GROUSE

CoverType: S SubArea: LC1

LEV 4	LEV 3	LEV 2	LEV 1
X86V2---usf-----grf-----prnd-HSI			
1.25	1.E+04	1.00	0.036
VDNML01---			
40.00			
VDNDE01---			
40.00			
VDNSH01---^			
50800.00			
VHTNL01---grf-----usf-----^			
9.24	1.00	0.04	
VHTDE01---grf-----			
3.66	0.70		
VHTSH04---grf-----			
1.50	0.00		
X86V2---usf-----			
1.25	148.65		
VDNML01---^			
40.00			
VDNDE01---			
40.00			
VDNSH01---usf-----^			
50800.00	1.E+04		

Study: ROSSRBBS

11-23-1987

Model: RUFFED GROUSE

CoverType: S SubArea: LC2

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc-----HSI			
1.66	7.E+03	1.00	0.042
VDNML01-----			
40.00			
VDNDE01-----			
72.00			
VDNSH01-----^			
26200.00			
VHTNL01-----grf-----usf-----^			
5.79	1.00	0.04	
VHTDE01-----grf-----			
4.54	0.98		
VHTSH04-----grf-----			
1.94	0.14		
X86V2-----usf-----			
1.66	135.26		
VDNML01-----^			
40.00			
VDNDE01-----			
72.00			
VDNSH01-----usf-----^			
26200.00	7.E+03		

PRRCOG HABITAT DATA

11-24-1987

ROSS, PRE-PROJECT (Diable, Pre + Post Project + George Pre-Project are
HABITAT: RIPARIAN CONIFER OLD GROWTH represented by R-1 & A only)
SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	rCOG BBV6	rCOG PO5A	rCOG R10A
TSS01	6.000	6.000	6.000
VCVTR01	97.800	100.000	70.250
VCVMD01	20.700	19.800	9.900
VDBSN01	199.000	51.000	51.000
VDNDB04	184.000	208.000	56.000
VDNDE01	528.000	400.000	488.000
VDNML01	688.000	400.000	128.000
VDNSH01	304.000	1584.000	5516.000
VDNSN02	16.000	0.000	0.000
VDNSN05	16.000	0.000	36.000
VHTDE01	6.098	5.122	5.170
VHTNL01	16.475	6.005	9.240
VHTSH04	1.991	2.295	2.408
VHTTR01	15.244	15.244	15.244
VRCEV01	98.382	100.000	82.382
X39V3	176.000	96.000	186.667
X86V2	4.435	4.515	4.600

Study: PRRCOG Model: BLACK-CAPPED CHICKADEE (1) 11-24-1987

CoverType	SubArea	Area	HSI
rCOG	BBV6	3.6	0.797
rCOG	POSA	1.5	0.000
rCOG	R10A	18.0	0.000

Overall: 23.2 0.124

Study: PRRCOG Model: MARTEN 11-24-1987

CoverType	SubArea	Area	HSI
rCOG	BBV6	3.6	1.000
rCOG	POSA	1.5	0.997
rCOG	R10A	18.0	0.865

Overall: 23.2 0.895

Study: PRRCOG Model: RUFFED GROUSE 11-24-1987

CoverType	SubArea	Area	HSI
rCOG	BBV6	3.6	0.000
rCOG	POSA	1.5	0.000
rCOG	R10A	18.0	0.000

Overall: 23.2 0.000

Study: PRRCOG Model: PILEATED WOODPECKER (western) 11-24-1987

CoverType	SubArea	Area	HSI
rCOG	BBV6	3.6	1.000
rCOG	POSA	1.5	0.000
rCOG	R10A	18.0	0.500

Overall: 23.2 0.545

Study name: PRRCOG 11-24-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	23.2	0.124
MARTEN	23.2	0.895
RUFFED GROUSE	23.2	0.000
PILEATED WOODPECKER (western)	23.2	0.545

Study: PRRCOG

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rCOG SubArea: BBV6

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
97.80	0.64	0.80	0.797	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	16.00	1.00		

Study: PRRCOG

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rCOG SubArea: P05A

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
100.00	0.60	0.77	0.000	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	0.00	0.00		

Study: PRRCOG

10-20-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rCOG SubArea: R10A

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
70.25	1.00	1.00	0.000	
VHTTR01	grf			
15.24	1.00			
	VDNSN02	grf		
	0.00	0.00		

Study: PRR006

11-24-1987

Model: MARTEN

CoverType: rC06 SubArea: BBV6

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
97.80	1.00	1.000
VRCEV01	grf	
98.38	1.00	
TSS01	anu	
6.00	1.00	
VCVMD01	grf	^
20.70	1.00	

Study: PRR006

11-24-1987

Model: MARTEN

CoverType: rC06 SubArea: P05A

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
100.00	1.00	0.997
VRCEV01	grf	
100.00	1.00	
TSS01	anu	
6.00	1.00	
VCVMD01	grf	^
19.80	1.00	

Study: PRR006

11-24-1987

Model: MARTEN

CoverType: rC06 SubArea: R10A

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
70.25	1.00	0.865
VRCEV01	grf	
82.38	1.00	
TSS01	anu	
6.00	1.00	
VCVMD01	grf	^
9.90	0.75	

Study: PRRCOG

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: rCOG SubArea: BBV6

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
97.80	1.00	1.00	1.00	1.000
VDNDB04	grf			
184.00	1.00			
X39V3	grf			
176.00	1.00			
VDNSN05	grf	gem		
16.00	1.00	1.00		
VDBSN01	grf			
199.00	1.00			

Study: PRRCOG

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: rCOG SubArea: P05A

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
100.00	1.00	1.00	0.00	0.000
VDNDB04	grf			
208.00	1.00			
X39V3	grf			
96.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: PRRCOG

10-20-1987

Model: PILEATED WOODPECKER (western)

CoverType: rCOG SubArea: R10A

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
70.25	0.91	0.81	0.50	0.500
VDNDB04	grf			
56.00	0.72			
X39V3	grf			
186.67	1.00			
VDNSN05	grf	gem		
36.00	1.00	0.50		
VDBSN01	grf			
51.00	0.25			

Study: PRRCD6

11-17-1987

Model: RUFFED GROUSE

CoverType: rCD6 SubArea: BRV6

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd-----HSI			
4.44	1:E+03	0.00	0.000
VDNML01----			
688.00			
VDNDE01----			
528.00			
VDNSH01----			
304.00			
VHTNL01-----grf-----usf-----			
16.48	1.00	0.27	
VHTDE01-----grf-----			
8.10	1.00		
VHTSH04-----grf-----			
1.99	0.15		
X86V2-----usf-----			
4.44	780.05		
VDNML01----			
688.00			
VDNDE01----			
528.00			
VDNSH01-----usf-----			
304.00	76.00		

Model: RUFFED GROUSE

CoverType: rCDB SubArea: P05A

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prf-----HSI *			
4.52	1.E+03	0.00	0.000
VDNNL01----			
400.00			
VDNDE01----			
400.00			
VDNSH01----			
1584.00			
VHTNL01-----grf-----usf-----			
6.01	1.00	0.17	
VHTDE01-----grf-----			
5.12	1.00		
VHTSH04-----grf-----			
2.30	0.26		
X86V2-----usf-----			
4.52	427.57		
VDNNL01----			
400.00			
VDNDE01----			
400.00			
VDNSH01-----usf-----			
1584.00	396.00		

Model: RUFFED GROUSE

CoverType: rCOG SubArea: R10A

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
4.60	2.E+03	0.00	0.000
VDNML01			
128.00			
VDNDE01			
488.00			
VDNSH01			
5516.00			
VHTNL01	grf	usf	
9.24	1.00	0.13	
VHTDE01	grf		
5.17	1.00		
VHTSH04	grf		
2.41	0.29		
X86V2	usf		
4.60	128.00		
VDNML01			
128.00			
VDNDE01			
488.00			
VDNSH01	usf		
5516.00	1.E+03		

ROSSRCOG HABITAT DATA

10-20-1987

ROSS, POST-PROJECT

HABITAT: *Riparian Conifer Old Growth*

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

rCOG

VARIABLE: P05A=P94

TSS01	6.000
VCVTR01	100.000
VCVWD01	19.800
VDASN01	51.000
VDNDB04	208.000
VDNDE01	400.000
VDNNL01	400.000
VDNSH01	1584.000
VDNSN02	0.000
VDNSN05	0.000
VHTDE01	5.122
VHTNL01	6.005
VHTSH04	2.295
VHTTR01	15.244
VRCEV01	100.000
X39V3	96.000
X86V2	4.515

Study: ROSSRC06 Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
rC06	P05A	1.5	0.000

Overall: 1.5 0.000

Study: ROSSRC06 Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
rC06	P05A	1.5	0.997

Overall: 1.5 0.997

Study: ROSSRC06 Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
rC06	P05A	1.5	0.000

Overall: 1.5 0.000

Study: ROSSRC06 Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
rC06	P05A	1.5	0.000

Overall: 1.5 0.000

Study name: ROSSRC06 11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	1.5	0.000
MARTEN	1.5	0.997
RUFFED GROUSE	1.5	0.000
PILEATED WOODPECKER (western)	1.5	0.000

Study: DIABLORB

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: r8 SubArea: R108

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
96.00	0.66	0.81	0.815
VHTTR01	grf		
15.24	1.00		
VNMEN02	grf		
16.00	1.00		

Study: DIABLORB

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: r8 SubArea: R14

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
98.00	0.63	0.79	0.795
VHTTR01	grf		
15.24	1.00		
VNMEN02	grf		
25.67	1.00		

Study: DIABLORB

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: r8 SubArea: R108

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
96.00	1.00	0.00	0.000
VNMEN04	grf		
0.00	0.00		
X3SV3	grf		
80.00	1.00		
VNMEN05	grf	gem	
0.00	0.00	0.00	
VNMEN01	grf		
51.00	0.25		

Study: RQSSRCOG

11-17-1987

Model: RUFFED GROUSE

CoverType: rCOG SubArea: P05A

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prd--HSI			
4.52	1.E+03	0.00	0.000
VDNML01---			
400.00			
VDNDE01---			
400.00			
VDNSH01---			
1584.00			
VHTNL01---grf-----usf-----			
5.01	1.00	0.17	
VHTDE01---grf-----			
5.12	1.00		
VHTSH04---grf-----			
2.36	0.26		
X86V2-----usf-----			
4.52	427.57		
VDNML01---			
400.00			
VDNDE01---			
400.00			
VDNSH01---usf-----			
1584.00	396.00		

DIABLO, PRE & POST PROJECT; ROSS, PRE & POST PROJECT, GORGE, PRE-PROJECT
HABITAT: RIPARIAN CLOSED CANOPY CONIFER
SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

rcc

VARIABLE:	R11A = R1
TSS01	5.000
VCVTR01	75.200
VCVMD01	8.350
VDBSN01	105.000
VDNDB04	112.000
VDNDE01	672.000
VDNML01	96.000
VDNSH01	27504.000
VDNSN02	8.000
VDNSN05	16.000
VHTDE01	9.985
VHTNL01	30.488
VHTSH04	2.161
VHTTR01	37.076
VRCEV01	93.120
X39V3	136.000
X86V2	4.600

Study: DIABRCC Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
rCC	R11A	1.4	0.998

Overall:		1.4	0.998
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Study: DIABRCC Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
rCC	R11A	1.4	0.842

Overall:		1.4	0.842
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Study: DIABRCC Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
rCC	R11A	1.4	0.157

Overall:		1.4	0.157
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Study: DIABRCC Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
rCC	R11A	1.4	1.000

Overall:		1.4	1.000
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Study name: DIABRCC 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	1.4	0.998
MARTEN	1.4	0.842
RUFFED GROUSE	1.4	0.157
PILEATED WOODPECKER (western)	1.4	1.000

Study: DIABRCC

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rCC SubArea: R11A

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
75.20	1.00	1.00	0.998
WMTTR01	grf		
37.08	1.00		
VDMNO2	grf		
8.00	1.00		

Study: DIABRCC

11-23-1987

Model: MARTEN

CoverType: rCC SubArea: R11A

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
75.20	1.00	0.842
VRCEV01	grf	
93.12	1.00	
TSS01	anu	
5.00	1.00	
VCVMD01	grf	
8.35	0.71	

Study: DIABRCC

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: rCC SubArea: R11A

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min-HSI
75.20	1.00	1.00	1.000
VDMBO4	grf		
112.00	1.00		
X39V3	grf		
136.00	1.00		
VDMNO5	grf	gem	
16.00	1.00	1.00	
VDBNO1	grf		
105.00	1.00		

Study: DIABRCC

11-17-1987

Model: RUFFED GROUSE

CoverType: rCC SubArea: R11A

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
4.60	8.E+03	1.00	0.157
VDNML01			
96.00			
VDNDE01			
672.00			
VDNSH01			
27504.00			
VHTNL01	grf	usf	
30.49	1.00		0.16
VHTDE01	grf		
9.98	1.00		
VHTSH04	grf		
2.16	0.21		
X86V2	usf		
4.60	96.00		
VDNML01			
96.00			
VDNDE01			
672.00			
VDNSH01	usf		
27504.00	7.E+03		

PRRM HABITAT DATA

11-23-1987

ROSS, PRE-PROJECT

HABITAT: RIPARIAN MIXED

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	BBV7	H59
TSS01	4.000	5.000
VCVTR01	90.267	70.000
VCVMD01	27.100	14.200
VDBSN01	233.000	51.000
VDNDB04	138.667	0.000
VDNDE01	1797.333	1984.000
VDNML01	202.667	960.000
VDNSH01	2464.000	1856.000
VDNSN02	90.667	144.000
VDNSN05	5.333	0.000
VHTDE01	12.624	6.098
VHTNL01	6.098	6.098
VHTSH04	2.330	1.471
VHTTR01	15.244	15.244
VRCV01	70.931	85.714
X39V3	181.333	880.000
X86V2	4.600	1.100

Study: PRRM Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
rM	BBV7	4.8	0.869
rM	H59	9.0	1.000
Overall:		13.8	0.954

Study: PRRM Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
rM	BBV7	4.8	0.866
rM	H59	9.0	0.925
Overall:		13.8	0.904

Study: PRRM Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
rM	BBV7	4.8	0.000
rM	H59	9.0	1.000
Overall:		13.8	0.650

Study: PRRM Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
rM	BBV7	4.8	1.000
rM	H59	9.0	0.000
Overall:		13.8	0.350

Study name: PRRM 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	13.8	0.954
MARTEN	13.8	0.904
RUFFED GROUSE	13.8	0.650
PILEATED WOODPECKER (western)	13.8	0.350

Study: PRRM

11-23-1987

Model: MARTEN

CoverType: rM SubArea: BBV7

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
90.27	1.00	0.866
VRCEV01	grf	
70.93	1.00	
TSS01	nu	
4.00	0.75	
VCVMD01	grf	
27.10	1.00	

Study: PRRM

11-23-1987

Model: MARTEN

CoverType: rM SubArea: H59

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
70.00	1.00	0.925
VRCEV01	grf	
85.71	1.00	
TSS01	nu	
5.00	1.00	
VCVMD01	grf	
14.20	0.86	

Study: PRRM

11-22-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rM SubArea: BBV7

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
90.27	0.76	0.87	0.869
VHTTR01	grf		
15.24	1.00		
VDNSN02	grf		
90.67	1.00		

Study: PRRM

11-22-1987

Model: RUFFED GROUSE

CoverType: rM SubArea: BBV7

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
4.60	3.E+03	0.00	0.000
VDNML01			
202.67			
VDNDE01			
1797.33			
VDNSH01	^		
2464.00			
VHTNL01	grf	usf	^
6.10	1.00	0.41	
VHTDE01	grf		
12.62	1.00		
VHTSH04	grf		
2.33	0.27		
X86V2	usf		
4.60	202.67		
VDNML01	^		
202.67			
VDNDE01			
1797.33			
VDNSH01	usf	^	
2464.00	616.00		

Study: PRRM

11-22-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rM SubArea: H59

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min HSI
70.00	1.00	1.00	1.000
VHTTR01	grf	^	
15.24	1.00		
VDNSN02	grf	^	
144.00	1.00		

Model: RUFFED GROUSE

CoverType: rM SubArea: H59

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prnd HSI
1.10	6.E+03	1.00	1.000
VDNML01			
960.00			
VDNDE01			
1984.00			
VDNSH01			
1856.00			
VHTNL01	grf	usf	
6.10	1.00	1.00	
VHTDE01	grf		
6.10	1.00		
VHTSH04	grf		
1.47	0.00		
X86V2	usf		
1.10	4.E+03		
VDNML01			
960.00			
VDNDE01			
1984.00			
VDNSH01	usf		
1856.00	464.00		

Study: PRRM

11-22-1987

Model: PILEATED WOODPECKER (western)

CoverType: rM SubArea: BBV7

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min-HSI
90.27	1.00	1.00	1.000
VDNDB04	grf		
138.67	1.00		
X39V3	grf		
181.33	1.00		
VDNSN05	grf	gem	
5.33	1.00	1.00	
VDBSN01	grf		
233.00	1.00		

Study: PRRM

11-22-1987

Model: PILEATED WOODPECKER (western)

CoverType: rM SubArea: H59

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min-HSI
70.00	0.90	0.00	0.000
VDNDB04	grf		
0.00	0.00		
X39V3	grf		
880.00	1.00		
VDNSN05	grf	gem	
0.00	0.00	0.00	
VDBSN01	grf		
51.00	0.25		

RPOSTRM HABITAT DATA

11-23-1987

ROSS, POST PROJECT; DIABLO, POST PROJECT

HABITAT: RIPARIAN MIXED

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	FM
TSS01	5.000
VCVTR01	70.000
VCVWD01	14.200
VDNSN01	51.000
VDNDB04	0.000
VDNDE01	1984.000
VDNNL01	960.000
VDNSH01	1856.000
VDNSN02	144.000
VDNSN05	51.000
VHTDE01	6.098
VHTNL01	6.098
VHTSH04	1.471
VHTTR01	15.244
VRCEV01	85.714
X39V3	880.000
X86V2	1.100

Study: RPOSTRM Model: BLACK-CAPPED CHICKADEE (1) 11-23-1987

CoverType	SubArea	Area	HSI
rM	H59	9.0	1.000

Overall:		9.0	1.000
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Study: RPOSTRM Model: MARTEN 11-23-1987

CoverType	SubArea	Area	HSI
rM	H59	9.0	0.925

Overall:		9.0	0.925
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Study: RPOSTRM Model: RUFFED GROUSE 11-23-1987

CoverType	SubArea	Area	HSI
rM	H59	9.0	1.000

Overall:		9.0	1.000
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Study: RPOSTRM Model: PILEATED WOODPECKER (western) 11-23-1987

CoverType	SubArea	Area	HSI
rM	H59	9.0	0.000

Overall:		9.0	0.000
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Study name: RPOSTRM 11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	9.0	1.000
MARTEN	9.0	0.925
RUFFED GROUSE	9.0	1.000
PILEATED WOODPECKER (western)	9.0	0.000

Study: RPOSTRM

11-23-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rM SubArea: H59

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
70.00	1.00	1.00	1.000
VMTTR01	grf		
15.24	1.00		
	VDNSN02	grf	
	144.00	1.00	

Study: RPOSTRM

11-23-1987

Model: MARTEN

CoverType: rM SubArea: H59

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf-HSI
70.00	1.00	0.925
VRCEV01	grf	
85.71	1.00	
TSS01	nu	
5.00	1.00	
VCVMD01	grf	
14.20	0.86	

Study: RPOSTRM

11-23-1987

Model: RUFFED GROUSE

CoverType: rM SubArea: H59

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
1.10	6.E+03	1.00	1.000
VDNML01			
960.00			
VDNDE01			
1984.00			
VDNSH01			
1856.00			
VHTNL01	grf	usf	
6.10	1.00	1.00	
VHTDE01	grf		
6.10	1.00		
VHTSH04	grf		
1.47	0.00		
X86V2	usf		
1.10	4.E+03		
VDNML01			
960.00			
VDNDE01			
1984.00			
VDNSH01	usf		
1856.00	464.00		

Study: RPOSTRM

11-23-1987

Model: PILEATED WOODPECKER (western)

CoverType: rM SubArea: H59

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min HSI
70.00	0.90	0.00	0.000
VDNDB04	grf		
0.00	0.00		
X39V3	grf		
880.00	1.00		
VDNSN05	grf	gem	
51.00	1.00	0.50	
VDBSN01	grf		
51.00	0.25		

DIABLO HABITAT DATA

10-21-1987

DIABLO, POST PROJECT

HABITAT: *Riparian Broadleaf*

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	rB R10B-K117	rB R14
TSS01	*****	*****
VCVTR01	96.000	98.000
VCVMD01	*****	*****
VBBSN01	51.000	51.000
VINDB04	0.000	0.000
VINDIE01	992.000	2314.667
VINDML01	96.000	117.333
VINDSH01	7248.000	906.667
VINDSN02	16.000	25.667
VINDSN05	0.000	0.000
VHTDE01	6.098	12.458
VHTML01	3.760	5.346
VHTSH04	2.085	2.262
VHTTR01	15.244	15.244
VACEV01	*****	*****
X39V3	80.000	304.000
X86V2	0.800	1.361

Study: ROSSRM Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
rB	R10B	1.6	0.815
rB	R14	14.4	0.795

Overall: 16.0 0.797

Study: ROSSRM Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: ROSSRM Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
rB	R10B	1.6	0.000
rB	R14	14.4	0.000

Overall: 16.0 0.000

Study: ROSSRM Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
rB	R10B	1.6	0.000
rB	R14	14.4	0.000

Overall: 16.0 0.000

Study name: ROSSRM 11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	16.0	0.797
MARTEN	0.0	0.000
RUFFED GROUSE	16.0	0.000
PILEATED WOODPECKER (western)	16.0	0.000

Study: DIABLOR3

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rB SubArea: R10B

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
96.00	0.66	0.81	0.815
VHTTR01	grf		
13.24	1.00		
VDNSN02	grf		
16.00	1.00		

Study: DIABLOR3

10-21-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rB SubArea: R14

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
98.00	0.63	0.79	0.795
VHTTR01	grf		
15.24	1.00		
VDNSN02	grf		
26.67	1.00		

Study: DIABLOR3

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: rB SubArea: R10B

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min-HSI
96.00	1.00	0.00	0.000
VDNDB04	grf		
0.00	0.00		
X39V3	grf		
80.00	1.00		
VDNSN05	grf	gem	
0.00	0.00	0.00	
VDNSN01	grf		
51.00	0.25		

Study: DIABLORB

10-21-1987

Model: PILEATED WOODPECKER (western)

CoverType: rB SubArea: R14

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
98.00	1.00	0.00	0.00	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
304.00	1.00			
VDNSN05	grf	gas		
0.00	0.00	0.00		
VDNSN01	grf			
51.00	0.25			

Study: DIABLORE

11-17-1987

Model: RUFFED GROUSE

CoverType: rB SubArea: R10E

LEV 4	LEV 3	LEV 2	LEV 1	
X86V2	usf	grf	prd	HSI
0.80	3.E+03	0.00	0.00	
VDNBL01				
96.00				
VDNDE01				
992.00				
VDNSH01				
7248.00				
VHTNL01	grf	usf		
3.76	0.73	0.26		
VHTDE01	grf			
6.10	1.00			
VHTSH04	grf			
2.09	0.19			
X86V2	usf			
0.80	384.00			
VDNBL01				
96.00				
VDNDE01				
992.00				
VDNSH01	usf			
7248.00	2.E+03			

Study: DIABLORE

11-17-1987

Model: RUFFED GROUSE

CoverType: 45 SubArea: R14

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prc--HSI			
1.36	3.E+03	0.00	0.000
VDNHL01----			
117.33			
VDNDE01----			
2314.67			
VDNSH01----			
906.67			
VHTNL01---grf-----usf-----			
5.25	1.00		0.56
VHTDE01---grf-----			
12.46	1.00		
VHTSH04---grf-----			
2.26	0.25		
X86V2-----usf-----			
1.36	425.48		
VDNHL01----			
117.33			
VDNDE01----			
2314.67			
VDNSH01---usf-----			
906.67	226.67		

ROSS, PRE-PROJECT

HABITAT: *Riparian Broadleaf*

SPECIES: RUFFED GROUSE, BLACK-CAPPED CHICKADEE, PILEATED WOODPECKER, MARTEN

COVER TYPE / SUB-AREA:

VARIABLE:	rB CS1	rB R10B = R117	rB R14
TSS01	*****	*****	*****
VCVTR01	89.400	96.000	98.000
VCVMD01	*****	*****	*****
VDBSN01	51.000	51.000	51.000
VDNDB04	48.000	0.000	0.000
VDNDE01	1440.000	992.000	2314.667
VDNHL01	128.000	96.000	117.333
VDNSH01	4800.000	7248.000	906.667
VDNSN02	80.000	16.000	26.667
VDNSN05	0.000	0.000	0.000
VHTDE01	6.098	6.098	12.845
VHTNL01	7.996	3.760	5.346
VHTSH04	1.904	2.085	2.262
VHTTR01	15.244	15.244	15.244
VRCEV01	*****	*****	*****
X39V3	384.000	80.000	304.000
X86V2	1.065	0.800	1.361

Study: ROSSrM Model: BLACK-CAPPED CHICKADEE (1) 11-10-1987

CoverType	SubArea	Area	HSI
rB	CS1	15.7	0.877
rB	R10B	1.0	0.815
rB	R14	14.4	0.795
Overall:		31.1	0.837

Study: ROSSrM Model: MARTEN 11-10-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: ROSSrM Model: RUFFED GROUSE 11-10-1987

CoverType	SubArea	Area	HSI
rB	CS1	15.7	0.000
rB	R10B	1.0	0.000
rB	R14	14.4	0.000
Overall:		31.1	0.000

Study: ROSSrM Model: PILEATED WOODPECKER (western) 11-10-1987

CoverType	SubArea	Area	HSI
rB	CS1	15.7	0.000
rB	R10B	1.0	0.000
rB	R14	14.4	0.000
Overall:		31.1	0.000

Study name: ROSSrM 11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	31.1	0.837
MARTEN	0.0	0.000
RUFFED GROUSE	31.1	0.000
PILEATED WOODPECKER (western)	31.1	0.000

Study: ROSSrM

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rB SubArea: CS1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
89.40	0.77	0.88	0.877
VHTTR01	grf		
15.24	1.00		
VDNSN02	grf		
80.00	1.00		

Study: ROSSrM

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rB SubArea: R10B

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
96.00	0.66	0.81	0.815
VHTTR01	grf		
15.24	1.00		
VDNSN02	grf		
16.00	1.00		

Study: ROSSrM

11-10-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: rB SubArea: R14

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
98.00	0.63	0.79	0.795
VHTTR01	grf		
15.24	1.00		
VDNSN02	grf		
26.67	1.00		

Model: RUFFED GROUSE

CoverType: nB SubArea: CS1

LEV 4	LEV 3	LEV 2	LEV 1
X86V2-----usf-----grf-----prf-----HSI			
1.07	3.E+03	0.00	0.000
VDNNL01---			
128.00			
VDNDE01---			
1440.00			
VDNSH01---^			
4800.00			
VHTNL01---grf-----usf-----^			
8.00	1.00	0.39	
VHTDE01---grf-----			
6.10	1.00		
VHTSH04---grf-----			
1.90	0.13		
X86V2-----usf-----			
1.07	494.89		
VDNNL01---^			
128.00			
	VDNDE01---		
	1440.00		
VDNSH01---usf-----^			
4800.00	1.E+03		

Model: RUFFED GROUSE

CoverType: rB SubArea: R10B

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
0.80	3.E+03	0.00	0.000
VDNML01			
96.00			
VDNDE01			
992.00			
VDNSH01			
7248.00			
VHTNL01	grf	usf	
3.76	0.73	0.26	
VHTDE01	grf		
6.10	1.00		
VHTSH04	grf		
2.09	0.19		
X86V2	usf		
0.80	384.00		
VDNML01			
96.00			
VDNDE01			
992.00			
VDNSH01	usf		
7248.00	2.E+03		

Model: RUFFED GROUSE

CoverType: rB SubArea: R14

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
1.36	3.E+03	0.00	0.000
VDNML01			
117.33			
VDNDE01			
2314.67			
VDNSH01			
906.67			
VHTNL01	grf	usf	
5.35	1.00	0.56	
VHTDE01	grf		
12.85	1.00		
VHTSH04	grf		
2.26	0.25		
X86V2	usf		
1.36	425.48		
VDNML01			
117.33			
VDNDE01			
2314.67			
VDNSH01	usf		
906.67	226.67		

Study: ROSSrM

11-10-1987

Model: PILEATED WOODPECKER (western)

CoverType: rB SubArea: CS1

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
89.40	1.00	0.77	0.00	
VDNDB04	grf			
48.00	0.60			
X39V3	grf			
384.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Study: ROSSrM

11-10-1987

Model: PILEATED WOODPECKER (western)

CoverType: rB SubArea: R10B

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	usf	min	HSI
96.00	1.00	0.00	0.00	
VDNDB04	grf			
0.00	0.00			
X39V3	grf			
80.00	1.00			
VDNSN05	grf	gem		
0.00	0.00	0.00		
VDBSN01	grf			
51.00	0.25			

Model: PILEATED WOODPECKER (western)

CoverType: rB SubArea: R14

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	min-HS1
98.00	1.00	0.00	0.000
VDNDB04	grf		
0.00	0.00		
X39V3	grf		
304.00	1.00		
VDNSN05	grf	gem	
0.00	0.00	0.00	
VDBSN01	grf		
51.00	0.25		

RPREPWF HABITAT DATA

11-22-1987

ROSS, PRE-PROJECT

HABITAT: PALUSTRINE MIXED FOREST

SPECIES: BLACK-CAPPED CHICKADEE

COVER TYPE / SUB-AREA:

PMF

VARIABLE:

CS4

VCVTR01 73.933

VDNSN02 0.667

VHTTR01 16.269

Study: RPREPMF Model: BLACK-CAPPED CHICKADEE (1) 11-22-1987

CoverType	SubArea	Area	HSI
PMF	CSA	56.7	0.133

Overall:		56.7	0.133
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Study name: RPREPMF 11-22-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	56.7	0.133

Study: RPREFMF

11-22-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: PMF SubArea: CSA

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	gem	min-HSI
73.93	1.00	1.00	0.133
VHTTR01	grf	^	
16.27	1.00		
	VDNSN02	grf	^
	0.67	0.13	

ROSSPBF HABITAT DATA

11-22-1987

ROSS, PRE & POST PROJECT

HABITAT: PALUSTRINE BROADLEAF FOREST

SPECIES: BLACK-CAPPED CHICKADEE

COVER TYPE / SUB-AREA:

VARIABLE:	PBF
VCVTR01	93.000
VDNSN02	0.333
VHTTR01	15.244

Study: RDSSPBF Model: BLACK-CAPPED CHICKADEE (1) 11-22-1987

CoverType	SubArea	Area	HSI
PBF	P8	9.3	0.067

Overall:		9.3	0.067
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Study name: RDSSPBF 11-22-1987

HSI Values For The Entire Study Area:

	Area	HSI
BLACK-CAPPED CHICKADEE (1)	9.3	0.067

Study: ROSSPBF

11-22-1987

Model: BLACK-CAPPED CHICKADEE (1)

CoverType: PBF SubArea: P8

LEV 4	LEV 3	LEV 2	LEV 1	
VCVTR01	grf	gem	min	HSI
93.00	0.71	0.84	0.067	
VHTTR01	grf			
15.24	1.00			
VDNSN02	grf			
0.33	0.07			

GORGERS HABITAT DATA

11-23-1987

GORGE, PRE & POST PROJECT
HABITAT: RIPARIAN SHRUBLANDS
SPECIES: RUFFED GROUSE

COVER TYPE / SUB-AREA:

VARIABLE:	rs
VDNDE01	2320.000
VDNML01	312.000
VDNSH01	14600.000
VHTDE01	8.227
VHTNL01	6.098
VHTSH04	4.032
X86V2	2.681

Study: GORGRGRS Model: RUFFED GROUSE

11-23-1987

CoverType	SubArea	Area	HSI
r5	D13	2.1	0.636

Overall:		2.1	0.636
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Study name: GORGRGRS

11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
RUFFED GROUSE	2.1	0.636

Study: GORGRSRS

11-23-1987

Model: RUFFED GROUSE

CoverType: rS SubArea: D13

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
2.68	7.E+03	1.00	0.636
VDNML01			
312.00			
VDNDE01			
2320.00			
VDNSH01			
14600.00			
VHTNL01	grf	usf	
6.10	1.00	0.64	
VHTDE01	grf		
8.23	1.00		
VHTSH04	grf		
4.03	0.82		
X86V2	usf		
2.68	797.47		
VDNML01			
312.00			
VDNDE01			
2320.00			
VDNSH01	usf		
14600.00	4.E+03		

RPOSRGSR HABITAT DATA

11-23-1987

ROSS, POST PROJECT
HABITAT: RIPARIAN SHRUBLANDS
SPECIES: RUFFED GROUSE

COVER TYPE / SUB-AREA:

rs

VARIABLE:	P74
VDNDE01	12736.000
VDNHL01	240.000
VDNSH01	6000.000
VHTDE01	9.471
VHTNL01	10.697
VHTSH04	2.005
X86V2	1.890

Study: RPOSRGRS Model: RUFFED GROUSE

11-23-1987

CoverType	SubArea	Area	HSI
rS	P74	2.1	0.967
Overall:		2.1	0.967

Study name: RPOSRGRS

11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
RUFFED GROUSE	2.1	0.967

Study: RPOSRRS

11-23-1987

Model: RUFFED GROUSE

CoverType: r6 SubArea: P74

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd-HSI
1.89	2.E+04	0.97	0.967
VDNML01			
240.00			
VDNDE01			
12736.00			
VDNSH01			
6000.00			
VHTNL01	grf	usf	
10.70	1.00	1.00	
VHTDE01	grf		
9.47	1.00		
VHTSH04	grf		
2.01	0.16		
X86V2	usf		
1.89	767.37		
VDNML01			
240.00			
VDNDE01			
12736.00			
VDNSH01	usf		
6000.00	2.E+03		

RPRRGRS HABITAT DATA

11-23-1987

ROSS, PRE-PROJECT

HABITAT: RIPARIAN SHRUBLANDS

SPECIES: RUFFED GROUSE

COVER TYPE / SUB-AREA:

VARIABLE:	rS	rS
	BV9	P74
VNDDE01	592.000	12736.000
VNDNL01	16.000	240.000
VDNH01	114000.000	6000.000
VHTDE01	8.155	9.471
VHTNL01	76.220	10.697
VHTSH04	5.990	2.005
X86V2	0.000	1.890

Study: RPREGRS Model: RUFFED GROUSE

11-23-1987

CoverType	SubArea	Area	HSI
rs	BV9	2.4	0.000
rs	P74	2.1	0.967
Overall:		4.5	0.450

Study name: RPREGRS

11-23-1987

HSI Values For The Entire Study Area:

	Area	HSI
RUFFED GROUSE	4.5	0.450

Study: RPRERGRS

11-23-1987

Model: RUFFED GROUSE

CoverType: r5 SubArea: BV9

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prnd HSI
0.00	3.E+04	0.00	0.000
VDNML01			
16.00			
VDNDE01			
592.00			
VDNSH01			
114000.00			
VHTNL01	grf	usf	
76.22	1.00	0.13	
VHTDE01	grf		
8.16	1.00		
VHTSH04	grf		
5.99	1.00		
X86V2	usf		
0.00	64.00		
VDNML01			
16.00			
VDNDE01			
592.00			
VDNSH01	usf		
114000.00	3.E+04		

Model: RUFFED GROUSE

CoverType: r5 SubArea: P74

LEV 4	LEV 3	LEV 2	LEV 1
X86V2	usf	grf	prd HSI
1.89	2.E+04	0.97	0.967
VDNML01			
240.00			
VDNDE01			
12736.00			
VDNSH01			
6000.00			
VHTNL01	grf	usf	
10.70	1.00	1.00	
VHTDE01	grf		
9.47	1.00		
VHTSH04	grf		
2.01	0.16		
X86V2	usf		
1.89	767.37		
VDNML01			
240.00			
VDNDE01			
12736.00			
VDNSH01	usf		
6000.00	2.E+03		

YELLOW WARBLER

10-16-1987

Model name: YELLOW WARBLER

Creation/modification date: 11-06-1985

Range: throughout the breeding range of the species.

Covertypes:

PSS : Palustrine scrub/shrub wetland

VRCSHO1--grf-----^

Habitat variables:

VRCSH01 : % of deciduous shrub canopy cover | hydrophytic species (%)

GRAPH FUNCTION at level 2, position 1

Title: * DECIDUOUS SHRUB CROWN COVER

X: 100.000, Y: 0.600

GRAPH FUNCTION at level 2, position 2

Title: AVERAGE HEIGHT OF SHRUB CANOPY (M)

X: 5.000, Y: 1.000

GRAPH FUNCTION at level 2, position 3

Title: % SHRUB CANOPY COMPRISED OF HYDROPHYTIC SHRUBS

X: 0.000, Y: 0.100

X: 100.000, Y: 1.000

USER-SPECIFIED FUNCTION at level 1, position 1

USUB = (X(1)*X(2)*X(3))^.5

Comments:

(none)

PRE-PROJECT, ROSS.

HABITAT: *Riparian Conifer Old Growth*

SPECIES: YELLOW WARBLER

	COVER TYPE / SUB-AREA:		
VARIABLE:	rCOG BV6	rCOG PSA R44	rCOG RTOR R100
VCVSH02	6.650	11.600	55.800
VHTSH05	1.991	2.295	2.408
VRCSH01	7.050	59.500	40.775

1. $\frac{1}{2}$ 2. $\frac{1}{3}$ 3. $\frac{1}{4}$ 4. $\frac{1}{5}$ 5. $\frac{1}{6}$ 6. $\frac{1}{7}$ 7. $\frac{1}{8}$ 8. $\frac{1}{9}$ 9. $\frac{1}{10}$ 10. $\frac{1}{11}$ 11. $\frac{1}{12}$ 12. $\frac{1}{13}$ 13. $\frac{1}{14}$ 14. $\frac{1}{15}$ 15. $\frac{1}{16}$ 16. $\frac{1}{17}$ 17. $\frac{1}{18}$ 18. $\frac{1}{19}$ 19. $\frac{1}{20}$ 20. $\frac{1}{21}$ 21. $\frac{1}{22}$ 22. $\frac{1}{23}$ 23. $\frac{1}{24}$ 24. $\frac{1}{25}$ 25. $\frac{1}{26}$ 26. $\frac{1}{27}$ 27. $\frac{1}{28}$ 28. $\frac{1}{29}$ 29. $\frac{1}{30}$ 30. $\frac{1}{31}$ 31. $\frac{1}{32}$ 32. $\frac{1}{33}$ 33. $\frac{1}{34}$ 34. $\frac{1}{35}$ 35. $\frac{1}{36}$ 36. $\frac{1}{37}$ 37. $\frac{1}{38}$ 38. $\frac{1}{39}$ 39. $\frac{1}{40}$ 40. $\frac{1}{41}$ 41. $\frac{1}{42}$ 42. $\frac{1}{43}$ 43. $\frac{1}{44}$ 44. $\frac{1}{45}$ 45. $\frac{1}{46}$ 46. $\frac{1}{47}$ 47. $\frac{1}{48}$ 48. $\frac{1}{49}$ 49. $\frac{1}{50}$ 50. $\frac{1}{51}$ 51. $\frac{1}{52}$ 52. $\frac{1}{53}$ 53. $\frac{1}{54}$ 54. $\frac{1}{55}$ 55. $\frac{1}{56}$ 56. $\frac{1}{57}$ 57. $\frac{1}{58}$ 58. $\frac{1}{59}$ 59. $\frac{1}{60}$ 60. $\frac{1}{61}$ 61. $\frac{1}{62}$ 62. $\frac{1}{63}$ 63. $\frac{1}{64}$ 64. $\frac{1}{65}$ 65. $\frac{1}{66}$ 66. $\frac{1}{67}$ 67. $\frac{1}{68}$ 68. $\frac{1}{69}$ 69. $\frac{1}{70}$ 70. $\frac{1}{71}$ 71. $\frac{1}{72}$ 72. $\frac{1}{73}$ 73. $\frac{1}{74}$ 74. $\frac{1}{75}$ 75. $\frac{1}{76}$ 76. $\frac{1}{77}$ 77. $\frac{1}{78}$ 78. $\frac{1}{79}$ 79. $\frac{1}{80}$ 80. $\frac{1}{81}$ 81. $\frac{1}{82}$ 82. $\frac{1}{83}$ 83. $\frac{1}{84}$ 84. $\frac{1}{85}$ 85. $\frac{1}{86}$ 86. $\frac{1}{87}$ 87. $\frac{1}{88}$ 88. $\frac{1}{89}$ 89. $\frac{1}{90}$ 90. $\frac{1}{91}$ 91. $\frac{1}{92}$ 92. $\frac{1}{93}$ 93. $\frac{1}{94}$ 94. $\frac{1}{95}$ 95. $\frac{1}{96}$ 96. $\frac{1}{97}$ 97. $\frac{1}{98}$ 98. $\frac{1}{99}$ 99. $\frac{1}{100}$ 100. $\frac{1}{101}$ 101. $\frac{1}{102}$ 102. $\frac{1}{103}$ 103. $\frac{1}{104}$ 104. $\frac{1}{105}$ 105. $\frac{1}{106}$ 106. $\frac{1}{107}$ 107. $\frac{1}{108}$ 108. $\frac{1}{109}$ 109. $\frac{1}{110}$ 110. $\frac{1}{111}$ 111. $\frac{1}{112}$ 112. $\frac{1}{113}$ 113. $\frac{1}{114}$ 114. $\frac{1}{115}$ 115. $\frac{1}{116}$ 116. $\frac{1}{117}$ 117. $\frac{1}{118}$ 118. $\frac{1}{119}$ 119. $\frac{1}{120}$ 120. $\frac{1}{121}$ 121. $\frac{1}{122}$ 122. $\frac{1}{123}$ 123. $\frac{1}{124}$ 124. $\frac{1}{125}$ 125. $\frac{1}{126}$ 126. $\frac{1}{127}$ 127. $\frac{1}{128}$ 128. $\frac{1}{129}$ 129. $\frac{1}{130}$ 130. $\frac{1}{131}$ 131. $\frac{1}{132}$ 132. $\frac{1}{133}$ 133. $\frac{1}{134}$ 134. $\frac{1}{135}$ 135. $\frac{1}{136}$ 136. $\frac{1}{137}$ 137. $\frac{1}{138}$ 138. $\frac{1}{139}$ 139. $\frac{1}{140}$ 140. $\frac{1}{141}$ 141. $\frac{1}{142}$ 142. $\frac{1}{143}$ 143. $\frac{1}{144}$ 144. $\frac{1}{145}$ 145. $\frac{1}{146}$ 146. $\frac{1}{147}$ 147. $\frac{1}{148}$ 148. $\frac{1}{149}$ 149. $\frac{1}{150}$ 150. $\frac{1}{151}$ 151. $\frac{1}{152}$ 152. $\frac{1}{153}$ 153. $\frac{1}{154}$ 154. $\frac{1}{155}$ 155. $\frac{1}{156}$ 156. $\frac{1}{157}$ 157. $\frac{1}{158}$ 158. $\frac{1}{159}$ 159. $\frac{1}{160}$ 160. $\frac{1}{161}$ 161. $\frac{1}{162}$ 162. $\frac{1}{163}$ 163. $\frac{1}{164}$ 164. $\frac{1}{165}$ 165. $\frac{1}{166}$ 166. $\frac{1}{167}$ 167. $\frac{1}{168}$ 168. $\frac{1}{169}$ 169. $\frac{1}{170}$ 170. $\frac{1}{171}$ 171. $\frac{1}{172}$ 172. $\frac{1}{173}$ 173. $\frac{1}{174}$ 174. $\frac{1}{175}$ 175. $\frac{1}{176}$ 176. $\frac{1}{177}$ 177. $\frac{1}{178}$ 178. $\frac{1}{179}$ 179. $\frac{1}{180}$ 180. $\frac{1}{181}$ 181. $\frac{1}{182}$ 182. $\frac{1}{183}$ 183. $\frac{1}{184}$ 184. $\frac{1}{185}$ 185. $\frac{1}{186}$ 186. $\frac{1}{187}$ 187. $\frac{1}{188}$ 188. $\frac{1}{189}$ 189. $\frac{1}{190}$ 190. $\frac{1}{191}$ 191. $\frac{1}{192}$ 192. $\frac{1}{193}$ 193. $\frac{1}{194}$ 194. $\frac{1}{195}$ 195. $\frac{1}{196}$ 196. $\frac{1}{197}$ 197. $\frac{1}{198}$ 198. $\frac{1}{199}$ 199. $\frac{1}{200}$ 200. $\frac{1}{201}$ 201. $\frac{1}{202}$ 202. $\frac{1}{203}$ 203. $\frac{1}{204}$ 204. $\frac{1}{205}$ 205. $\frac{1}{206}$ 206. $\frac{1}{207}$ 207. $\frac{1}{208}$ 208. $\frac{1}{209}$ 209. $\frac{1}{210}$ 210. $\frac{1}{211}$ 211. $\frac{1}{212}$ 212. $\frac{1}{213}$ 213. $\frac{1}{214}$ 214. $\frac{1}{215}$ 215. $\frac{1}{216}$ 216. $\frac{1}{217}$ 217. $\frac{1}{218}$ 218. $\frac{1}{219}$ 219. $\frac{1}{220}$ 220. $\frac{1}{221}$ 221. $\frac{1}{222}$ 222. $\frac{1}{223}$ 223. $\frac{1}{224}$ 224. $\frac{1}{225}$ 225. $\frac{1}{226}$ 226. $\frac{1}{227}$ 227. $\frac{1}{228}$ 228. $\frac{1}{229}$ 229. $\frac{1}{230}$ 230. $\frac{1}{231}$ 231. $\frac{1}{232}$ 232. $\frac{1}{233}$ 233. $\frac{1}{234}$ 234. $\frac{1}{235}$ 235. $\frac{1}{236}$ 236. $\frac{1}{237}$ 237. $\frac{1}{238}$ 238. $\frac{1}{239}$ 239. $\frac{1}{240}$ 240

100-12-1397

100-12-1397

Area: 451
23.6 0.557

YELLOW WARBLER

Study: WPRERCOG

10-23-1987

Model: YELLOW WARBLER

CoverType: rCOG SubArea: BV6

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
6.65	0.11	0.134
VHTSH05	grf	
1.99	1.00	
VRCSH01	grf	^
7.05	0.16	

Study: WPRERCOG

10-23-1987

Model: YELLOW WARBLER

CoverType: rCOG SubArea: PSA (P11)

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
11.60	0.19	0.351
VHTSH05	grf	
2.30	1.00	
VRCSH01	grf	^
59.50	0.64	

Study: WPRERCOG

10-23-1987

Model: YELLOW WARBLER

CoverType: rCOG SubArea: R10A (R10)

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
55.80	0.93	0.659
VHTSH05	grf	
2.41	1.00	
VRCSH01	grf	^
40.78	0.47	

WDIARCOG HABITAT DATA

10-23-1987

DIABLO, POST-PROJECT & PRE-PROJECT & PRE-PROJECT GORGE

HABITAT: Riparian Conifer Old Growth

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

rCOG

VARIABLE: R10A = R120

VCVSH02 55.800

VHTSH05 2.408

VRCSH01 40.775

Study: WDIARCOG Model: YELLOW WARBLER

11-16-1987

CoverType	SubArea	Area	HSI
rCOG	R10A	18.0	0.659

Overall:		18.0	0.659
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Study name: WDIARCOG

11-16-1987

HSI values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	18.0	0.659

Study: WDIARCOG

10-23-1987

Model: YELLOW WARBLER

CoverType: rCOG SubArea: R10A

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
55.80	0.93	0.659
VHTSH05	grf	
2.41	1.00	
VRCSH01	grf	^
40.78	0.47	

(Blank)

WRRCOG HABITAT DATA

10-21-1987

RESS, POST-PROJECT

HABITAT: *Riparian Conifer Old Growth*
SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

rCOG

VARIABLE:	PSA = P94
VCVSH02	11.600
VHTSH05	2.295
VRCSH01	59.500

Study: WRCDS Name: YELLOW WARBLER 11-12-1987

CoverType	SubArea	Area	MSI
WCS	SEA	1.5	0.351
Overall:		1.5	0.351

Study name: WRCDS 11-12-1987

MSI Values For The Entire Study Area:

	Area	MSI
YELLOW WARBLER	1.5	0.351

Study: WRRCDG

10-21-1987

Model: YELLOW WARBLER

CoverType: rCDG SubArea: P5A

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf
11.60	0.19	0.351
VHTSH05	grf	
2.30	1.00	
VRCSH01	grf	^
59.50	0.64	

PRE-PROJECT, ROSS, GORGE, DIABLO; *Post-Project Diablo + Ross*

HABITAT: *Riparian Closed Canopy Conifer*

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

rcc'

VARIABLE: R4A = R121

VCVSH02 63.600

VHTSH05 2.161

VRCSH01 99.450

Model: YELLOW WARBLER

CoverType: rCC SubArea: R11A 1.0023

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
69.60	1.00	0.998
VHTSH05	grf	
2.16	1.00	
VRCSH01	grf	^
99.45	1.00	

Area HST
0.989

YELLOW MIRELESS

HST Values for the Study Area

11-12-1997

Study Name: MIRELESS

0.989 1.4

0.989 1.4
0.989 1.4

11-12-1997

Study: MIRELESS YELLOW MIRELESS

WDIARM HABITAT DATA

10-23-1987

Ross, Pre - Project
HABITAT: *Riparian Mixed*
SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

VARIABLE:	rM BV7	rM H59
VCVSH02	36.133	27.000
VHTSH05	2.330	1.471
VRCSH01	8.900	20.700

Study: WDIARM Species: YELLOW WARBLER 11-16-1997

CoverType	SubArea	Area	HSI
WT	347	4.8	0.328
WT	458	3.1	0.200
Overall:		13.8	0.315

Study Name: WDIARM 11-16-1997

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	13.8	0.315

Study: WDIARM

10-23-1987

Model: YELLOW WARBLER

CoverType: rM SubArea: BV7

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
36.13	0.60	0.329
VHTSH05	grf	
2.33	1.00	
VRCSH01	grf	^
8.90	0.18	

Study: WDIARM

10-23-1987

Model: YELLOW WARBLER

CoverType: rM SubArea: H59

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
27.00	0.45	0.308
VHTSH05	grf	
1.47	0.74	
VRCSH01	grf	^
20.70	0.29	

Study: WRRM Model: YELLOW WARBLER 10-21-1987

CoverType	SubArea	Area	HSI
RM	H59	9.0	0.308

Overall:		9.0	0.308
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Study name: WRRM 10-21-1987

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	9.0	0.308

WARM HABITAT DATA

10-21-1987

ROSS, POST-PROJECT, *Diablo Post-Project*
HABITAT: *Riparian Mixed*
SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

VARIABLE:	rM
VCVSH02	27.000
VHTSH05	1.471
VRCSH01	20.700

(Bank)

Study: WRRM

10-21-1987

Model: YELLOW WARBLER

CoverType: rM SubArea: H59

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf--HSI
27.00	0.45	0.308
VHTSH05	grf	
1.47	0.74	
VRCSH01	grf	^
20.70	0.29	

WDIARB HABITAT DATA

10-23-1987

DIABLO, POST-PROJECT

HABITAT: *Riparian Broadleaf*

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

	r8	r8
VARIABLE:	$R10B = R117$	R14
VCVSH02	35.100	19.767
VHTSH05	2.085	2.262
VRCSH01	71.700	18.633

Study: WETFE Yellow Warbler

11-16-1987

Time Type	Count	Area	HSI
10	2000	11.0	0.179
10	914	14.4	0.267
Overall:		15.0	0.333

Study name: WETFE

11-16-1987

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	15.0	0.333

Study: WDIARB

10-23-1987

Model: YELLOW WARBLER

CoverType: rB SubArea: R10B

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
36.10	0.60	0.670
VHTSH05	grf	
2.09	1.00	
VRCSH01	grf	^
71.70	0.75	

Study: WDIARB

10-23-1987

Model: YELLOW WARBLER

CoverType: rB SubArea: R14

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
19.77	0.33	0.297
VHTSH05	grf	
2.26	1.00	
VRCSH01	grf	^
18.63	0.27	

PRE-PROJECT, ROSS.

HABITAT: *Riparian Broadleaf Forest*

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

VARIABLE:	rB CS1	rB R10B R11 R12	rB R14
VCVSH02	57.400	36.100	19.767
VHTSH05	1.904	2.085	2.262
VRCSH01	41.800	71.700	18.633

Study: WPRERB Model: YELLOW WARBLER

11-12-1987

CoverType	SubArea	Area	HSI
7B	DS1	15.7	0.359
7B	R11B	1.6	0.670
7B	R14	14.4	0.297

Overall:	31.6	0.495
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Study name: WPRERB

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	31.6	0.495

Study: WPRERB

10-23-1987

Model: YELLOW WARBLER

CoverType: rB SubArea: CS1

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf--HSI
57.40	0.96	0.659
VHTSH05	grf	
1.90	0.95	
VRCSH01	grf	^
41.80	0.48	

Study: WPRERB

10-23-1987

Model: YELLOW WARBLER

CoverType: rB SubArea:

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf--HSI
36.10	0.60	0.670
VHTSH05	grf	
2.09	1.00	
VRCSH01	grf	^
71.70	0.75	

Study: WPRERB

10-23-1987

Model: YELLOW WARBLER

CoverType: rB SubArea: R14

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf--HSI
19.77	0.33	0.297
VHTSH05	grf	
2.26	1.00	
VRCSH01	grf	^
18.63	0.27	

WPRERS HABITAT DATA

11-19-1987

PRE-PROJECT ROSS

HABITAT: *Riparian shrubland*

SPECIES: YELLOW WARBLER

	COVER TYPE / SUB-AREA:	
	rS	rS
VARIABLE:	BV9	P74
VCVSH02	99.000	90.200
VHTSH05	3.813	2.005
VRCSH01	81.350	0.000

Study: WPRERS Model: YELLOW WARBLER

11-10-1987

CoverType	SubArea	Area	HSI
rS	BV9	2.4	0.718
rS	P74	2.1	0.282
Overall:		4.5	0.515

Study name: WPRERS

11-10-1987

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	4.5	0.515

Study: WPRENS

10-23-1987

Model: YELLOW WARBLER

CoverType: rS SubArea: BV9

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
99.00	0.62	0.718
VHTSH05	grf	
5.99	1.00	
VRCSH01	grf	^
81.35	0.83	

Study: WPRENS

10-23-1987

Model: YELLOW WARBLER

CoverType: rS SubArea: P74

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
90.20	0.80	0.282
VHTSH05	grf	
2.01	1.00	
VRCSH01	grf	^
0.00	0.10	

WRRS HABITAT DATA

10-21-1987

ROSS, POST-PROJECT

HABITAT: *Riparian Shrubland*

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

VARIABLE:	rs
VCVSH02	P74
VHTSH05	90.200
VRCSH01	2.005
	0.000

Study: WRRS Model: YELLOW WARBLER 10-21-1987

CoverType	SubArea	Area	HSI
r5	P74	2.1	0.282

Overall:		2.1	0.282
----------	--	-----	-------

Study name: WRRS 10-21-1987

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	2.1	0.282

Study: WRRS

10-21-1987

Model: YELLOW WARBLER

CoverType: rS SubArea: P74

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf
90.20	0.80	0.282
VHTSH05	grf	
2.01	1.00	
VRCSH01	grf	^
0.00	0.10	

WPREPMPR HABITAT DATA

10-23-1987

PRE-PROJECT, ROSS

HABITAT: *Palustrine Mixed Forest*

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

	PMF
VARIABLE:	CS4
VCVSH02	80.133
VHTSH05	1.871
VRCSH01	45.246

Study: WPPEPMF Model: YELLOW WARELER

11-16-1987

CoverType	SubArea	Area	HSI
PMF	CS4	56.7	0.688

Overall:		56.7	0.688
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Study name: WPPEPMF

11-16-1987

HSI Values For The Entire Study Area:

YELLOW WARELER

Area	HSI
56.7	0.688

Study: WPREFMF

11-16-1987

Model: YELLOW WARBLER

CoverType: PMF SubArea: CS4

LEV 3	LEV 2	LEV 1
VCVSH02---grf-----usf--HSI		
80.13	1.00	0.688
VHTSH05---grf-----		
1.87	0.94	
VRCSH01---grf-----^		
45.25	0.51	

1. WHITEY BIRD YELLOW WARBLER 11-11-1987

Count	Area	Count	Area
55.7	0.558	55.7	0.558
55.7	0.558	55.7	0.558

2. Yellow Warbler 11-15-1987

3. Includes For The Entire Study Area:

Area	Count
55.7	0.558

YELLOW WARBLER

WPREPBF HABITAT DATA

10-23-1987

PRE-PROJECT, *v. Post-Project Ross*
HABITAT: *Palustrine Broadleaf Forest*
SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

	PBF
VARIABLE:	P8
VCVSH02	55.400
VHTSH05	1.898
VRCSH01	71.797

Study: WREDEF 11-16-1987 YELLOW WARBLER

Survey Type	SubArea	Count	HBI
REP	DE	9.3	0.809
Overall:		9.3	0.809

Study Name: WREDEF 11-16-1987

HBI Values For The Entire Study Area:

	Area	HBI
YELLOW WARBLER	9.3	0.809

01/27/1987

11-15-1987

Model: YELLOW WARBLER

CoverType: PBF SubArea: 28

LEV 3	LEV 2	LEV 1
WDVCH02---	g	f-----usf--H01
55.40	0.98	0.309
WHTCH05---	g	f-----
1.90	0.95	
VRCH01---	g	f-----
71.80	0.75	

PRE-PROJECT, ROSS

HABITAT: *Palustrine Shrub Swamp*

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

	PSS BV11	PSS BV2	PSS P34
VCVSH02	45.700	44.533	100.000
VHTSH05	1.605	1.336	1.800
VRCSH01	100.000	100.000	100.000

Study: WFR0735 Species: YELLOW WARBLER

11-15-1987

CoverType	SubArea	Area	HSI
TBB	0011	15.9	0.730
TBB	200	24.1	0.704
PBB	001	8.1	0.735
Overall:		48.1	0.735

Study name: WFR0735

11-15-1987

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	48.1	0.735

Study: WPREPSS

10-23-1987

Model: YELLOW WARBLER

CoverType: PSS SubArea: BV11

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
45.70	0.76	0.782
VHTSH05	grf	
1.61	0.80	
VRCSH01	grf	^
100.00	1.00	

Study: WPREPSS

10-23-1987

Model: YELLOW WARBLER

CoverType: PSS SubArea: BV2

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
44.53	0.74	0.704
VHTSH05	grf	
1.34	0.67	
VRCSH01	grf	^
100.00	1.00	

Study: WPREPSS

10-23-1987

Model: YELLOW WARBLER

CoverType: PSS SubArea: P34

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
100.00	0.60	0.735
VHTSH05	grf	
1.80	0.90	
VRCSH01	grf	^
100.00	1.00	

WRPSS HABITAT DATA

10-21-1987

ROSS, POST-PROJECT

HABITAT: *Palustrine Shrub Swamp*

SPECIES: YELLOW WARBLER

COVER TYPE / SUB-AREA:

	PSS
VARIABLE:	P34
VCVSH02	100.000
VHTSH05	1.800
VRCSH01	100.000

Study: WPPSB Model: YELLOW WARBLER 11-12-1987

Event Type	SubArea	Area	HSI
735	703	2.1	0.735
Overall:		2.1	0.735

Study name: WPPSB 11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
YELLOW WARBLER	2.1	0.735

Study: WRPSS

10-21-1987

Model: YELLOW WARBLER

CoverType: PSS SubArea: P34

LEV 3	LEV 2	LEV 1
VCVSH02	grf	usf-HSI
100.00	0.60	0.735
VHTSH05	grf	
1.80	0.90	
VRCSH01	grf	^
100.00	1.00	

BEAVER

一、
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 十七、
 十八、
 十九、
 二十、

Verification level: Expert Review

Creation/modification date: 11-18-1987

ALLEN, A. W. 1983.

HABITAT SUITABILITY INDEX MODELS: BEAVER.

U. S. FISH WILDL. SERV. FWS/OBS-82/10.30. REVISED. 20 pp.

Covert types:

PSS : Palustrine scrub/shrub wetland

n30STR1 : 100m band around rivers & streams

n30STB2 : 100-200m band around rivers & streams

n30PSS1 : 100 band around PSS cover type

n30PSS2 : 100-200m band around PSS cover type

n30L (B1 : 100 band around lakes (Bha

n30L (82 : 100-200m band around lakes (8ha

n30L>B1 : 100m band around lakes } 8ha

n30L)82 : 100-200m band around lakes) 8ha

RIVERn : Streams, rivers, & other inland waters that are predominantly moving

n30L (8 : lakes, ponds, & reservoirs (8ha

n30L18 : Lakes, ponds, & reservoirs } Bha

PBF : palustrine broadleaf forest

PMF : palustrine mixed forest

PM : wet meadow/marsh

n30PBF1 : 100m band around PBF cover type

n30PBF2 : 100-200m band around PBF cover type

n30PMF1 : 100m band around PMF cover type

n30PMF2 : 100-200m band around PMF cover type

n30PM1 : 100m band around PM cover type

n30PM2 : 100-200m band around PM cover

TEMPERATURE : 100 DEGREES CELSIUS OR 212 DEGREES FAHRENHEIT

LIFE REQUISITE: WNTFOOD

Covertypes:

n30STR1, n30PSS1, PSS, n30L>81, PBF, n30PBF1, PMF, n30PMF1, PM, n30PM1

Lev 4 Lev 3 Lev 2 Lev 1

VCVTR01--grf-----usf-----usf-LRSI

VRDTRO1--grf-----|

X30V5-----

VCVSH01--grf-----usf-----

VHTSH02--grf-----1

X30V5-----^

Habitat variables:

VCVSH01 : Percent canopy cover of shrubs (i.e., all woody plants 6m tall) (%)

VCVTR01 : Percent canopy cover of trees (%)
VHTSH02 : Mean height of shrub canopy (not of individual shrubs) (m)
VRDTR01 : % of the number of all trees that have 3-15cm DBH (%)
X3OV5 :Spp. composition of woody veg. (Aspen,willow,cottonw=1,decid=2,con=3)

GRAPH FUNCTION at level 3, position 1

Title: Percent tree canopy closure

X:	0.000,	Y:	0.000
X:	40.000,	Y:	1.000
X:	60.000,	Y:	1.000
X:	100.000,	Y:	0.500

GRAPH FUNCTION at level 3, position 2

Title: % of trees that have 3 - 15 cm dbh

X:	0.000,	Y:	0.200
X:	100.000,	Y:	1.000

MENU FUNCTION at level 3, position 3

Menu choice:	1	Output value:	1.000
Menu choice:	2	Output value:	0.600
Menu choice:	3	Output value:	0.200

GRAPH FUNCTION at level 3, position 4

Title: Percent shrub crown cover

X:	0.000,	Y:	0.000
X:	40.000,	Y:	1.000
X:	60.000,	Y:	1.000
X:	100.000,	Y:	0.800

GRAPH FUNCTION at level 3, position 5

Title: Ave. height shrub canopy

X:	0.000,	Y:	0.000
X:	2.000,	Y:	1.000
X:	4.000,	Y:	1.000

MENU FUNCTION at level 3, position 6

Menu choice:	1	Output value:	1.000
Menu choice:	2	Output value:	0.600
Menu choice:	3	Output value:	0.200

USER-SPECIFIED FUNCTION at level 2, position 1

USUB=((X(1)*X(2))^(1/2)*X(3))^(1/2)

USER-SPECIFIED FUNCTION at level 2, position 2

USUB=((X(1)*X(2))^(1/2)*X(3))^(1/2)

USER-SPECIFIED FUNCTION at level 1, position 1

USUB=X(1)+X(2)

IF USUB>1 THEN USUB =1

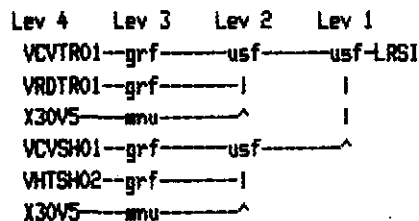
Comments:

Note: the cover types listed differ from those in the published model. This tree diagram considers the value of winter food within the wetlands themselves and within a 100 m band around the wetlands, and within a 100 m band around streams and lakes greater than 8 ha in size. These changes were made because the model requires measuring winter food in the lands adjacent to the wetlands and water. These bands will be different cover types and therefore should be sampled separately, as is suggested here.

LIFE REQUISITE: WNTFOOD

Covertypes:

n30STR2, n30PSS2, n30L82, n30PBF2, n30PMF2, n30PM2



Habitat variables:

VCVSH01 : Percent canopy cover of shrubs (i.e., all woody plants <6m tall) (%)

VCVTR01 : Percent canopy cover of trees (%)

VHTSH02 : Mean height of shrub canopy (not of individual shrubs) (m)

VRDTR01 : % of the number of all trees that have 3-15cm DBH (%)

X30V5 : Spp. composition of woody veg. (Aspen,willow,cottonw=1,decid=2,con=3)

GRAPH FUNCTION at level 3, position 1

Title: Percent tree canopy closure

X: 0.000, Y: 0.000

X: 40.000, Y: 1.000

X: 60.000, Y: 1.000

X: 100.000, Y: 0.500

GRAPH FUNCTION at level 3, position 2

Title: % of trees that have 3 - 15 cm dbh

X: 0.000, Y: 0.200

X: 100.000, Y: 1.000

MENU FUNCTION at level 3, position 3

Menu choice: 1 Output value: 1.000

Menu choice: 2 Output value: 0.500

Menu choice: 3 Output value: 0.200

GRAPH FUNCTION at level 3, position 4

Title: Percent shrub crown cover

X: 0.000, Y: 0.000

X: 40.000, Y: 1.000

X: 60.000, Y: 1.000

X: 100.000, Y: 0.800

GRAPH FUNCTION at level 3, position 5

Title: Ave. height shrub canopy

X: 0.000, Y: 0.000

X: 2.000, Y: 1.000

X: 4.000, Y: 1.000

MENU FUNCTION at level 3, position 6

Menu choice: 1 Output value: 1.000

Menu choice: 2 Output value: 0.500

Menu choice: 3 Output value: 0.200

USER-SPECIFIED FUNCTION at level 2, position 1

USUB=((X(1)*X(2))^(1/2)*X(3))^(1/2)

USER-SPECIFIED FUNCTION at level 2, position 2

USUB=((X(1)*X(2))^(1/2)*X(3))^(1/2)

USER-SPECIFIED FUNCTION at level 1, position 1

USUB=X(1)+X(2)

IF USUB>1 THEN USUB =1

USUB = USUB * (0.5)

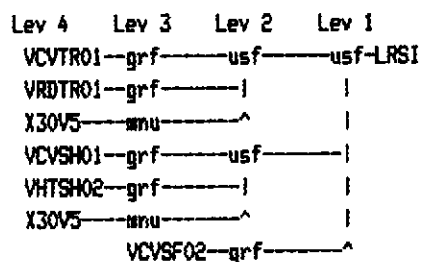
Comments:

Note: this tree diagram contains cover types somewhat different from those in the published model. This diagram applies to the zone of habitat 100-200 m around wetlands, streams, and lakes greater than 8 ha in size.

LIFE REQUISITE: WNTFOOD

Covertypes:

n30L (81



Habitat variables:

VCVSF02 : Percent canopy cover of yellow and white water lily (%)
VCVSH01 : Percent canopy cover of shrubs (i.e., all woody plants (6m tall) (%)
VCVTR01 : Percent canopy cover of trees (%)
VHTSH02 : Mean height of shrub canopy (not of individual shrubs) (m)
VRDTR01 : % of the number of all trees that have 3-15cm DBH (%)
X30V5 : Spp. composition of woody veg. (Aspen,willow,cottonw=1,decid=2,con=3)

GRAPH FUNCTION at level 3, position 1

Title: Percent tree canopy closure

X:	0.000,	Y:	0.000
X:	40.000,	Y:	1.000
X:	50.000,	Y:	1.000
X:	100.000,	Y:	0.500

GRAPH FUNCTION at level 3, position 2

Title: % of trees that have 3 - 15 cm dbh

X:	0.000,	Y:	0.200
X:	100.000,	Y:	1.000

MENU FUNCTION at level 3, position 3

Menu choice:	1	Output value:	1.000
Menu choice:	2	Output value:	0.600
Menu choice:	3	Output value:	0.200

GRAPH FUNCTION at level 3, position 4

Title: Percent shrub crown cover

X:	0.000,	Y:	0.000
X:	40.000,	Y:	1.000
X:	50.000,	Y:	1.000
X:	100.000,	Y:	0.800

GRAPH FUNCTION at level 3, position 5

Title: Ave. height shrub canopy

X:	0.000,	Y:	0.000
X:	2.000,	Y:	1.000
X:	4.000,	Y:	1.000

MENU FUNCTION at level 3, position 6

Menu choice:	1	Output value:	1.000
Menu choice:	2	Output value:	0.600
Menu choice:	3	Output value:	0.200

USER-SPECIFIED FUNCTION at level 2, position 1

USUB=((X(1)*X(2))^(1/2)*X(3))^(1/2)

USER-SPECIFIED FUNCTION at level 2, position 2

USUB = ((X(1)*X(2))^(1/2)*X(3))^(1/2)

GRAPH FUNCTION at level 2, position 3

Title: % of lake surf. dominated by water lily

X:	0.000,	Y:	0.000
X:	100.000,	Y:	0.400

USER-SPECIFIED FUNCTION at level 1, position 1

USUB=X(1)+X(2)

IF USUB > 1 THEN USUB = 1

USUB=USUB + X(3)

IF USUB > 1 THEN USUB = 1

Comments:

Note: this tree diagram applies to lakes less than 8 ha in size and a band 100 m surrounding such lakes.

LIFE REQUISITE: WNTFOOD

Covertypes:

n30L (82, n30L) 82

```

      Lev 4   Lev 3   Lev 2   Lev 1
VCVTR01--grf-----usf-----usf-LRSI
VRDTR01--grf-----|-----|
X30V5---anu-----^-----|
VCVSH01--grf-----usf-----|
VHTSH02--grf-----|-----|
X30V5---anu-----^-----|
          VCVSF02--grf-----^

```

Habitat variables:

VCVSF02 : Percent canopy cover of yellow and white water lily (%)

VCVSH01 : Percent canopy cover of shrubs (i.e., all woody plants (6m tall) (%)

VCVTR01 : Percent canopy cover of trees (%)

VHTSH02 : Mean height of shrub canopy (not of individual shrubs) (m)

VRDTR01 : % of the number of all trees that have 3-15cm DBH (%)

X30V5 : Spp. composition of woody veg. (Aspen,willow,cottonw=1,decid=2,con=3)

GRAPH FUNCTION at level 3, position 1

Title: Percent tree canopy closure

X: 0.000, Y: 0.000

X: 40.000, Y: 1.000

X: 60.000, Y: 1.000

X: 100.000, Y: 0.500

GRAPH FUNCTION at level 3, position 2

Title: % of trees that have 3 - 15 cm dbh

X: 0.000, Y: 0.200

X: 100.000, Y: 1.000

MENU FUNCTION at level 3, position 3

Menu choice: 1 Output value: 1.000

Menu choice: 2 Output value: 0.600

Menu choice: 3 Output value: 0.200

GRAPH FUNCTION at level 3, position 4

Title: Percent shrub crown cover

X: 0.000, Y: 0.000

X: 40.000, Y: 1.000

X: 60.000, Y: 1.000

X: 100.000, Y: 0.800

GRAPH FUNCTION at level 3, position 5

Title: Ave. height shrub canopy

X: 0.000, Y: 0.000

X: 2.000, Y: 1.000

X: 4.000, Y: 1.000

MENU FUNCTION at level 3, position 6

Menu choice: 1 Output value: 1.000

Menu choice: 2 Output value: 0.600

Menu choice: 3 Output value: 0.200

USER-SPECIFIED FUNCTION at level 2, position 1

USUB=((X(1)*X(2))^(1/2)*X(3))^(1/2)

USER-SPECIFIED FUNCTION at level 2, position 2

USUB=((X(1)*X(2))^(1/2)*X(3))^(1/2)

GRAPH FUNCTION at level 2, position 3

Title: % of lake surface dominated by lily

X: 0.000, Y: 0.000

X: 100.000, Y: 0.400

USER-SPECIFIED FUNCTION at level 1, position 1

USUB=X(1)+X(2)

IF USUB>1 THEN USUB=1

USUB=(USUB * 0.5) + X(3)

Comments:

Note: this tree diagram applies to a band 100-200 m around lakes of all sizes.

LIFE REQUISITE: WATER

Covertypes:

RIVERn

Lev 3 Lev 2 Lev 1
WGD01---grf---min-LRSI
X30VB---anu-----^

Habitat variables:

WSD01 : Stream gradient (m/km,n)

X30V8 : Avg. water fluctuation on annual basis (small=1,moderate=2,extreme=3)

GRAPH FUNCTION at level 2, position 1

Title: Percent stream gradient

X: 0.000, Y: 1.000

X: 5.000, Y: 1.000

X: 15.000, Y: 0.000

X: 20.000, Y: 0.000

MENU FUNCTION at level 2, position 2

Menu choice: 1 Output value: 1.000

Menu choice: 2 Output value: 0.500

Menu choice: 3 Output value: 0.000

Comments:

(none)

LIFE REQUISITE: WATER

Covertypes:

n30L)8

```

Lev 4   Lev 3   Lev 2   Lev 1
      X30V8-----min-LRSI
SED01---usf-----grf-----^
SAR101-----^
```

Habitat variables:

SAR101 : Surface area of lake or reservoir at listed elevation (ha,n)

SED01 : Length of shoreline (km,n)

X30V8 : Avg. water fluctuation on annual basis (small=1,moderate=2,extreme=3)

USER-SPECIFIED FUNCTION at level 3, position 2

USUB=X(1)*10 / (2*((X(2)*3.14)^(1/2))) 'correct for units

MENU FUNCTION at level 2, position 1

Menu choice: 1 Output value: 1.000

Menu choice: 2 Output value: 0.500

Menu choice: 3 Output value: 0.000

GRAPH FUNCTION at level 2, position 2

Title: Shoreline development factor

X: 1.000, Y: 0.100

X: 3.000, Y: 1.000

X: 5.000, Y: 1.000

Comments:

(none)

LIFE REQUISITE: WATER

Covertypes:

PSS, n30L(8, PBF, PMF, PM

Lev 2 Lev 1

X30V8----anu-LRSI

Habitat variables:

X30V8 : Avg. water fluctuation on annual basis (small=1, moderate=2, extreme=3)

MENU FUNCTION at level 1, position 1

Menu choice: 1 Output value: 1.000

Menu choice: 2 Output value: 0.500

Menu choice: 3 Output value: 0.000

Comments:

(none)

LIFE REQUISITE: WATER2

Covertypes:

RIVERn, n30L(8, n30L)8, PSS, n30STR1, n30STR2, n30PSS1, n30PSS2, n30L(81
n30L(82, n30L)81, n30L)82, PBF, n30PBF1, n30PBF2, PMF, n30PMF1, n30PMF2
PM, n30PM1, n30PM2

Lev 2 Lev 1

BAREA1---sum-LRSI

Habitat variables:

BAREA1 : (AREA OF RIVERn+n30L(8+n30L)8+PBF+PMF+PM)/(area of all beaver cts)

Comments:

NOTE: this life requisite is not a part of the published model. It was added to allow the proper consideration of water values. The variable

BEAV10 asks how much of the total beaver habitat is in cover types that can provide a water value. For example, if 50% (0.5) of the area being analyzed is in water providing cover types, this will be used in HSI calculations as a standard of comparison. Thus, since this model is being treated as a multi-cover type model, this variable will automatically set up a composition percentage for water that is dependent on the cover type mix in each study area. In effect, what this does is say that the best conditions occur when water habitat values (from SI graphs) are at optimum (1.0), regardless of the amount of area present in water cover types. Without this life requisite, the model would require an estimate of how much of the area should be in water types compared to upland types that provide food only.

LIFE REQUISITE: WNTFOOD2

Covertypes:

PSS, n30STR1, n30STR2, n30PSS1, n30PSS2, n30L(81, n30L(82, n30L)81, n30L)82
 RIVERn, n30L(8, n30L)8, PBF, n30PBF1, n30PBF2, PMF, n30PMF1, n30PMF2
 PM, n30PM1, n30PM2

Lev 2 Lev 1
 X30V30—sum—LRSI

Habitat variables:

X30V30 : [(area of all beaver CT's)-STREAMn-n30L(8-n30L)8]/(area, beav. CT's)

Comments:

Note: the purpose of this tree diagram is to be sure that WNTFOOD is properly considered in HSI calculations.

Note: this life requisite was added for the same basic reasons as noted under the comments for the life requisite WATER2, except that this applies to food producing cover types.

DISTANCE FUNCTION:

(not used)

HSI TREE DIAGRAM:

Lev 3	Lev 2	Lev 1
WNTFOOD	—usf—	min—HSI
WTF00D2	—^	
WATER	—usf—	^
WATER2	—^	

USER-SPECIFIED FUNCTION at level 2, position 1

USUB=X(1)/X(2)

USER-SPECIFIED FUNCTION at level 2, position 2

USUB=X(1)/X(2)

Comments:

Note: this tree diagram does not appear in the published model. It is necessary because the beaver has been entered as a multi-cover type species. WNTFOOD represents the percent of the area in equivalent optimum winter food. WFOOD2 is the percent of the area that is in cover types that have the potential to provide winter food. The user specified function compares the amount of area in optimum food with the total amount of area potentially available in food producing types. The same process is used to scale the water life requisite value against the amount of area in water cover types.

12-2-87

SPREADSHEET TO TRACK THE ACRES AND DATA OF EACH COVER-TYPE TO BE EVALUATED AS BEAVER HABITAT ON ROSS

TY0 & TY1, With and Without Project

Cover Type/ Sub-area	Number	Input Data									Intermediate HSIs								Cover Type				
		Polyg	Acres	% Tree Cover	% Shrub Cover	Shrub Height	% Small Trees	Stream Gradient	Water Fluctuation	Species Composition	TC S11	ST S12	SpC S13	SC S14	SH S15	MF S16	SG S17	Food	Food+	Water	Food HSI	Water HSI	HSI
wet meadow/marsh (PM)	2	7.07									0.87	0.76	0.60	0.17	0.49	1.00	0.00	0.79	0.79	1.00	0.87	1.00	0.87
BBV-3		2.41	0.00	2.23	0.50	0.00	0.00	0.00	1	2	0.00	0.20	0.60	0.06	0.29	1.00	0.00	0.28	0.28	1.00			
BBV-8		1.21	0.00	0.00	1.70	0.00	0.00	0.00	1	2	0.00	0.20	0.60	0.00	0.05	1.00	0.00	0.00	0.00	1.00			
CR-5		8.44	4.00	9.40	0.90	100.00	0.00	0.00	1	2	0.10	1.00	0.60	0.23	0.49	1.00	0.00	0.88	0.88	1.00			
0-100M (n30PM1)		36.46	64.11	27.65	2.30	78.18	0.00	0.00		2	0.95	0.83	0.60	0.69	1.00	0.00	0.00	1.44	1.00	0.00			
100-200M (n30PM2)		67.50	70.62	20.72	2.12	76.50	0.00	0.00		3	0.87	0.81	0.20	0.52	1.00	0.00	0.00	0.39	0.39	0.00			
shrub swamp (PSS)	30	385.01									0.80	0.65	0.30	0.39	0.73	1.00	0.00	1.30	1.00	1.00	0.96	1.00	0.96
BBV-2		24.12	5.53	42.87	1.34	100.00	0.00	0.00	1	1	0.14	1.00	1.00	1.00	0.07	1.00	0.00	1.52	1.00	1.00			
BBV-11		16.08	0.00	45.70	1.60	0.00	0.00	0.00	1	1	0.00	0.20	1.00	1.00	0.00	1.00	0.00	0.95	0.95	1.00			
P-34		2.10	0.00	100.00	1.00	0.00	0.00	0.00	1	2	0.00	0.20	0.60	0.00	0.90	1.00	0.00	0.71	0.71	1.00			
0-100M (n30PSS1)		831.01	64.11	27.65	2.30	78.18	0.00	0.00		2	0.95	0.83	0.60	0.69	1.00	0.00	0.00	1.44	1.00	0.00			
100-200M (n30PSS2)		1642.96	70.62	20.72	2.12	76.50	0.00	0.00		3	0.87	0.81	0.20	0.52	1.00	0.00	0.00	0.39	0.39	0.00			
broadleaf swamp (PBF) (P-B)	3	32.47	89.67	95.40	1.90	51.82	0.00	0.00	1	2	0.63	0.61	0.60	1.00	0.95	1.00	0.00	1.37	1.00	1.00	0.96	1.00	0.96
0-100M (n30PBF1)		78.21	64.11	27.65	2.30	78.18	0.00	0.00		2	0.95	0.83	0.60	0.69	1.00	0.00	0.00	1.44	1.00	0.00			
100-200M (n30PBF2)		124.77	70.62	20.72	2.12	76.50	0.00	0.00		3	0.87	0.81	0.20	0.52	1.00	0.00	0.00	0.39	0.39	0.00			
mixed swamp & conifer swamp (PMF) (CS-4)	11	83.60	64.60	9.40	1.96	84.34	0.00	0.00	1	2	0.94	0.87	0.60	0.23	0.90	1.00	0.00	1.27	1.00	1.00	0.96	1.00	0.96
0-100M (n30PMF1)		251.13	64.11	27.65	2.30	78.18	0.00	0.00		2	0.95	0.83	0.60	0.69	1.00	0.00	0.00	1.44	1.00	0.00			
100-200M (n30PMF2)		424.81	70.62	20.72	2.12	76.50	0.00	0.00		3	0.87	0.81	0.20	0.52	1.00	0.00	0.00	0.39	0.39	0.00			
pond (n30L(B))	4	53.82							1							1.00	0.00	0.00	1.00	0.93	1.00	0.93	
0-100M (n30L(B1))		112.72	64.11	27.65	2.30	78.18	0.00	0.00		2	0.95	0.83	0.60	0.69	1.00	0.00	0.00	1.44	1.00	0.00			
100-200M (n30L(B2))		174.77	70.62	20.72	2.12	76.50	0.00	0.00		3	0.87	0.81	0.20	0.52	1.00	0.00	0.00	0.39	0.39	0.00			
riverine & tributary (nRIVER)																1.00	1.00	0.00	1.00	0.93	1.00	0.93	
MS	1	554.06							1							1.00	1.00	0.00	1.00				
BBC1	1	39.81							1							1.00	1.00	0.00	1.00				
BBC2	1	7.63							9	1						1.00	0.67	0.00	0.67				
LC	1	10.22							1							1.00	1.00	0.00	1.00				
RC	1	32.57							1							1.00	1.00	0.00	1.00				
0-100M (n30STR1)											0.85	0.82	0.60	0.71	1.00	0.00	0.00	1.42	1.00	0.00			
MSn1	1	2387.04	71.44	30.80	2.30	78.18	0.00	0.00		2	0.86	0.83	0.60	0.77	1.00	0.00	0.00	1.44	1.00	0.00			
BBC1n1	1	151.83	75.69	21.51	1.95	72.27	0.00	0.00		2	0.80	0.78	0.60	0.54	0.98	0.00	0.00	1.35	1.00	0.00			
BBC2n1	1	34.19	80.86	15.80	2.04	77.96	0.00	0.00		2	0.74	0.82	0.60	0.40	1.00	0.00	0.00	1.30	1.00	0.00			
LCn1	1	100.98	52.57	29.70	1.90	83.50	0.00	0.00		2	1.00	0.87	0.60	0.74	0.95	0.00	0.00	1.46	1.00	0.00			
RCn1	1	290.23	81.18	11.66	2.00	72.36	0.00	0.00		2	0.74	0.78	0.60	0.29	1.00	0.00	0.00	1.24	1.00	0.00			
100-200M (n30STR2)											0.81	0.81	0.20	0.51	1.00	0.00	0.00	0.39	0.39	0.00			
MSn2	1	2387.04	74.19	21.19	2.12	76.39	0.00	0.00		3	0.82	0.81	0.20	0.53	1.00	0.00	0.00	0.39	0.39	0.00			
BBC1n2	1	151.83	83.68	14.73	2.01	76.89	0.00	0.00		3	0.70	0.82	0.20	0.37	1.00	0.00	0.00	0.37	0.37	0.00			
BBC2n2	1	34.19	81.28	16.68	2.08	78.29	0.00	0.00		3	0.73	0.83	0.20	0.42	1.00	0.00	0.00	0.38	0.38	0.00			

LCn2	1	100.98	43.12	30.01	1.81	87.55	*****	3	1.00	0.90	0.20	0.75	0.91	*****	0.42	0.42	*****
RCn2	1	290.23	81.52	11.02	1.73	72.36	*****	3	0.73	0.78	0.20	0.30	1.00	*****	0.36	0.36	*****

total area of cover-types used by beaver 10879.16

total area in water 1206.28

total area in food 10236.13

ratio of area in water 0.111

ratio of area in food 0.341

NOTES

data for PM, TY041 are a weighted average of data from CRS, BBV3, and BBV8

data for PSS, TY041 are a weighted average of data for BBV2, BBV11, and P34

data for PSF, TY041 come from polygon P8

data for PMF & PCF, TY041 come from polygon C5

all data for palustrine sites, 0-100m band, TY041, comes from spreadsheet 1b

all data for palustrine sites, 100-200m band, TY041, comes from spreadsheet 1a

all data for the mainstem site, 0-100m band, TY041, comes from spreadsheet 1d

all data for the mainstem site, 100-200m band, TY041, comes from spreadsheet 1c

all data for the tributaries, 0-100m and 100-200m bands, TY041, comes from spreadsheet 5

areas of the 0-100m and 100-200m bands for palustrine polygons that were measured in the field were calculated assuming that each polygon was circular

areas of the 0-100m and 100-200m bands for palustrine areas that were not measured in the field were calculated using the average polygon size, assuming each was circular in shape and multiplying by the number

areas of the 0-100m bands for riverine areas were calculated by multiplying the river or tributary length by 100m (328 ft) and converting to acres

areas of the 100-200m bands for riverine areas were calculated by multiplying the river or tributary length by 100m (328 ft) and converting to acres

* Converts HSIa)1.00 to 1.00

SPREADSHEET TO TRACK THE ACRES AND DATA OF EACH COVER-TYPE TO BE EVALUATED AS BEAVER HABITAT ON ROSS

TY4 With Project

Cover Type/ Sub-area	Input Data									Intermediate HSI's							Cover Type			
	Number	% Tree	% Shrub	Shrub	% Small Stream	Water	Species	TC	ST	SpC	SC	SH	WF	SG	Food	Food*	Water	Food HSI	Water HSI	HSI
	Polyg	Acres	Cover	Cover Height	Trees	Gradient	Fluctuation	Composition	Average	Average	Average	Average	Average	Average						
								SI1	SI2	SI3	SI4	SI5	SI6	SI7						
wet meadow/marsh (PM)	2	7.07						0.07	0.76	0.60	0.17	0.49	1.00	0.79	0.79	1.00	0.87	1.00	0.87	
BBV-3		2.41	0.00	2.23	0.50	0.00	0.00	0.00	0.20	0.60	0.06	0.29	1.00	0.28	0.28	1.00				
BBV-8		1.21	0.00	0.00	1.70	0.00	0.00	0.00	0.20	0.60	0.00	0.85	1.00	0.00	0.00	1.00				
CR-5		8.44	4.00	9.40	0.90	100.00	0.00	0.10	1.00	0.60	0.23	0.49	1.00	0.88	0.88	1.00				
0-100M (n30PM1)		36.46	66.06	27.94	2.27	78.86	0.00	0.92	0.83	0.60	0.70	1.00	0.00	1.43	1.00	0.00				
100-200M (n30PM2)		67.50	71.55	20.87	2.11	76.87	0.00	0.86	0.81	0.20	0.52	1.00	0.00	0.39	0.39	0.00				
shrub swamp (PSS)	29	377.90						0.08	0.65	0.90	0.99	0.73	1.00	1.38	1.00	1.00	0.96	1.00	0.96	
BBV-2		24.12	5.53	42.87	1.34	100.00	0.00	0.14	1.00	1.00	1.00	0.67	1.00	1.52	1.00	1.00				
BBV-11		16.08	0.00	45.70	1.60	0.00	0.00	0.00	0.20	1.00	1.00	0.00	1.00	0.95	0.95	1.00				
P-34		2.10	0.00	100.00	1.80	0.00	0.00	0.00	0.20	0.60	0.80	0.90	1.00	0.71	0.71	1.00				
0-100M (n30PSS1)		803.59	66.06	27.94	2.27	78.86	0.00	0.92	0.83	0.60	0.70	1.00	0.00	1.43	1.00	0.00				
100-200M (n30PSS2)		1580.33	71.55	20.87	2.11	76.87	0.00	0.86	0.81	0.20	0.52	1.00	0.00	0.39	0.39	0.00				
broadleaf swamp (PBF) (PB)	3	32.47	89.67	55.40	1.90	51.82	0.00	0.63	0.61	0.60	1.00	0.95	1.00	1.37	1.00	1.00	0.96	1.00	0.96	
0-100M (n30PBF1)		78.21	66.06	27.94	2.27	78.86	0.00	0.92	0.83	0.60	0.70	1.00	0.00	1.43	1.00	0.00				
100-200M (n30PBF2)		124.77	71.55	20.87	2.11	76.87	0.00	0.86	0.81	0.20	0.52	1.00	0.00	0.39	0.39	0.00				
mixed swamp & conifer swamp (PMF) (CS-4)	11	83.60	64.60	9.40	1.96	84.34	0.00	0.94	0.87	0.60	0.23	0.90	1.00	1.27	1.00	1.00	0.96	1.00	0.96	
0-100M (n30PMF1)		251.13	66.06	27.94	2.27	78.86	0.00	0.92	0.83	0.60	0.70	1.00	0.00	1.43	1.00	0.00				
100-200M (n30PMF2)		424.81	71.55	20.87	2.11	76.87	0.00	0.86	0.81	0.20	0.52	1.00	0.00	0.39	0.39	0.00				
pond (n30L (B)	3	41.10					0.00						1.00			1.00	0.93	1.00	0.93	
0-100M (n30L (B1)		124.09	66.06	27.94	2.27	78.86	0.00	0.92	0.83	0.60	0.70	1.00	0.00	1.43	1.00	0.00				
100-200M (n30L (B2)		131.79	71.55	20.87	2.11	76.87	0.00	0.86	0.81	0.20	0.52	1.00	0.00	0.39	0.39	0.00				
riverine & tributary (nRIVER)													1.00	0.99	0.99	0.93	0.99	0.93		
MS	1	325.40			(1	1	0.00						1.00	1.00	1.00	1.00				
BBC1	1	0.90			(1	1	0.00						1.00	1.00	1.00	1.00				
BBC2	1	7.63			9	1	0.00						1.00	0.67	0.67	0.67				
LC	1	10.22			(1	1	0.00						1.00	1.00	1.00	1.00				
RC	1	13.58			(1	1	0.00						1.00	1.00	1.00	1.00				
0-100M (n30STR1)								0.85	0.78	0.60	0.69	1.00	0.00	1.40	1.00	0.00				
MSn1	1	1404.85	71.19	30.19	2.37	78.86	0.00	0.86	0.77	0.60	0.75	1.00	0.00	1.42	1.00	0.00				
BBC1n1	1	77.92	75.69	21.51	1.95	72.27	0.00	0.80	0.78	0.60	0.54	0.90	0.00	1.35	1.00	0.00				
BBC2n1	1	34.19	80.86	15.88	2.04	77.96	0.00	0.74	0.82	0.60	0.40	1.00	0.00	1.30	1.00	0.00				
LCn1	1	100.98	52.57	29.70	1.90	83.50	0.00	1.00	0.87	0.60	0.74	0.95	0.00	1.46	1.00	0.00				
RCn1	1	174.14	81.18	11.66	2.00	72.36	0.00	0.74	0.78	0.60	0.29	1.00	0.00	1.24	1.00	0.00				
100-200M (n30STR2)								0.82	0.81	0.20	0.52	0.99	0.00	0.39	0.39	0.00				
MSn2	1	1404.85	73.88	21.55	2.11	76.87	0.00	0.83	0.81	0.20	0.54	1.00	0.00	0.39	0.39	0.00				
BBC1n2	1	77.92	83.68	14.73	2.01	75.89	0.00	0.70	0.82	0.20	0.37	1.00	0.00	0.37	0.37	0.00				

BBC2n2	1	34.13	81.28	16.68	2.88	78.23	*****	3	0.73	0.83	0.20	0.42	1.00	*****	0.36	0.36	*****
LCn2	1	100.98	43.12	30.81	1.81	87.55	*****	3	1.00	0.90	0.20	0.75	0.31	*****	0.42	0.42	*****
RCn2	1	174.14	81.52	11.82	1.99	72.36	*****	3	0.73	0.78	0.20	0.30	1.00	*****	0.36	0.36	*****

total area of cover-types used by beaver 8184.67

total area in water 913.87

total area in food 7771.84

ratio of area in water 0.112

ratio of area in food 0.958

NOTES

data for PM, TY4 are a weighed average of data from CRS, BBV3, and BBV8
 data for PSS, TY4 are a weighted average of data for BBV2, BBV11, and P34
 data for PBF, TY4 come from polygon PB
 data for PMF & PCF, TY4 come from polygon CS
 data for palustrine sites, 0-100m band, TY4, are from spreadsheet 2b
 data for palustrine sites, 100-200m band, TY4, are from spreadsheet 2a
 data for the mainstem, 0-100m band, TY4, are from spreadsheet 2d
 data for the mainstem, 100-200m band, TY4, are from spreadsheet 2c
 all data for the tributaries, 0-100m and 100-200m bands, TY4, comes from spreadsheet 5

SPREADSHEET TO TRACK THE ACRES AND DATA OF EACH COVER-TYPE TO BE EVALUATED AS BEAVER HABITAT ON ROSS

TY11 With Project

Cover Type/ Sub-area	Number	Input Data							Intermediate HSI's							Cover Type							
		Polyg	Acreage	% Tree Cover	% Shrub Cover	Shrub Height	% Small Stream Trees	Stream Gradient	Water Fluctuation	Species Composition	TC Average SI1	ST Average SI2	SpC Average SI3	SC Average SI4	SH Average SI5	WF Average SI6	SG Average SI7	Food	Food*	Water HSI	Food HSI	Water HSI	
wet meadow/marsh (PM)	1	4.20									0.07	0.76	0.60	0.17	0.43	1.00	*****	0.79	0.79	1.00	0.87	1.00	0.87
BBV-3		2.41	0.00	2.23	0.50	0.00			2	0.00	0.20	0.60	0.06	0.23	1.00	*****	0.20	0.20	1.00				
BBV-0		1.21	0.00	0.00	1.70	0.00			2	0.00	0.20	0.60	0.00	0.05	1.00	*****	0.00	0.00	1.00				
CR-5		8.44	4.00	9.40	0.98	100.00	*****		2	0.10	1.00	0.60	0.23	0.43	1.00	*****	0.88	0.88	1.00				
0-100M (n30PM1)		18.23	60.01	20.20	2.27	79.54	*****		2	0.66	0.04	0.60	0.71	1.00	*****	1.30	1.00	*****					
100-200M (n30PM2)		33.75	72.90	20.96	2.11	77.33	*****		3	0.04	0.02	0.20	0.52	1.00	*****	0.39	0.39	*****					
shrub swamp (PSS)	20	249.00								0.00	0.65	0.90	0.73	0.73	1.00	*****	1.30	1.00	1.00	0.96	1.00	0.96	
BBV-2		24.12	5.53	42.07	1.34	100.00			1	0.14	1.00	1.00	1.00	0.67	1.00	*****	1.52	1.00	1.00				
BBV-11		16.00	0.00	45.70	1.60	0.00			1	0.00	0.20	1.00	1.00	0.00	1.00	*****	0.95	0.95	1.00				
P-34		2.10	0.00	100.00	1.00	0.00			2	0.00	0.20	0.60	0.00	0.90	1.00	*****	0.71	0.71	1.00				
0-100M (n30PSS1)		354.20	60.01	20.20	2.27	79.54	*****		2	0.66	0.04	0.60	0.71	1.00	*****	1.30	1.00	*****					
100-200M (n30PSS2)		1095.40	72.90	20.96	2.11	77.33	*****		3	0.04	0.02	0.20	0.52	1.00	*****	0.39	0.39	*****					
broadleaf swamp (PBF) (P0)	2	18.90	89.67	53.40	1.90	51.02	*****	1	2	0.63	0.61	0.60	1.00	0.95	1.00	*****	1.37	1.00	1.00	0.96	1.00	0.96	
0-100M (n30PBF1)		73.70	60.01	20.20	2.27	79.54	*****		2	0.66	0.04	0.60	0.71	1.00	*****	1.30	1.00	*****					
100-200M (n30PBF2)		30.10	72.90	20.96	2.11	77.33	*****		3	0.04	0.02	0.20	0.52	1.00	*****	0.39	0.39	*****					
mixed swamp & conifer swamp (PMF) (CS-4)	9	66.90	64.60	9.40	1.96	84.34	*****	1	2	0.94	0.07	0.60	0.23	0.90	1.00	*****	1.27	1.00	1.00	0.96	1.00	0.96	
0-100M (n30PMF1)		207.93	60.01	20.20	2.27	79.54	*****		2	0.66	0.04	0.60	0.71	1.00	*****	1.30	1.00	*****					
100-200M (n30PMF2)		347.50	72.90	20.96	2.11	77.33	*****		3	0.04	0.02	0.20	0.52	1.00	*****	0.39	0.39	*****					
pond (n30L (B))	1	16.60	*****					1	*****	*****	*****	*****	*****	*****	1.00	*****		1.00	0.93	1.00	0.93		
0-100M (n30L (B1))		20.10	60.01	20.20	2.27	79.54	*****		2	0.66	0.04	0.60	0.71	1.00	*****	1.30	1.00	*****					
100-200M (n30L (B2))		43.93	72.90	20.96	2.11	77.33	*****		3	0.04	0.02	0.20	0.52	1.00	*****	0.39	0.39	*****					
riverine & tributary (nRIVER)															1.00	0.99	*****	0.99	0.93	0.99	0.93		
MS	1	126.30	*****		(1	1	*****		*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00					
BBC1	1	0.90	*****		(1	1	*****		*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00					
BBC2	1	5.70	*****		9	1	*****		*****	*****	*****	*****	*****	*****	1.00	0.67	*****	0.67					
LC	1	10.22	*****		(1	1	*****		*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00					
RC	1	0.10	*****		(1	1	*****		*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00					
0-100M (n30STR1)										0.05	0.03	0.60	0.67	0.99	*****	1.41	1.00	*****					
MSn1	1	543.00	71.94	29.64	2.27	79.54	*****		2	0.05	0.04	0.60	0.74	1.00	*****	1.43	1.00	*****					
BBC1n1	1	77.92	75.69	21.51	1.95	72.27	*****		2	0.00	0.70	0.60	0.54	0.90	*****	1.35	1.00	*****					
BBC2n1	1	25.42	80.06	15.00	2.04	77.96	*****		2	0.74	0.02	0.60	0.40	1.00	*****	1.30	1.00	*****					
LCn1	1	100.90	52.57	29.70	1.90	83.50	*****		2	1.00	0.07	0.60	0.74	0.75	*****	1.46	1.00	*****					
RCn1	1	72.52	01.10	11.66	2.00	72.36	*****		2	0.74	0.70	0.60	0.23	1.00	*****	1.24	1.00	*****					
100-200M (n30STR2)										0.03	0.03	0.20	0.50	0.99	*****	0.39	0.39	*****					
MSn2	1	543.00	73.95	20.2	2.12	77.60	*****		3	0.03	0.02	0.20	0.51	1.00	*****	0.39	0.39	*****					
BBC1n2	1	77.92	83.60	14.73	2.01	76.09	*****		3	0.70	0.02	0.20	0.37	1.00	*****	0.37	0.37	*****					
BBC2n2	1	25.42	81.20	16.60	2.00	70.29	*****		3	0.73	0.03	0.20	0.42	1.00	*****	0.30	0.30	*****					

LCn2	1	100.98	43.12	38.01	1.81	87.55	*****	3	1.00	0.90	0.20	0.75	0.91	*****	0.42	0.42	*****
RCn2	1	72.52	81.52	11.82	1.97	72.36	*****	3	0.73	0.78	0.20	0.30	1.00	*****	0.35	0.35	*****

total area of cover-types used by beaver 4653.52

total area in water 515.7

total area in food 4477.62

ratio of area in water 0.111

ratio of area in food 0.962

NOTES

data for PM, TY11 are a weighed average of data from CRS, BBV3, and BBV8

data for PBS, T11 are a weighted average of data for BBV2, BBV11, and P34

data for PSF, TY11 come from polygon P8

data for PMF & PCF, TY11 come from polygon CS

data for palustrine sites, 0-100m band, TY11, are from spreadsheet 3b

data for palustrine sites, 100-200m band, TY11, are from spreadsheet 3a

data for the mainstem, 0-100m band, TY11, are from spreadsheet 3d

data for the mainstem, 100-200m band, TY11, are from spreadsheet 3c

all data for the tributaries, 0-100m and 100-200m bands, TY11, comes from spreadsheet 5

SPREADSHEET TO TRACK THE ACRES AND DATA OF EACH COVER-TYPE TO BE EVALUATED AS BEAVER HABITAT ON ROSS

TY12 With Project

Cover Type/ Sub-area	Input Data								Intermediate HSIs							Cover Type						
	Number	% Tree	% Shrub	Shrub	% Small Stream	Water	Species	TC	ST	SpC	SC	SH	HF	SG								
	Polyg	Acres	Cover	Cover Height	Trees	Gradient	Fluctuation	Composition	SI1	SI2	SI3	SI4	SI5	SI6	SI7	Food	Food	Water	HSI	Water	HSI	HSI
shrub swamp (PSS)	8	109.60							0.66	0.65	0.98	0.99	0.73	1.00	*****	1.38	1.00	1.00	0.95	1.00		0.95
BBV-2		24.12	5.53	42.87	1.34	100.00		1	0.14	1.00	1.00	1.00	0.67	1.00	*****	1.52	1.00	1.00				
BBV-11		16.88	0.00	45.70	1.60	0.00		1	0.00	0.20	1.00	1.00	0.80	1.00	*****	0.95	0.95	1.00				
P-34		2.10	0.00	100.00	1.80	0.00		2	0.00	0.20	0.60	0.80	0.90	1.00	*****	0.71	0.71	1.00				
0-100M (n30PSS1)		221.58	69.72	28.00	2.23	78.53	*****	2	0.88	0.83	0.60	0.72	1.00	*****	1.43	1.00	*****					
100-200M (n30PSS2)		437.60	77.14	18.30	2.09	75.58	*****	3	0.79	0.80	0.20	0.46	1.00	*****	0.38	0.38	*****					
broadleaf swamp (PBF) (PB)	1	11.60	89.67	55.40	1.90	51.82		1	0.63	0.61	0.60	1.00	0.95	1.00	*****	1.37	1.00	1.00	0.95	1.00		0.95
0-100M (n30PBF1)		26.07	69.72	28.00	2.23	78.53	*****	2	0.88	0.83	0.60	0.72	1.00	*****	1.43	1.00	*****					
100-200M (n30PBF2)		41.59	77.14	18.30	2.09	75.58	*****	3	0.79	0.80	0.20	0.46	1.00	*****	0.38	0.38	*****					
riverine & tributary (nRIVER)														1.00	0.99	*****	0.99	0.93	0.99		0.93	
MS	1	28.70	*****		(1	1	*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00						
BBC1	1	8.90	*****		(1	1	*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00						
BBC2	1	1.10	*****		9	1	*****	*****	*****	*****	*****	*****	1.00	0.67	*****	0.67						
LC	1	9.50	*****		(1	1	*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00						
0-100M (n30STR1)									0.84	0.83	0.60	0.77	0.90	*****	1.43	1.00	*****					
MSn1	1	124.04	72.65	30.01	2.23	78.53	*****	2	0.75	0.83	0.60	0.94	1.00	*****	1.45	1.00	*****					
BBC1n1	1	77.92	75.69	21.51	1.95	72.27	*****	2	0.80	0.78	0.60	0.54	0.98	*****	1.35	1.00	*****					
BBC2n1	1	4.93	80.86	15.80	2.04	77.96	*****	2	0.74	0.82	0.60	0.40	1.00	*****	1.30	1.00	*****					
LCn1	1	93.83	52.57	23.70	1.90	83.50	*****	2	1.00	0.87	0.60	0.74	0.95	*****	1.46	1.00	*****					
100-200M (n30STR2)									0.83	0.84	0.20	0.53	0.97	*****	0.39	0.39	*****					
MSn2	1	124.04	77.99	18.46	2.09	75.58	*****	3	0.78	0.80	0.20	0.46	1.00	*****	0.38	0.38	*****					
BBC1n2	1	77.92	83.68	14.73	2.01	76.89	*****	3	0.70	0.82	0.20	0.37	1.00	*****	0.37	0.37	*****					
BBC2n2	1	4.93	81.28	16.68	2.00	78.29	*****	3	0.73	0.83	0.20	0.42	1.00	*****	0.38	0.38	*****					
LCn2	1	93.83	43.12	30.01	1.81	87.55	*****	3	1.00	0.90	0.20	0.75	0.91	*****	0.42	0.42	*****					
total area of cover-types used by beaver		1497.78																				
total area in water		169.4																				
total area in food		1443.38																				
ratio of area in water		0.113																				
ratio of area in food		0.960																				

NOTES

data for PSS, T12 are a weighted average of data for BBV2, BBV11, and P34

data for PBF, TY12 come from polygon P8
data for palustrine sites, 0-100m band, TY12, are from spreadsheet 4b
data for palustrine sites, 100-200m band, TY12, are from spreadsheet 4a
data for the mainstem, 0-100m band, TY12, are from spreadsheet 4d
data for the mainstem, 100-200m band, TY12, are from spreadsheet 4c
all data for the tributaries, 0-100m and 100-200m bands, TY12, comes from spreadsheet 5

SPREADSHEET TO TRACK THE ACREAGES AND DATA OF EACH COVER-TYPE TO BE EVALUATED AS BEAVER HABITAT ON ROSS

TY13, TY30 and TY51 With Project

Cover Type/ Sub-area	Number	Input Data								Intermediate HSIs							Cover Type						
		Polyg	Acreage	% Tree Cover	% Shrub Cover	Shrub Height	% Small Stream Trees	Stream Gradient	Water Fluctuation	Species Composition	TC	ST	SpC	SC	SH	WF	SG	Food	Food*	Water	HSI	HSI	HSI
											Average	Average	Average	Average	Average	Average	Average						
shrub swamp (PSS) (P34)	1	2.18	0.00	100.00	1.00	100.00	*****	1	2	0.00	0.20	0.60	0.80	0.90	1.00	*****	0.71	0.71	1.00	0.83	1.00	0.83	
0-100M (n30PSS1)		15.83	76.36	10.65	1.95	73.14	*****	2	0.00	0.79	0.60	0.27	0.98	*****	1.25	1.00	*****						
100-200M (n30PSS2)		31.25	84.71	10.73	2.06	72.00	*****	3	0.69	0.78	0.20	0.27	1.00	*****	0.35	0.35	*****						
broadleaf swamp (PBF) (P8)	1	9.31	89.67	55.40	1.90	51.82	*****	1	2	0.63	0.61	0.60	1.00	0.95	1.00	*****	1.37	1.00	1.00	0.93	1.00	0.93	
0-100M (n30PBF1)		24.75	83.14	7.56	2.14	70.22	*****	2	0.71	0.76	0.60	0.19	1.00	*****	1.18	1.00	*****						
100-200M (n30PBF2)		40.20	96.30	7.00	2.08	70.30	*****	3	0.55	0.76	0.20	0.10	1.00	*****	0.33	0.33	*****						
riverine & tributary (nRIVER) (BBC1)	1	7.47	*****	*****	*****	*****	1	1	*****	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00	0.89	1.00	0.89		
0-100M (n30STR1) (BBC1n1)	2	77.92	94.37	13.19	2.09	68.19	*****	2	0.57	0.75	0.60	0.33	1.00	*****	1.21	1.00	*****						
100-200M (n30STR2) (BBC1n2)	2	77.92	91.53	9.01	2.05	70.38	*****	3	0.61	0.76	0.20	0.23	1.00	*****	0.34	0.34	*****						
total area of cover-types used by beaver		286.75																					
total area in water		18.88																					
total area in food		279.28																					
ratio of area in water		0.066																					
ratio of area in food		0.974																					

NOTES

data for PSS, T13&51 are from polygon P34
 data for PBF, TY13&51 are from polygon P8
 data for palustrine sites, 0-100m band, TY13, TY30 & TY51, are from spreadsheet 6a
 data for palustrine sites, 100-200m band, TY13, TY30 & TY51 are from spreadsheet 6a
 data for the tributary, 0-100m and 100-200m bands, TY13, TY30 & TY51, are from spreadsheet 6b

SPREADSHEET TO TRACK THE AREAGES AND DATA OF EACH COVER TYPE TO BE EVALUATED AS BEAVER HABITAT ON ROSS

TY30, Without Project

Cover Type/ Sub-area	Input Data									Intermediate HSI's							Cover Type				
	Number	% Tree	% Shrub	Shrub	% Small Stream	Water	Species	TC	ST	SpC	SC	SH	WF	SG							
	Polyg	Area	Cover	Cover	Height	Trees	Gradient	Fluctuation	Composition	SI1	SI2	SI3	SI4	SI5	SI6	SI7	Food	Food*	Water	HSI	HSI
wet meadow/marsh (PM)	2	7.07								0.87	0.76	0.60	0.17	0.49	1.00	0.79	0.79	1.00	0.87	1.00	0.87
BBV-3		2.41	0.00	2.23	0.58	0.00	0.00	0.00	1	0.00	0.20	0.60	0.06	0.29	1.00	0.28	0.28	1.00			
BBV-8		1.21	0.00	0.00	1.70	0.00	0.00	0.00	1	0.00	0.20	0.60	0.00	0.85	1.00	0.00	0.00	1.00			
CR-5		8.44	4.00	9.40	0.98	100.00	0.00	0.00	1	0.10	1.00	0.60	0.23	0.49	1.00	0.88	0.88	1.00			
0-100M (n30PM1)		36.46	63.85	27.72	2.30	77.94	0.00	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00			
100-200M (n30PM2)		67.50	72.41	19.56	2.14	74.53	0.00	0.00	3	0.84	0.80	0.20	0.49	1.00	0.00	0.39	0.39	0.00			
shrub swamp (PSS)	30	385.01								0.00	0.65	0.90	0.99	0.73	1.00	1.38	1.00	1.00	0.96	1.00	0.96
BBV-2		24.12	5.53	42.07	1.34	100.00	0.00	0.00	1	0.14	1.00	1.00	1.00	0.67	1.00	1.52	1.00	1.00			
BBV-11		16.88	0.00	45.70	1.60	0.00	0.00	0.00	1	0.00	0.20	1.00	1.00	0.80	1.00	0.95	0.95	1.00			
P-34		2.10	0.00	100.00	1.00	0.00	0.00	0.00	1	0.00	0.20	0.60	0.80	0.90	1.00	0.71	0.71	1.00			
0-100M (n30PSS1)		831.01	63.85	27.72	2.30	77.94	0.00	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00			
100-200M (n30PSS2)		1642.96	72.41	19.56	2.14	74.53	0.00	0.00	3	0.84	0.80	0.20	0.49	1.00	0.00	0.39	0.39	0.00			
broadleaf swamp (PBF) (P-8)	3	32.47	89.67	55.40	1.90	51.82	0.00	0.00	1	0.63	0.61	0.60	1.00	0.95	1.00	1.37	1.00	1.00	0.96	1.00	0.96
0-100M (n30PBF1)		78.21	63.85	27.72	2.30	77.94	0.00	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00			
100-200M (n30PBF2)		124.77	72.41	19.56	2.14	74.53	0.00	0.00	3	0.84	0.80	0.20	0.49	1.00	0.00	0.39	0.39	0.00			
mixed swamp & conifer swamp (PMF) (CS-4)	11	83.60	64.60	9.40	1.96	84.34	0.00	0.00	1	0.94	0.87	0.60	0.23	0.98	1.00	1.27	1.00	1.00	0.96	1.00	0.96
0-100M (n30PMF1)		251.13	63.85	27.72	2.30	77.94	0.00	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00			
100-200M (n30PMF2)		424.81	72.41	19.56	2.14	74.53	0.00	0.00	3	0.84	0.80	0.20	0.49	1.00	0.00	0.39	0.39	0.00			
pond (n30L (B))	4	53.82							1						1.00			1.00	0.93	1.00	0.93
0-100M (n30L (B1))		112.72	63.85	27.72	2.30	77.94	0.00	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00			
100-200M (n30L (B2))		174.77	72.41	19.56	2.14	74.53	0.00	0.00	3	0.84	0.80	0.20	0.49	1.00	0.00	0.39	0.39	0.00			
riverine & tributary (nRIVER)															1.00	1.00		1.00	0.92	1.00	0.92
MS	1	554.00					(1		1						1.00	1.00		1.00			
BBC1	1	39.81					(1		1						1.00	1.00		1.00			
BBC2	1	7.63					3		1						1.00	0.67		0.67			
LC	1	18.22					(1		1						1.00	1.00		1.00			
RC	1	32.57					(1		1						1.00	1.00		1.00			
0-100M (n30STR1)										0.84	0.81	0.60	0.71	1.00	0.00	1.41	1.00	0.00			
MSn1	1	2387.04	71.74	31.83	2.20	77.06	0.00	0.00	2	0.85	0.82	0.60	0.78	1.00	0.00	1.44	1.00	0.00			
BBC1n1	1	151.83	80.83	19.44	2.01	68.50	0.00	0.00	2	0.75	0.75	0.60	0.49	1.00	0.00	1.32	1.00	0.00			
EPCCn1	1	24.19	88.93	12.05	2.08	71.01	0.00	0.00	2	0.64	0.77	0.60	0.32	1.00	0.00	1.22	1.00	0.00			
LCn1	1	100.90	51.19	38.45	1.93	82.91	0.00	0.00	2	1.00	0.35	0.60	0.71	0.93	0.00	1.44	1.00	0.00			
RCn1	1	230.23	81.45	11.69	2.04	70.92	0.00	0.00	2	0.73	0.78	0.60	0.29	1.00	0.00	1.24	1.00	0.00			
100-200M (n30STR2)										0.79	0.80	0.20	0.48	1.00	0.00	0.39	0.39	0.00			
MSn2	1	2387.04	76.06	20.54	2.14	74.53	0.00	0.00	3	0.98	0.88	0.20	0.51	1.00	0.00	0.39	0.39	0.00			
BBC1n2	1	151.83	80.95	11.73	2.10	71.44	0.00	0.00	3	0.63	0.77	0.20	0.29	1.00	0.00	0.35	0.35	0.00			

BBC2n2	1	34.19	98.02	12.5	2.21	70.78	*****	3	0.62	0.77	0.20	0.31	1.00	*****	0.35	0.35	*****
LCn2	1	100.98	42.95	28.79	1.78	86.48	*****	3	1.00	0.93	2.20	0.72	0.87	*****	0.42	0.42	*****
RCn2	1	230.23	81.43	11.75	1.08	72.35	*****	3	0.73	0.78	0.20	0.29	1.00	*****	0.36	0.36	*****
total area of cover-types used by beaver		10879.16															
total area in water		1206.28															
total area in food		10236.19															
ratio of area in water		0.111															
ratio of area in food		0.941															

NOTES

data for PM, TY041 are a weighed average of data from CRS, BBV3, and BBV8
 data for PSS, TY041 are a weighted average of data for BBV2, BBV11, and P34
 data for PBF, TY041 come from polygon P8
 data for PMF & PCF, TY041 come from polygon CS
 all data for palustrine sites, 0-100m band, TY30, comes from spreadsheet 20b
 all data for palustrine sites, 100-200m band, TY30, comes from spreadsheet 20a
 all data for the mainstem site, 0-100m band, TY30, comes from spreadsheet 20d
 all data for the mainstem site, 100-200m band, TY30, comes from spreadsheet 20c
 all data for the tributaries, 0-100m and 100-200m bands, TY30, comes from spreadsheet B

SPREADSHEET TO TRACK THE ACRES AND DATA OF EACH COVER TYPE TO BE EVALUATED AS BEAVER HABITAT ON PCC

TY51, Without Project

Cover Type/ Sub-area	Input Data								Intermediate HSI's							Cover Type		
	Number	% Tree	% Shrub	Shrub	% Small Stream	Water	Species	Polyg	TC	ST	SpC	SC	SH	WF	SG	Food		
	Polyg	Acres	Cover	Cover Height	Trees	Gradient	Fluctuation		Average S11	Average S12	Average S13	Average S14	Average S15	Average S16	Average S17	Food	Food*	Water
wet meadow/marsh (PM)	2	7.87							0.87	0.76	0.60	0.17	0.43	1.00	0.79	0.79	1.00	0.87
BBV-3		2.41	0.00	2.23	0.58	0.00	0.00	1	0.00	0.20	0.60	0.06	0.29	1.00	0.28	0.28	1.00	
BBV-8		1.21	0.00	0.00	1.70	0.00	0.00	1	0.00	0.20	0.60	0.00	0.85	1.00	0.00	0.00	1.00	
CR-5		8.44	4.00	9.40	0.98	100.00	0.00	1	0.18	1.00	0.60	0.23	0.43	1.00	0.88	0.88	1.00	
0-100M (n30PM1)		36.46	63.85	27.72	2.30	77.93	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00	
100-200M (n30PM2)		67.50	73.56	19.50	2.16	74.50	0.00	3	0.83	0.80	0.20	0.43	1.00	0.00	0.39	0.39	0.00	
shrub swamp (PSS)	30	385.01							0.08	0.65	0.38	0.33	0.73	1.00	1.38	1.00	1.00	0.96
BBV-2		24.12	5.53	42.87	1.34	100.00	0.00	1	0.14	1.00	1.00	1.00	0.67	1.00	1.52	1.00	1.00	
BBV-11		16.88	0.00	45.70	1.60	0.00	0.00	1	0.00	0.20	1.00	1.00	0.80	1.00	0.95	0.95	1.00	
P-34		2.10	0.00	100.00	1.00	0.00	0.00	1	0.00	0.20	0.60	0.80	0.90	1.00	0.71	0.71	1.00	
0-100M (n30PSS1)		831.01	63.85	27.72	2.30	77.93	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00	
100-200M (n30PSS2)		1642.96	73.56	19.50	2.16	74.50	0.00	3	0.83	0.80	0.20	0.43	1.00	0.00	0.39	0.39	0.00	
broadleaf swamp (PBF) (P-B)	3	32.47	89.67	55.40	1.90	51.82	0.00	1	0.63	0.61	0.60	1.00	0.95	1.00	1.37	1.00	1.00	0.96
0-100M (n30PBF1)		78.21	63.85	27.72	2.30	77.93	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00	
100-200M (n30PBF2)		124.77	73.56	19.50	2.16	74.50	0.00	3	0.83	0.80	0.20	0.43	1.00	0.00	0.39	0.39	0.00	
mixed swamp & conifer swamp (PMF) (CS-4)	11	83.60	64.60	9.40	1.96	84.34	0.00	1	0.94	0.87	0.60	0.23	0.98	1.00	1.27	1.00	1.00	0.96
0-100M (n30PMF1)		251.13	63.85	27.72	2.30	77.93	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00	
100-200M (n30PMF2)		424.81	73.56	19.50	2.16	74.50	0.00	3	0.83	0.80	0.20	0.43	1.00	0.00	0.39	0.39	0.00	
pond (n30L(B))	4	53.82						1						1.00		1.00	0.93	1.00
0-100M (n30L(B1))		112.72	63.85	27.72	2.30	77.93	0.00	2	0.95	0.82	0.60	0.69	1.00	0.00	1.43	1.00	0.00	
100-200M (n30L(B2))		174.77	73.56	19.50	2.16	74.50	0.00	3	0.83	0.80	0.20	0.43	1.00	0.00	0.39	0.39	0.00	
riverine & tributary (nRIVER)														1.00	1.00	1.00	0.92	1.00
MS	1	554.88						1						1.00	1.00	1.00	1.00	0.92
BBC1	1	39.81						1						1.00	1.00	1.00	1.00	0.92
BBC2	1	7.63						1						1.00	0.67	0.67	0.67	0.67
LC	1	10.00						1						1.00	1.00	1.00	1.00	0.92
RC	1	32.57						1						1.00	1.00	1.00	1.00	0.92
0-100M (n30STR1)									0.84	0.81	0.60	0.71	1.00	0.00	1.42	1.00	0.00	
MSn1	1	2307.04	71.67	31.02	2.28	77.05	0.00	2	0.86	0.82	0.60	0.78	1.00	0.00	1.44	1.00	0.00	
BBC1n1	1	151.82	80.83	10.44	2.01	68.50	0.00	2	0.75	0.75	0.60	0.43	1.00	0.00	1.32	1.00	0.00	
BBC2n1	1	34.13	80.89	10.05	1.28	71.01	0.00	2	0.64	0.77	0.60	0.30	1.00	0.00	1.22	1.00	0.00	
LCn1	1	100.98	51.18	28.40	1.83	82.01	0.00	2	1.00	0.86	0.60	0.71	0.92	0.00	1.44	1.00	0.00	
RCn1	1	292.23	81.45	11.63	2.24	72.92	0.00	2	0.73	0.78	0.60	0.29	1.00	0.00	1.24	1.00	0.00	
100-200M (n30STR2)									0.78	0.82	0.20	0.48	1.00	0.00	0.39	0.39	0.00	
MSn2	1	2307.04	71.67	31.02	2.28	77.05	0.00	2	0.73	0.83	0.20	0.51	1.00	0.00	0.39	0.39	0.00	

BBCIn2	1	151.83	89.95	11.73	2.18	71.44	*****	3	0.63	0.77	0.20	0.29	1.00	*****	0.35	0.35	*****
BBC2n2	1	34.19	96.82	12.5	2.21	70.76	*****	3	0.62	0.77	0.20	0.31	1.00	*****	0.35	0.35	*****
LDn2	1	100.98	42.96	28.79	1.78	86.48	*****	3	1.00	0.83	0.20	0.72	0.89	*****	0.42	0.42	*****
RCn2	1	290.23	81.43	11.75	1.98	72.35	*****	3	0.72	0.78	0.20	0.29	1.00	*****	0.36	0.36	*****

total area of cover-types used by beaver 10079.16

total area in water 1206.28

total area in food 10236.19

ratio of area in water 0.111

ratio of area in food 0.941

NOTES

data for PM, TY881 are a weighed average of data from CRS, BRV3, and BRV8
 data for PSS, TY881 are a weighed average of data for BRV2, BRV11, and F34
 data for PBF, TY881 come from polygon P8
 data for PWF & PCF, TY881 come from polygon CS
 all data for palustrine sites, 0-100m band, TY51, comes from spreadsheet 38b
 all data for palustrine sites, 100-200m band, TY51, comes from spreadsheet 38a
 all data for the mainstem site, 0-100m band, TY51, comes from spreadsheet 38d
 all data for the mainstem site, 100-200m band, TY51, comes from spreadsheet 38c
 all data for the tributaries, 0-100m and 100-200m bands, TY51, comes from spreadsheet 8

SPREADSHEET TO TRACK THE ACRES AND DATA OF EACH COVER-TYPE TO BE EVALUATED AS BEAVER HABITAT ON DIABLO (THUNDER ARM)

TY0 & TY1 WITH PROJECT AND TY0, TY1, TY30 AND TY60 WITHOUT PROJECT
(THUNDER ARM)

Cover Type/ Sub-area	Input Data							Intermediate HSI's							Cover Type		
	Number	% Tree	% Shrub	Shrub	% Small Stream	Water	Species	TC	ST	SpC	SC	SN	WF	SG			
	Polyg	Acres	Cover	Cover	Height	Trees	Gradient	Fluctuation	Composition	Average	Average	Average	Average	Average	Average	Average	Average
										SI1	SI2	SI3	SI4	SI5	SI6	SI7	Food
																	Food
																	Water
																	HSI
																	HSI
																	HSI
riverine & tributary (nRIVER)	1	43.03	*****	*****	1	1	*****	*****	*****	1.00	1.00	*****	1.00	0.89	1.00	0.89	0.89
0-100m (n30STR1)	1	330.78	86.37	6.03	2.00	82.48	*****	2	0.67	0.86	0.60	0.15	1.00	*****	1.16	1.00	*****
100-200m (n30STR2)	1	330.78	86.2	7.70	2.00	54.92	*****	3	0.67	0.64	0.20	0.19	1.00	*****	0.33	0.33	*****
total area of cover-types used by beaver		704.65															
total area in water		43.03															
total area in food		561.56															
ratio of area in water		0.061150															
ratio of area in food		0.938849															

NOTES

data for the Thunder Creek, 0-100m and 100-200m bands, TY0 and TY1, are from spreadsheet 7a

areas of the 0-100m bands for riverine areas were calculated by multiplying the river or tributary length by 100m (328 ft) and converting to acres
areas of the 100-200m bands for riverine areas were calculated by multiplying the river or tributary length by 100m (328 ft) and converting to acres

SPREADSHEET TO TRACK THE AREAGES AND DATA OF EACH COVER-TYPE TO BE EVALUATED AS BEAVER HABITAT ON DIABLO (THUNDER ARM)

TY2, TY30 & TY60 WITH PROJECT
(THUNDER ARM)

Cover Type/ Sub-area	Input Data										Intermediate HSIs							Cover Type		
	Number	% Tree	% Shrub	Shrub	% Small Stream	Water	Species	TC	ST	SpC	SC	SH	WF	SG				Food	Water	
	Polyg	Acreege	Cover	Cover Height	Trees	Gradient	Fluctuation	Composition	Average	Average	Average	Average	Average	Average	Food	Food*	Water	HSI	HSI	HSI
riverine & tributary (nRIVER)	1	25.82	*****	*****	*****	1	1	*****	*****	*****	*****	*****	1.00	1.00	*****	1.00	0.90	1.00	0.90	
0-100M (n30STR1)	1	201.97	86.06	15.48	2.00	71.61	*****	2	0.67	0.77	0.60	0.39	1.00	*****	1.27	1.00	*****			
100-200M (n30STR2)	1	201.97	88.34	13.46	2.00	67.26	*****	3	0.65	0.74	0.20	0.34	1.00	*****	0.36	0.36	*****			
total area of cover-types used by beaver		429.76																		
total area in water		25.82																		
total area in food		403.94																		
ratio of area in water		0.060080																		
ratio of area in food		0.939919																		

NOTES

data for the Thunder Creek, 0-100m and 100-200m bands, TY2 and TY60, are from spreadsheet 7

areas of the 0-100m bands for riverine areas were calculated by multiplying the river or tributary length by 100m (328 ft) and converting to acres
areas of the 100-200m bands for riverine areas were calculated by multiplying the river or tributary length by 100m (328 ft) and converting to acres

SPREADSHEET TO CALCULATE HABITAT VARIABLE AVERAGES FOR 2 100M AND 100 200M BANDS ADJACENT TO RIVERINE OR PALUSTRINE HABITAT FOR 2000, TY0 & TY1 WITH AND WITHOUT PROJECT

WITH AND WITHOUT PROJECT TY0 & TY1--PALUSTRINE HABITATS (spreadsheet 1a)
100-200M BAND (USES ALL HABITATS)

Community Type	# Polygons	Acreage	Habitat Averages and Weighted Averages									
			Percent of Percent of all Tree & Total	Percent of Shrub cts	% Tree Canopy Closure	Weighted Tree Closure	% Shrub Canopy Closure	Weighted Shrub Closure	Shrub Height	Weighted Shrub Height	% Trees 2.5 15.2 cm dbh	Weighted Small Trees
old growth conifer	40	957.96	6.97	7.40	97.93	6.83	5.30	0.37	2.03	0.15	70.32	5.20
closed mature conifer	67	3485.43	25.37	26.91	91.24	23.15	12.66	3.21	2.25	0.61	70.24	18.30
open mature conifer	51	637.00	4.64	4.32	33.90	1.57	16.52	0.77	1.53	0.08	63.66	3.13
lodgepole pine (open & closed)	15	520.91	3.85	4.00	54.70	2.11	7.82	0.30	1.13	0.05	81.10	3.31
regenerative conifer (8 reg. lodgepole)	36	1521.53	11.00	11.75	70.07	7.05	22.40	2.40	1.95	0.23	87.92	10.33
regenerative broadleaf/mixed	1	3.56	0.03	0.03	60.16	0.02	57.74	0.01	2.81	0.00	81.49	0.02
broadleaf	2	3.33	0.02	0.03	71.10	0.02	23.41	0.01	1.81	0.00	82.88	0.02
grassland/meadow	2	0.84	0.06	0.07	0.00	0.00	0.00	0.00		0.00	0.00	0.00
agriculture	1	9.46	0.07	0.07	0.00	0.00	0.00	0.00		0.00	0.00	0.00
avalanche shrub		22.18	0.16	0.17	71.05	0.11	73.60	0.12	2.90	0.00	22.37	0.04
shrubland	18	361.77	2.63	2.79	15.60	0.41	42.05	1.13	1.69	0.05	99.12	2.77
rock talus	7	21.08	0.16	0.17	0.00	0.00	0.00	0.00		0.00	0.00	0.00
exposed rock	9	23.92	0.17	0.18	0.00	0.00	0.00	0.00		0.00	0.00	0.00
wet meadow/marsh	2	7.07	0.05	0.05	2.00	0.00	7.00	0.00	0.09	0.00	100.00	0.05
bog	2	0.32	0.06	0.06	0.00	0.00	0.00	0.00		0.00	0.00	0.00
shrub swamp	30	385.01	2.80	2.97	3.94	0.11	46.40	1.30	1.42	0.04	100.00	2.97
conifer swamp\3	7	30.31	0.20	0.30	64.60	0.18		0.00	1.96	0.01	84.34	0.25
broadleaf swamp	3	32.47	0.24	0.25	89.67	0.21	55.40	0.13	1.90	0.00	51.82	0.13
mixed swamp	4	44.09	0.33	0.35	64.60	0.21	9.40	0.03	1.96	0.01	84.34	0.29
pond	4	53.82	0.39	0.42	0.00	0.00	9.40	0.04		0.00	0.00	0.00
tributary	6	74.24	0.54	0.57	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riverine	7	554.00	4.03	4.20	0.00	0.00	0.00	0.00		0.00	0.00	0.00
gravelbar	0	29.44	0.21	0.23	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riparian old growth conifer	64	3075.04	22.30	23.74	76.20	17.06	20.60	6.40	2.36	0.56	80.16	19.03
riparian closed mature conifer	35	607.71	4.42	4.69	75.20	3.33	32.30	1.43	2.50	0.12	82.40	3.87
riparian open conifer\4	2	16.05	0.12	0.12	33.90	0.04	73.60	0.09	2.90	0.00	63.66	0.08
riparian regenerative conifer\5	1	25.30	0.18	0.20	70.07	0.13	22.40	0.04	1.95	0.00	87.92	0.17
riparian broadleaf	47	551.47	4.01	4.26	93.45	3.75	20.65	0.83	2.11	0.09	99.64	2.54
riparian mixed conifer/broadleaf	30	450.40	3.28	3.40	77.09	2.53	29.93	0.90	2.30	0.00	87.54	3.04
riparian shrubland		195.56	1.42	1.51	71.05	1.01	73.60	1.05	2.90	0.04	22.37	0.34
developed--low density residential	1	2.60	0.02	0.02	0.00	0.00	0.00	0.00		0.00	0.00	0.00
TOTALS	502	13737.55	100.00	106.07		70.62		20.72		2.12		76.50
		12950.95										

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

5/ used values from regenerative conifer

TYB & TYI, WITH AND WITHOUT PROJECT--PALUSTRINE & LACUSTRINE HABITATS (spreadsheet 1b)
0-100M BAND (USES RIPARIAN, RIVERINE & PALUSTRINE HABITATS ONLY)

Community Type	Habitat Averages and Weighted Averages											
	# Polygons	Acreage	Percent of		X Tree Weighted		X Shrub Weighted		Weighted		X Trees Weighted	
			Percent of all Tree & Shrub	cts	Canopy Closure	Tree Closure	Canopy Closure	Shrub Closure	Shrub Height	Shrub Height	2.5-15.2 cm dbh	Small Trees
wet meadow/marsh	2	7.07	0.12	0.13	2.80	0.00	7.88	0.01	0.89	0.00	100.00	0.13
bog	2	8.32	0.14	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp	30	385.01	6.29	7.09	3.94	0.25	46.40	2.92	1.42	0.10	100.00	7.09
conifer swamp/1	7	38.31	0.63	0.71	64.60	0.40	0.00	0.00	1.96	0.01	84.34	0.60
broadleaf swamp	3	32.47	0.53	0.60	89.67	0.48	55.40	0.29	1.90	0.01	51.82	0.31
mixed swamp	4	44.89	0.73	0.83	64.60	0.47	9.40	0.07	1.96	0.02	84.34	0.70
pond	4	53.82	0.88	0.99	0.00	0.00	3.40	0.08	0.00	0.00	0.00	0.00
tributary	6	74.24	1.21	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine	7	554.08	9.05	10.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	64	3875.04	50.25	56.64	76.20	38.29	28.60	14.37	2.36	1.34	88.16	45.48
riparian closed mature conifer	35	687.71	9.93	11.19	75.20	7.47	32.30	3.21	2.50	0.29	82.48	9.23
riparian open conifer/2	2	16.05	0.26	0.30	33.90	0.09	73.60	0.19	2.90	0.01	63.66	0.19
riparian regenerative conifer/3	1	25.30	0.41	0.47	70.87	0.29	22.40	0.09	1.95	0.01	87.92	0.41
riparian broadleaf	47	551.47	9.01	10.16	93.45	0.42	20.65	1.86	2.11	0.21	59.64	6.06
riparian mixed conifer/broadleaf	30	450.40	7.36	8.30	77.09	5.67	29.93	2.20	2.30	0.19	87.54	7.26
riparian shrubland	38	195.56	3.20	3.60	71.05	2.27	73.60	2.35	2.90	0.10	22.37	0.81
TOTALS	262	6119.74	100.00	112.72		64.11		27.65		2.30		78.18

5429.28

1/ same values as mixed swamp

2/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

3/ used values from regenerative conifer

TY0 & TY1, WITH AND WITHOUT PROJECT-- RIVERINE HABITATS (spreadsheet 1c)
100-200M BAND (USES ALL HABITATS EXCEPT RIVERINE, GRAVELBAR & TRIBUTARY)

Habitat Averages and Weighted Averages

Community Type	# Polygons	Acreage	Percent of all Tree & Shrub		Percent of all Tree & Shrub		X Tree Weighted		X Shrub Weighted		Weighted		X Trees Weighted	
			Total	cts	Closure	Closure	Tree	Canopy	Shrub	Canopy	Shrub	Height	2.5-15.2	Small
old growth conifer	40	957.96	7.32	7.39	97.93	7.17	5.38	0.39	2.03	0.15	70.32	5.19		
closed mature conifer	67	3485.43	26.65	26.87	91.24	24.31	12.66	3.37	2.25	0.60	70.24	18.88		
open mature conifer	51	637.00	4.87	4.91	33.90	1.65	16.52	0.80	1.53	0.08	63.66	3.13		
lodgepole pine	15	528.91	4.04	4.08	54.70	2.21	7.82	0.32	1.13	0.05	81.10	3.31		
regenerative conifer (8 reg. lodgepole)	36	1521.53	11.63	11.73	70.87	8.24	22.40	2.61	1.95	0.23	87.92	18.31		
regenerative broadleaf/mixed	1	3.56	0.03	0.03	68.16	0.02	57.74	0.02	2.81	0.00	81.49	0.02		
broadleaf	2	3.33	0.03	0.03	71.10	0.02	23.41	0.01	1.81	0.00	82.88	0.02		
grassland/meadow	2	8.84	0.07	0.07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
agriculture	1	9.46	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
avalanche shrub	3	22.18	0.17	0.17	71.05	0.12	73.68	0.12	2.90	0.00	22.37	0.04		
shrubland	18	361.77	2.77	2.79	15.68	0.43	42.85	1.19	1.69	0.05	93.12	2.76		
rock talus	7	21.88	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
exposed rock	9	23.92	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
wet meadow/marsh	2	7.07	0.05	0.05	2.88	0.08	7.08	0.08	0.89	0.00	100.00	0.05		
bog	2	8.32	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
shrub swamp	30	385.01	2.94	2.97	3.94	0.12	46.40	1.37	1.42	0.04	100.00	2.97		
conifer swamp/3	7	38.31	0.29	0.30	64.60	0.19	0.00	0.00	1.96	0.01	84.34	0.25		
broadleaf swamp	3	32.47	0.25	0.25	89.67	0.22	55.48	0.14	1.90	0.00	51.82	0.13		
mixed swamp	4	44.89	0.34	0.35	64.60	0.22	9.40	0.03	1.96	0.01	84.34	0.29		
pond	4	53.82	0.41	0.41	0.00	0.00	9.40	0.04	0.00	0.00	0.00	0.00		
riparian old growth conifer	64	3075.04	23.51	23.71	76.20	17.91	28.60	6.72	2.36	0.56	88.16	13.81		
riparian closed mature conifer	35	687.71	4.65	4.69	75.20	3.49	32.30	1.50	2.58	0.12	82.48	3.86		
riparian open conifer/4	2	16.05	0.12	0.12	33.90	0.04	73.68	0.09	2.90	0.00	63.66	0.08		
riparian regenerative conifer/5	1	25.38	0.19	0.20	70.87	0.14	22.40	0.04	1.95	0.00	87.92	0.17		
riparian broadleaf	47	551.47	4.22	4.25	93.45	3.94	20.65	0.87	2.11	0.09	59.64	2.54		
riparian mixed conifer/broadleaf	38	450.40	3.44	3.47	77.09	2.65	29.93	1.03	2.38	0.08	87.54	3.04		
riparian shrubland	38	195.56	1.50	1.51	71.05	1.06	73.68	1.10	2.90	0.04	22.37	0.34		
developed--low density residential	1	2.68	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TOTALS	522	13079.79	100.00	100.85		74.19		21.76		2.12		76.39		
		12969.25												

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

5/ used values from regenerative conifer

TY0 & TY1, WITH AND WITHOUT PROJECT - RIVERINE (spreadsheet 1d)
 0-100M BAND (USES RIPARIAN & PALUSTRINE HABITATS ONLY)

0-100M BAND (USES RIPARIAN & PALUSTRINE HABITATS ONLY)				Habitat Averages and Weighted Averages									
Community Type	# Polygons	Acreage	Percent of		% Tree Canopy Closure	Weighted Tree Closure	% Shrub Canopy Closure		Shrub Height	Weighted Shrub Height	% Trees 2.5-15.2 cm dbh	Weighted Small Trees	
			Percent of all Tree & Shrub cts	Total			Shrub	Shrub					
wet meadow/marsh	2	7.07	0.13	0.13	2.80	0.00	7.00	0.01	0.03	0.00	100.00	0.13	
bog	2	8.32	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
shrub swamp/1	30	385.01	7.01	7.03	3.94	0.28	46.40	3.25	1.42	0.10	100.00	7.03	
conifer swamp	7	38.31	0.70	0.71	64.60	0.45	9.40	0.07	1.96	0.01	84.34	0.60	
broadleaf swamp	3	32.47	0.59	0.60	89.67	0.53	55.40	0.33	1.90	0.01	51.82	0.31	
mixed swamp	4	44.89	0.82	0.83	64.60	0.53	9.40	0.08	1.96	0.02	84.34	0.70	
pond	4	53.02	0.98	0.99	0.00	0.00	9.40	0.09	0.00	0.00	0.00	0.00	
riparian old growth conifer	64	3875.04	56.00	56.64	76.20	42.67	20.60	16.02	2.36	1.34	80.16	45.40	
riparian closed mature conifer	35	607.71	11.07	11.19	75.20	0.32	32.30	3.57	2.58	0.29	82.48	3.23	
riparian open conifer/2	2	16.05	0.29	0.30	33.90	0.10	73.60	0.22	2.90	0.01	63.66	0.19	
riparian regenerative conifer/3	1	25.30	0.46	0.47	70.87	0.33	22.40	0.10	1.95	0.01	87.92	0.41	
riparian broadleaf	47	551.47	10.04	10.16	93.45	9.38	20.65	2.07	2.11	0.21	59.64	6.06	
riparian mixed conifer/broadleaf	30	450.40	8.20	8.30	77.09	6.32	29.93	2.45	2.30	0.19	87.54	7.26	
riparian shrubland	30	195.56	3.56	3.60	71.05	2.53	73.60	2.62	2.90	0.10	22.37	0.81	
TOTALS	269	5491.42	100.00	101.14		71.44		30.80		2.30		70.10	
		5429.28											

1/ same values as mixed swamp

2/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

3/ used values from regenerative conifer

SPREADSHEETS TO CALCULATE HABITAT VARIABLE AVERAGES FOR 0-100M AND 100-200M BANDS ADJACENT TO RIVERINE OR PALUSTRINE HABITAT FOR BOSS, TY4, WITH PROJECT

TY4, WITH PROJECT--PALUSTRINE HABITATS (spreadsheet 2a)
100-200M BAND (USES ALL HABITATS)

Community Type	Habitat Averages and Weighted Averages										
	# Polygons	Acreage	Percent of		% Tree Canopy Closure	Weighted Tree Closure	% Shrub Canopy Closure		Weighted Shrub Height	% Trees 2.5-15.2 cm dbh	% Trees Weighted Small Trees
			Percent of all Tree & Shrub cts	Total			Shrub	Shrub			
old growth conifer	862.60	7.23	7.53	97.93	7.08	5.38	0.38	2.03	0.15	70.32	5.38
closed mature conifer	3842.20	25.51	26.56	91.24	23.28	12.66	3.23	2.25	0.60	70.24	18.66
open mature conifer	595.00	5.00	5.20	33.90	1.69	16.52	0.83	1.53	0.00	63.66	3.31
lodgepole pine	427.20	3.58	3.73	54.78	1.96	7.82	0.28	1.13	0.04	81.18	3.03
regenerative conifer (8 reg. lodgepole)	1498.50	11.81	12.30	78.87	8.37	22.40	2.65	1.95	0.24	87.92	10.81
broadleaf	2.90	0.02	0.03	71.18	0.02	23.41	0.01	1.81	0.00	82.88	0.02
grassland/meadow	8.88	0.07	0.08	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
avalanche shrub	22.18	0.19	0.19	71.05	0.13	73.60	0.14	2.90	0.01	22.37	0.04
shrubland	361.50	3.03	3.16	15.60	0.47	42.85	1.38	1.69	0.05	99.12	3.13
rock talus	14.78	0.12	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	23.38	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
wet meadow/marsh	7.07	0.06	0.06	2.88	0.00	7.08	0.00	0.89	0.00	100.00	0.06
bog	8.32	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp	377.90	3.17	3.30	3.94	0.12	46.40	1.47	1.42	0.05	100.00	3.30
conifer swamp\3	37.50	0.31	0.33	64.60	0.20	0.00	0.00	1.96	0.01	84.34	0.28
broadleaf swamp	32.47	0.27	0.28	89.67	0.24	55.40	0.15	1.90	0.01	51.82	0.15
mixed swamp	44.89	0.38	0.39	64.60	0.24	9.40	0.04	1.96	0.01	84.34	0.33
pond	41.10	0.34	0.36	0.00	0.00	9.40	0.03	0.00	0.00	0.00	0.00
tributary	46.20	0.39	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine	325.40	2.73	2.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
gravelbar	4.60	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	2846.20	23.87	24.85	76.28	18.19	28.60	6.83	2.36	0.59	88.16	19.92
riparian closed mature conifer	383.18	3.21	3.35	75.20	2.42	32.30	1.04	2.58	0.09	82.48	2.76
riparian open conifer\4	3.40	0.03	0.03	33.90	0.01	73.60	0.02	2.90	0.00	63.66	0.02
riparian broadleaf	517.30	4.34	4.52	93.45	4.05	20.65	0.90	2.11	0.10	59.64	2.69
riparian mixed conifer/broadleaf	372.90	3.13	3.26	77.09	2.41	29.93	0.94	2.30	0.07	87.54	2.85
riparian shrubland	106.70	0.89	0.93	71.05	0.64	73.60	0.66	2.90	0.03	22.37	0.21
developed--low density residential	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	11924.65	100.00	104.13		71.55		20.87		2.11		76.87
	11452.23										

1/ same values as closed canopy lodgepole pine

2/ same values as regenerative conifer

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

TY4, WITH PROJECT--PALUSTRINE & LACUSTRINE HABITATS (spreadsheet 2b)
 0-100M BAND (USES RIPARIAN, RIVERINE & PALUSTRINE HABITATS ONLY)

Community Type	Habitat Averages and Weighted Averages											
	# Polygons	Acreage	Percent of		% Tree Weighted		% Shrub Weighted		Weighted		% Trees Weighted	
			Percent of all Tree & Shrub cts	Total	Canopy Closure	Tree Closure	Canopy Closure	Shrub Closure	Shrub Height	Shrub Height	2.5-15.2 cm dbh	Small Trees
wet meadow/marsh		7.87	0.14	0.15	2.88	0.00	7.08	0.01	0.89	0.00	100.00	0.15
bog		8.32	0.16	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp		377.98	7.34	7.99	3.94	0.29	46.48	3.48	1.42	0.11	100.00	7.99
conifer swamp/1		37.58	0.73	0.79	64.68	0.47	0.00	0.00	1.96	0.02	84.34	0.67
broadleaf swamp		32.47	0.63	0.69	83.67	0.57	55.48	0.35	1.98	0.01	51.82	0.36
mixed swamp		44.89	0.87	0.95	64.68	0.56	3.48	0.08	1.96	0.02	84.34	0.88
pond		41.18	0.88	0.87	0.00	0.00	3.48	0.08	0.00	0.00	0.00	0.00
tributary		46.28	0.98	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine		325.48	6.32	6.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer		2846.28	55.26	68.18	76.28	42.11	28.68	15.88	2.36	1.42	88.16	48.24
riparian closed mature conifer		383.18	7.44	8.18	75.28	5.59	32.38	2.48	2.58	0.21	82.48	6.68
riparian open conifer/2		3.48	0.07	0.07	33.98	0.02	73.68	0.05	2.98	0.00	63.66	0.05
riparian broadleaf		517.38	10.04	10.94	93.45	9.39	28.65	2.87	2.11	0.23	59.64	6.52
riparian mixed conifer/broadleaf		372.98	7.24	7.88	77.89	5.58	29.93	2.17	2.38	0.18	87.54	6.98
riparian shrubland		186.78	2.87	2.26	71.85	1.47	73.68	1.52	2.98	0.87	22.37	0.58
TOTALS		5158.45	100.00	108.98		66.86		27.94		2.27		78.86
		4729.43										

1/ same values as mixed swamp

2/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

PRE-PROJECT CONDITIONS--RIVERINE HABITAT (spreadsheet 2c)
100-200M BAND (USES ALL HABITATS EXCEPT RIVERINE, GRAVELBAR & TRIBUTARY)

Habitat Averages and Weighted Averages												
Community Type	# Polygons	Acreage	Percent of		% Tree Canopy Closure	Weighted Tree Closure	% Shrub Canopy Closure	Weighted Shrub Closure	Shrub Height	Weighted Shrub Height	% Trees 2.5-15.2 cm dbh	Weighted Small Trees
			Percent of all Tree Total	Shrub cts								
old growth conifer		862.60	7.47	7.53	97.93	7.31	5.30	0.40	2.03	0.15	70.32	5.30
closed mature conifer		3842.20	26.34	26.56	91.24	24.04	12.66	3.34	2.25	0.60	70.24	18.66
open mature conifer		595.80	5.16	5.20	33.90	1.75	16.52	0.85	1.53	0.00	63.66	3.31
lodgepole pine		427.20	3.70	3.73	54.70	2.02	7.02	0.29	1.13	0.04	81.10	3.03
regenerative conifer (& reg. lodgepole)		1400.50	12.20	12.30	70.87	0.64	22.40	2.73	1.95	0.24	87.92	10.01
broadleaf		2.90	0.03	0.03	71.10	0.02	23.41	0.01	1.81	0.00	82.00	0.02
grassland/meadow		0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
avalanche shrub		22.10	0.19	0.19	71.05	0.14	73.60	0.14	2.90	0.01	22.37	0.04
shrubland		361.50	3.13	3.16	15.60	0.43	42.05	1.34	1.69	0.05	99.12	3.13
rock talus		14.70	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock		23.30	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
wet meadow/marsh		7.07	0.06	0.06	2.00	0.00	7.00	0.00	0.09	0.00	100.00	0.06
bog		0.32	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp		377.90	3.27	3.30	3.94	0.13	46.40	1.52	1.42	0.05	100.00	3.30
conifer swamp/3		37.50	0.32	0.33	64.60	0.21	0.00	0.00	1.96	0.01	84.34	0.28
broadleaf swamp		32.47	0.28	0.28	89.67	0.25	55.40	0.16	1.90	0.01	51.82	0.15
mixed swamp		44.89	0.39	0.39	64.60	0.25	9.40	0.04	1.96	0.01	84.34	0.33
pond		41.10	0.36	0.36	0.00	0.00	9.40	0.03	0.00	0.00	0.00	0.00
riparian old growth conifer		2046.20	24.65	24.85	76.20	18.78	20.60	7.05	2.36	0.59	80.16	19.92
riparian closed mature conifer		303.10	3.32	3.35	75.20	2.49	32.30	1.07	2.50	0.09	82.40	2.76
riparian open conifer/4		3.40	0.03	0.03	33.90	0.01	73.60	0.02	2.90	0.00	63.66	0.02
riparian broadleaf		517.30	4.48	4.52	93.45	4.19	20.65	0.92	2.11	0.10	59.64	2.69
riparian mixed conifer/broadleaf		372.90	3.23	3.26	77.09	2.49	29.93	0.97	2.30	0.07	87.54	2.05
riparian shrubland		106.70	0.92	0.93	71.05	0.66	73.60	0.60	2.90	0.03	22.37	0.21
developed--low density residential		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS		11548.45	100.00	100.04		73.88		21.55		2.11		76.87
		11452.23										

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

TY4, WITH PROJECT--RIVERINE HABITAT (spreadsheet 2d)
0-100M BAND (USES RIPARIAN & PALUSTRINE HABITATS ONLY)

Community Type	Habitat Averages and Weighted Averages											
	# Polygons	Acreage	Percent of		% Tree		% Shrub		Weighted		% Trees	
			Percent of all	Shrub cts	Tree & Canopy Closure	Tree Closure	Canopy Closure	Shrub Closure	Shrub Height	Shrub Height	2.5-15.2 cm dbh	Small Trees
wet meadow/marsh		7.07	0.15	0.15	2.00	0.00	7.00	0.01	0.09	0.00	100.00	0.15
bog		8.32	0.17	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp/1		377.90	7.91	7.99	3.94	0.31	46.40	3.67	1.42	0.11	100.00	7.99
conifer swamp		37.50	0.78	0.79	64.60	0.51	9.40	0.07	1.96	0.02	84.34	0.67
broadleaf swamp		32.47	0.68	0.69	89.67	0.61	55.40	0.38	1.90	0.01	51.82	0.36
mixed swamp		44.89	0.94	0.95	64.60	0.61	9.40	0.09	1.96	0.02	84.34	0.80
pond		41.1	0.86	0.87	0.00	0.00	9.40	0.08	0.00	0.00	0.00	0.00
riparian old growth conifer		2846.20	59.56	60.10	76.20	45.38	20.60	17.03	2.36	1.42	80.16	48.24
riparian closed mature conifer		383.10	8.02	8.10	75.20	6.03	32.30	2.59	2.58	0.21	82.48	6.68
riparian open conifer/2		3.40	0.07	0.07	33.90	0.02	73.60	0.05	2.90	0.00	63.66	0.05
riparian regenerative conifer/3		0.00	0.00	0.00	70.87	0.00	22.40	0.00	1.95	0.00	87.32	0.00
riparian broadleaf		517.30	10.82	10.94	93.45	10.12	20.65	2.24	2.11	0.23	59.64	6.52
riparian mixed conifer/broadleaf		372.90	7.80	7.88	77.09	6.02	29.93	2.34	2.30	0.10	87.54	6.90
riparian shrubland		106.70	2.23	2.26	71.05	1.59	73.60	1.64	2.90	0.07	22.37	0.50
TOTALS		4778.85	100.00	101.04		71.19		30.19		2.27		78.86
		4729.43										

1/ same values as mixed swamp

2/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

3/ used values from regenerative conifer

SPREADSHEETS TO CALCULATE HABITAT VARIABLE AVERAGES FOR 0-100M AND 100-200M BANDS ADJACENT TO RIVERINE OR PALUSTRINE HABITAT FOR ROSS, TY11, WITH PROJECT

TY11, WITH PROJECT--PALUSTRINE HABITATS (spreadsheet 3a)
100-200M BAND (USES ALL HABITATS)

Community Type	Habitat Averages and Weighted Averages											
	# Polygons	Acreage	Percent of		x Tree		x Shrub		Weighted		x Trees	
			Percent of all	Shrub cts	Canopy Closure	Tree Closure	Canopy Closure	Shrub Closure	Shrub Height	Shrub Height	2.5-15.2 cm dbh	Small Trees
old growth conifer		636.50	7.91	8.12	97.93	7.75	5.30	0.42	2.03	0.16	70.32	5.71
closed mature conifer		1984.00	24.67	25.32	91.24	22.51	12.66	3.12	2.25	0.57	70.24	17.70
open mature conifer		354.70	4.41	4.53	33.90	1.50	16.52	0.73	1.53	0.07	63.66	2.80
lodgepole pine		304.10	3.78	3.88	54.78	2.07	7.82	0.38	1.13	0.04	81.10	3.15
regenerative conifer (& reg. lodgepole)		1018.40	12.66	13.00	70.87	8.97	22.40	2.04	1.95	0.25	87.92	11.43
broadleaf		1.90	0.02	0.02	71.10	0.02	23.41	0.01	1.81	0.00	82.88	0.02
grassland/meadow		8.80	0.11	0.11	0.00	0.02	0.00	0.00		0.00	0.00	0.00
avalanche shrub		17.70	0.22	0.23	71.05	0.16	73.60	0.16	2.90	0.01	22.37	0.05
shrubland		234.70	2.92	2.99	15.60	0.46	42.85	1.25	1.69	0.05	99.12	2.97
rock talus		8.80	0.11	0.11	0.00	0.00	0.00	0.00		0.00	0.00	0.00
exposed rock		20.10	0.25	0.26	0.00	0.00	0.00	0.00		0.00	0.00	0.00
wet meadow/marsh		4.20	0.05	0.05	2.80	0.00	7.00	0.00	0.09	0.00	100.00	0.05
shrub swamp		249.00	3.11	3.19	3.94	0.12	46.40	1.44	1.42	0.05	100.00	3.19
conifer swamp\3		22.10	0.27	0.28	64.60	0.18	0.00	0.00	1.96	0.01	84.34	0.24
broadleaf swamp		18.90	0.24	0.24	89.67	0.21	55.40	0.13	1.90	0.00	51.82	0.12
mixed swamp		44.80	0.56	0.57	64.60	0.36	9.40	0.05	1.96	0.01	84.34	0.48
pond		17.60	0.22	0.22	0.00	0.00	9.40	0.02		0.00	0.00	0.00
tributary		24.10	0.30	0.31	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riverine		126.30	1.57	1.61	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riparian old growth conifer		1960.40	24.38	25.02	76.20	18.57	28.60	6.97	2.36	0.59	80.16	20.05
riparian closed mature conifer		263.60	3.28	3.36	75.20	2.46	32.30	1.06	2.50	0.09	82.40	2.77
riparian broadleaf		367.00	4.57	4.69	93.45	4.27	20.65	0.94	2.11	0.10	59.64	2.80
riparian mixed conifer/broadleaf		314.90	3.92	4.02	77.09	3.02	29.93	1.17	2.30	0.09	87.54	3.52
riparian shrubland		38.00	0.47	0.48	71.05	0.34	73.60	0.35	2.90	0.01	22.37	0.11
TOTALS		8042.20	100.00	102.62		72.90		20.96		2.11		77.33

7836.50

1/ same values as closed canopy lodgepole pine

2/ same values as regenerative conifer

3/ same values as mixed swamp

TY11, WITH PROJECT--PALUSTRINE & LACUSTRINE HABITATS (spreadsheet 3b)
 0-100M BAND (USES RIPARIAN, RIVERINE & PALUSTRINE HABITATS ONLY)

Community Type				Habitat Averages and Weighted Averages								
				# Polygons	Acreage	Percent of all Tree %	Percent of Shrub cts	% Tree Canopy Closure	Weighted Tree Closure	% Shrub Canopy Closure	Weighted Shrub Closure	Shrub Height
wet meadow/marsh		4.20	0.12	0.13	2.80	0.00	7.80	0.01	0.89	0.00	100.00	0.13
shrub swamp		249.00	7.24	7.61	3.94	0.29	46.40	3.36	1.42	0.11	100.00	7.61
conifer swamp/1		22.10	0.64	0.67	64.60	0.41		0.00	1.96	0.01	84.34	0.57
broadleaf swamp		10.90	0.55	0.58	89.67	0.49	55.40	0.30	1.90	0.01	51.82	0.30
mixed swamp		44.00	1.30	1.36	64.60	0.04	9.40	0.12	1.96	0.03	84.34	1.15
pond		17.60	0.51	0.54	0.00	0.00	9.40	0.05		0.00	0.00	0.00
tributary		24.10	0.70	0.73	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riverine		126.30	3.66	3.85	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riparian old growth conifer		1960.40	56.70	59.69	76.20	43.27	28.60	16.24	2.36	1.41	80.16	47.04
riparian closed mature conifer		263.60	7.64	8.03	75.20	5.74	32.30	2.47	2.58	0.21	82.40	6.62
riparian broadleaf		367.00	10.65	11.20	93.45	9.96	20.65	2.20	2.11	0.24	59.64	6.68
riparian mixed conifer/broadleaf		314.90	9.12	9.59	77.09	7.03	29.93	2.73	2.30	0.22	87.54	8.39
riparian shrubland		38.00	1.10	1.16	71.05	0.70	73.60	0.01	2.90	0.03	22.37	0.26

TOTALS 3452.50 100.00 105.11 68.01 28.28 2.27 79.54

3284.50

1/ same values as mixed swamp

TY11, WITH PROJECT--RIVERINE HABITAT (spreadsheet 3c)
100-200M BAND (USES ALL HABITATS EXCEPT RIVERINE, GRAVELBAR & TRIBUTARY)

Habitat Averages and Weighted Averages

Community Type	# Polygons	Acreage	Percent of		% Tree Canopy Closure	Weighted Tree Canopy Closure	% Shrub Canopy Closure	Weighted Shrub Canopy Closure	Shrub Height	Weighted Shrub Height	% Trees 2.5-15.2 cm dbh	Weighted Small Trees
			Percent of all	Shrub cts								
old growth conifer		636.50	8.87	8.15	97.93	7.90	5.38	8.43	2.03	0.17	70.32	5.73
closed mature conifer	1984.00	25.14	25.41	91.24	22.94	12.66	3.18	2.25	0.57	70.24	17.85	
open mature conifer	354.70	4.43	4.54	33.90	1.52	16.52	0.74	1.53	0.07	63.66	2.89	
lodgepole pine	384.10	3.85	3.89	54.70	2.11	7.82	0.30	1.13	0.04	81.10	3.16	
regenerative conifer (& reg. lodgepole)	1018.40	12.90	13.04	78.87	9.15	22.40	2.89	1.95	0.25	87.92	11.47	
broadleaf	1.90	0.02	0.02	71.10	0.02	23.41	0.01	1.01	0.00	82.88	0.02	
grassland/meadow	8.80	0.11	0.11	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	
avalanche shrub	17.70	0.22	0.23	71.05	0.16	73.60	0.17	2.90	0.01	22.37	0.05	
shrubland	234.70	0.22	3.01	15.60	0.03	42.85	0.10	1.63	0.05	99.12	2.96	
rock talus	8.80	2.97	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
exposed rock	20.10	0.11	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
wet meadow/marsh	4.20	0.25	0.05	2.00	0.01	7.00	0.02	0.89	0.00	100.00	0.05	
shrub swamp	243.00	3.17	3.20	3.94	0.12	46.40	1.47	1.42	0.05	100.00	3.20	
conifer swamp/3	22.10	0.28	0.28	64.60	0.18	0.00	0.00	1.96	0.01	84.34	0.24	
broadleaf swamp	18.90	0.24	0.24	89.67	0.21	55.40	0.13	1.90	0.00	51.82	0.13	
mixed swamp	44.00	0.57	0.57	64.60	0.37	9.40	0.05	1.96	0.01	84.34	0.48	
pond	17.60	0.22	0.23	0.00	0.00	3.40	0.02	0.00	0.00	0.00	0.00	
riparian old growth conifer	1360.40	24.84	25.10	76.20	18.93	28.60	7.10	2.36	0.59	80.16	20.12	
riparian closed mature conifer	263.60	3.34	3.38	75.20	2.51	32.30	1.00	2.50	0.09	82.48	2.78	
riparian broadleaf	367.80	4.66	4.71	93.45	4.36	20.65	0.96	2.11	0.10	59.64	2.81	
riparian mixed conifer/broadleaf	314.90	3.99	4.03	77.09	3.08	29.93	1.19	2.38	0.09	87.54	1.53	
riparian shrubland	38.00	0.48	0.49	71.05	0.34	73.60	0.35	2.90	0.01	22.37	0.11	
TOTALS		7891.80	100.17	101.06		73.95		20.20		2.12		77.60
		7809.88										

1/ same values as closed canopy lodgepole pine
2/ same values as regenerative conifer
3/ same values as mixed swamp

TY11, WITH PROJECT--RIVERINE HABITAT (spreadsheet 3d)
 0-100M BAND (USES RIPARIAN & PALUSTRINE HABITATS ONLY)

Community Type	# Polygons	Acreage	Habitat Averages and Weighted Averages									
			Percent of		% Tree	Weighted	% Shrub	Weighted	Shrub	Shrub	Weighted	% Trees
			Percent of all	Tree &	Canopy	Tree	Canopy	Shrub				
			Total	Shrub cts	Closure	Closure	Closure	Closure	Height	Height	cm dbh	Small Trees
wet meadow/marsh		4.20	0.13	0.13	2.00	0.00	7.00	0.01	0.09	0.00	100.00	0.13
shrub swamp/1		249.00	7.56	7.61	3.94	0.30	46.40	3.51	1.42	0.11	100.00	7.61
conifer swamp		22.10	0.67	0.67	64.60	0.43	9.40	0.06	1.96	0.01	84.34	0.57
broadleaf swamp		18.90	0.57	0.58	89.67	0.51	55.40	0.32	1.90	0.01	51.82	0.30
mixed swamp		44.00	1.36	1.36	64.60	0.88	9.40	0.13	1.96	0.03	84.34	1.15
pond		17.60	0.53	0.54	0.00	0.00	9.40	0.05	0.00	0.00	0.00	0.00
riparian old growth conifer		1960.40	53.37	59.69	76.20	45.24	28.60	16.90	2.36	1.41	80.16	47.04
riparian closed mature conifer		263.60	7.98	8.03	75.20	6.00	32.30	2.50	2.50	0.21	82.40	6.62
riparian broadleaf		367.00	11.14	11.20	93.45	10.41	20.65	2.30	2.11	0.24	59.64	6.60
riparian mixed conifer/broadleaf		314.90	9.54	9.59	77.09	7.35	29.93	2.85	2.30	0.22	87.54	8.39
riparian shrubland		30.00	1.15	1.16	71.05	0.02	73.60	0.05	2.90	0.03	22.37	0.26
TOTALS		3382.10	100.00	100.54		71.94		29.64		2.27		79.54
		3284.5										

1/ same values as mixed swamp

SPREADSHEETS TO CALCULATE HABITAT VARIABLE AVERAGES FOR 0-100M AND 100-200M BANDS ADJACENT TO RIVERINE OR PALUSTRINE HABITAT FOR RDSS, TY12, WITH PROJECT

TY12, WITH PROJECT--PALUSTRINE HABITATS (spreadsheet 4a)
100-200M BAND (USES ALL HABITATS)

Community Type	Habitat Averages and Weighted Averages											
	# Polygons	Acreage	Percent of		% Tree Canopy Closure	Weighted Tree Closure	% Shrub Canopy Closure	Weighted Shrub Closure	Shrub Height	Weighted Shrub Height	% Trees 2.5-15.2 cm dbh	Weighted Small Trees
			Percent of all	Shrub cts								
old growth conifer		499.90	11.31	11.52	97.93	11.07	5.30	0.60	2.03	0.23	70.32	8.10
closed mature conifer		1545.2	34.95	35.61	91.24	31.89	12.66	4.43	2.25	0.00	70.24	25.01
open mature conifer		219.00	4.97	5.07	33.90	1.69	16.52	0.02	1.53	0.00	63.66	3.22
lodgepole pine		151.00	3.42	3.48	54.70	1.07	7.02	0.27	1.13	0.04	01.10	2.82
regenerative conifer (1 reg. lodgepole)		704.50	15.94	16.23	70.07	11.29	22.40	3.57	1.95	0.32	07.92	14.27
broadleaf		1.50	0.03	0.03	71.10	0.02	23.41	0.01	1.01	0.00	02.00	0.03
grassland/meadow		6.90	0.16	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
avalanche shrub		14.00	0.32	0.32	71.05	0.23	73.60	0.23	2.90	0.01	22.37	0.07
shrubland		56.50	1.20	1.30	15.60	0.20	42.85	0.55	1.69	0.02	99.12	1.29
rock talus		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock		17.30	0.39	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp		109.60	2.48	2.53	3.94	0.10	46.40	1.15	1.42	0.04	100.00	2.53
broadleaf swamp		11.60	0.26	0.27	09.67	0.24	55.40	0.15	1.90	0.01	51.02	0.14
tributary		19.50	0.44	0.45	0.00	0.00	3.40	0.04	0.00	0.00	0.00	0.00
riverine		20.70	0.65	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer		574.70	13.00	13.24	76.20	3.91	28.60	3.72	2.36	0.31	00.16	10.62
riparian closed mature conifer		45.50	1.03	1.05	75.20	0.77	32.30	0.33	2.50	0.03	02.40	0.06
riparian broadleaf		211.70	4.79	4.88	93.45	4.48	20.65	0.99	2.11	0.10	59.64	2.91
riparian mixed conifer/broadleaf		100.10	4.07	4.15	77.09	3.14	29.93	1.22	2.30	0.10	07.54	3.63
riparian shrubland		13.90	0.31	0.32	71.05	0.22	73.60	0.23	2.90	0.01	22.37	0.07
TOTALS		4420.70	100.00	101.07		77.14		10.30		2.09		75.50
		4339.5										

1/ same values as closed canopy lodgepole pine

2/ same values as regenerative conifer

TY12, WITH PROJECT--PALUSTRINE & LACUSTRINE HABITATS (spreadsheet 4b)
0-100M BAND (USES RIPARIAN, RIVERINE & PALUSTRINE HABITATS ONLY)

Habitat Averages and Weighted Averages

[illegible]

TY12, WITH PROJECT--RIVERINE HABITAT (spreadsheet A)
100-200M BAND (USES ALL HABITATS EXCEPT RIVERINE, GRAVELBAR & TRIBUTARY)

Habitat Averages and Weighted Averages

Community Type	# Polygons	Acreage	Percent of		% Tree Canopy Closure	Weighted Tree Closure	% Shrub Canopy Closure		Weighted Shrub Height	Weighted Shrub Height	% Trees 2.5-15.2 cm dbh	Weighted Small Trees
			Percent of Total	all Tree & Shrub cts								
old growth conifer		499.90	11.43	11.52	97.93	11.20	5.30	0.61	2.03	0.23	70.32	8.10
closed mature conifer		1545.2	35.34	35.51	91.24	32.24	12.65	4.47	2.25	0.00	70.24	25.01
open mature conifer		219.00	5.03	5.07	33.90	1.70	16.52	0.83	1.53	0.08	63.66	3.22
lodgepole pine		151.00	3.45	3.48	54.70	1.89	7.82	0.27	1.13	0.04	81.10	2.82
regenerative conifer (l reg. lodgepole)		704.50	16.11	16.23	70.87	11.42	22.40	3.61	1.95	0.32	87.32	14.27
broadleaf		1.50	0.03	0.03	71.10	0.02	23.41	0.01	1.01	0.00	82.80	0.03
grassland/meadow		6.90	0.16	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
avalanche shrub		14.00	0.32	0.32	71.05	0.23	73.60	0.24	2.90	0.01	22.37	0.07
shrubland		56.50	1.29	1.30	15.60	0.20	42.85	0.55	1.63	0.02	99.12	1.29
rock talus		8.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock		17.30	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp		109.60	2.51	2.53	3.94	0.10	46.40	1.16	1.42	0.04	100.00	2.53
broadleaf swamp		11.60	0.27	0.27	89.67	0.24	55.40	0.15	1.90	0.01	51.82	0.14
riparian old growth conifer		574.70	13.14	13.24	76.20	10.02	28.60	3.76	2.36	0.31	80.16	10.62
riparian closed mature conifer		45.50	1.04	1.05	75.20	0.78	32.30	0.34	2.58	0.03	82.48	0.06
riparian broadleaf		211.70	4.84	4.88	93.45	4.52	20.65	1.00	2.11	0.10	59.64	2.91
riparian mixed conifer/broadleaf		100.10	4.12	4.15	77.09	3.18	29.93	1.23	2.30	0.10	87.54	3.63
riparian shrubland		13.90	0.32	0.32	71.05	0.23	73.60	0.23	2.90	0.01	22.37	0.07

TOTALS 4372.50 100.00 100.76 77.99 18.46 2.09 75.58

4339.50

1/ same values as closed canopy lodgepole pine

2/ same values as regenerative conifer

TY12, WITH PROJECT--RIVERINE HABITAT (spreadsheet 4d)
 R-100M BAND (USES RIPARIAN & PALUSTRINE HABITATS ONLY)

Community Type	Habitat Averages and Weighted Averages										
	# Polygons	Acreage	Percent of		% Tree Canopy Closure	% Tree Closure	Percent of		% Shrub Canopy Closure	% Shrub Closure	Weighted % Trees 2.5-15.2 cm dbh
			Total	Shrub cts			all Tree %	Shrub cts			Weighted % Trees
shrub swamp		109.68	3.55		3.94	0.38	46.40	4.43	1.42	0.14	100.00
broadleaf swamp		11.68	1.01		89.67	0.91	55.40	0.56	1.90	0.02	51.02
riparian old growth conifer		574.70	50.10		76.20	38.18	20.60	14.33	2.36	1.18	80.16
riparian closed mature conifer		45.50	3.97		75.20	2.98	32.30	1.28	2.58	0.10	82.48
riparian broadleaf		211.70	18.46		93.45	17.25	20.65	3.81	2.11	0.39	59.64
riparian mixed conifer/broadleaf		180.10	15.70		77.09	12.10	29.93	4.70	2.30	0.36	87.54
riparian shrubland		13.90	1.21		71.05	0.86	73.60	0.89	2.90	0.04	22.37
TOTALS		1147.10	100.00				72.65	30.01		2.23	78.53

Notes: input for TY13, TY30 and TY51, with project was calculated directly from acreage proportions on the edit plots for TY51 (1987) (spreadsheets 5a and 5b). The amount of remaining palustrine and riverine habitat remaining after TY12 is low

SPREADSHEETS TO CALCULATE HABITAT VARIABLE AVERAGES FOR 0-100M AND 100-200M BANDS ADJACENT TO RIVERINE OR PALUSTRINE HABITAT FOR ROSS, TY30, WITHOUT PROJECT

TY30, WITHOUT PROJECT---PALUSTRINE HABITATS (spreadsheet 20a)
100-200M BAND (USES ALL HABITATS)

1730, WITHOUT PROJECT---HABITAT TYPE HABITATS (spreadsheet 1730-2000 BAND (USES ALL HABITATS))			Habitat Averages and Weighted Averages									
Community Type	# Polygons	Acreage	Percent of		% Tree	Weighted	% Shrub	Weighted	Shrub Height	Weighted	% Trees	Weighted
			Percent of all	Tree & Shrub cts	Canopy Closure	Tree Closure	Canopy Closure	Shrub Closure		Shrub Height	2.5-15.2 cm dbh	Small Trees
old growth conifer	957.20	6.97	7.39	97.93	6.83	5.30	0.37	2.03	0.15	70.32	5.20	
closed mature conifer	4818.90	35.09	37.23	91.24	32.02	12.66	4.44	2.25	0.84	70.24	26.15	
open mature conifer	656.10	4.78	5.07	33.90	1.62	16.52	0.79	1.53	0.00	63.66	3.23	
lodgepole pine (open & closed)	700.60	5.16	5.47	54.70	2.82	7.02	0.40	1.13	0.06	81.10	4.44	
broadleaf	5.10	0.04	0.04	71.10	0.03	23.41	0.01	1.81	0.00	82.80	0.03	
mixed conifer/broadleaf	1.80	0.01	0.01	74.50	0.01	20.84	0.00	1.90	0.00	70.20	0.01	
grassland/meadow	8.80	0.06	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
agriculture	9.60	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
shrubland	346.90	2.53	2.68	15.60	0.39	42.85	1.00	1.69	0.05	99.12	2.66	
rock talus	21.70	0.16	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
exposed rock	23.50	0.17	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
wet meadow/marsh	7.10	0.05	0.05	2.00	0.00	7.00	0.00	0.03	0.00	100.00	0.05	
bog	8.32	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
shrub swamp	304.70	2.00	2.97	3.94	0.11	46.40	1.30	1.42	0.04	100.00	2.97	
conifer swamp\3	37.50	0.27	0.29	64.60	0.10	0.00	0.00	1.96	0.01	84.34	0.24	
broadleaf swamp	32.60	0.24	0.25	89.67	0.21	55.40	0.13	1.90	0.00	51.02	0.13	
mixed swamp	44.00	0.33	0.35	64.60	0.21	9.40	0.03	1.96	0.01	84.34	0.29	
pond	54.00	0.39	0.42	0.00	0.00	9.40	0.04	0.00	0.00	0.00	0.00	
tributary	74.24	0.54	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
riverine	554.00	4.04	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
gravelbar	29.44	0.21	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
riparian old growth conifer	3076.00	22.40	23.76	75.20	17.07	28.60	6.41	2.36	0.56	80.16	19.05	
riparian closed mature conifer	633.00	4.62	4.90	75.20	3.47	32.30	1.49	2.50	0.13	82.40	4.04	
riparian open conifer\4	16.05	0.12	0.12	33.90	0.04	73.60	0.03	2.90	0.00	63.66	0.08	
riparian broadleaf	551.60	4.02	4.26	93.45	3.75	20.65	0.83	2.11	0.03	59.64	2.54	
riparian mixed conifer/broadleaf	449.00	3.28	3.47	77.03	2.53	23.93	0.98	2.30	0.08	87.54	3.04	
riparian/avalanche shrubland	216.60	1.58	1.67	71.05	1.12	73.60	1.16	2.90	0.05	22.37	0.37	
developed--low density residential	2.60	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS	0	13731.43	100.00	106.07	72.41	19.56		2.14			74.53	
		12945.15										

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

5/ used values from regenerative conifer

TY30, WITHOUT PROJECT--PALUSTRINE & LACUSTRINE HABITATS (spreadsheet 205)
0-100M BAND (USES RIPARIAN, RIVERINE & PALUSTRINE HABITATS ONLY)

Community Type	Habitat Averages and Weighted Averages											
	# Polygons	Acreage	Percent of all		% Tree Canopy		% Shrub Canopy		Weighted Shrub		% Trees Weighted	
			Total	Shrub pts	Closure	Tree Closure	Closure	Closure	Height	Height	2.5-15.2 cm dbh	Small Trees
wet meadow/marsh		7.10	0.12	0.13	2.00	0.00	7.00	0.01	0.09	0.00	100.00	0.13
bog		8.32	0.13	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp		384.70	6.22	7.06	3.94	0.25	46.40	2.89	1.42	0.10	100.00	7.06
conifer swamp\3		37.50	0.61	0.69	64.60	0.39	0.00	1.96	0.01	0.01	84.34	0.50
broadleaf swamp		32.60	0.53	0.60	89.67	0.47	55.40	0.29	1.90	0.01	51.82	0.31
mixed swamp		44.00	0.73	0.82	64.60	0.47	9.40	0.07	1.96	0.02	84.34	0.69
pond		54.00	0.88	0.99	0.00	0.00	9.40	0.08	0.00	0.00	0.00	0.00
tributary		74.24	1.20	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine		534.00	8.90	10.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
gravelbar		29.44	0.48	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer		3076.00	49.85	56.43	76.20	37.98	28.60	14.26	2.36	1.33	80.16	45.24
riparian closed mature conifer		633.00	10.27	11.63	75.20	7.72	32.30	3.32	2.50	0.30	82.48	9.59
riparian open conifer\4		16.05	0.26	0.29	33.90	0.09	73.60	0.19	2.90	0.01	63.66	0.19
riparian broadleaf		551.60	8.94	10.12	93.45	0.35	20.65	1.85	2.11	0.21	59.64	6.04
riparian mixed conifer/broadleaf		449.00	7.29	8.25	77.09	5.62	29.93	2.18	2.30	0.19	87.54	7.22
riparian/avalanche shrubland		216.60	3.51	3.97	71.05	2.49	73.60	2.50	2.90	0.12	22.37	0.89
TOTALS		6170.63	100.00	113.21		63.85		27.72		2.30		77.94
		5450.55										

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

TY30, WITHOUT PROJECT--PALUSTRINE HABITATS (spreadsheet 20c)
100-200M BAND (USES ALL HABITATS EXCEPT RIVERINE, GRAVELBAR & TRIBUTARY)

100-200M BAND (USES ALL HABITATS EXCEPT RIVERINE, GRAVELBAR & TRIBUTARY)				Habitat Averages and Weighted Averages								
Community Type	# Polygons	Acreage	Percent of		% Tree Canopy Closure	Weighted Tree Closure	% Shrub		Shrub Height	Weighted Shrub Height	% Trees 2.5-15.2 cm dbh	Weighted Small Trees
			Percent of all Tree & Shrub cts	Total			Canopy Closure	Shrub Closure				
old growth conifer		957.20	7.32	7.39	97.93	7.17	5.30	0.39	2.03	0.15	70.32	5.20
closed mature conifer		4018.90	36.06	37.23	91.24	33.63	12.66	4.67	2.25	0.04	70.24	26.15
open mature conifer		656.10	5.02	5.07	33.90	1.70	16.52	0.83	1.53	0.00	63.66	3.23
lodgepole pine (open & closed)		700.60	5.42	5.47	54.70	2.96	7.02	0.42	1.13	0.06	81.10	4.44
broadleaf		5.10	0.04	0.04	71.10	0.03	23.41	0.01	1.01	0.00	82.00	0.03
mixed conifer/broadleaf		1.00	0.01	0.01	74.50	0.01	20.04	0.00	1.90	0.00	70.20	0.01
grassland/meadow		0.00	0.07	0.07	0.00	0.00	0.00	0.00		0.00	0.00	0.00
agriculture		9.60	0.07	0.07	0.00	0.00	0.00	0.00		0.00	0.00	0.00
shrubland		346.90	2.65	2.68	15.60	0.41	42.05	1.14	1.63	0.05	99.12	2.66
rock talus		21.70	0.17	0.17	0.00	0.00	0.20	0.00		0.00	0.00	0.00
exposed rock		23.50	0.18	0.18	0.00	0.00	0.00	0.00		0.00	0.00	0.00
wet meadow/marsh		7.10	0.05	0.05	2.00	0.00	7.00	0.00	0.09	0.00	100.00	0.05
bog		0.32	0.06	0.06	0.00	0.00	0.00	0.00		0.00	0.00	0.00
shrub swamp		384.70	2.94	2.97	3.94	0.12	46.40	1.37	1.42	0.04	100.00	2.97
conifer swamp\3		37.50	0.29	0.29	64.60	0.19	0.00	0.00	1.96	0.01	84.34	0.24
broadleaf swamp		32.60	0.25	0.25	89.67	0.22	55.40	0.14	1.90	0.00	91.02	0.13
mixed swamp		44.00	0.34	0.35	64.60	0.22	9.40	0.03	1.96	0.01	84.34	0.29
pond		54.00	0.41	0.42	0.00	0.00	9.40	0.04		0.00	0.00	0.00
riparian old growth conifer		3076.00	23.53	23.76	76.20	17.93	20.60	6.73	2.36	0.56	80.16	19.05
riparian closed mature conifer		633.00	4.85	4.90	75.20	3.65	32.30	1.57	2.50	0.13	82.40	4.04
riparian open conifer\4		16.05	0.12	0.12	33.90	0.04	73.60	0.09	2.90	0.00	63.66	0.08
riparian broadleaf		551.60	4.22	4.26	93.45	3.94	20.65	0.07	2.11	0.09	59.64	2.54
riparian mixed conifer/broadleaf		449.00	3.44	3.47	77.09	2.65	29.93	1.03	2.30	0.08	87.54	3.04
riparian/avalanche shrubland		216.60	1.66	1.67	71.05	1.10	73.60	1.22	2.90	0.05	22.37	0.37
developed--low density residential		2.60	0.02	0.02	0.00	0.00	0.00	0.00		0.00	0.00	0.00
TOTALS		13073.67	100.00	100.99		76.05		20.54		2.14		74.53
		12945.15										

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

TY30, WITH PROJECT--RIVERINE (spreadsheet 20d)
0-100M BAND (USES RIPARIAN & PALUSTRINE HABITATS ONLY)

0-100M BAND (USES RIPARIAN & PALUSTRINE HABITATS ONLY)				Habitat Averages and Weighted Averages									
Community Type	# Polygons	Acreage	Percent of		% Tree	Weighted	% Shrub	Weighted	Shrub Height	Weighted	% Trees	Weighted	
			Percent of all Tree & Shrub cts	Total	Canopy Closure	Tree Closure	Canopy Closure	Shrub Closure		Shrub Height	Shrub Height	2.5-15.2 cm dbh	Small Trees
wet meadow/marsh		7.10		0.13		2.80	0.00	7.00	0.01	0.09	0.00	100.00	0.13
bog		8.32		0.15		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp		384.70		6.98		3.94	0.27	46.40	3.24	1.42	0.10	100.00	6.98
conifer swamp\3		37.50		0.68		64.60	0.44		0.00	1.96	0.01	84.34	0.57
broadleaf swamp		32.60		0.59		89.67	0.53	55.40	0.33	1.90	0.01	51.02	0.31
mixed swamp		44.00		0.81		64.60	0.52	9.40	0.00	1.96	0.02	84.34	0.59
pond		54.00		0.98		0.00	0.00	9.40	0.09	0.00	0.00	0.00	0.00
riparian old growth conifer		3076.00		55.80		76.20	42.52	28.60	15.96	2.36	1.32	80.16	44.73
riparian closed mature conifer		633.00		11.50		75.20	0.65	32.30	3.71	2.50	0.30	82.40	9.40
riparian open conifer\4		16.05		0.29		33.90	0.10	73.60	0.21	2.90	0.01	63.66	0.19
riparian broadleaf		551.60		10.01		93.45	3.35	20.65	2.07	2.11	0.21	59.64	5.97
riparian mixed conifer/broadleaf		449.00		8.16		77.09	6.29	29.93	2.44	2.30	0.19	87.54	7.14
riparian/avalanche shrubland		216.60		3.93		71.05	2.79	73.60	2.09	2.90	0.11	22.37	0.60
TOTALS		5512.87		100.00			71.47	31.03		2.28			77.06

3/ same values as mixed swamp

4/ used values for tree cover and X small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

SPREADSHEETS TO CALCULATE HABITAT VARIABLE AVERAGES FOR 0-100M AND 100-200M BANDS ADJACENT TO RIVERINE OR PALUSTRINE HABITAT FOR POSS, TYSI, WITHOUT PROJECT

TYSI, WITHOUT PROJECT--PALUSTRINE HABITATS (spreadsheet 32a)
100-200M BAND (USES ALL HABITATS)

Community Type			Habitat Averages and Weighted Averages									
# Polygons	Acreage	Percent of all Tree & Shrub cts	Percent of all Tree & Shrub cts	% Tree Closure	% Tree Weighted Closure	% Shrub Closure	% Shrub Weighted Closure	Shrub Height	Shrub Weighted Height	2.5 15.2 cm dbh.	% Trees Small	
old growth conifer	388.30	7.20	7.63	97.93	7.05	5.30	0.38	2.03	0.15	70.32	5.36	
closed mature conifer	5045.50	36.74	38.34	91.24	33.53	12.66	4.65	2.25	0.88	70.24	27.35	
open mature conifer	498.30	3.63	3.85	33.90	1.23	16.52	0.60	1.52	0.06	63.66	2.40	
lodgepole pine (open & closed)	629.80	4.59	4.86	54.70	2.51	7.82	0.36	1.13	0.05	81.10	3.94	
broadleaf	5.10	0.04	0.04	71.10	0.03	23.41	0.01	1.81	0.00	82.80	0.03	
mixed conifer/broadleaf	3.80	0.07	0.08	74.50	0.05	20.84	0.01	1.90	0.00	70.20	0.05	
grassland/meadow	8.80	0.06	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
agriculture	3.60	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
shrubland	329.00	2.40	2.54	15.60	0.37	42.85	1.03	1.69	0.04	39.12	2.52	
rock talus	13.70	0.10	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
exposed rock	19.60	0.14	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
wet meadow/marsh	7.10	0.05	0.05	2.80	0.00	7.00	0.00	0.09	0.00	100.00	0.05	
bog	8.32	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
shrub swamp	384.70	2.90	2.97	3.34	0.11	45.40	1.30	1.42	0.04	100.00	2.97	
conifer swamp\3	37.50	0.27	0.29	64.60	0.18	0.00	0.00	1.96	0.01	84.34	0.24	
broadleaf swamp	32.60	0.24	0.25	89.67	0.21	55.40	0.13	1.90	0.00	51.82	0.13	
mixed swamp	44.80	0.33	0.35	64.60	0.21	9.40	0.03	1.96	0.01	84.34	0.29	
pond	54.00	0.39	0.42	0.00	0.00	9.40	0.04	0.00	0.00	0.00	0.00	
tributary	74.24	0.54	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
riverine	554.00	4.04	4.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
gravelbar	29.44	0.21	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
riparian old growth conifer	3081.60	22.44	23.78	76.20	17.10	28.60	6.42	2.36	0.56	80.16	19.06	
riparian closed mature conifer	628.20	4.57	4.85	75.20	3.44	32.30	1.40	2.50	0.13	82.48	4.00	
riparian open conifer\4	16.05	0.12	0.12	33.90	0.04	73.60	0.09	2.90	0.00	63.66	0.08	
riparian broadleaf	551.60	4.02	4.26	33.45	3.75	20.65	0.83	2.11	0.09	59.64	2.54	
riparian mixed conifer/broadleaf	449.00	3.28	3.47	77.09	2.53	29.93	0.90	2.30	0.00	87.54	3.04	
riparian/avalanche shrubland	216.60	1.58	1.67	71.05	1.12	73.60	1.16	2.90	0.05	22.37	0.37	
developed--low density residential	2.60	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS	13731.33	100.00	105.98		73.45		19.50		2.16		74.50	
	10956.95											

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

TVS1, WITHOUT PROJECT - PALUSTRINE & LACUSTRINE HABITATS (spreadsheet 2001)
0-100M BAND (USES RIPARIAN, RIVERINE & PALUSTRINE HABITATS ONLY)

Community Type	Habitat Averages and Weighted Averages											
	# Polygons	Acreage	Percent of Total	Percent of all Tree & Shrub cts	% Tree	Weighted	% Shrub	Weighted	Shrub Height	Weighted	% Trees	Weighted
					Canopy Closure	Tree Closure	Canopy Closure	Shrub Closure		Tree Height	2.5-15.2 cm dbh	Small Trees
wet meadow/marsh		7.10	0.12	0.13	2.00	0.00	7.00	0.01	0.89	0.00	100.00	0.13
bog		8.32	0.13	0.15	0.00	0.00	0.00	0.00		0.20	0.00	0.00
shrub swamp		384.70	5.23	7.06	3.94	0.25	45.40	2.89	1.42	0.10	100.00	7.06
conifer swamp\3		37.50	0.61	0.69	64.60	0.39		0.00	1.96	0.01	04.34	0.50
broadleaf swamp		32.60	0.53	0.60	89.67	0.47	55.40	0.29	1.90	0.01	51.82	0.31
mixed swamp		44.00	0.73	0.82	64.60	0.47	9.40	0.07	1.96	0.02	04.34	0.69
pond		54.00	0.88	0.93	0.00	0.00	3.40	0.00		0.00	0.00	0.00
tributary		74.24	1.20	1.36	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riverine		554.00	8.90	10.17	0.00	0.00	0.00	0.00		0.00	0.00	0.00
gravelbar		29.44	0.40	0.54	0.00	0.00	0.00	0.00		0.00	0.00	0.00
riparian old growth conifer		3081.60	49.94	56.54	76.20	38.05	20.60	14.20	2.36	1.33	80.16	45.32
riparian closed mature conifer		628.20	10.10	11.53	75.20	7.66	32.30	3.29	2.50	0.30	82.40	9.51
riparian open conifer\4		16.05	0.26	0.29	33.90	0.09	73.60	0.19	2.90	0.01	63.66	0.19
riparian broadleaf		551.60	8.94	10.12	93.45	8.35	20.65	1.85	2.11	0.21	59.64	6.04
riparian mixed conifer/broadleaf		449.00	7.29	8.25	77.09	5.62	29.93	2.18	2.30	0.19	87.54	7.22
riparian/avalanche shrubland		216.60	3.51	3.97	71.05	2.49	73.60	2.50	2.90	0.12	22.37	0.89
TOTALS		6170.63	100.00	113.21		63.85		27.72		2.30		77.93
		5450.55										

3/ same values as mixed swamp

4/ used values for tree cover and % small trees from open canopy conifer; values for shrub cover and height from riparian shrubland

SG. ROSS -- WITH PROJECT (TY0, TY1, TY4, TY11, TY12)
 WITHOUT PROJECT (TY0, TY1)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 , COMPRISING THE BANDS AROUND TRIBUTARIES

Ruby Creek

	Number of Dots	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat						
CC	149	75.3	91.24	12.66	2.25	70.24
CLC	35	17.7	54.7	7.82	1.13	81.10
COG	2	1.0	97.93	5.3	2.03	70.32
B	2	1.0	71.10	23.41	1.81	82.88
T	5	2.5	0	0	0	0
rCOG	2	1.0	97.93	5.3	2.03	70.32
CO	2	1.0	33.9	16.52	1.53	63.66
RL	1	0.5	70.87	22.46	1.95	87.92
			<u>81.53</u>	<u>11.76</u>	<u>2.00</u>	<u>71.12</u>
100-200 m band habitat						
CO	7	3.4	33.9	16.52	1.53	63.66
CC	154	75.1	91.24	12.66	2.25	70.24
*RL	1	0.5	70.87	22.40	1.98	87.92
*CLC	43	21.0	54.7	7.82	1.13	81.10
			<u>81.52</u>	<u>11.82</u>	<u>1.99</u>	<u>72.36</u>

5a. ROSS -- WITH PROJECT (TY0, TY1, TY4, TY11, TY12)
 WITHOUT PROJECT (TY0, TY1)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 COMPRISING THE BANDS AROUND TRIBUTARIES

Big Beaver Creek - TrR1

	Number of Dots	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat						
CC	2	2.2	91.24	12.66	2.25	70.24
rCC	8	9.0	45.20	32.30	2.58	82.48
rS	7	7.9	71.05	73.60	2.8	22.37
Gr	1	1.1	0	0	0	0
CR	19	21.3	70.87	22.40	1.95	87.92
rCO	0	0	33.9	73.6	2.9	63.66
COG	23	25.8	97.93	5.3	2.03	70.32
rCOG	5	5.6	76.2	28.6	2.36	80.16
PFB	5	5.6	89.67	55.4	1.9	81.10
CLO	19	21.3	54.7	7.82	1.13	81.10
			<u>75.69</u>	<u>21.51</u>	<u>1.95</u>	<u>72.27</u>
100-200 m band habitat						
CC	17	18.7	91.24	12.66	2.25	70.24
rCC	5	5.5	75.20	32.30	2.58	82.45
CR	28	30.8	70.87	22.40	1.95	87.92
CLO	7	7.7	54.7	7.82	1.13	81.10
COG	32	35.2	97.93	5.3	2.03	70.32
*PFB	2	2.2	89.67	55.4	1.9	51.82
			<u>83.67</u>	<u>14.73</u>	<u>2.01</u>	<u>76.89</u>

5. ROSS -- WITH PROJECT (TY0, TY1, TY4, TY11, TY12)
 WITHOUT PROJECT (TY0, TY1)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 COMPRISING THE BANDS AROUND TRIBUTARIES

Big Beaver Creek - TrR4

	Number of Dots	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat						
CLO	2	7.1	54.7	7.82	1.13	81.10
CC	14	50.0	91.24	12.66	2.25	70.24
COG	1	3.6	97.93	5.3	2.03	70.32
CR	11	39.3	70.87	22.40	1.95	87.92
			<u>80.86</u>	<u>15.88</u>	<u>2.04</u>	<u>77.96</u>
100-200 m band habitat						
CC	15	53.6	91.24	12.66	2.25	70.24
CR	12	42.9	70.87	22.40	1.95	87.92
*CLO	1	3.6	54.7	7.85	1.13	81.10
			<u>81.28</u>	<u>16.68</u>	<u>2.08</u>	<u>78.29</u>

50. ROSS -- WITH PROJECT (TY0, TY1, TY4, TY11, TY12)
 WITHOUT PROJECT (TY0, TY1)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 , COMPRISING THE BANDS AROUND TRIBUTARIES

Lightning Creek

	Number of Dots	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat						
rCOG	12	17.1	76.2	28.6	2.36	80.16
rB	12	17.1	93.45	20.65	2.11	59.64
S	30	42.9	15.60	42.85	1.69	99.12
CO	2	2.9	33.9	16.52	1.53	63.66
COG	7	10.0	97.93	5.3	2.03	70.32
CLR	6	8.6	70.87	22.40	1.95	87.92
ER	1	1.4	0	0	0	0
			<u>52.57</u>	<u>29.7</u>	<u>1.90</u>	<u>83.50</u>
100-200 m band habitat						
CR	2	3.8	70.87	22.40	1.95	87.92
S	28	53.8	15.6	42.85	1.69	99.12
CO	5	9.6	33.9	16.52	1.53	63.66
CLR	3	5.8	70.87	22.40	1.95	87.92
COG	10	19.2	97.93	5.3	2.03	70.32
rCOG	4	7.7	76.2	28.6	2.36	80.16
			<u>43.12</u>	<u>30.01</u>	<u>1.81</u>	<u>87.55</u>

Spreadsheets 6a and b - Calculations for Variable Input Data in 0-100m
and 100-200m Bands Adjacent to Wetlands and Riverine Habitats ~~4/30~~
ROSS -- WITH PROJECT (TY13, TY30 and TY51)

6a. PBF (P-8)

	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat					
CO	8.3/9.1	33.90	16.52	1.53	63.66
CC	29.2/31.8	91.24	12.66	2.25	70.24
rCOG	29.2/31.8	100	4.00	2.31	72.00
R	8.3	0	0	0	0
COG	25.0/27.3	97.93	5.30	2.03	70.32
		<u>83.14</u>	<u>7.56</u>	<u>2.14</u>	<u>70.22</u>
100-200 m band habitat					
CC	23.1	91.24	12.66	2.25	70.24
COG	76.9	97.93	5.30	2.03	70.32
		<u>96.38</u>	<u>7.00</u>	<u>2.08</u>	<u>70.30</u>
PSS (P-59)					
0-100 m band habitat					
CC	68.7/73.3	91.24	12.66	2.25	70.24
LP	25.0/26.7	54.70	7.82	1.13	81.10
RD	6.3	0	0	0	0
		<u>76.36</u>	<u>10.65</u>	<u>1.95</u>	<u>73.14</u>
100-200 m band habitat					
CC	74.1/80.0	91.24	12.66	2.25	70.24
COG	3.7/14.0	97.93	5.30	2.03	70.32
LP	14.8/16.0	54.70	7.82	1.13	81.10
RD	7.4/18.0	0	0	0	0
		<u>84.71</u>	<u>10.73</u>	<u>2.06</u>	<u>72.00</u>

ROSS -- WITH PROJECT (TY13, TY30 and TY51)

6b. Big Beaver Creek - Tributary (7.47 acres)

	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat					
CO	1.7	33.9	16.52	1.53	63.66
PFB	11.9	89.7	55.4	1.90	51.82
rCOG	10.2	100	4.0	2.31	72.00
CC	25.4	91.24	13.66	2.25	70.24
COG	50.8	97.93	5.3	2.03	70.32
		<u>94.37</u>	<u>13.19</u>	<u>2.09</u>	<u>68.16</u>
100-200 m band habitat					
COG	61.8	97.93	5.3	2.03	70.32
CC	29.1	91.24	12.66	2.25	70.24
CLC	1.8	54.70	7.82	1.13	81.10
PFB	1.8	89.67	55.40	1.9	84.34
		<u>91.53</u>	<u>9.01</u>	<u>2.05</u>	<u>70.38</u>

1/ Unweighted variable values are from Wetlands 2 Data Summary.

2/ Percent of each habitat was calculated using a dot grid and the edit plots for 1987 conditions.

*Spreadsheets 7a and b -- Calculations for Variables Input Data in
0-100m and 100-200m bands Adjacent to Thunder Arm*

7a. DIABLO -- WITH PROJECT (TYO, TY1) AND
WITHOUT PROJECT (TYO, TY1, TY30, TY60)

Thunder Creek

	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat					
CC	63.3/64.8	98.85	3.05	2.05	42.23
CLC	3.3/3.4	50.67	0.03	1.40	65.13
CO	8.8/19.0	44.10	1.47	1.81	35.19
ER	2.3	0	0	0	0
rCOG	6.5/6.7	70.25	31.78	2.45	81.09
COG	14.9/15.3	86.1	15.58	2.12	74.91
B	0.5/0.5	96.27	4.50	2.42	64.27
rCC	0.5	75.2	32.30	2.58	82.48
		<u>86.37</u>	<u>6.09</u>	<u>2.00</u>	<u>50.37</u>
100-200 m band habitat					
CC	49.1/49.7	98.85	3.05	2.05	42.23
CLC	3.7/3.7	50.67	0.03	1.40	65.13
CO	8.2/8.3	44.10	1.47	1.81	35.19
ER	1.1	0	0	0	0
rCOG	2.2/2.2	70.25	31.78	2.45	81.09
COG	34.8/35.2	86.1	15.58	2.12	74.91
B	0.7/0.7	96.27	4.50	2.42	64.27
		<u>86.20</u>	<u>7.7</u>	<u>2.00</u>	<u>54.92</u>

7b. DIABLO -- WITH PROJECT (TY2, TY30, TY60)

Thunder Arm (25.83 acres)

	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat					
CC	12.0	98.85	3.05	2.05	42.23
COG	70.0	86.1	15.58	2.12	74.91
rCC	0.7	75.2	32.3	2.58	82.48
rB	4.7	97.5	10.5	2.27	65.2
rM	3.3	70.0	27.00	1.49	88.59
rCOG	9.3	70.25	31.78	2.45	81.09
		<u>86.08</u>	<u>15.48</u>	<u>2.0</u>	<u>71.61</u>
100-200 m band habitat					
CC	24.3	98.85	3.05	2.05	42.23
COG	69.1	86.1	15.58	2.12	74.91
rB	0.7	97.5	10.5	2.27	65.2
rCOG	5.9	70.25	31.78	2.45	81.09
		<u>88.34</u>	<u>13.46</u>	<u>2.00</u>	<u>67.26</u>

8a. ROSS -- WITHOUT PROJECT (TY30 and TY60) (SUCCESSION)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 COMPRISING THE BANDS AROUND TRIBUTARIES

Ruby Creek

	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat					
CC	75.3/78.0	91.24	12.66	2.25	70.24
LP	18.2/18.7	54.7	7.82	1.13	81.10
COG	1.0/1.0	97.93	5.3	2.03	70.32
B	1.0/1.0	71.10	23.41	1.81	82.88
T	2.5	0	0	0	0
rCOG	1.0/1.0	76.2	28.6	2.36	80.16
CO	1.0/1.0	33.9	16.52	1.5	63.66
		<u>81.45</u>	<u>11.69</u>	<u>2.04</u>	<u>72.92</u>
100-200 m band habitat					
CO	3.4	33.9	16.52	1.53	63.66
CC	75.1	91.24	12.66	2.25	70.24
LP	21.5	54.7	7.82	1.13	81.10
		<u>81.43</u>	<u>11.75</u>	<u>1.98</u>	<u>72.35</u>

8a. ROSS -- WITHOUT PROJECT (TY30 and TY60) (SUCCESSION)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 COMPRISING THE BANDS AROUND TRIBUTARIES

Big Beaver Creek - TrR1

	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
0-100 m band habitat					
CC	23.5	91.24	12.66	2.25	70.24
rCC	9.0	75.20	32.30	2.58	82.48
rS	7.9	71.05	73.60	2.9	22.37
Gr	1.1	0	0	0	0
COG	25.8	97.93	5.3	2.03	70.32
rCOG	5.6	76.2	28.6	2.36	80.16
PFB	5.6	89.67	55.4	1.9	51.82
LP	21.3	54.7	7.82	1.13	81.10
		<u>80.03</u>	<u>19.44</u>	<u>2.01</u>	<u>68.50</u>

100-200 m band
habitat

CC	49.5	91.24	12.66	2.25	70.24
rCC	5.5	75.20	32.00	2.58	82.48
LP	7.7	54.7	7.82	1.13	81.10
COG	35.2	97.93	5.3	2.03	70.32
PFB	2.2	89.67	55.4	1.9	51.82
		<u>89.95</u>	<u>11.73</u>	<u>2.10</u>	<u>71.44</u>

Big Beaver Creek - TR4

0-100 m band
habitat

LP	7.1	54.7	7.83	1.13	81.10
CC	89.3	91.24	12.66	2.25	70.24
COG	3.6	97.93	5.3	2.03	70.32
		<u>88.89</u>	<u>12.05</u>	<u>2.08</u>	<u>71.01</u>

Sta. ROSS -- WITHOUT PROJECT (TY30 and TY60) (SUCCESSION)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 COMPRISING THE BANDS AROUND TRIBUTARIES

Big Beaver Creek - TR4

	Percent	Tree Cover	Shrub Cover	Shrub Height	Percent Small Trees
100-200 m band habitat					
CC	96.5	91.24	12.66	2.25	70.24
LP	3.6	54.7	7.83	1.13	81.10
		<u>90.02</u>	<u>12.50</u>	<u>2.21</u>	<u>70.70</u>

8a ROSS -- WITHOUT PROJECT (TY30 and TY60) (SUCCESSION)
 VARIABLE INPUT DATA FOR BEAVER MODEL (WEIGHTED AVERAGES OF HABITATS
 COMPRISING THE BANDS AROUND TRIBUTARIES

Lightning Creek

	Percent	Tree Cover	Shrub. Cover	Shrub Height	Percent Small Trees
0-100 m band habitat					
vCOG	17.1	76.2	28.6	2.36	80.16
vB	17.1	93.45	20.65	2.11	59.64
S	42.9	15.6	42.85	1.69	99.12
CO	2.9	33.9	16.52	1.53	63.66
COG	10.0	97.93	5.3	2.03	70.32
LP	8.6	54.7	7.83	1.13	81.10
ER	1.4	0	0	0	0
		<u>51.18</u>	<u>28.45</u>	<u>1.83</u>	<u>82.91</u>
100-200 m band habitat					
CC	3.8	91.24	12.66	2.25	70.24
S	53.8	15.6	42.85	1.69	99.12
CO	9.6	33.9	16.52	1.53	63.66
LP	5.8	54.7	7.83	1.13	81.10
COG	19.2	97.93	5.3	2.03	70.32
vCOG	7.7	76.2	28.6	2.36	80.16
		<u>42.96</u>	<u>28.79</u>	<u>1.78</u>	<u>86.48</u>

RIVER2 HABITAT DATA

12-22-1987

RIVERINE HABITAT

Ross, Mainstem River, 0-100m and 100-200m bands, TY1, TY11 & TY12,

With Project

Ross, Big Beaver Creek, 0-100m and 100-200m bands, TY13, TY30 & TY51,

With Project

Variable input dat for the Maistem was calculated as a weighted average of data

Variable input dat for the Maistem was calculated as a weighted average of data from palustrine & riparian cover types for the 0-100 band and from all cover types for the 100-200 band

COVER TYPE / SUB-AREA:						
VARIABLE:	n30STR1 TY11	n30STR1 TY12	n30STR1 TY13	n30STR1 TY4	n30STR2 TY11*1	n30STR2 TY12*1
BAREN1	1.000	1.000	1.000	1.000	1.000	1.000
CAR101	*****	*****	*****	*****	*****	*****
SED01	*****	*****	*****	*****	*****	*****
VCVSH02	*****	*****	*****	*****	*****	*****
VCVSH01	29.640	72.650	13.100	30.190	28.200	18.450
VCVTR01	71.940	30.010	94.370	71.190	72.950	77.990
VHTSH02	2.270	2.230	2.090	2.370	2.120	2.230
VRDTR01	79.540	70.530	60.190	70.260	77.800	75.500
WC001	*****	*****	*****	*****	*****	*****
X30V30	1.000	1.000	1.000	1.000	1.000	1.000
X30V5	2.000	2.000	2.000	2.000	3.000	3.000
X30V9	*****	*****	*****	*****	*****	*****

COVER TYPE / SUB-AREA:		
VARIABLE:	n30STR2 TY13*1	n30STR2 TY4*1
BAREN1	1.000	1.000
CAR101	*****	*****
SED01	*****	*****
VCVSH02	*****	*****
VCVSH01	9.010	21.550
VCVTR01	91.530	73.830
VHTSH02	2.050	2.110
VRDTR01	70.380	70.870
WC001	*****	*****
X30V30	1.000	1.000
X30V5	3.000	3.000
X30V9	*****	*****

Study: RIVER2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: TY11

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
71.94	0.85	0.71	1.000
VRDTR01---grf-----			
79.54	0.84		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
29.64	0.74	0.72	
VHTSH02---grf-----			
2.27	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: RIVER2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: TY12

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
30.01	0.75	0.69	1.000
VRDTR01---grf-----			
78.53	0.83		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
72.65	0.94	0.76	
VHTSH02---grf-----			
2.23	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: RIVER2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: TY13

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
94.37	0.57	0.63	1.000
VRDTR01---grf-----			
68.19	0.75		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
13.19	0.33	0.59	
VHTSH02---grf-----			
2.09	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: RIVER2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: TY4

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
71.19	0.86	0.70	1.000
VRDTR01---grf-----			
70.86	0.77		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
30.19	0.75	0.72	
VHTSH02---grf-----			
2.37	1.00		
X30V5-----mnu-----^			
2.00	0.60		

1815

Study: RIVER2

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X20STR2 SubArea: TY11*1

LEV 4	LEV 3	LEV 2	LEV 1
VCNTR01---grf-----usf-----usf-LRS1			
72.95	0.83	0.41	0.291
VRDTR01---grf-----			
77.63	2.82		
X30VS-----mnu-----^			
3.20	0.20		
VCVSR01---grf-----usf-----^			
20.82	2.51	0.38	
VHTSH02---grf-----			
2.12	1.00		
X30VS-----mnu-----^			
3.00	0.20		

Study: RIVER2

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X20STR2 SubArea: TY12*1

LEV 4	LEV 3	LEV 2	LEV 1
VCNTR01---grf-----usf-----usf-LRS1			
77.99	0.78	0.40	0.383
VRDTR01---grf-----			
75.58	0.90		
X30VS-----mnu-----^			
3.00	0.20		
VCVSR01---grf-----usf-----^			
18.45	0.45	0.37	
VHTSH02---grf-----			
2.23	1.00		
X30VS-----mnu-----^			
3.00	0.20		

Study: RIVER2

12-02-1987

Model: BEAVER

Life requisite: WANTOOD

CoverType: n30STR2 SubArea: TY13*

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
91.53	0.61	0.37	0.336
VROTR01---grf-----			
72.38	0.76		
X30V5-----mru-----			
3.20	0.20		
VCVSH01---grf-----usf-----			
9.01	0.23	0.31	
VHTSH02---grf-----			
2.05	1.00		
X30V5-----mru-----			
3.20	0.20		

Study: RIVER2

12-02-1987

Model: BEAVER

Life requisite: WANTOOD

CoverType: n30STR2 SubArea: TY4*1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
73.86	0.83	0.41	0.394
VROTR01---grf-----			
76.37	0.81		
X30V5-----mru-----			
3.20	0.20		
VCVSH01---grf-----usf-----			
21.55	0.54	0.38	
VHTSH02---grf-----			
2.11	1.00		
X30V5-----mru-----			
3.20	0.20		

6-100 AND 100-200M BANDS AROUND WETLANDS & ADJACENT TO RIVERINE HABITAT

Ross, Without Project, TY30 & TY51

COVER TYPE / SUB-AREA:						
VARIABLE:	n30PM1 TY30	n30PM1 TY51	n30PM2 TY30	n30PM2 TY51	n30STR1 BBC1n1	n30STR1 BBC2n1
BAREA1	1.000	1.000	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****	*****	*****
SED01	*****	*****	*****	*****	*****	*****
VCVSF02	*****	*****	*****	*****	*****	*****
VCVSH01	27.720	27.720	19.560	19.500	19.440	12.050
VCVTR01	63.850	63.850	72.410	73.560	80.030	88.890
VHTSH02	2.300	2.300	2.140	2.160	2.010	2.080
VRDTR01	77.940	77.930	74.530	74.500	68.500	71.010
WGDO1	*****	*****	*****	*****	*****	*****
X30V30	1.000	1.000	1.000	1.000	1.000	1.000
X30V5	2.000	2.000	3.000	3.000	2.000	2.000
X30V8	*****	*****	*****	*****	*****	*****

COVER TYPE / SUB-AREA:						
VARIABLE:	n30STR1 LCn1	n30STR1 MSn1-30	n30STR1 MSn1-51	n30STR1 RCn1	n30STR2 BBC1n2	n30STR2 BBC2n2
BAREA1	1.000	1.000	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****	*****	*****
SED01	*****	*****	*****	*****	*****	*****
VCVSF02	*****	*****	*****	*****	*****	*****
VCVSH01	28.450	31.030	31.020	11.590	11.730	12.500
VCVTR01	51.180	71.740	71.470	51.450	89.950	90.020
VHTSH02	1.830	2.290	2.290	2.040	2.130	2.210
VRDTR01	82.910	77.080	77.850	72.520	71.440	70.730
WGDO1	*****	*****	*****	*****	*****	*****
X30V30	1.000	1.000	1.000	1.000	1.000	1.000
X30V5	2.000	2.000	2.000	2.000	3.000	3.000
X30V8	*****	*****	*****	*****	*****	*****

COVER TYPE / SUB-AREA:				
VARIABLE:	n30STR2 LCn2	n30STR2 MSn2-30	n30STR2 MSn2-51	n30STR2 RCn2
BAREA1	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****
SED01	*****	*****	*****	*****
VCVSF02	*****	*****	*****	*****
VCVSH01	28.790	20.540	20.480	11.750
VCVTR01	42.960	76.050	77.160	81.430
VHTSH02	1.780	2.140	2.220	1.990
VRDTR01	85.430	74.530	78.890	72.350
WGDO1	*****	*****	*****	*****
X30V30	1.000	1.000	1.000	1.000
X30V5	3.000	3.000	3.000	3.000
X30V8	*****	*****	*****	*****

Study: SANDS3

12-02-1997

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X30PM1 SubArea: 1TY20

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
63.85	0.95	0.73	1.000
VRDTR01---grf-----			
77.94	0.82		
X30V5-----anu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
27.72	0.69	0.71	
VHTSH02---grf-----			
2.30	1.00		
X30V5-----anu-----^			
2.00	0.60		

Study: SANDS3

12-02-1997

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X30PM1 SubArea: 1TY51

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
63.85	0.95	0.73	1.000
VRDTR01---grf-----			
77.93	0.82		
X30V5-----anu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
27.72	0.69	0.71	
VHTSH02---grf-----			
2.30	1.00		
X30V5-----anu-----^			
2.00	0.60		

Study: SAND92

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: B9C1n1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
90.33	0.75	0.57	1.000
VRCTR01---grf-----			
68.50	0.75		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
19.44	0.49	0.65	
VHTSH02---grf-----			
2.01	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: SAND92

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: B9C3n1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
68.57	0.64	0.65	1.000
VRCTR01---grf-----			
71.01	0.77		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
12.05	0.30	0.57	
VHTSH02---grf-----			
2.00	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: BANDS2

12-22-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: LOn1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
51.18	1.00	0.75	1.000
VRDTR01---grf-----			
82.91	0.86		
X30V5-----mru-----^			
2.20	0.50		
VCVSH01---grf-----usf-----^			
28.45	0.71	0.70	
VHTSH02---grf-----			
1.83	0.92		
X30V5-----mru-----^			
2.20	0.50		

Study: BANDS2

12-22-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: MSn1-30

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR21---grf-----usf-----usf-LRS1			
71.74	0.85	0.71	1.000
VRDTR21---grf-----			
77.26	0.82		
X30V5-----mru-----^			
2.20	0.50		
VCVSH01---grf-----usf-----^			
31.03	0.78	0.73	
VHTSH02---grf-----			
2.28	1.20		
X30V5-----mru-----^			
2.00	0.50		

Study: BANDS3

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: MSn1-51

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LR01			
71.47	0.65	0.71	1.000
VRDTR01---grf-----			
77.05	0.82		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
31.22	0.78	0.73	
VHTSH02---grf-----			
2.28	1.00		
X30V5-----mnu-----^			
2.23	0.60		

Study: BANDS3

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: ROn1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LR01			
81.45	0.73	0.67	1.000
VRDTR01---grf-----			
72.92	0.78		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
11.63	0.29	0.57	
VHTSH02---grf-----			
2.24	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: BANDS3

12-22-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM2

SubArea: TY30

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LR01			
72.41	0.24	0.41	0.389
VADTR01---grf-----			
74.53	0.83		
X30V5-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
19.56	0.49	0.37	
VHTSH02---grf-----			
2.14	1.00		
X30V5-----mnu-----^			
3.00	0.20		

Study: BANDS3

12-23-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM2

SubArea: TYE1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LR01			
73.56	0.83	0.40	0.383
VADTR01---grf-----			
74.50	0.80		
X30V5-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
19.50	0.49	0.37	
VHTSH02---grf-----			
2.15	1.00		
X30V5-----mnu-----^			
3.00	0.20		

Study: BAND63

12-22-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2 SubArea: BBC1n2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
89.95	0.63	0.37	0.351
VRDTR01---grf-----			
71.44	0.77		
X30V5-----mnu-----^			
3.20	0.20		
VCVSH01---grf-----usf-----^			
11.73	0.29	0.33	
VNTSH02---grf-----			
2.10	1.20		
X30V5-----mnu-----^			
3.00	0.20		

Study: BAND63

12-22-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2 SubArea: BBC2n2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
90.02	0.62	0.37	0.353
VRDTR01---grf-----			
70.70	0.77		
X30V5-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
12.50	0.31	0.33	
VNTSH02---grf-----			
2.21	1.22		
X30V5-----mnu-----^			
3.20	0.20		

Study: BANDS3

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2

SubArea: LCN2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
42.96	1.00	0.43	0.417
VRDTR01---grf-----			
86.48	0.89		
X30V5-----mmu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
29.79	0.72	0.40	
VHTSH02---grf-----			
1.79	0.89		
X30V5-----mmu-----^			
3.00	0.20		

Study: BANDS3

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2

SubArea: M3r2-20

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
76.25	0.80	0.40	0.389
VRDTR01---grf-----			
74.53	0.80		
X30V5-----mmu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
20.54	0.51	0.30	
VHTSH02---grf-----			
2.14	1.00		
X30V5-----mmu-----^			
3.00	0.20		

Study: BANDS3

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2 SubArea: MSn2-51

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
77.16	0.79	0.40	0.390
VRDTR01---grf-----			
78.89	0.83		
X30V5-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
20.48	0.51	2.38	
VHTSH02---grf-----			
2.29	1.00		
X30V5-----mnu-----^			
3.00	0.20		

Study: BANDS3

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2 SubArea: RCn2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
81.43	0.73	0.39	0.259
VRDTR01---grf-----			
72.35	0.79		
X30V5-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
11.75	0.29	0.33	
VHTSH02---grf-----			
1.98	0.99		
X30V5-----mnu-----^			
3.00	0.20		

RIVERINE HABITAT

Diablo, With and Without Project, TY0, TY1, TY2, TY60

Variable input data for the 0-100m and 100-200m bands was

calculated based on a weighed average of the amount of
each cover typed comprising the bands

	COVER TYPE / SUB-AREA:					
	RIVERn	RIVERn	n30STR1	n30STR1	n30STR2	n30STR2
VARIABLE:	TC0-1	TC2-60	TY0-1	TY2-60	TY0-1*	TY2-60*
BAREA1	1.000	1.000	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****	*****	*****
SED01	*****	*****	*****	*****	*****	*****
VCVSF02	*****	*****	*****	*****	*****	*****
VCVSH01	*****	*****	6.090	15.480	7.700	13.460
VCVTR01	*****	*****	86.370	86.060	86.200	88.340
VHTSH02	*****	*****	2.000	2.000	2.000	2.000
VRDTR01	*****	*****	82.480	71.610	54.920	67.260
WGD01	1.000	1.000	*****	*****	*****	*****
X30V30	1.000	1.000	1.000	1.000	1.000	1.000
X30V5	*****	*****	2.000	2.000	3.000	3.000
X30V8	1.000	1.000	*****	*****	*****	*****

Study: DIABLO

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: TY0-1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
86.37	0.67	0.67	1.000
VRDTR01---grf-----			
82.48	0.86		
X3OV5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
6.09	0.15	0.48	
VHTSH02---grf-----			
2.00	1.00		
X3OV5-----mnu-----^			
2.00	0.60		

Study: DIABLO

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: TY2-60

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
86.06	0.67	0.66	1.000
VRDTR01---grf-----			
71.61	0.77		
X3OV5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
15.48	0.39	0.61	
VHTSH02---grf-----			
2.00	1.00		
X3OV5-----mnu-----^			
2.00	0.60		

Study: DIABLO

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2 SubArea: TY0-1*

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---	grf-----	usf-----	usf-LRSI
86.20	0.67	0.36	0.329
VRDTR01---	grf-----		
54.92	0.64		
X30V5-----	mnu-----	^	
3.00	0.20		
VCVSH01---	grf-----	usf-----	^
7.70	0.19	0.30	
VHTSH02---	grf-----		
2.00	1.00		
X30V5-----	mnu-----	^	
3.00	0.20		

Study: DIABLO

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2 SubArea: TY2-60*

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---	grf-----	usf-----	usf-LRSI
88.34	0.65	0.37	0.356
VRDTR01---	grf-----		
67.26	0.74		
X30V5-----	mnu-----	^	
3.00	0.20		
VCVSH01---	grf-----	usf-----	^
13.46	0.34	0.34	
VHTSH02---	grf-----		
2.00	1.00		
X30V5-----	mnu-----	^	
3.00	0.20		

Study: DIABLO

11-20-1987

Model: BEAVER

Life requisite: WATER

CoverType: RIVERn SubArea: TC0-1

LEV 3	LEV 2	LEV 1
WGD01-----grf-----min-LRSI		
1.00	1.00	1.000
		1
X30VB-----mu-----^		
1.00	1.00	

Study: DIABLO

11-20-1987

Model: BEAVER

Life requisite: WATER

CoverType: RIVERn SubArea: TC2-60

LEV 3	LEV 2	LEV 1
WGD01-----grf-----min-LRSI		
1.00	1.00	1.000
		1
X30VB-----mu-----^		
1.00	1.00	

0-100M AND 100-200M BANDS AROUND WETLANDS
Ross, With Project, TV13 & TV51 ~~TV30~~

	COVER TYPE / SUB-AREA:			
	n30PSS1	n30PSS1	n30PSS2	n30PSS2
VARIABLE:	PBF	PSS	PBF2	PSS2
BRERA1	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****
SED01	*****	*****	*****	*****
VCVSF02	*****	*****	*****	*****
VCVSH01	7.560	10.650	7.000	10.730
VCVTR01	83.140	76.360	96.390	84.710
VHTSH02	2.140	1.950	2.080	2.060
VRDTR01	70.220	73.140	70.300	72.000
WGD01	*****	*****	*****	*****
X30V30	1.000	1.000	1.000	1.000
X30V5	2.000	2.000	3.000	3.000
X30V8	*****	*****	*****	*****

Variable input data for the 0-100m and 100-200m bands was calculated as a weighted average of the data for the cover types comprising each band.

Study: BANDS2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PSS1 SubArea: PBF

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
83.14	0.71	0.66	1.000
VRDTR01---grf-----			
70.22	0.76		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
7.56	0.19	0.51	
VHTSH02---grf-----			
2.14	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: BANDS2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PSS1 SubArea: PSS

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
76.36	0.80	0.69	1.000
VRDTR01---grf-----			
73.14	0.79		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
10.65	0.27	0.55	
VHTSH02---grf-----			
1.95	0.98		
X30V5-----mnu-----^			
2.00	0.60		

(Bank)

Study: BANDS2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PSS2 SubArea: PBF2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
96.38	0.55	0.36	0.324
VRDTR01---grf-----			
70.30	0.76		
X30V5-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
7.00	0.18	0.29	
VHTSH02---grf-----			
2.08	1.00		
X30V5-----mnu-----^			
3.00	0.20		

Study: BANDS2

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PSS2 SubArea: PSS2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
84.71	0.69	0.38	0.352
VRDTR01---grf-----			
72.00	0.78		
X30V5-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
10.73	0.27	0.32	
VHTSH02---grf-----			
2.06	1.00		
X30V5-----mnu-----^			
3.00	0.20		

RIVERINE HABITATS

Ross, Mainstem, With and Without Project, all target years

Ross, 0-100m and 100-200m bands adjacent to Mainstem River

With and Without Project, TY0 & TY1

Ross, Tributaries, With and Without Project, all target years

Ross, 0-100m and 100-200m bands adjacent to tributaries,

With and Without Project, TY0 & TY1 and With Project,

TY4, TY11, and TY12

Variable input was an average of all palustrine and riparian

cover types for the 0-100m band and an average of data from

all cover types for the 100-200m band

COVER TYPE / SUB-AREA:						
VARIABLE:	RIVERn BSC1	RIVERn BSC2	RIVERn LC	RIVERn MS	RIVERn RC	R30STR1 BSC1A1
BARER1	1.000	1.000	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****	*****	*****
SED01	*****	*****	*****	*****	*****	*****
VOVSF02	*****	*****	*****	*****	*****	*****
VOVSH01	*****	*****	*****	*****	*****	21.510
VOVTR01	*****	*****	*****	*****	*****	75.690
VVTH002	*****	*****	*****	*****	*****	1.950
VRDTR01	*****	*****	*****	*****	*****	72.270
WSD01	1.000	1.000	1.000	1.000	1.000	*****
XSDV02	1.000	1.000	1.000	1.000	1.000	1.000
XSDVE	*****	*****	*****	*****	*****	2.000
XSDVB	1.000	1.000	1.000	1.000	1.000	*****

COVER TYPE / SUB-AREA:						
VARIABLE:	R30STR1 BSC2A1	R30STR1 LCn1	R30STR1 MSn1	R30STR1 RCn1	R30STR2 BSC1n2	R30STR2 BSC2n2
BARER1	1.000	1.000	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****	*****	*****
SED01	*****	*****	*****	*****	*****	*****
VOVSF02	*****	*****	*****	*****	*****	*****
VOVSH01	15.630	29.700	32.660	11.660	14.730	16.630
VOVTR01	32.860	52.570	71.440	91.180	93.690	61.290
VVTH002	2.040	1.900	2.300	2.300	2.210	2.380
VRDTR01	77.960	83.500	79.180	72.360	76.990	70.290
WSD01	*****	*****	*****	*****	*****	*****
XSDV02	1.000	1.000	1.000	1.000	1.000	1.000
XSDVE	2.000	2.000	2.000	2.000	3.000	2.000
XSDVB	*****	*****	*****	*****	*****	*****

COVER TYPE / SUB-AREA:		
VARIABLE:	R30STR2 LCn2	R30STR2 MSn2
BARER1	1.000	1.000
SAR101	*****	*****
SED01	*****	*****
VOVSF02	*****	*****
VOVSH01	20.010	21.190

VCVTR01	43.120	74.190	81.520
VHTSH02	1.810	2.120	1.920
VRETR01	87.550	78.390	72.350
WSD01	*****	*****	*****
X32V30	1.000	1.000	1.000
X32V5	3.000	3.000	3.000
X32V8	*****	*****	*****

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: BBC1n1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
75.69	0.80	0.69	1.000
VRDTR01---grf-----			
72.27	0.78		
X30V5-----mru-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
21.51	0.54	0.66	
VHTSH02---grf-----			
1.35	0.98		
X30V5-----mru-----^			
2.00	0.60		

Study: RIVER1

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: BBC2n1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
80.86	0.74	0.68	1.000
VRDTR01---grf-----			
77.96	0.82		
X30V5-----mru-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
15.88	0.40	0.61	
VHTSH02---grf-----			
2.04	1.00		
X30V5-----mru-----^			
2.00	0.60		

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: LCn1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
52.57	1.00	0.75	1.000
VRDTR01---grf-----			
83.50	0.87		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
29.70	0.74	0.71	
VHTSH02---grf-----			
1.90	0.95		
X30V5-----mnu-----^			
2.00	0.60		

Study: RIVER1

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: MSn1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
71.44	0.86	0.71	1.000
VRDTR01---grf-----			
78.18	0.83		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
30.88	0.77	0.73	
VHTSH02---grf-----			
2.30	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR1 SubArea: RCn1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	usf-LRS1
81.18	0.74	0.67	1.000
VRDTR01	grf		
72.36	0.78		
X30V5	nu		
2.00	0.60		
VCVSH01	grf	usf	
11.66	0.29	0.57	
VHTSH02	grf		
2.00	1.00		
X30V5	nu		
2.00	0.60		

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2 SubArea: BRCIn2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	usf-LRS1
83.68	0.70	0.39	0.369
VRDTR01	grf		
76.89	0.82		
X30V5	nu		
3.00	0.20		
VCVSH01	grf	usf	
14.73	0.37	0.35	
VHTSH02	grf		
2.01	1.00		
X30V5	nu		
3.00	0.20		

Study: RIVER1

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2

SubArea: BBC2n2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	usf-LRSI
81.28	0.73	0.39	0.377
VRDTR01	grf		
78.29	0.83		
X30V5	nu		
3.00	0.20		
VCVSH01	grf	usf	
16.68	0.42	0.36	
VHTSH02	grf		
2.08	1.00		
X30V5	nu		
3.00	0.20		

Study: RIVER1

11-15-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30STR2

SubArea: LCn2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf	usf-LRSI
43.12	1.00	0.44	0.421
VRDTR01	grf		
87.55	0.90		
X30V5	nu		
3.00	0.20		
VCVSH01	grf	usf	
30.01	0.75	0.41	
VHTSH02	grf		
1.81	0.91		
X30V5	nu		
3.00	0.20		

Study: RIVER1

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X30STR3 SubArea: MSn2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----Lsf-----Lsf-LR01			
74.19	0.82	0.40	0.333
VR0TR01---grf-----			
76.39	0.91		
X30V5-----mnu-----^			
3.20	0.20		
VCVSH01---grf-----Lsf-----^			
21.19	0.53	0.33	
WNTSH02---grf-----			
2.12	1.00		
X30V5-----mnu-----^			
3.20	0.20		

Study: RIVER1

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X30STR3 SubArea: X0n1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----Lsf-----Lsf-LR01			
81.52	0.73	0.39	0.359
VR0TR01---grf-----			
72.36	0.70		
X30V5-----mnu-----^			
3.20	0.20		
VCVSH01---grf-----Lsf-----^			
11.82	0.30	0.33	
WNTSH02---grf-----			
1.99	1.00		
X30V5-----mnu-----^			
3.20	0.20		

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: RIVERn

SubArea: BBC1

LEV 3	LEV 2	LEV 1
WGD01	grf	min-LRSI
1.00	1.00	1.000
		1
X30V8	mru	^
1.00	1.00	

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: RIVERn

SubArea: BBC2

LEV 3	LEV 2	LEV 1
WGD01	grf	min-LRSI
9.00	0.67	0.667
		1
X30V8	mru	^
1.00	1.00	

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: RIVERn

SubArea: LC

LEV 3	LEV 2	LEV 1
WGD01	grf	min-LRSI
1.00	1.00	1.000
		1
X30V8	mru	^
1.00	1.00	

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: RIVERn

SubArea: MS

LEV 3	LEV 2	LEV 1
WGD01	grf	min-LRSI
1.00	1.00	1.000
		1
X30V8	mru	^
1.00	1.00	

Study: RIVER1

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: RIVERn

SubArea: RC

LEV 3	LEV 2	LEV 1
WG001-----grf-----min-LRSI		
1.00	1.00	1.000
		1
X30V8-----mu-----^		
1.00	1.00	

0-100 AND 100-200M BANDS AROUND WETLANDS

Ross, With and Without Project, TY0 & TY1

Ross, with Project, TY4, TY11 & TY12

Variable input was an average of data from all palustrine and riparian cover types for the 0-100m and an average of data from all cover types for the 100-200m band

COVER TYPE / SUB-AREA:						
VARIABLE:	n30PM1 TY0&1	n30PM1 TY11	n30PM1 TY12	n30PM1 TY4	n30PM2 TY0&1*2	n30PM2 TY11*2
BAREA1	1.000	1.000	1.000	1.000	1.000	1.000
SAR101	*****	*****	*****	*****	*****	*****
SEED1	*****	*****	*****	*****	*****	*****
VOUSEF02	*****	*****	*****	*****	*****	*****
VOUSE01	27.450	28.230	28.800	27.240	28.720	28.950
VOVTR01	64.110	65.817	69.720	66.060	70.520	72.980
VHTSH02	2.300	2.270	2.230	2.270	2.120	2.110
VRDTR01	78.180	79.540	78.530	78.850	76.500	77.330
WGD01	*****	*****	*****	*****	*****	*****
X30V30	1.000	1.000	1.000	1.000	1.000	1.000
X30V5	3.000	2.000	2.000	2.000	3.000	3.000
X30V8	*****	*****	*****	*****	*****	*****

COVER TYPE / SUB-AREA:		
VARIABLE:	n30PM2 TY12*2	n30PM2 TY4*2
BAREA1	1.000	1.000
SAR101	*****	*****
SEED1	*****	*****
VOUSEF02	*****	*****
VOUSE01	10.300	20.670
VOVTR01	77.140	71.530
VHTSH02	2.090	2.110
VRDTR01	75.530	75.670
WGD01	*****	*****
X30V30	1.000	1.000
X30V5	3.000	3.000
X30V8	*****	*****

Study: BANDS1

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM1 SubArea: TY0&1

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
64.11	0.95	0.73	1.000
VRDTR01---grf-----			
78.18	0.83		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
27.65	0.68	0.70	
VHTSH02---grf-----			
2.30	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: BANDS1

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM1 SubArea: TY11

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
86.82	0.66	0.67	1.000
VRDTR01---grf-----			
79.54	0.84		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
28.28	0.71	0.71	
VHTSH02---grf-----			
2.27	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: BANDS1

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM1 SubArea: TY12

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
69.72	0.88	0.72	1.000
VRDTR01---grf-----			
78.53	0.83		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
28.80	0.72	0.71	
VHTSH02---grf-----			
2.23	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: BANDS1

11-20-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM1 SubArea: TY4

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRS1			
66.06	0.92	0.73	1.000
VRDTR01---grf-----			
78.86	0.83		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
27.94	0.70	0.71	
VHTSH02---grf-----			
2.27	1.00		
X30V5-----mnu-----^			
2.00	0.60		

Study: BANDA1

12-02-1997

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X30FM2 SubArea: TY221X2

LEV 4	LEV 3	LEV 2	LEV 1
WDVTR01---grf-----usf-----usf-LRS1			
70.62	2.87	0.41	0.295
VRDTR01---grf-----			
75.52	2.81		
X30V5-----mru-----			
3.00	0.20		
WDVSH01---grf-----usf-----			
20.72	0.52	0.38	
WHTSH02---grf-----			
2.12	1.00		
X30V5-----mru-----			
3.00	0.20		

Study: BANDA1

12-02-1997

Model: BEAVER

Life requisite: WNTFOOD

CoverType: X30FM2 SubArea: TY114C

LEV 4	LEV 3	LEV 2	LEV 1
WDVTR01---grf-----usf-----usf-LRS1			
72.98	0.84	0.41	0.394
VRDTR01---grf-----			
77.33	0.82		
X30V5-----mru-----			
3.20	0.20		
WDVSH01---grf-----usf-----			
20.96	0.52	0.38	
WHTSH02---grf-----			
2.11	1.00		
X30V5-----mru-----			
3.00	0.20		

Study: BOND01

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM2 SubArea: TY12*2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LR01			
77.14	0.79	0.40	0.363
VRDTR01---grf-----			
75.59	0.80		
X30VS-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
18.30	0.46	0.37	
VHTSH02---grf-----			
2.09	1.00		
X30VS-----mnu-----^			
3.00	0.20		

Study: BOND01

12-02-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: n30PM2 SubArea: TY14*2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LR01			
71.55	0.66	0.41	0.399
VRDTR01---grf-----			
76.87	0.81		
X30VS-----mnu-----^			
3.00	0.20		
VCVSH01---grf-----usf-----^			
20.87	0.52	0.38	
VHTSH02---grf-----			
2.11	1.00		
X30VS-----mnu-----^			
3.00	0.20		

PALUSTRINE BROADLEAF FOREST, PALUSTRINE MIXED FOREST & POND

Data apply to all target years, With and Without Project for Ross
(no PMF for Pond With Project, for TY12, TY13 or TY14)

	COVER TYPE / SUB-AREA:		
	PBF	PMF	n30L48
VARIABLE:	PBF	PMF	n30L48
SAREA1	1.000	1.000	1.000
SAR101	*****	*****	*****
SED01	*****	*****	*****
VCVSF02	*****	*****	*****
VCVSH01	55.400	9.400	*****
VCVTR01	89.670	64.600	*****
VHTSH02	1.900	1.960	*****
VRDTR01	51.820	84.340	*****
WGD01	*****	*****	*****
X30V30	1.000	1.000	1.000
X30V5	2.000	2.000	*****
X30V8	1.000	1.000	1.000

Study: BEAVER

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: PBF

SubArea: PBF

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
85.67	0.63	0.61	1.000
VRDTR01---grf-----			
51.82	0.61		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
55.40	1.00	0.76	
VHTSH02---grf-----			
1.90	0.95		
X30V5-----mnu-----^			
2.00	0.60		

Study: BEAVER

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: PMF

SubArea: PMF

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
64.60	0.94	0.74	1.000
VRDTR01---grf-----			
84.34	0.87		
X30V5-----mnu-----^			
2.00	0.60		
VCVSH01---grf-----usf-----^			
9.40	0.23	0.54	
VHTSH02---grf-----			
1.96	0.98		
X30V5-----mnu-----^			
2.00	0.60		

Study: BEAVBMP

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PBF SubArea: PBF

LEV 2	LEV 1
X30V8-----mnu-LRSI	
1.00	1.000

Study: BEAVBMP

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PMF SubArea: PMF

LEV 2	LEV 1
X30V8-----mnu-LRSI	
1.00	1.000

Study: BEAVBMP

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: n30L (8) SubArea: n30L (8)

LEV 2	LEV 1
X30V8-----mnu-LRSI	
1.00	1.000

CALCULATED DATA

Data from all 3 polygons represent Ross, With Project, TY0, TY1,
TY2, TY3, and TY4 AND Ross

Without Project for all target years

Data from P34 represents Ross, With Project, TY13 and TY31 (1987)

COVER TYPE / SUB-AREA:

VARIABLE:	PSS BEV11	PSS BEV2	PSS P34
BAREA1	1.000	1.000	1.000
SAR101	*****	*****	*****
SED01	*****	*****	*****
VCVSF02	*****	*****	*****
VCVSH01	45.700	42.867	100.000
VCVTR01	0.000	5.533	0.000
VATER02	1.500	1.336	1.500
VRDTR01	0.000	100.000	0.000
WSD01	*****	*****	*****
X30V30	1.000	1.000	1.000
X30V5	1.000	1.000	2.000
X30V8	1.000	1.000	1.000

Study: BEAVPSS

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: PSS SubArea: BBV11

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
0.00	0.00	0.00	0.946
VRDTR01---grf-----			
0.00	0.20		
X30V5-----mnu-----^			
1.00	1.00		
VCVSH01---grf-----usf-----^			
45.70	1.00	0.95	
VHTSH02---grf-----			
1.60	0.80		
X30V5-----mnu-----^			
1.00	1.00		

Study: BEAVPSS

11-19-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: PSS SubArea: BBV2

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
5.53	0.14	0.61	1.000
VRDTR01---grf-----			
100.00	1.00		
X30V5-----mnu-----^			
1.00	1.00		
VCVSH01---grf-----usf-----^			
42.87	1.00	0.90	
VHTSH02---grf-----			
1.34	0.67		
X30V5-----mnu-----^			
1.00	1.00		

Model: BEAVER

Life Requisite: WNTFOOD

CoverType: P55 SubArea: P54

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LPBI			
0.00	0.00	0.00	0.714
VRDTR01---grf-----			
0.00	0.20		
X3CV5-----mnu-----^			
2.00	0.50		
VCVSH01---grf-----usf-----^			
100.00	0.80	0.71	
VHTSH02---grf-----			
1.80	0.90		
X3CV5-----mnu-----^			
2.00	0.50		

Study: BEAVPSS

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PSS SubArea: BBV11

LEV 2 LEV 1
X30V8-----mmu-LRSI
1.00 1.000

Study: BEAVPSS

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PSS SubArea: BBV2

LEV 2 LEV 1
X30V8-----mmu-LRSI
1.00 1.000

Study: BEAVPSS

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PSS SubArea: P34

LEV 2 LEV 1
X30V8-----mmu-LRSI
1.00 1.000

Study: BEAVER

11-15-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: PM

SubArea: E5V3

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
0.00	0.00	0.00	0.276
VRDTR01---grf-----			
0.00	0.20		
X30V5-----mnu-----			
2.00	0.60		
VCVSH01---grf-----usf-----			
2.23	0.06	0.28	
VHTSH02---grf-----			
0.58	0.29		
X30V5-----mnu-----			
2.00	0.60		

Study: BEAVER

11-15-1987

Model: BEAVER

Life requisite: WNTFOOD

CoverType: PM

SubArea: BBV8

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LRSI			
0.00	0.00	0.00	0.000
VRDTR01---grf-----			
0.00	0.20		
X30V5-----mnu-----			
2.00	0.60		
VCVSH01---grf-----usf-----			
0.00	0.00	0.00	
VHTSH02---grf-----			
1.70	0.85		
X30V5-----mnu-----			
2.00	0.60		

Model: BBRVER

Life requirement: WNTF000

OwnerType: PM SubArea: CSE

LEV 4	LEV 3	LEV 2	LEV 1
VCVTR01---grf-----usf-----usf-LPS1			
4.00	0.10	0.44	0.887
VRDTR01---grf-----			
100.00	1.00		
X30V5-----mu-----			
2.00	0.60		
VCVSH01---grf-----usf-----			
3.40	0.23	0.45	
VHTSH02---grf-----			
0.98	0.49		
X30V5-----mu-----			
2.00	0.60		

Study: BEAVPM

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PM SubArea: BBV3

LEV 2 LEV 1
X30V8-----mmu-LRSI
1.00 1.000

Study: BEAVPM

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PM SubArea: BBV8

LEV 2 LEV 1
X30V8-----mmu-LRSI
1.00 1.000

Study: BEAVPM

11-19-1987

Model: BEAVER

Life requisite: WATER

CoverType: PM SubArea: CS5

LEV 2 LEV 1
X30V8-----mmu-LRSI
1.00 1.000

RED-TAILED HAWK

Note: See Appendix F for final HSI value calculation for this species.

Library: C:\SCL.HLB
10-31-1987

Model # 9

Single covertype model.

Model name: RED-TAILED HAWK-FOOD, OPEN

Verification level: Author Draft

Creation/modification date: 10-31-1987

USFWS, Western Energy Land Use Team, Fort Collins, Colorado, 1982

Covertypes:

S : shrubland

rS : riparian/avalanche shrubland

PM : wet meadow/marsh

Lev 3 Lev 2 Lev 1

VCVME01-grf-usf-HSI

HERBHT-grf-|

ANTREES-grf-|

VCVSH01-grf-^

Habitat variables:

ANTREES : Number of trees > 25 cm dbh per ^{ha} acre

HERBHT : Percent herbaceous canopy cover 8-46cm tall

VCVME01 : Percent canopy cover of herbs (non-woody plants: grasses & forbs) (%)

VCVSH01 : Percent canopy cover of shrubs (i.e., all woody plants 6m tall) (%)

GRAPH FUNCTION at level 2, position 1

Title: Percent Herbaceous Canopy Cover

X: 0.000, Y: 0.000

X: 12.500, Y: 0.200

X: 25.000, Y: 0.390

X: 40.000, Y: 0.600

X: 52.000, Y: 0.800

X: 65.000, Y: 1.000

X: 75.000, Y: 1.000

X: 100.000, Y: 1.000

GRAPH FUNCTION at level 2, position 2

Title: Percent Herbaceous Canopy Cover 8-46cm

X: 0.000, Y: 0.000

X: 10.000, Y: 0.200

X: 20.000, Y: 0.400

X: 25.000, Y: 0.480

X: 32.000, Y: 0.600

X: 40.000, Y: 0.800

X: 50.000, Y: 1.000

X: 100.000, Y: 1.000

GRAPH FUNCTION at level 2, position 3

Title: Number of trees > 25 cm dbh per ha

X:	0.000,	Y:	0.000
X:	1.300,	Y:	0.200
X:	2.500,	Y:	0.370
X:	5.000,	Y:	0.650
X:	6.000,	Y:	0.800
X:	7.500,	Y:	1.000
X:	10.000,	Y:	1.000

GRAPH FUNCTION at level 2, position 4

Title: Percent Canopy of Shrubs > 5 m tall

X:	0.000,	Y:	1.000
X:	25.000,	Y:	1.000
X:	50.000,	Y:	1.000
X:	60.000,	Y:	0.800
X:	75.000,	Y:	0.500
X:	90.000,	Y:	0.200
X:	100.000,	Y:	0.000

USER-SPECIFIED FUNCTION at level 1, position 1

USUB=((X(1)^.5)*X(2)*X(3)*X(4))^2

Comments:

acre measures were converted to hectares

a shrub canopy measure was added to downweight the effect of shrub cover
on feeding

(blank)

DHAWKCOG HABITAT DATA

11-09-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Conifer Old Growth*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	COG R10	COG R11
ANTREES	*****	*****
HERBHT	*****	*****
VCVHE01	*****	*****
VCVSH01	*****	*****
VCVTR01	*****	*****
VDNDB04	69.333	112.000

Study: DHAMK06 Model: RED-TAILED HAWK—FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: DHAMK06 Model: RED-TAILED HAWK—REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
COG	R10	33.5	1.000
COG	R11	56.2	1.000
Overall:		89.7	1.000

Study: DHAMK06 Model: RED-TAILED HAWK—FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: DHAMK06 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	89.7	1.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: DHAMK06

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: R10

LEV 2	LEV 1
VDNDB04---grf---HSI	
69.33	1.000

Study: DHAMK06

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: R11

LEV 2	LEV 1
VDNDB04---grf---HSI	
112.00	1.000

DIARHC06 HABITAT DATA

11-24-1987

DIABLO, PRE AND POST PROJECT
HABITAT: CONIFER OLD GROWTH
SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	COG R10	COG R11
ANTREES	*****	*****
HERBHT	*****	*****
VCVME01	*****	*****
VCVSH01	*****	*****
VCVTR01	*****	*****
VDNDB04	69.333	112.000

Study: DIARHCOG Model: RED-TAILED HAWK—FOOD, FOREST 11-24-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: DIARHCOG Model: RED-TAILED HAWK—REPRODUCTION 11-24-1987

CoverType	SubArea	Area	HSI
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COG	R10	33.5	1.000
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COG	R11	56.2	1.000
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Overall:		89.7	1.000
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Study: DIARHCOG Model: RED-TAILED HAWK—FOOD, OPEN 11-24-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study name: DIARHCOG 11-24-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	89.7	1.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

RPOSTCOG HABITAT DATA

11-08-1987

ROSS, POST-PROJECT + *PRE-PROJECT*HABITAT: *Conifer Old Growth*

SPECIES: RED-TAILED HAWK

	COVER TYPE / SUB-AREA:			
VARIABLE:	COG P05	COG P17A	COG P31	COG P59
ANTREES	*****	*****	*****	*****
HERBHT	*****	*****	*****	*****
VCVHE01	*****	*****	*****	*****
VCVSH01	*****	*****	*****	*****
VCVTR01	*****	*****	*****	*****
VDNDB04	149.333	96.000	176.000	298.667

Study: DIARHCOG

11-24-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: R10

LEV 2	LEV 1
VDNDB04--grf--HSI	
69.33	1.000

Study: DIARHCOG

11-24-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: R11

LEV 2	LEV 1
VDNDB04--grf--HSI	
112.00	1.000

Study: RPOSTCOG Model: RED-TAILED HAWK--FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPOSTCOG Model: RED-TAILED HAWK--REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
COG	P05	80.2	1.000
COG	P17A	1.0	1.000
COG	P31	4.7	1.000
COG	P59	7.9	1.000
Overall:		93.8	1.000

Study: RPOSTCOG Model: RED-TAILED HAWK--FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPOSTCOG 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	93.8	1.000
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: RPOSTC06

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: P05

LEV 2	LEV 1
VDNDB04---grf---HSI	
149.33	1.000

Study: RPOSTC06

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: P17A

LEV 2	LEV 1
VDNDB04---grf---HSI	
96.00	1.000

Study: RPOSTC06

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: P31

LEV 2	LEV 1
VDNDB04---grf---HSI	
176.00	1.000

Study: RPOSTC06

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: C06 SubArea: P59

LEV 2	LEV 1
VDNDB04---grf---HSI	
298.67	1.000

CC HABITAT DATA

11-09-1987

O, PRE & POST PROJECT

AT: *Glossed Canopy Conifer*

ES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	CC R15	CC R16	CC R50
IBLE:	*****	*****	*****
ES	*****	*****	*****
IT	*****	*****	*****
01	*****	*****	*****
01	*****	*****	*****
01	*****	*****	*****
04	136.000	64.000	144.000

DHAWKCC HABITAT DATA

11-03-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: RED-TAILED HAWK

	COVER TYPE / SUB-AREA:		
VARIABLE:	CC R15	CC R16	CC R50
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	*****	*****	*****
VCVTR01	*****	*****	*****
VDNDB04	136.000	64.000	144.000

Study: DHAWKCC Model: RED-TAILED HAWK--FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: DHAWKCC Model: RED-TAILED HAWK--REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
CC	R15	55.6	1.000
CC	R16	29.0	1.000
CC	R50	4.6	1.000
Overall:		89.3	1.000

Study: DHAWKCC Model: RED-TAILED HAWK--FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: DHAWKCC 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	89.3	1.000
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: DHAWKCC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: R15

LEV 2	LEV 1
VDNDB04--grf--HSI	
135.00	1.000

Study: DHAWKCC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: R16

LEV 2	LEV 1
VDNDB04--grf--HSI	
64.00	1.000

Study: DHAWKCC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: R50

LEV 2	LEV 1
VDNDB04--grf--HSI	
144.00	1.000

GNAMCC HABITAT DATA

11-09-1987

GORGE, PRE & POST PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: RED-TAILED HAWK

ENE

COVER TYPE / SUB-AREA:

VARIABLE:	CC D21	CC D27	CC D34
ANTREES	*****	*****	*****
HERDHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	*****	*****	*****
VCVTR01	*****	*****	*****
VDNDB04	95.000	80.000	176.000

Study: GHAMKCC Model: RED-TAILED HAWK—FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: GHAMKCC Model: RED-TAILED HAWK—REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
CC	D21	14.1	1.000
CC	D27	11.2	1.000
CC	D34	5.8	1.000
Overall:		31.2	1.000

Study: GHAMKCC Model: RED-TAILED HAWK—FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: GHAMKCC 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	31.2	1.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: GHAMKCC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: D21

LEV 2	LEV 1
VDNDB04--grf--HSI	
96.00	1.000

Study: GHAMKCC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: D27

LEV 2	LEV 1
VDNDB04--grf--HSI	
80.00	1.000

Study: GHAMKCC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: D34

LEV 2	LEV 1
VDNDB04--grf--HSI	
176.00	1.000

RPOSTCC HABITAT DATA

11-16-1987

ROSS, POST-PROJECT & PRE-PROJECT
HABITAT: *Closed Canopy Conifer*
SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	CC H32	CC H60	CC H74	CC P17	CC P44	CC P49
ANTREES	*****	*****	*****	*****	*****	*****
HERBHT	*****	*****	*****	*****	*****	*****
VCVHE01	*****	*****	*****	*****	*****	*****
VCVSH01	*****	*****	*****	*****	*****	*****
VCVTR01	*****	*****	*****	*****	*****	*****
VDNDB04	80.000	0.000	10.667	128.000	0.000	0.000

COVER TYPE / SUB-AREA:

VARIABLE:	CC P52	CC P65	CC R94
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	*****	*****	*****
VCVTR01	*****	*****	*****
VDNDB04	640.000	42.667	80.000

Study: RPOSTCC Model: RED-TAILED HAWK—FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPOSTCC Model: RED-TAILED HAWK—REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	1.000
CC	H60	50.6	0.000
CC	H74	21.9	0.594
CC	P17	49.7	1.000
CC	P44	54.6	0.000
CC	P49	10.4	0.000
CC	P52	3.6	1.000
CC	P65	7.9	1.000
CC	R94	24.0	1.000
Overall:		233.0	0.466

Study: RPOSTCC Model: RED-TAILED HAWK—FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPOSTCC 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	233.0	0.466
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: H32

LEV 2	LEV 1
VDNDB04--grf--HSI	
80.00	1.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: H60

LEV 2	LEV 1
VDNDB04--grf--HSI	
0.00	0.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: H74

LEV 2	LEV 1
VDNDB04--grf--HSI	
15.24	0.594

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: P17

LEV 2	LEV 1
VDNDB04--grf--HSI	
128.00	1.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: P44

LEV 2	LEV 1
VDNDB04--grf--HSI	
0.00	0.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: P49

LEV 2	LEV 1
VDNDB04--grf--HSI	
0.00	0.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: P52

LEV 2	LEV 1
VDNDB04--grf--HSI	
640.00	1.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: P65

LEV 2	LEV 1
VDNDB04--grf--HSI	
42.67	1.000

Study: RPOSTCC

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: CC SubArea: R94

LEV 2	LEV 1
VDNDB04--grf--HSI	
80.00	1.000

DHAWKOC HABITAT DATA

11-12-1987

DIABLO, PRE & POST PROJECT
 HABITAT: *Open Canopy Conifer*
 SPECIES: RED-TAILED HAWK
 END

	COVER TYPE / SUB-AREA:		
VARIABLE:	DC D43	DC R49	DC R71
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	0.000	4.400	0.000
VCVTR01	40.800	55.500	36.000
VDNDB04	0.000	16.000	48.000

Study: DHAWKOC Model: RED-TAILED HAWK--FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
DC	D43	1.9	0.600
DC	R49	2.2	0.534
DC	R71	3.9	0.600

Overall: 8.0 0.582

Study: DHAWKOC Model: RED-TAILED HAWK--REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
DC	D43	1.9	0.000
DC	R49	2.2	0.626
DC	R71	3.9	1.000

Overall: 8.0 0.663

Study: DHAWKOC Model: RED-TAILED HAWK--FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
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Overall: 0.0 0.000

Study name: DHAWKOC 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	8.0	0.582
RED-TAILED HAWK--REPRODUCTION	8.0	0.663
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: DHAWKOC

11-09-1987

Model: RED-TAILED HAWK—FOOD, FOREST

CoverType: OC SubArea: D43

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf—HSI
40.80	1.00	0.600
VCVSH01	grf	
0.00	1.00	

Study: DHAWKOC

11-09-1987

Model: RED-TAILED HAWK—FOOD, FOREST

CoverType: OC SubArea: R49

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf—HSI
55.50	0.89	0.534
VCVSH01	grf	
4.40	1.00	

Study: DHAWKOC

11-09-1987

Model: RED-TAILED HAWK—FOOD, FOREST

CoverType: OC SubArea: R71

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf—HSI
36.00	1.00	0.600
VCVSH01	grf	
0.00	1.00	

Study: DHAMKOC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: OC SubArea: D43

LEV 2	LEV 1
VDNDB04	grf-HSI
0.00	0.000

Study: DHAMKOC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: OC SubArea: R49

LEV 2	LEV 1
VDNDB04	grf-HSI
16.00	0.626

Study: DHAMKOC

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: OC SubArea: R71

LEV 2	LEV 1
VDNDB04	grf-HSI
48.00	1.000

SHAWKOC HABITAT DATA

11-09-1987

GORGE, PRE & POST PROJECT

HABITAT: *Open Canopy Conifer*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	DC
VARIABLE:	D29
ANTREES	*****
HERBHT	*****
VCVHE01	*****
VCVSH01	23.600
VCVTR01	59.000
VDNDB04	0.000

Study: SHAMKOC Model: RED-TAILED HAWK—FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
OC	D29	6.4	0.492

Overall:		6.4	0.492
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Study: SHAMKOC Model: RED-TAILED HAWK—REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
OC	D29	6.4	0.000

Overall:		6.4	0.000
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Study: SHAMKOC Model: RED-TAILED HAWK—FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI

Overall:		0.0	0.000
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Study name: SHAMKOC 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	6.4	0.492
RED-TAILED HAWK—REPRODUCTION	6.4	0.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: GHAMKOC

11-09-1987

Model: RED-TAILED HAWK—FOOD, FOREST

CoverType: DC SubArea: D29

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf—HSI
59.00	0.82	0.492
VCVSH01	grf	^
23.60	1.00	

Study: GHAMKOC

11-09-1987

Model: RED-TAILED HAWK—REPRODUCTION

CoverType: OC SubArea: D29

LEV 2	LEV 1
VDMDB04	grf—HSI
0.00	0.000

RPOSTOC HABITAT DATA

11-08-1987

ROSS, POST-PROJECT + ~~PRE-PROJECT~~HABITAT: *Open Canopy Conifer*

SPECIES: RED-TAILED HAWK

	COVER TYPE / SUB-AREA:		
VARIABLE:	DC H25	DC H30	DC H58 = P68
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	29.150	11.100	42.000
VCVTR01	78.000	5.400	31.200
VDNDB04	48.000	5.333	0.000

Study: RPOSTOC Model: RED-TAILED HAWK--FOOD, FOREST 11-12-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	0.264
OC	H30	7.0	0.600
OC	H68	1.1	0.600
Overall:		12.1	0.488

Study: RPOSTOC Model: RED-TAILED HAWK--REPRODUCTION 11-12-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	1.000
OC	H30	7.0	0.212
OC	H68	1.1	0.000
Overall:		12.1	0.455

Study: RPOSTOC Model: RED-TAILED HAWK--FOOD, OPEN 11-12-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPOSTOC 11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	12.1	0.488
RED-TAILED HAWK--REPRODUCTION	12.1	0.455
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: RPOSTOC

11-12-1987

Model: RED-TAILED HAWK—FOOD, FOREST

CoverType: OC SubArea: H25

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf—HSI
78.00	0.44	0.264
VCVSH01	grf	
29.15	1.00	

Study: RPOSTOC

11-12-1987

Model: RED-TAILED HAWK—FOOD, FOREST

CoverType: OC SubArea: H30

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf—HSI
5.40	1.00	0.600
VCVSH01	grf	
11.10	1.00	

Study: RPOSTOC

11-12-1987

Model: RED-TAILED HAWK—FOOD, FOREST

CoverType: OC SubArea: H68

LEV 3	LEV 2	LEV 1
VCVTR01	grf	usf—HSI
31.20	1.00	0.600
VCVSH01	grf	
42.00	1.00	

Study: RPOSTOC

11-12-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: OC SubArea: H25

LEV 2	LEV 1
VDNDB04--grf--HSI	
48.00	1.000

Study: RPOSTOC

11-12-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: OC SubArea: H30

LEV 2	LEV 1
VDNDB04--grf--HSI	
5.33	0.212

Study: RPOSTOC

11-12-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: OC SubArea: H68

LEV 2	LEV 1
VDNDB04--grf--HSI	
0.00	0.000

DHAWKM HABITAT DATA

11-09-1987

DIABLO, POST PROJECT
HABITAT: Mixed
SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	M
VARIABLE:	R67
ANTREES	*****
HERBHT	*****
VCVHE01	*****
VCVSH01	*****
VCVTR01	*****
VINDBO4	48.000

Study: DHAMM Model: RED-TAILED HAWK—FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: DHAMM Model: RED-TAILED HAWK—REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
M	R67	5.6	1.000
Overall:		5.6	1.000

Study: DHAMM Model: RED-TAILED HAWK—FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: DHAMM 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	5.6	1.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: DHAMM

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: M SubArea: R67

LEV 2	LEV 1
VDNDB04	grf-HSI
48.00	1.000

SHAWM HABITAT DATA

11-09-1987

GORGE, POST PROJECT

HABITAT: *Mixed*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	M
VARIABLE:	D17
ANTREES	*****
HERBHT	*****
VCVHE01	*****
VCVSH01	*****
VCVTR01	*****
VDNDB04	8.000

Study: GHAMKM Model: RED-TAILED HAWK—FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: GHAMKM Model: RED-TAILED HAWK—REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
M	D17	8.6	0.312

Overall:		8.6	0.312
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Study: GHAMKM Model: RED-TAILED HAWK—FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study name: GHAMKM 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	8.6	0.312
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: GHAMM

11-09-1987

Model: RED-TAILED HAWK—REPRODUCTION

CoverType: M SubArea: D17

LEV 2	LEV 1
VDNDB04	grf-HSI
8.00	0.312

RPOSTM HABITAT DATA

11-08-1987

ROSS, POST-PROJECT

HABITAT: *Mixed*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	M H24	M P42	M R83
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	*****	*****	*****
VCVTR01	*****	*****	*****
VDNDB04	0.000	384.000	0.000

Study: RPOSTM Model: RED-TAILED HAWK—FOOD, FOREST 11-16-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPOSTM Model: RED-TAILED HAWK—REPRODUCTION 11-16-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	0.000
M	P42	6.4	1.000
M	R83	4.7	0.000
Overall:		13.8	0.463

Study: RPOSTM Model: RED-TAILED HAWK—FOOD, OPEN 11-16-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPOSTM 11-16-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	13.8	0.463
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: RPOSTM

11-16-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: M SubArea: H24

LEV 2	LEV 1
VDNDB04---grf---HSI	
0.00	0.000

Study: RPOSTM

11-16-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: M SubArea: P42

LEV 2	LEV 1
VDNDB04---grf---HSI	
384.00	1.000

Study: RPOSTM

11-16-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: M SubArea: R83

LEV 2	LEV 1
VDNDB04---grf---HSI	
0.00	0.000

DHAWKB HABITAT DATA

11-09-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Broadleaf*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	B R51	B R60
VARIABLE:		
ANTREES	*****	*****
HERBNT	*****	*****
VCVHE01	*****	*****
VCVSH01	*****	*****
VCVTR01	*****	*****
VDNDB04	40.000	16.000

Study: DHAWKB Model: RED-TAILED HAWK—FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: DHAWKB Model: RED-TAILED HAWK—REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
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B	RS1	9.2	1.000
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B	RE0	3.8	0.626
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Overall:		13.0	0.890
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Study: DHAWKB Model: RED-TAILED HAWK—FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study name: DHAWKB 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	13.0	0.890
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: DHAMKB

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: B SubArea: R51

LEV 2	LEV 1
VDNDB04--grf--HSI	
40.00	1.000

Study: DHAMKB

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: B SubArea: R60

LEV 2	LEV 1
VDNDB04--grf--HSI	
16.00	0.625

RPOSTB HABITAT DATA

11-08-1987

ROSS, POST-PROJECT & PRE-PROJECT

HABITAT: Broadleaf

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	B H44	B H54	B P55
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	*****	*****	*****
VCVTR01	*****	*****	*****
VDNDB04	0.000	10.667	16.000

Study: RPOSTB Model: RED-TAILED HAWK—FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPOSTB Model: RED-TAILED HAWK—REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.000
B	H54	10.7	0.412
B	P55	5.6	0.626
Overall:		18.9	0.417

Study: RPOSTB Model: RED-TAILED HAWK—FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPOSTB 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	18.9	0.417
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: RPOSTB

11-08-1987

Model: RED-TAILED HAWK—REPRODUCTION

CoverType: B SubArea: H44

LEV 2	LEV 1
VDNDB04—grf—HSI	
0.00	0.000

Study: RPOSTB

11-08-1987

Model: RED-TAILED HAWK—REPRODUCTION

CoverType: B SubArea: H54

LEV 2	LEV 1
VDNDB04—grf—HSI	
10.67	0.412

Study: RPOSTB

11-08-1987

Model: RED-TAILED HAWK—REPRODUCTION

CoverType: B SubArea: P55

LEV 2	LEV 1
VDNDB04—grf—HSI	
16.00	0.626

RPRES HABITAT DATA

11-08-1987

ROSS, PRE-PROJECT & POST-PROJECT, DIABLO POST-PROJECT

HABITAT: *Shrubland*

SPECIES: RED-TAILED HAWK

	COVER TYPE / SUB-AREA:	
	S	S
VARIABLE:	LC-1	LC-2
ANTREES	4.000	4.000
HERBHT	52.750	67.750
VCVHE01	28.750	21.250
VCVSH01	48.900	46.100
VCVTR01	*****	*****
VDNDB04	*****	*****

Study: RPRES Model: RED-TAILED HAWK--FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: RPRES Model: RED-TAILED HAWK--REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: RPRES Model: RED-TAILED HAWK--FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
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S	LC-1	1.0	0.814
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S	LC-2	1.0	0.791
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Overall:		2.0	0.803
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Study name: RPRES 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	0.0	0.000
RED-TAILED HAWK--FOOD, OPEN	2.0	0.803

Study: RPRES

11-08-1987

Model: RED-TAILED HAWK--FOOD, OPEN

CoverType: S SubArea: LC-1

LEV 3	LEV 2	LEV 1
VCVNE01	grf	usf-HSI
28.75	0.44	0.814
HERBHT	grf	
52.75	1.00	
ANTREES	grf	
4.00	0.54	
VCVSH01	grf	^
48.90	1.00	

Study: RPRES

11-08-1987

Model: RED-TAILED HAWK--FOOD, OPEN

CoverType: S SubArea: LC-2

LEV 3	LEV 2	LEV 1
VCVNE01	grf	usf-HSI
21.25	0.33	0.791
HERBHT	grf	
67.75	1.00	
ANTREES	grf	
4.00	0.54	
VCVSH01	grf	^
46.10	1.00	

DHAWRC06 HABITAT DATA

11-09-1987

DIABLO, PRE+ POST PROJECT & PRE PROTECT GORGE

HABITAT: Riparian Conifer Old Growth

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	RC06
VARIABLE:	R120
ANTREES	*****
HERBHT	*****
VCVHE01	*****
VCVSH01	*****
VCVTR01	*****
VINDB04	56.000

Study: DHAWRCOG Model: RED-TAILED HAWK--FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: DHAWRCOG Model: RED-TAILED HAWK--REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
rCOG	R120	18.0	1.000
Overall:		18.0	1.000

Study: DHAWRCOG Model: RED-TAILED HAWK--FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: DHAWRCOG 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	18.0	1.000
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: DHAWR006

11-09-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: F005 SubArea: R120

LEV 2 LEV 1
VDNDB04---grf---HSI
56.00 1.000

RPRRCOG HABITAT DATA

11-08-1987

ROSS, PRE-PROJECT

HABITAT: *Riparian Conifer Old Growth*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	rCOG BV-6	rCOG P94	rCOG R120
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVHE01	*****	*****	*****
VCVSH01	*****	*****	*****
VCVTR01	*****	*****	*****
VDNDB04	184.000	208.000	56.000

Study: RPRERCOG Model: RED-TAILED HAWK--FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPRERCOG Model: RED-TAILED HAWK--REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
rCOG	BV-6	3.6	1.000
rCOG	P94	1.5	1.000
rCOG	R120	18.0	1.000
Overall:		23.2	1.000

Study: RPRERCOG Model: RED-TAILED HAWK--FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPRERCOG 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	23.2	1.000
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: RPRERCOG

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rCOG SubArea: BV-6

LEV 2	LEV 1
VDNDB04--grf--HSI	
184.00	1.000

Study: RPRERCOG

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rCOG SubArea: P94

LEV 2	LEV 1
VDNDB04--grf--HSI	
208.00	1.000

Study: RPRERCOG

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rCOG SubArea: R120

LEV 2	LEV 1
VDNDB04--grf--HSI	
56.00	1.000

RPOSRC06 HABITAT DATA

11-08-1987

ROSS, POST-PROJECT

HABITAT: *Riparian Conifer Old Growth*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	PC06
VARIABLE:	P94
ANTREES	*****
HERBHT	*****
VCVHE01	*****
VCVSH01	*****
VCVTR01	*****
VIND904	208.000

Study: RPOSRC06 Model: RED-TAILED HAWK--FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: RPOSRC06 Model: RED-TAILED HAWK--REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
rC06	P34	1.5	1.000

Overall:		1.5	1.000
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Study: RPOSRC06 Model: RED-TAILED HAWK--FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study name: RPOSRC06 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	1.5	1.000
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: RPOSRCOG

11-08-1987

Model: RED-TAILED HAWK—REPRODUCTION

CoverType: rCOG SubArea: P94

LEV 2 LEV 1
VDNDB04—grf—HSI
208.00 1.000

DHAWKRECC HABITAT DATA

11-09-1987

DIABLO, PRE & POST PROJECT, *ROSS PRE & POST PROJECT*

HABITAT: *Riparian Closed Canopy Conifer*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

rcc

VARIABLE:	R121
ANTREES	*****
HERBHT	*****
VCVHE01	*****
VCVSH01	*****
VCVTR01	*****
VINDB04	112.000

Study: DHAWKRCC Model: RED-TAILED HAWK--FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: DHAWKRCC Model: RED-TAILED HAWK--REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
rcc	R121	1.4	1.000

Overall:		1.4	1.000
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Study: DHAWKRCC Model: RED-TAILED HAWK--FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study name: DHAWKRCC 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	1.4	1.000
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: DHAWKRC

11-09-1987

Model: RED-TAILED HAWK—REPRODUCTION

CoverType: MCC SubArea: R121

LEV 2 LEV 1
VONDB04—grf—HSI
112.00 1.000

RPRERM HABITAT DATA

11-08-1987

ROSS, PRE-PROJECT

HABITAT: *Riparian Mixed Forest*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	rm	rm
ANTREES	BV-7	H59
HERBHT	*****	*****
VCVHE01	*****	*****
VCVSH01	*****	*****
VCVTR01	*****	*****
VDNDB04	138.667	0.000

Study: RPRERM Model: RED-TAILED HAWK--FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPRERM Model: RED-TAILED HAWK--REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
rM	BV-7	4.8	1.000
rM	H59	9.0	0.000
Overall:		13.8	0.350

Study: RPRERM Model: RED-TAILED HAWK--FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPRERM 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	13.8	0.350
RED-TAILED HAWK--FOOD, OPEN	0.0	0.000

Study: RPRERM

11-16-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rM SubArea: BV-7

LEV 2	LEV 1
VDNDB04---grf---HSI	
138.67	1.000

Study: RPRERM

11-16-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rM SubArea: H59

LEV 2	LEV 1
VDNDB04---grf---HSI	
0.00	0.000

RPOSTRM HABITAT DATA

11-08-1987

ROSS, POST-PROJECT & DIABLO POST-PROJECT

HABITAT: *Riparian Mixed*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

	rM
VARIABLE:	H59
ANTREES	*****
HERBHT	*****
VCVHE01	*****
VCVSH01	*****
VCVTR01	*****
VDNDB04	0.000

Study: RPOSTRM Model: RED-TAILED HAWK—FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: RPOSTRM Model: RED-TAILED HAWK—REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
rH	HS9	9.0	0.000

Overall:		9.0	0.000
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Study: RPOSTRM Model: RED-TAILED HAWK—FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study name: RPOSTRM 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	9.0	0.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: RPOSTRM

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: PM SubArea: H59

LEV 2	LEV 1
VDNDB04--grf--HSI	
0.00	0.000

DIABLO, PRE-PROJECT

HABITAT: *Riparian Broadleaf*

SPECIES: RED-TAILED HAWK

	COVER TYPE / SUB-AREA:	
VARIABLE:	rB	rB
ANTREES	R117	R14
	*****	*****
HERBHT	*****	*****
VCVHE01	*****	*****
VCVSH01	*****	*****
VCVTR01	*****	*****
VDNDB04	0.000	0.000

Study: RPOSTRB Model: RED-TAILED HAWK—FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study: RPOSTRB Model: RED-TAILED HAWK—REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
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rB	R117	1.6	0.000
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rB	R14	14.4	0.000
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Overall:		16.0	0.000
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Study: RPOSTRB Model: RED-TAILED HAWK—FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
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Overall:		0.0	0.000
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Study name: RPOSTRB 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	16.0	0.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: RPOSTRB

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rB SubArea: R117

LEV 2	LEV 1
VDNDB04--grf--HSI	
0.00	0.000

Study: RPOSTRB

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rB SubArea: R14

LEV 2	LEV 1
VDNDB04--grf--HSI	
0.00	0.000

DHAWKRB HABITAT DATA

11-09-1987

DIABLO, POST PROJECT

HABITAT: *Riparian Broadleaf*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	rB R117	rB R14
ANTREES	*****	*****
HERBHT	*****	*****
VCVHE01	*****	*****
VCVSH01	*****	*****
VCVTR01	*****	*****
VONDB04	0.000	0.000

Study: DHAMKRB Model: RED-TAILED HAWK—FOOD, FOREST 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: DHAMKRB Model: RED-TAILED HAWK—REPRODUCTION 11-09-1987

CoverType	SubArea	Area	HSI
rB	R117	1.6	0.000
rB	R14	14.4	0.000
Overall:		16.0	0.000

Study: DHAMKRB Model: RED-TAILED HAWK—FOOD, OPEN 11-09-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: DHAMKRB 11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	16.0	0.000
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: DHAWKRB

11-16-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rB SubArea: R117

LEV 2	LEV 1
VDNDB04	grf-HSI
0.00	0.000

Study: DHAWKRB

11-16-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rB SubArea: R14

LEV 2	LEV 1
VDNDB04	grf-HSI
0.00	0.000

RPRERB HABITAT DATA

11-08-1987

ROSS, PRE-PROJECT

HABITAT: *Riparian Broadleaf*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	rB CS-1	rB R117	rB R14
ANTREES	*****	*****	*****
HERBHT	*****	*****	*****
VCVME01	*****	*****	*****
VCVSH01	*****	*****	*****
VCVTRO1	*****	*****	*****
VDNDB04	48.000	0.000	0.000

Study: RPRERB Model: RED-TAILED HAWK—FOOD, FOREST 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPRERB Model: RED-TAILED HAWK—REPRODUCTION 11-08-1987

CoverType	SubArea	Area	HSI
rB	CS-1	15.7	1.000
rB	R117	1.6	0.000
rB	R14	14.4	0.000
Overall:		31.6	0.496

Study: RPRERB Model: RED-TAILED HAWK—FOOD, OPEN 11-08-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study name: RPRERB 11-08-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK—FOOD, FOREST	0.0	0.000
RED-TAILED HAWK—REPRODUCTION	31.6	0.496
RED-TAILED HAWK—FOOD, OPEN	0.0	0.000

Study: RPRERB

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rB SubArea: CS-1

LEV 2 LEV 1
VDNDB04---grf---HSI
48.00 1.000

Study: RPRERB

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rB SubArea: R117

LEV 2 LEV 1
VDNDB04---grf---HSI
0.00 0.000

Study: RPRERB

11-08-1987

Model: RED-TAILED HAWK--REPRODUCTION

CoverType: rB SubArea: R14

LEV 2 LEV 1
VDNDB04---grf---HSI
0.00 0.000

RPREM HABITAT DATA

11-12-1987

ROSS, PRE-PROJECT

HABITAT: *Palustrine Marsh*

SPECIES: RED-TAILED HAWK

COVER TYPE / SUB-AREA:

VARIABLE:	PM BV3	PM BV8	PM CSS
ANTREES	10.000	10.000	10.000
HERBHT	24.167	0.000	0.000
VCVME01	70.667	93.000	25.500
VCVSH01	0.000	0.000	0.000
VCVTR01	*****	*****	*****
VENDB04	*****	*****	*****

Study: RPREM Model: RED-TAILED HAWK--FOOD, FOREST 11-12-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPREM Model: RED-TAILED HAWK--REPRODUCTION 11-12-1987

CoverType	SubArea	Area	HSI
Overall:		0.0	0.000

Study: RPREM Model: RED-TAILED HAWK--FOOD, OPEN 11-12-1987

CoverType	SubArea	Area	HSI
PM	BV3	2.4	0.859
PM	BV8	1.2	0.000
PM	CSS	8.4	0.000
Overall:		12.0	0.172

Study name: RPREM 11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
RED-TAILED HAWK--FOOD, FOREST	0.0	0.000
RED-TAILED HAWK--REPRODUCTION	0.0	0.000
RED-TAILED HAWK--FOOD, OPEN	12.0	0.172

Study: RPREM

11-12-1987

Model: RED-TAILED HAWK--FOOD, OPEN

CoverType: PM SubArea: BV3

LEV 3	LEV 2	LEV 1
VCVHE01	grf	usf-HSI
70.67	1.00	0.859
HERBHT	grf	
24.17	0.47	
ANTREES	grf	
10.00	1.00	
VCVSH01	grf	^
0.00	1.00	

Study: RPREM

11-12-1987

Model: RED-TAILED HAWK--FOOD, OPEN

CoverType: PM SubArea: BV8

LEV 3	LEV 2	LEV 1
VCVHE01	grf	usf-HSI
93.00	1.00	0.000
HERBHT	grf	
0.00	0.00	
ANTREES	grf	
10.00	1.00	
VCVSH01	grf	^
0.00	1.00	

Study: RPREM

11-12-1987

Model: RED-TAILED HAWK--FOOD, OPEN

CoverType: PM SubArea: CSS

LEV 3	LEV 2	LEV 1
VCVHE01	grf	usf-HSI
25.50	0.40	0.000
HERBHT	grf	
0.00	0.00	
ANTREES	grf	
10.00	1.00	
VCVSH01	grf	^

OSPREY

Note: See Appendix F for final HSI value calculation for this species.

[illegible]

USFWS, Division of Ecological Services, Sacramento, California 1984

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COG      : old growth conifer
CC       : mature closed canopy conifer
OC       : mature open canopy conifer
rCOG     : riparian old growth conifer
rCC      : riparian mature closed canopy conifer
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Habitat variables:

APTREES : Number of Pilot trees per nest site / Acres
AREA : Polygon Area
BNTREES : Number of nest trees per 100 acres

USER-SPECIFIED FUNCTION at level 3, position 1
USUB=(X(1)/X(2))*5

```
USER-SPECIFIED FUNCTION at level 3, position 2
USUB=(X(1)/X(2))*100
```

```

GRAPH FUNCTION at level 2, position 1
Title: # of Pilot Trees Per Nest Site / Sacre
X:      0.000,  Y:  0.500
X:      1.000,  Y:  0.800
X:      2.000,  Y:  1.000
X:      3.000,  Y:  1.000

```

GRAPH FUNCTION at level 2, position 2
Title: 0
X: 0.000, Y: 0.000

10-31-1987

Single covertime model.

Model name: DSPREY--FOOD

Creation/modification date: 10-31-1987

USFWS, Division of Ecological Services, Sacramento, California 1984

Covert types:

rCC : riparian mature closed canopy conifer

WTU03---grf-----^

Habitat variables:

WTU03 : Mean secchi disk water transparency (cm)

$$USUB=X(1)/X(2)$$

GRAPH FUNCTION at level 2, position 1

Title: Number of Perch Sites/Mile of Shoreline

X: 10.000, Y: 1.000

GRAPH FUNCTION at level 2, position 2

Title: Secchi Disc Reading

X: 90.000, Y: 0.950

X:	1.000,	Y:	0.300
X:	2.000,	Y:	0.600
X:	4.000,	Y:	0.800
X:	6.000,	Y:	0.900
X:	8.000,	Y:	0.950
X:	10.000,	Y:	1.000

Comments:

need to know polygon area

X: 100.000, Y: 1.000

Comments:

secchi disc reading is in cm

need to know miles of shoreline for each polygon measured

ROSS, PRE & POST PROJECT

HABITAT: *Conifer Old Growth*

SPECIES: OSPREY

	COVER TYPE / SUB-AREA:	
	COG	COG
VARIABLE:	P31	P59
APERCH	6.000	3.000
APTREES	2.000	0.000
AREA	4.660	7.900
00 BNT	0.500	0.000
00 MIL	0.110	0.110
00 WTU	100.000	100.000

Study: DSPCOGR Model: DSPREY--FOOD

11-21-1987

CoverType	SubArea	Area	HSI
COG	P31	0.1	1.000
COG	P59	0.1	1.000
Overall:		0.2	1.000

Study: ROSPRCOG Model: OPREY--REPRODUCTION

11-09-1987

CoverType	SubArea	Area	HSI
COG	P31	4.7	1.000
COG	P59	7.9	0.000
Overall:		12.6	0.371

Study name: ROSPRCOG

11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
DSPREY--FOOD	0.2	1.000
OPREY--REPRODUCTION	12.6	0.371

Note: Area for food is based on shoreline length

Study: DSPCOGR

11-21-1987

Model: OSPREY--FOOD

CoverType: COG SubArea: P31

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
6.00	54.55	1.00	1.000
MILES-----^			
0.11			
WTU03-----grf-----^			
	100.00	1.00	

Study: DSPCOGR

11-21-1987

Model: OSPREY--FOOD

CoverType: COG SubArea: P59

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
3.00	27.27	1.00	1.000
MILES-----^			
0.11			
WTU03-----grf-----^			
	100.00	1.00	

Study: ROSPRCOG

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: COG SubArea: P31

LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd--HSI
2.00	2.15	1.00	1.000
AREA			
4.66			
BNTREES	usf	grf	
0.50	10.73	1.00	
AREA			
4.66			

Study: ROSPRCOG

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: COG SubArea: P59

LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd--HSI
0.00	0.00	0.50	0.000
AREA			
7.90			
BNTREES	usf	grf	
0.00	0.00	0.00	
AREA			
7.90			

DIABLO PRE & POST PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: OSPREY

COVER TYPE / SUB-AREA:

VARIABLE:	CC R15	CC R16
APERCH	34.000	18.000
APTREES	30.000	10.000
AREA	55.620	29.040
00 BNT	0.000	2.000
00 MIL	0.530	0.150
00 MTU	93.300	93.300

Study: DSPCCD Model: DSPREY--FOOD

11-21-1987

CoverType	SubArea	Area	HSI
CC	R15	0.5	0.967
CC	R16	0.2	0.967
Overall:		0.7	0.967

Study: DSPCC Model: OPREY--REPRODUCTION

11-09-1987

CoverType	SubArea	Area	HSI
CC	R15	55.6	0.000
CC	R16	29.0	0.871
Overall:		84.7	0.299

Study name: DSPCC

11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
DSPREY--FOOD	0.7	0.967
OPREY--REPRODUCTION	84.7	0.299

Study: OSPCCD

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: R15

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
34.00	64.15	1.00	0.967
MILES			
0.53			
	WTU03	grf	
	93.30	0.97	

Study: OSPCCD

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: R16

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
18.00	120.00	1.00	0.967
MILES			
0.15			
	WTU03	grf	
	93.30	0.97	

Study: DOSPCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: R15

	LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd	HSI
	30.00	2.70	1.00	0.000
AREA	55.62			
BNTREES	usf	grf		
	0.00	0.00	0.00	
AREA	55.62			

Study: DOSPCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: R16

	LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd	HSI
	10.00	1.72	0.94	0.871
AREA	29.04			
BNTREES	usf	grf		
	2.00	6.89	0.92	
AREA	29.04			

GORGE, PRE & POST PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: OSPREY

	COVER TYPE / SUB-AREA:		
	CC	CC	CC
VARIABLE:	D12	D18	D34
APERCH	0.000	1.000	0.000
APTREES	0.000	50.000	0.000
AREA	14.620	11.570	5.830
00 BNT	0.000	5.000	0.000
00 MIL	0.350	0.380	0.390
00 WTU	230.000	300.000	300.000

Study: DSPCOGD Model: DSPREY--FOOD

11-21-1987

CoverType	SubArea	Area	HSI
COG	D12	0.4	0.000
COG	D18	0.4	0.579
COG	D34	0.4	0.000
Overall:		1.1	0.196

Study: GOSPCG Model: OPREY--REPRODUCTION

11-09-1987

CoverType	SubArea	Area	HSI
CC	D12	14.6	0.000
CC	D18	11.6	1.000
CC	D34	5.8	0.000
Overall:		32.0	0.361

Study name: GOSPCG

11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
DSPREY--FOOD	1.1	0.196
OPREY--REPRODUCTION	32.0	0.361

Note: Foot area is based on shoreline length

Study: DSPCOGD

11-21-1987

Model: OSPREY--FOOD

CoverType: C06 SubArea: D12

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
0.00	0.00	0.00	0.000
MILES			
0.35			
WTU03			
	230.00	1.00	

Study: DSPCOGD

11-21-1987

Model: OSPREY--FOOD

CoverType: C06 SubArea: D18

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
1.00	2.63	0.58	0.579
MILES			
0.38			
WTU03			
	300.00	1.00	

Study: DSPCOGD

11-21-1987

Model: OSPREY--FOOD

CoverType: C06 SubArea: D34

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
0.00	0.00	0.00	0.000
MILES			
0.39			
WTU03			
	300.00	1.00	

Study: GOSPCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: D12

LEV 4	LEV 3	LEV 2	LEV 1	
APTREES	usf	grf	prd	HSI
0.00		0.00	0.50	0.000
AREA	^			
14.62				
BNTREES	usf	grf	^	
0.00		0.00	0.00	
AREA	^			
14.62				

Study: GOSPCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: D18

LEV 4	LEV 3	LEV 2	LEV 1	
APTREES	usf	grf	prd	HSI
50.00		21.61	1.00	1.000
AREA	^			
11.57				
BNTREES	usf	grf	^	
5.00		43.22	1.00	
AREA	^			
11.57				

Study: GOSPCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: D34

LEV 4	LEV 3	LEV 2	LEV 1	
APTREES	usf	grf	prd	HSI
0.00		0.00	0.50	0.000
AREA	^			
5.83				
BNTREES	usf	grf	^	
0.00		0.00	0.00	
AREA	^			
5.83				

ROSS, PRE & POST PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: OSPREY

	COVER TYPE / SUB-AREA:					
VARIABLE:	CC H32	CC H60	CC H74	CC P17	CC P49	CC P52
APERCH	12.000	1.000	82.000	21.000	5.000	0.500
APTREES	15.000	2.000	100.000	3.000	5.000	0.000
AREA	10.320	50.560	21.890	49.660	10.440	3.630
00 BNT	3.000	0.000	9.000	1.000	0.000	0.000
00 MIL	0.480	0.300	0.880	1.000	0.500	0.610
00 WTU	100.000	100.000	100.000	100.000	100.000	100.000

	COVER TYPE / SUB-AREA:	
VARIABLE:	CC P65	CC P85
APERCH	4.000	7.000
APTREES	7.000	9.000
AREA	7.860	2.580
00 BNT	1.000	1.000
00 MIL	0.020	0.090
00 WTU	100.000	100.000

Study: OSPCCR Model: OSPREY--FOOD

11-21-1987

CoverType	SubArea	Area	HSI
CC	H32	0.5	1.000
CC	H60	0.3	0.667
CC	H74	0.9	1.000
CC	P17	1.0	1.000
CC	P49	0.5	1.000
CC	P52	0.6	0.205
CC	P65	0.0	1.000
CC	P85	0.1	1.000

Overall: 3.9 0.849

Study: ROSPRCC Model: OPREY--REPRODUCTION

11-09-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	1.000
CC	H60	50.6	0.000
CC	H74	21.9	1.000
CC	P17	49.7	0.355
CC	P49	10.4	0.000
CC	P52	3.6	0.000
CC	P65	7.9	1.000
CC	P85	2.6	1.000

Overall: 156.9 0.384

Study name: ROSPRCC

11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
OSPREY--FOOD	3.9	0.849
OPREY--REPRODUCTION	156.9	0.384

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: H32

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
12.00	25.00	1.00	1.000
MILES-----^			
0.48			
WTU03-----grf-----^			
	100.00	1.00	

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: H60

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
1.00	3.33	0.67	0.667
MILES-----^			
0.30			
WTU03-----grf-----^			
	100.00	1.00	

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: H74

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
82.00	93.18	1.00	1.000
MILES-----^			
0.88			
WTU03-----grf-----^			
	100.00	1.00	

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: P17

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
21.00	21.00	1.00	1.000
MILES-----^			
1.00			
WTU03-----grf-----^			
	100.00	1.00	

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: P49

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
5.00	10.00	1.00	1.000
MILES-----^			
0.50			
WTU03-----grf-----^			
	100.00	1.00	

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: P52

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
0.50	0.82	0.20	0.205
MILES-----^			
0.61			
WTU03-----grf-----^			
	100.00	1.00	

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: P65

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
4.00	200.00	1.00	1.000
MILES	^		
0.02			
WTU03			
grf			
100.00 1.00			

Study: OSPCCR

11-21-1987

Model: OSPREY--FOOD

CoverType: CC SubArea: P85

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
7.00	77.78	1.00	1.000
MILES	^		
0.09			
WTU03			
grf			
100.00 1.00			

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: H32

LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd
15.00	7.27	1.00	1.000
AREA			
10.32			
BNTREES	usf	grf	
3.00	29.07	1.00	
AREA			
10.32			

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: H60

LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd
2.00	0.20	0.56	0.000
AREA			
50.56			
BNTREES	usf	grf	
0.00	0.00	0.00	
AREA			
50.56			

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: H74

LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd
100.00	22.84	1.00	1.000
AREA			
21.89			
BNTREES	usf	grf	
9.00	41.11	1.00	
AREA			
21.89			

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: P17

```

      LEV 4      LEV 3      LEV 2      LEV 1
      APTREES---usf-----grf-----prd---HSI
              3.00 |      0.30      0.59 | 0.355
              |
      AREA-----^
              49.66
              |
      BNTREES---usf-----grf-----^
              1.00 |      2.01      0.60
              |
      AREA-----^
              49.66

```

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: P49

```

      LEV 4      LEV 3      LEV 2      LEV 1
      APTREES---usf-----grf-----prd---HSI
              5.00 |      2.39      1.00 | 0.000
              |
      AREA-----^
              10.44
              |
      BNTREES---usf-----grf-----^
              0.00 |      0.00      0.00
              |
      AREA-----^
              10.44

```

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: P52

```

      LEV 4      LEV 3      LEV 2      LEV 1
      APTREES---usf-----grf-----prd---HSI
              0.00 |      0.00      0.50 | 0.000
              |
      AREA-----^
              3.63
              |
      BNTREES---usf-----grf-----^
              0.00 |      0.00      0.00
              |
      AREA-----^
              3.63

```

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: P65

LEV 4	LEV 3	LEV 2	LEV 1
APTRES	usf	grf	prd
7.00	4.45	1.00	1.000
AREA	^		
7.86			
BNTRES	usf	grf	^
1.00	12.72	1.00	
AREA	^		
7.86			

Study: ROSPRCC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: CC SubArea: P85

LEV 4	LEV 3	LEV 2	LEV 1
APTRES	usf	grf	prd
9.00	17.44	1.00	1.000
AREA	^		
2.58			
BNTRES	usf	grf	^
1.00	38.76	1.00	
AREA	^		
2.58			

DOSPOC HABITAT DATA

11-09-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Open Canopy Conifer*

SPECIES: OSPREY

	COVER TYPE / SUB-AREA:			
VARIABLE:	DC R25	DC R49	DC R50	DC R74
APERCH	5.000	2.000	0.000	12.000
APTREES	3.000	0.000	2.000	20.000
AREA	1.000	2.230	4.620	1.000
00 BNT	1.000	0.000	1.000	9.000
00 MIL	0.240	0.060	0.120	0.270
00 WTU	95.000	250.000	250.000	225.000

Study: DOPDCD Model: OSPREY--FOOD

11-21-1987

CoverType	SubArea	Area	HSI
DC	R25	0.2	0.975
DC	R49	0.1	1.000
DC	R50	0.1	0.000
DC	R74	0.3	1.000
Overall:		0.7	0.817

Study: DOPDCD Model: OSPREY--REPRODUCTION

11-16-1987

CoverType	SubArea	Area	HSI
DC	R25	5.9	1.000
DC	R49	2.2	0.000
DC	R50	4.6	1.000
DC	R74	9.0	1.000
Overall:		21.8	0.898

Study name: DOPDCD

11-16-1987

HSI Values For The Entire Stud, Area:

	Area	HSI
OSPREY--FOOD	0.7	0.817
OSPREY--REPRODUCTION	21.8	0.898

Study: DOSPOC

11-22-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: R25

LEV 4	LEV 3	LEV 2	LEV 1
APTRES--usf-----grf-----prd--HSI			
3.00	15.00	1.00	1.000
AREA-----^			
1.00			
BNTRES--usf-----grf-----^			
1.00	100.00	1.00	
AREA-----^			
1.00			

Study: DOSPOC

11-22-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: R49

LEV 4	LEV 3	LEV 2	LEV 1
APTRES--usf-----grf-----prd--HSI			
0.00	0.00	0.50	0.000
AREA-----^			
2.23			
BNTRES--usf-----grf-----^			
0.00	0.00	0.00	
AREA-----^			
2.23			

Study: DOSPOC

11-22-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: R50

LEV 4	LEV 3	LEV 2	LEV 1
APTRES--usf-----grf-----prd--HSI			
2.00	2.16	1.00	1.000
AREA-----^			
4.62			
BNTRES--usf-----grf-----^			
1.00	21.65	1.00	
AREA-----^			
4.62			

Study: DQSPDC

11-22-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: R74

LEV 4	LEV 3	LEV 2	LEV 1
APTREES---usf-----grf-----prd--HSI			
20.00	100.00	1.00	1.000
AREA-----^			
1.00			
BNTREES---usf-----grf-----^			
9.00	900.00	1.00	
AREA-----^			
1.00			

Study: OSPCCD

11-21-1987

Model: OSPREY--FOOD

CoverType: OC SubArea: R25

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
5.00	20.83	1.00	0.975
MILES			
0.24			
	WTU03	grf	
	95.00	0.98	

Study: OSPCCD

11-21-1987

Model: OSPREY--FOOD

CoverType: OC SubArea: R49

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
2.00	33.33	1.00	1.000
MILES			
0.05			
	WTU03	grf	
	250.00	1.00	

Study: OSPCCD

11-21-1987

Model: OSPREY--FOOD

CoverType: OC SubArea: R50

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd-HSI
0.00	0.00	0.00	0.000
MILES			
0.12			
	WTU03	grf	
	250.00	1.00	

Study: OSPDCD

11-21-1987

Model: OSPREY--FOOD

CoverType: OC SubArea: R74

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
12.00	44.44	1.00	1.000
MILES-----^			
0.27			
WTU03-----grf-----^			
	225.00	1.00	

GORGE, PRE & POST PROJECT

HABITAT: *Open Canopy Conifer*

SPECIES: OSPREY

COVER TYPE / SUB-AREA:

	DC
VARIABLE:	D5
APERCH	2.000
APTREES	0.000
AREA	6.960
00 BNT	0.000
00 MIL	0.270
00 WTU	300.000

Study: DSPOC6 Model: DSPREY--FOOD

11-21-1987

CoverType	SubArea	Area	HSI
DC	DC	0.3	0.935

Overall:		0.3	0.935
----------	--	-----	-------

Study: 60SPOC Model: OPREY--REPRODUCTION

11-09-1987

CoverType	SubArea	Area	HSI
DC	D5	7.0	0.000

Overall:		7.0	0.000
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Study name: 60SPOC

11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
DSPREY--FOOD	0.3	0.935
OPREY--REPRODUCTION	7.0	0.000

Study: GOSP00

11-22-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: D5

LEV 4	LEV 3	LEV 2	LEV 1
APTREES	usf	grf	prd
0.00	0.00	0.50	0.000
AREA-----^			
6.96			
BNTREES	usf	grf	^
0.00	0.00	0.00	
AREA-----^			
6.96			

Study: OSPDCS

11-21-1987

Model: DSPREY--FDDO

CoverType: DC SubArea: DC

LEV 4	LEV 3	LEV 2	LEV 1
APERCH-----usf-----grf-----prd-HSI			
2.00	7.41	0.94	0.935
MILES-----^			
0.27			
	WTU03-----grf-----^		
	300.00	1.00	

ROSS, PRE & POST PROJECT

HABITAT: *Open Canopy Conifer*

SPECIES: OSPREY

	COVER TYPE / SUB-AREA:		
VARIABLE:	OC H25	OC H30	OC P68
APERCH	2.000	11.000	0.000
APTREES	7.000	24.000	0.000
AREA	4.040	6.960	1.140
00 BNT	1.000	9.000	0.000
00 MIL	0.180	0.300	0.080
00 WTU	100.000	100.000	100.000

Study: OSPOCR Model: OSPREY--FOOD

11-21-1987

CoverType	SubArea	Area	HSI
OC	H25	0.2	1.000
OC	H30	0.3	1.000
OC	P68	0.1	0.000

Overall: 0.6 0.857

Study: ROSPROC Model: OPREY--REPRODUCTION

11-09-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	1.000
OC	H30	7.0	1.000
OC	P68	1.1	0.000

Overall: 12.1 0.906

Study name: ROSPROC

11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
OSPREY--FOOD	0.6	0.857
OPREY--REPRODUCTION	12.1	0.906

Study: OSPOCR

11-21-1987

Model: OSPREY--FOOD

CoverType: OC SubArea: H25

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
2.00	11.11	1.00	1.000
MILES	^		
0.18			
WTU03		grf	^
100.00		1.00	

Study: OSPOCR

11-21-1987

Model: OSPREY--FOOD

CoverType: OC SubArea: H30

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
11.00	36.67	1.00	1.000
MILES	^		
0.30			
WTU03		grf	^
100.00		1.00	

Study: OSPOCR

11-21-1987

Model: OSPREY--FOOD

CoverType: OC SubArea: P68

LEV 4	LEV 3	LEV 2	LEV 1
APERCH	usf	grf	prd--HSI
0.00	0.00	0.00	0.000
MILES	^		
0.08			
WTU03		grf	^
100.00		1.00	

Study: ROSPROC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: H25

```
      LEV 4    LEV 3    LEV 2    LEV 1
      APTREES---usf-----grf-----prd--HSI
            7.00 |    8.66    1.00 |    1.000
            |
      AREA-----^
            4.04
            |
      BNTREES---usf-----grf-----^
            1.00 |    24.75    1.00
            |
      AREA-----^
            4.04
```

Study: ROSPROC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: H30

```
      LEV 4    LEV 3    LEV 2    LEV 1
      APTREES---usf-----grf-----prd--HSI
            24.00 |    17.24    1.00 |    1.000
            |
      AREA-----^
            6.96
            |
      BNTREES---usf-----grf-----^
            9.00 |    129.31    1.00
            |
      AREA-----^
            6.96
```

Study: ROSPROC

11-09-1987

Model: OPREY--REPRODUCTION

CoverType: OC SubArea: P68

```
      LEV 4    LEV 3    LEV 2    LEV 1
      APTREES---usf-----grf-----prd--HSI
            0.00 |    0.00    0.50 |    0.000
            |
      AREA-----^
            1.14
            |
      BNTREES---usf-----grf-----^
            0.00 |    0.00    0.00
            |
      AREA-----^
            1.14
```

MULE DEER

Note: See Appendix F for final HSI calculation for this species.

Model # 7

Single coverytype model.

Model name: MULE DEER—WINTER FOOD

Verification level: Author Draft

Creation/modification date: 10-28-1987

USFSM, Western Energy Land Use Team, Fort Collins, Colorado, 1982.

Coverytypes:

COG : old growth conifer

CC : mature closed canopy conifer

OC : mature open canopy conifer

LP : mature lodgepole pine

RC : regenerative conifer

RM : regenerative mixed

M : mixed conifer/broadleaf

B : mature broadleaf

S : shrubland

rCOG : riparian old growth conifer

rCC : riparian mature closed canopy conifer

rM : riparian mixed conifer/broadleaf

rB : riparian broadleaf

rS : riparian/avalanche shrubland

Lev 3 Lev 2 Lev 1
COSH—grf—usf—HSI
COPSH—grf—
COPHERB—grf—

Habitat variables:

COPHERB : Percent Palatable Herbaceous Canopy Cover

COPSHB : Percent Canopy Cover of Preferred Shrubs (2m in height

COSH : Percent shrub canopy cover (2m in height

GRAPH FUNCTION at level 2, position 1

Title: % Shrub Canopy Cover (2m in height

X: 0.000, Y: 0.000

X: 12.500, Y: 0.200

X: 20.000, Y: 0.300

X: 25.000, Y: 0.450

X: 30.000, Y: 0.600

X: 40.000, Y: 1.000

X: 65.000, Y: 1.000

X: 75.000, Y: 0.900

X: 100.000, Y: 0.700

GRAPH FUNCTION at level 2, position 2

Title: % Canopy Cover of Preferred Shrubs (2 m

X: 0.000, Y: 0.200
X: 6.250, Y: 0.200
X: 14.000, Y: 0.400

X: 25.000, Y: 0.650
X: 30.000, Y: 0.800
X: 37.000, Y: 0.900

X: 40.000, Y: 1.000
X: 60.000, Y: 1.000
X: 75.000, Y: 0.900

X: 100.000, Y: 0.700

GRAPH FUNCTION at level 2, position 3

Title: % Palatable Herbaceous Canopy Cover

X: 0.000, Y: 0.000

X: 5.000, Y: 0.150

X: 10.000, Y: 0.300

X: 15.000, Y: 0.500

X: 20.000, Y: 0.800

X: 25.000, Y: 0.900

X: 30.000, Y: 1.000

X: 100.000, Y: 1.000

USER-SPECIFIED FUNCTION at level 1, position 1

$((3*((X(1)+X(2))^5)+X(3)))/4$

Comments:

winter food model only

shrub data was collected on shrubs (2m not 1.5 m in height as stipulated
in the printed version

data was collected on palatable herbaceous canopy cover not just herbaceous
cover as stipulated in the printed version

Model # 8

Single covertype model.

Model name: MULE DEER—COVER

Verification level: Author Draft

Creation/modification date: 10-28-1987

USFWS, Western Energy Land Use Team, Fort Collins, Colorado, 1982.

Covertypes:

COG : old growth conifer
CC : mature closed canopy conifer
OC : mature open canopy conifer
LP : mature lodgepole pine
RC : regenerative conifer
RM : regenerative mixed
M : mixed conifer/broadleaf
B : mature broadleaf
S : shrubland
rCOG : riparian old growth conifer
rCC : riparian mature closed canopy conifer
rM : riparian mixed conifer/broadleaf
rB : riparian broadleaf
rS : riparian/avalanche shrubland

Lev 3 Lev 2 Lev 1
COEW — grf — usf — HBI
BT — — — — —

Habitat variables:

COEW : Cover of evergreen woody vegetation > 3.0m in height
BT : Topographic diversity

GRAPH FUNCTION at level 2, position 1

Title: % cover of evergreen woody vegetation

X:	0.000,	Y:	0.000
X:	10.000,	Y:	0.200
X:	18.000,	Y:	0.300
X:	20.000,	Y:	0.400
X:	25.000,	Y:	0.550
X:	31.250,	Y:	0.800
X:	37.500,	Y:	1.000
X:	100.000,	Y:	1.000

MENU FUNCTION at level 2, position 2

Menu choice:	1	Output value:	0.300
Menu choice:	2	Output value:	0.900
Menu choice:	3	Output value:	0.500
Menu choice:	4	Output value:	1.000

Menu choice: 5 Output value: 0.700

1 USER-SPECIFIED FUNCTION at level 1, position 1
2 ((2*X(1))+X(2))/3
3
4

5 Comments:
6 (none)
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DIABLO, PRE & POST PROJECT

HABITAT: *conifer Old Growth*

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:	
	COB	COB
VARIABLE:	R10	R11
COENW	83.000	99.000
COPHERB	7.400	8.400
COPSHB	6.767	3.200
COSH8	35.100	47.600
DT	4.000	4.000

Study: RPP-COG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
COG	R10	33.5	0.374
COG	R11	56.2	0.398

Overall: 89.7 0.389

Study: RPP-COG Model: MULE DEER--COVER

11-06-1987

CoverType	SubArea	Area	HSI
COG	R10	33.5	1.000
COG	R11	56.2	1.000

Overall: 89.7 1.000

Study name: RPP-COG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	89.7	0.389
MULE DEER--COVER	89.7	1.000

Study: RPP-CDG

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CDG SubArea: R10

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
36.10	0.84	0.374
COPSHB	grf	
6.77	0.21	
COPHERB	grf	^
7.40	0.22	

Study: RPP-CDG

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CDG SubArea: R11

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
47.60	1.00	0.398
COPSHB	grf	
3.20	0.20	
COPHERB	grf	^
8.40	0.25	

Study: RPP-COG

11-06-1987

Model: MULE DEER—COVER

CoverType: COG SubArea: R10

LEV 3	LEV 2	LEV 1
COEWV	grf	usf—HSI
83.00	1.00	1.000
DT	4.00	1.00

Study: RPP-COG

11-06-1987

Model: MULE DEER—COVER

CoverType: COG SubArea: R11

LEV 3	LEV 2	LEV 1
COEWV	grf	usf—HSI
99.00	1.00	1.000
DT	4.00	1.00

RPMDC06 HABITAT DATA

11-03-1987

ROSS - POST PROJECT + PRE-PROJECT

HABITAT: Conifer Old Growth

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:			
VARIABLE:	CO6 P05	CO6 P17A	CO6 P31	CO6 P59
COENV	98.333	100.000	87.000	93.933
COPHERB	4.667	1.500	4.500	0.167
COPSHB	1.933	0.000	7.500	21.967
COSH8	12.667	20.800	35.100	27.467
DT	4.000	4.000	4.000	4.000

Study: RPDCCOG Model: MULE DEER--WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
COG	P05	80.2	0.186
COG	P17A	1.0	0.202
COG	P31	4.7	0.358
COG	P59	7.9	0.415

Overall: 93.8 0.214

Study: RPDCCOG Model: MULE DEER--COVER

11-12-1987

CoverType	SubArea	Area	HSI
COG	P05	80.2	1.000
COG	P17A	1.0	1.000
COG	P31	4.7	1.000
COG	P59	7.9	1.000

Overall: 93.8 1.000

Study name: RPDCCOG

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	93.8	0.214
MULE DEER--COVER	93.8	1.000

Study: RPNDCOG

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: C06 SubArea: P05

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
12.67	0.20	0.186
COPSHB	grf	
1.93	0.20	
COPHERB	grf	^
4.67	0.14	

Study: RPNDCOG

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: C06 SubArea: P17A

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
20.80	0.32	0.202
COPSHB	grf	
0.00	0.20	
COPHERB	grf	^
1.50	0.05	

Study: RPNDCOG

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: C06 SubArea: P31

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
35.10	0.80	0.358
COPSHB	grf	
7.50	0.23	
COPHERB	grf	^
4.50	0.14	

Study: RPHDCOG

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: COG SubArea: P59

LEV 3	LEV 2	LEV 1
COSH	grf	usf-HSI
27.47	0.52	0.415
COPSH	grf	
21.97	0.58	
COPHER	grf	^
0.17	0.01	

Study: RPHDCOG

11-03-1987

Model: MULE DEER--COVER

CoverType: COG SubArea: P05

LEV 3	LEV 2	LEV 1
COEW	grf	usf-HSI
98.33	1.00	1.000
DT	nuu	^
4.00	1.00	

Study: RPHDCOG

11-03-1987

Model: MULE DEER--COVER

CoverType: COG SubArea: P17A

LEV 3	LEV 2	LEV 1
COEW	grf	usf-HSI
100.00	1.00	1.000
DT	nuu	^
4.00	1.00	

Study: RPNDC06

11-03-1987

Model: MULE DEER—COVER

CoverType: C06 SubArea: P31

LEV 3	LEV 2	LEV 1
COEW	grf	usf-HS1
87.00	1.00	1.000
DT	mmu	
4.00	1.00	

Study: RPNDC06

11-03-1987

Model: MULE DEER—COVER

CoverType: C06 SubArea: P39

LEV 3	LEV 2	LEV 1
COEW	grf	usf-HS1
93.93	1.00	1.000
DT	mmu	
4.00	1.00	

ERMDCOG HABITAT DATA

11-03-1987

EAST ROSS - PRE & POST PROJECT
 HABITAT: Conifer Old Growth
 SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:	
	COG	COG
VARIABLE:	P31	P59
COEWV	87.000	93.933
COPHERB	4.500	0.167
COPSHB	7.500	21.967
COSHb	33.100	27.467
DT	4.000	4.000

Study: ERMDC06 Model: MULE DEER—WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
COG	P31	4.7	0.358
COG	P59	7.9	0.415
Overall:		12.6	0.394

Study: ERMDC06 Model: MULE DEER—COVER

11-12-1987

CoverType	SubArea	Area	HSI
COG	P31	4.7	1.000
COG	P59	7.9	1.000
Overall:		12.6	1.000

Study name: ERMDC06

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER—WINTER FOOD	12.6	0.394
MULE DEER—COVER	12.6	1.000

Study: ERMDC06

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: C06 SubArea: P31

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
35.10	0.80	0.358
COPSHB	grf	
7.50	0.23	
COPHERB	grf	
4.50	0.14	

Study: ERMDC06

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: C06 SubArea: P59

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
27.47	0.52	0.415
COPSHB	grf	
21.97	0.58	
COPHERB	grf	
0.17	0.01	

Study: ERMDCOG

11-03-1987

Model: MULE DEER---COVER

CoverType: C08 SubArea: P31

LEV 3	LEV 2	LEV 1
COEW	grf	usf-HSI
87.00	1.00	1.000
DT	anu	
4.00	1.00	

Study: ERMDCOG

11-03-1987

Model: MULE DEER---COVER

CoverType: C06 SubArea: P59

LEV 3	LEV 2	LEV 1
COEW	grf	usf-HSI
93.93	1.00	1.000
DT	anu	
4.00	1.00	

11-06-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:		
VARIABLE:	CC R15	CC R16	CC R50
COEW	99.000	100.000	95.400
COPHERB	7.750	0.500	4.500
COPSHB	1.100	31.000	0.600
COSHB	5.450	61.400	28.400
DT	4.000	4.000	4.000

Study: RPP-C06 Model: MULE DEER—WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
CC	R15	35.6	0.157
CC	R16	29.0	0.681
CC	R50	4.6	0.283
Overall:		89.3	0.334

Study: RPP-C06 Model: MULE DEER—COVER

11-06-1987

CoverType	SubArea	Area	HSI
CC	R15	35.6	1.000
CC	R16	29.0	1.000
CC	R50	4.6	1.000
Overall:		89.3	1.000

Study name: RPP-C06

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER—WINTER FOOD	89.3	0.334
MULE DEER—COVER	89.3	1.000

Study: RPPrC06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: R15

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
5.45	0.09	0.157
COPSHB	grf	
1.10	0.20	
COPHERB	grf	^
7.75	0.23	

Study: RPPrC06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: R16

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
61.40	1.00	0.681
COPSHB	grf	
31.00	0.81	
COPHERB	grf	^
0.50	0.02	

Study: RPPrC06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: R50

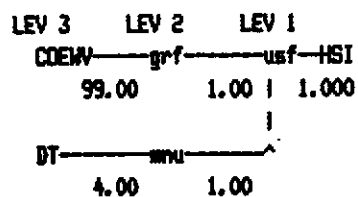
LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
28.40	0.55	0.283
COPSHB	grf	
0.60	0.20	
COPHERB	grf	^
4.50	0.14	

Study: RPP-COG

11-06-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: R15

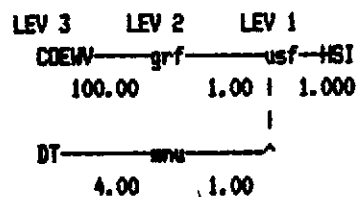


Study: RPP-COG

11-06-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: R16

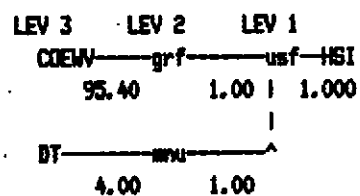


Study: RPP-COG

11-06-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: R50



SMOCC HABITAT DATA

11-06-1987

GORGE: PRE & POST PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	CC D21	CC D27	CC D34
COEWV	96.000	10.200	84.800
COPHERB	3.500	8.500	0.500
COPSHB	1.500	1.100	1.800
COSH	57.400	20.000	7.600
DT	4.000	4.000	4.000

Study: GNDCC Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
CC	D21	14.1	0.352
CC	D27	11.2	0.247
CC	D34	5.8	0.121

Overall: 31.2 0.276

Study: GNDCC Model: MULE DEER--COVER

11-06-1987

CoverType	SubArea	Area	HSI
CC	D21	14.1	1.000
CC	D27	11.2	0.468
CC	D34	5.8	1.000

Overall: 31.2 0.809

Study name: GNDCC

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	31.2	0.276
MULE DEER--COVER	31.2	0.809

Study: GNDCC

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: D21

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
57.40	1.00	0.362
COPSHB	grf	
1.50	0.20	
COPHERB	grf	^
3.50	0.11	

Study: GNDCC

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: D27

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
20.00	0.30	0.247
COPSHB	grf	
1.10	0.20	
COPHERB	grf	^
8.50	0.25	

Study: GNDCC

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: D34

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
7.60	0.12	0.121
COPSHB	grf	
1.80	0.20	
COPHERB	grf	^
0.50	0.02	

Study: GNDCC

11-06-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: D21

LEV 3	LEV 2	LEV 1
COENV	grf	usf—HSI
96.00	1.00	1.000
DT	msu	
4.00	1.00	

Study: GNDCC

11-06-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: D27

LEV 3	LEV 2	LEV 1
COENV	grf	usf—HSI
10.20	0.20	0.468
DT	msu	
4.00	1.00	

Study: GNDCC

11-06-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: D34

LEV 3	LEV 2	LEV 1
COENV	grf	usf—HSI
84.80	1.00	1.000
DT	msu	
4.00	1.00	

GNDCC HABITAT DATA

11-06-1987

RPMDC HABITAT DATA

11-03-1987

ROSS - POST PROJECT + PRE PROJECT

HABITAT: *Closed Canopy Conifer*

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:					
VARIABLE:	CC H32	CC H60	CC H74	CC P17	CC P44	CC P49
COENV	82.400	48.200	96.400	100.000	82.000	78.200
COPHERB	0.000	0.000	0.000	0.000	0.500	9.000
COPSHB	22.400	21.700	11.867	0.400	0.800	5.400
COSHB	72.000	63.400	22.033	10.300	27.500	34.400
DT	4.000	4.000	4.000	4.000	4.000	4.000

	COVER TYPE / SUB-AREA:		
VARIABLE:	CC P52	CC P65	CC R94
COENV	98.000	82.267	93.400
COPHERB	1.500	3.333	0.500
COPSHB	2.000	22.600	5.400
COSHB	6.600	66.333	23.600
DT	4.000	4.000	4.000

Study: RPDCC Model: MULE DEER--WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	0.556
CC	H60	50.6	0.569
CC	H74	21.9	0.265
CC	P17	49.7	0.136
CC	P44	54.6	0.247
CC	P49	10.4	0.363
CC	P52	3.6	0.120
CC	P65	7.9	0.600
CC	R94	24.0	0.218

Overall: 233.0 0.321

Study: RPDCC Model: MULE DEER--COVER

11-12-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	1.000
CC	H60	50.6	1.000
CC	H74	21.9	1.000
CC	P17	49.7	1.000
CC	P44	54.6	1.000
CC	P49	10.4	1.000
CC	P52	3.6	1.000
CC	P65	7.9	1.000
CC	R94	24.0	1.000

Overall: 233.0 1.000

Study name: RPDCC

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	233.0	0.321
MULE DEER--COVER	233.0	1.000

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: H32

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
72.00	0.93	0.556
COPSHB	grf	
22.40	0.59	
COPHERB	grf	
0.00	0.00	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: H60

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
63.40	1.00	0.569
COPSHB	grf	
21.70	0.58	
COPHERB	grf	
0.00	0.00	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: H74

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
22.03	0.36	0.265
COPSHB	grf	
11.87	0.34	
COPHERB	grf	
0.00	0.00	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: P17

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
10.30	0.16	0.136
COPSHB	grf	
0.40	0.20	
COPHERB	grf	^
0.00	0.00	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: P44

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
27.50	0.53	0.247
COPSHB	grf	
0.80	0.20	
COPHERB	grf	^
0.50	0.02	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: P49

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
34.40	0.78	0.363
COPSHB	grf	
5.40	0.20	
COPHERB	grf	^
9.00	0.27	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: P52

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
6.60	0.11	0.120
COPSHB	grf	
2.00	0.20	
COPHERB	grf	^
1.50	0.05	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: P65

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
66.33	0.99	0.600
COPSHB	grf	
22.60	0.60	
COPHERB	grf	^
3.33	0.10	

Study: RPNMCC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: R94

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
23.60	0.41	0.218
COPSHB	grf	
5.40	0.20	
COPHERB	grf	^
0.50	0.02	

Study: RPDCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: H32

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
82.40	1.00	1.000
DT	mw	
4.00	1.00	

Study: RPDCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: H60

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
48.20	1.00	1.000
DT	mw	
4.00	1.00	

Study: RPDCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: H74

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
96.40	1.00	1.000
DT	mw	
4.00	1.00	

Study: RPDCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: P17

LEV 3	LEV 2	LEV 1
COEWV	grf	usf HSI
100.00	1.00	1.000
DT	nuu	
4.00	1.00	

Study: RPDCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: P44

LEV 3	LEV 2	LEV 1
COEWV	grf	usf HSI
82.00	1.00	1.000
DT	nuu	
4.00	1.00	

Study: RPDCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: P49

LEV 3	LEV 2	LEV 1
COEWV	grf	usf HSI
78.20	1.00	1.000
DT	nuu	
4.00	1.00	

Study: RPNMCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: P52

LEV 3	LEV 2	LEV 1
COEW	grf	usf
98.00	1.00	1.000
DT	nu	
4.00	1.00	

Study: RPNMCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: P65

LEV 3	LEV 2	LEV 1
COEW	grf	usf
82.27	1.00	1.000
DT	nu	
4.00	1.00	

Study: RPNMCC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: R94

LEV 3	LEV 2	LEV 1
COEW	grf	usf
93.40	1.00	1.000
DT	nu	
4.00	1.00	

EAST ROSS - PRE & POST PROTECT

HABITAT: Closed Canopy Conifer

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:			
VARIABLE:	CC H32	CC P44	CC P49	CC P52
COEW	82.400	82.000	78.200	98.000
COPHERB	0.000	0.500	9.000	1.500
COPSHB	22.400	0.800	5.400	2.000
COSHB	72.000	27.500	34.400	6.600
DT	4.000	4.000	4.000	4.000

Study: ERMDC Model: MULE DEER—WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	0.556
CC	P44	54.6	0.247
CC	P49	10.4	0.363
CC	P52	3.6	0.120

Overall: 79.0 0.297

Study: ERMDC Model: MULE DEER—COVER

11-12-1987

CoverType	SubArea	Area	HSI
CC	H32	10.3	1.000
CC	P44	54.6	1.000
CC	P49	10.4	1.000
CC	P52	3.6	1.000

Overall: 79.0 1.000

Study name: ERMDC

11-12-1987

HSI Values For The Entire Study Area:

MULE DEER—WINTER FOOD
MULE DEER—COVER

Area	HSI
79.0	0.297
79.0	1.000

Study: ERMDC

11-03-1987

Model: MULE DEER-WINTER FOOD

CoverType: CC SubArea: H32

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
72.00	0.93	0.556
COPSHB	grf	
22.40	0.59	
COPHERB	grf	^
0.00	0.00	

Study: ERMDC

11-03-1987

Model: MULE DEER-WINTER FOOD

CoverType: CC SubArea: P44

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
27.50	0.53	0.247
COPSHB	grf	
0.80	0.20	
COPHERB	grf	^
0.50	0.02	

Study: ERMDC

11-03-1987

Model: MULE DEER-WINTER FOOD

CoverType: CC SubArea: P49

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
34.40	0.78	0.363
COPSHB	grf	
5.40	0.20	
COPHERB	grf	^
9.00	0.27	

Study: ERMDC

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: CC SubArea: P52

LEV 3	LEV 2	LEV 1
COSH—grf—	usf—HSI	
6.60	0.11	0.120
COPSH—grf—		
2.00	0.20	
COPHER—grf—		
1.50	0.05	

Study: ERMDC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: H32

LEV 3	LEV 2	LEV 1
COEW—grf—	usf—HSI	
82.40	1.00	1.000
DT—		
4.00	1.00	

Study: ERMDC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: P44

LEV 3	LEV 2	LEV 1
COEW—grf—	usf—HSI	
82.00	1.00	1.000
DT—		
4.00	1.00	

Study: ERMDC

11-03-1987

Model: MULE DEER—COVER

CoverType: CC SubArea: P49

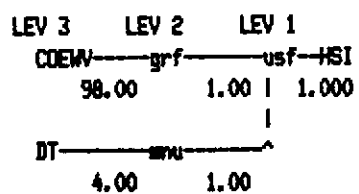
LEV 3	LEV 2	LEV 1
COEW—grf—	usf—HSI	
78.20	1.00	1.000
DT—		
4.00	1.00	

Study: ERMDC

11-03-1987

Model: MULE DEER-COVER

CoverType: CC SubArea: P52



Study Name: ERMDC

11-03-1987

Covertype	Sub-area	Area
RC	H22	3.10
RE	H39	27.79

RPP-COS HABITAT DATA

11-06-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Open Canopy Conifer*

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:		
VARIABLE:	DC D43	DC R49	DC R71
COEW	40.800	47.200	36.000
COPHERB	0.000	0.000	0.000
COPSHB	0.000	4.400	0.000
COSHB	7.800	5.000	0.000
DT	4.000	4.000	4.000

Study: RPPrC06 Model: MULE DEER—WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
OC	D43	1.9	0.118
OC	R49	2.2	0.095
OC	R71	3.9	0.000

Overall: 8.0 0.054

Study: RPPrC06 Model: MULE DEER—COVER

11-06-1987

CoverType	SubArea	Area	HSI
OC	D43	1.9	1.000
OC	R49	2.2	1.000
OC	R71	3.9	0.968

Overall: 8.0 0.984

Study name: RPPrC06

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER—WINTER FOOD	8.0	0.054
MULE DEER—COVER	8.0	0.984

Study: RPP-C06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: OC SubArea: D43

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
7.80	0.12	0.118
COPSHB	grf	
0.00	0.20	
COPHERB	grf	^
0.00	0.00	

Study: RPP-C06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: OC SubArea: R49

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
5.00	0.08	0.095
COPSHB	grf	
4.40	0.20	
COPHERB	grf	^
0.00	0.00	

Study: RPP-C06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: OC SubArea: R71

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
0.00	0.00	0.000
COPSHB	grf	
0.00	0.20	
COPHERB	grf	^
0.00	0.00	

Study: RPP-CDG

11-06-1987

Model: MULE DEER—COVER

CoverType: DC SubArea: D43

LEV 3	LEV 2	LEV 1	
COEWV	grf	usf	HSI
40.80	1.00	1.000	
DT	anu		
4.00	1.00		

Study: RPP-CDG

11-06-1987

Model: MULE DEER—COVER

CoverType: DC SubArea: R49

LEV 3	LEV 2	LEV 1	
COEWV	grf	usf	HSI
47.20	1.00	1.000	
DT	anu		
4.00	1.00		

Study: RPP-CDG

11-06-1987

Model: MULE DEER—COVER

CoverType: DC SubArea: R71

LEV 3	LEV 2	LEV 1	
COEWV	grf	usf	HSI
36.00	0.95	0.968	
DT	anu		
4.00	1.00		

GORGE, PRE & POST PROJECT

HABITAT: *Open Canopy Conifer*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	OC
	029
COEW	59.000
COPHERB	4.500
COPSHB	17.000
COSHB	36.200
DT	4.000

Study: GNDCC Model: MULE DEER—WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
DC	D29	6.4	0.506

Overall:		6.4	0.506
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Study: GNDCC Model: MULE DEER—COVER

11-06-1987

CoverType	SubArea	Area	HSI
DC	D29	6.4	1.000

Overall:		6.4	1.000
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Study name: GNDCC

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER—WINTER FOOD	6.4	0.506
MULE DEER—COVER	6.4	1.000

Study: GMDOC

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: OC SubArea: D29

LEV 3	LEV 2	LEV 1
CDSHB	grf	usf HSI
36.20	0.85	0.506
COPSHB	grf	
17.00	0.47	
COPHERB	grf	
4.50	0.14	

Study: GMDOC

11-06-1987

Model: MULE DEER—COVER

CoverType: OC SubArea: D29

LEV 3	LEV 2	LEV 1
COENV	grf	usf HSI
59.00	1.00	1.000
DT	grf	
4.00	1.00	

RPMDOC HABITAT DATA

11-09-1987

ROSS - POST PROJECT + PRE PROJECT

HABITAT: Open Canopy Conifer

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:		
VARIABLE:	DC H25	DC H30	DC P68
COEW	78.000	5.400	18.200
COPHERB	8.750	6.333	5.455
COPSHB	11.750	4.867	41.000
COSHB	27.100	11.033	56.600
DT	4.000	4.000	4.000

Study: RPNDOC Model: MULE DEER—WINTER FOOD

11-09-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	0.380
OC	H30	7.0	0.188
OC	P68	1.1	0.791

Overall: 12.1 0.309

Study: RPNDOC Model: MULE DEER—COVER

11-09-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	1.000
OC	H30	7.0	0.405
OC	P68	1.1	0.540

Overall: 12.1 0.616

Study name: RPNDOC

11-09-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER—WINTER FOOD	12.1	0.309
MULE DEER—COVER	12.1	0.616

Study: RPNDOC

11-16-1987

Model: MULE DEER--WINTER FOOD

CoverType: OC SubArea: H25

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
27.10	0.51	0.380
COPSHB	grf	
11.75	0.34	
COPHERB	grf	^
8.75	0.26	

Study: RPNDOC

11-16-1987

Model: MULE DEER--WINTER FOOD

CoverType: OC SubArea: H30

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
11.03	0.18	0.188
COPSHB	grf	
4.87	0.20	
COPHERB	grf	^
6.33	0.19	

Study: RPNDOC

11-16-1987

Model: MULE DEER--WINTER FOOD

CoverType: OC SubArea: P68

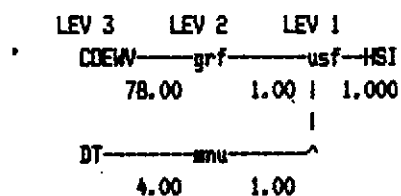
LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
56.60	1.00	0.791
COPSHB	grf	
41.00	1.00	
COPHERB	grf	^
5.46	0.16	

Study: RPD0C

11-16-1987

Model: MULE DEER—COVER

CoverType: DC SubArea: H25

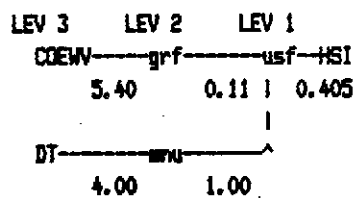


Study: RPD0C

11-16-1987

Model: MULE DEER—COVER

CoverType: DC SubArea: H30

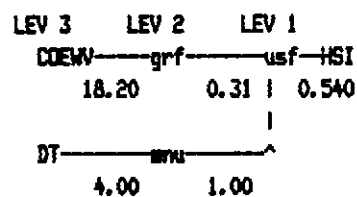


Study: RPD0C

11-16-1987

Model: MULE DEER—COVER

CoverType: DC SubArea: P68



EAST ROSS - PRE & POST PROTECT

HABITAT: Open Canopy Conifer

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	DC H25	DC H30	DC P68
COEWV	78.000	5.400	18.200
COPHERB	8.750	6.333	5.455
COPSHB	11.750	4.867	41.000
COSHB	27.100	11.033	56.600
DT	4.000	4.000	4.000

Study: ERMDOC Model: MULE DEER—WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	0.380
OC	H30	7.0	0.188
OC	P68	1.1	0.791

Overall: 12.1 0.309

Study: ERMDOC Model: MULE DEER—COVER

11-06-1987

CoverType	SubArea	Area	HSI
OC	H25	4.0	1.000
OC	H30	7.0	0.405
OC	P68	1.1	0.540

Overall: 12.1 0.616

Study name: ERMDOC

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER—WINTER FOOD	12.1	0.309
MULE DEER—COVER	12.1	0.616

Study: ERMDOC

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: OC SubArea: H25

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
27.10	0.51	0.380
COPSHB	grf	
11.75	0.34	
COPHERB	grf	^
8.75	0.26	

Study: ERMDOC

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: OC SubArea: H30

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
11.03	0.18	0.188
COPSHB	grf	
4.87	0.20	
COPHERB	grf	^
6.33	0.19	

Study: ERMDOC

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: OC SubArea: P68

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
56.60	1.00	0.791
COPSHB	grf	
41.00	1.00	
COPHERB	grf	^
5.46	0.16	

Study: ERMDOC

11-06-1987

Model: MULE DEER—COVER

CoverType: DC SubArea: H25

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
78.00	1.00	1.000
DT	mw	
4.00	1.00	

Study: ERMDOC

11-06-1987

Model: MULE DEER—COVER

CoverType: OC SubArea: H30

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
5.40	0.11	0.405
DT	mw	
4.00	1.00	

Study: ERMDOC

11-06-1987

Model: MULE DEER—COVER

CoverType: OC SubArea: P68

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
18.20	0.31	0.540
DT	mw	
4.00	1.00	

RPP-COS HABITAT DATA

11-06-1987

DIABLO, PRE & POST PROJECT
HABITAT: *Lodgepole Pine*
SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:	
	LP	LP
VARIABLE:	R32	R57
COEW	37.200	68.600
COPHERB	3.850	0.000
COPSHB	0.050	0.000
COSHB	67.950	5.200
DT	4.000	4.000

Study: RPP-COG Model: MULE DEER—WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
LP	R32	8.0	0.359
LP	R57	12.3	0.097
Overall:		20.3	0.200

Study: RPP-COG Model: MULE DEER—COVER

11-06-1987

CoverType	SubArea	Area	HSI
LP	R32	8.0	0.994
LP	R57	12.3	1.000
Overall:		20.3	0.997

Study name: RPP-COG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER—WINTER FOOD	20.3	0.200
MULE DEER—COVER	20.3	0.997

Study: RPP-C06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: LP SubArea: R32

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
67.95	0.97	0.359
COPSHB	grf	
0.05	0.20	
COPHERB	grf	
3.85	0.12	

Study: RPP-C06

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: LP SubArea: R57

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
5.20	0.08	0.097
COPSHB	grf	
0.00	0.20	
COPHERB	grf	
0.00	0.00	

Study: RPP-CDG

11-06-1987

Model: MULE DEER—COVER

CoverType: LP SubArea: R32

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
37.20	0.99	0.994
DT	ms	
4.00	1.00	

Study: RPP-CDG

11-06-1987

Model: MULE DEER—COVER

CoverType: LP SubArea: R57

LEV 3	LEV 2	LEV 1
COEW	grf	usf HSI
68.60	1.00	1.000
DT	ms	
4.00	1.00	

RPMDLP HABITAT DATA

11-03-1987

ROSS - POST PROJECT + *PRE PROJECT*
 HABITAT: *Lodgepole Pine*
 SPECIES: MULE DEER

VARIABLE:	COVER TYPE / SUB-AREA:		
	LP P33	LP P84	LP R98
COEW	70.800	71.200	42.900
COPHERB	0.500	0.000	0.167
COPSHB	0.900	3.300	2.900
COSHB	9.900	17.700	47.500
DT	4.000	4.000	4.000

Study: RPMDLP Model: MULE DEER--WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
LP	P33	7.9	0.137
LP	P84	2.6	0.174
LP	R98	28.6	0.337

Overall: 39.1 0.286

Study: RPMDLP Model: MULE DEER--COVER

11-12-1987

CoverType	SubArea	Area	HSI
LP	P33	7.9	1.000
LP	P84	2.6	1.000
LP	R98	28.6	1.000

Overall: 39.1 1.000

Study name: RPMDLP

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	39.1	0.286
MULE DEER--COVER	39.1	1.000

Study: RPMDLP

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: LP SubArea: P33

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
9.90	0.16	0.137
COPSHB	grf	
0.90	0.20	
COPHERB	grf	^
0.50	0.02	

Study: RPMDLP

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: LP SubArea: P84



LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
17.70	0.27	0.174
COPSHB	grf	
3.30	0.20	
COPHERB	grf	^
0.00	0.00	

Study: RPMDLP

11-03-1987

Model: MULE DEER—WINTER FOOD

CoverType: LP SubArea: R98

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
47.50	1.00	0.337
COPSHB	grf	
2.90	0.20	
COPHERB	grf	^
0.17	0.01	

Study: RPNLDP

11-03-1987

Model: MULE DEER---COVER

CoverType: LP SubArea: P33

LEV 3	LEV 2	LEV 1
COENV	grf	usf HSI
70.80	1.00	1.000
DT	anu	
4.00	1.00	

Study: RPNLDP

11-03-1987

Model: MULE DEER---COVER

CoverType: LP SubArea: P84

LEV 3	LEV 2	LEV 1
COENV	grf	usf HSI
71.20	1.00	1.000
DT	anu	
4.00	1.00	

Study: RPNLDP

11-03-1987

Model: MULE DEER---COVER

CoverType: LP SubArea: R96

LEV 3	LEV 2	LEV 1
COENV	grf	usf HSI
42.90	1.00	1.000
DT	anu	
4.00	1.00	

ERMOLP HABITAT DATA

11-06-1987

EAST ROSS - PRE & POST PROJECT

HABITAT: Lodgepole Pine

SPECIES: MULE DEER

VARIABLE:	COVER TYPE / SUB-AREA:	
	LP	LP
	P33	R98
COEW	70.800	42.900
COPHERB	0.500	0.167
COPSHB	0.900	2.900
COSH	9.900	47.500
DT	4.000	4.000

Study: ERMOLP Model: MULE DEER--WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
LP	P33	7.9	0.137
LP	R98	28.6	0.337

Overall: 36.5 0.294

Study: ERMOLP Model: MULE DEER--COVER

11-12-1987

CoverType	SubArea	Area	HSI
LP	P33	7.9	1.000
LP	R98	28.6	1.000

Overall: 36.5 1.000

Study name: ERMOLP

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	36.5	0.294
MULE DEER--COVER	36.5	1.000

Study: ERMOLP

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: LP SubArea: P33

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
9.90	0.16	0.137
COPSHB	grf	
0.90	0.20	
COPHERB	grf	^
0.50	0.02	

Study: ERMOLP

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: LP SubArea: R98

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
47.50	1.00	0.337
COPSHB	grf	
2.90	0.20	
COPHERB	grf	^
0.17	0.01	

Study: ERMDLP

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: LP SubArea: P33

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
9.90	0.16	0.137
COPSHB	grf	
0.90	0.20	
COPHERB	grf	^
0.50	0.02	

Study: ERMDLP

11-06-1987

Model: MULE DEER—WINTER FOOD

CoverType: LP SubArea: R96

LEV 3	LEV 2	LEV 1
COSHB	grf	usf—HSI
47.50	1.00	0.337
COPSHB	grf	
2.90	0.20	
COPHERB	grf	^
0.17	0.01	

11-03-1987

EAST ROSS - PRE & POST PROJECT
HABITAT: Regenerative Conifer
SPECIES: MULE DEER

VARIABLE:	COVER TYPE / SUB-AREA:	
	RC H22	RC H39
COENV	34.600	70.800
COPHERB	0.000	0.000
COPSHB	9.200	63.800
COSHb	31.800	116.800
DT	4.000	4.000

Study: ERMDRC Model: MULE DEER--WINTER FOOD

11-03-1987

CoverType	SubArea	Area	HSI
RC	H22	3.1	0.323
RC	H39	27.8	0.619
Overall:		30.9	0.590

Study: ERMDRC Model: MULE DEER--COVER

11-03-1987

CoverType	SubArea	Area	HSI
RC	H22	3.1	0.938
RC	H39	27.8	1.000
Overall:		30.9	0.994

Study name: ERMDRC

11-03-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	30.9	0.590
MULE DEER--COVER	30.9	0.994

Study: ERMDRC

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RC SubArea: H22

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
31.80	0.67	0.323
COPSHB	grf	
9.20	0.28	
COPHERB	grf	^
0.00	0.00	

Study: ERMDRC

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RC SubArea: H39

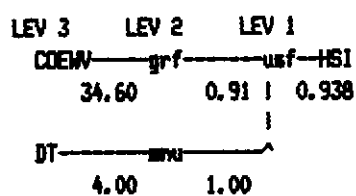
LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
116.80	0.70	0.619
COPSHB	grf	
63.80	0.97	
COPHERB	grf	^
0.00	0.00	

Study: ERMDRC

11-03-1987

Model: MULE DEER—COVER

CoverType: RC SubArea: H22

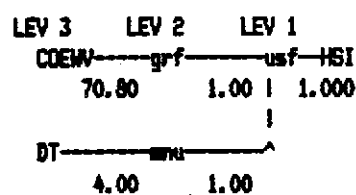


Study: ERMDRC

11-03-1987

Model: MULE DEER—COVER

CoverType: RC SubArea: H39



Study Name: ERMDC06

11-03-1987

Covertype	Sub-area	Area
COG	P31	9.46
COG	P59	7.90

ROSS - POST PROJECT + PRE PROJECT + DIABLO PRE- & POST + GORGE PRE-PROJECT
HABITAT: Regenerative Conifer
SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:			
VARIABLE:	RC H22	RC H39	RC H53	RC H64A = H84
COEWV	34.600	70.800	88.267	97.600
COPHERB	0.000	0.000	5.773	2.000
COPSHB	9.200	63.800	37.533	28.400
COSHB	31.800	116.800	49.933	98.800
DT	4.000	4.000	4.000	4.000

Study: RPMDRC Model: MULE DEER--WINTER FOOD 11-12-1987

CoverType	SubArea	Area	HSI
RC	H22	3.1	0.323
RC	H39	27.8	0.619
RC	H53	14.4	0.762
RC	H64A	6.3	0.563

Overall: 51.6 0.635

Study: RPMDRC Model: MULE DEER---COVER 11-12-1987

CoverType	SubArea	Area	HSI
RC	H22	3.1	0.938
RC	H39	27.8	1.000
RC	H53	14.4	1.000
RC	H64A	6.3	1.000

Overall: 51.6 0.996

Study name: RPMDRC 11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	51.6	0.635
MULE DEER---COVER	51.6	0.996

Study: RPDRC

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RC SubArea: HMA = H84

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
98.80	0.71	0.563
COPSHB-----grf-----		
28.40	0.75	
COPHERE-----grf-----^		
2.00	0.06	

Study: RPDRC

11-03-1987

Model: MULE DEER---COVER

CoverType: RC SubArea: H22

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
34.60	0.91	0.938
DT-----mnu-----^		
4.00	1.00	

Study: RPDRC

11-03-1987

Model: MULE DEER---COVER

CoverType: RC SubArea: H39

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
70.80	1.00	1.000
DT-----mnu-----^		
4.00	1.00	

Study: RPMDRC

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RC SubArea: H22

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
31.80	0.67	0.323
COPSHB-----grf-----		
9.20	0.28	
COPHERB-----grf-----^		
0.00	0.00	

Study: RPMDRC

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RC SubArea: H29

LEV 3	LEV 2	LEV 1
COSHE-----grf-----usf--HSI		
116.80	0.70	0.515
COPSHB-----grf-----		
63.80	0.97	
COPHERB-----grf-----^		
0.00	0.00	

Study: RPMDRC

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RC SubArea: H52

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
49.93	1.00	0.752
COPSHB-----grf-----		
37.53	0.92	
COPHERB-----grf-----^		
5.77	0.17	

Study: RMDRC

11-03-1987

Model: MULE DEER---COVER

CoverType: RC SubArea: H53

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
88.27	1.00	1.000
		1
DT-----mru-----		
4.00	1.00	

Study: RMDRC

11-03-1987

Model: MULE DEER---COVER

CoverType: RC SubArea: ~~H54~~ = H54

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
37.60	1.00	1.000
		1
DT-----mru-----		
4.00	1.00	

DIABLO, POST PROJECT
HABITAT: *Mixed Forest*
SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	M R67
COEWV	44.867
COPHER	0.833
COPSHB	3.533
COSHB	25.667
DT	4.000

Study: RPPrCDG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
M	R67	5.6	0.236

Overall:		5.6	0.236
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Study: RPPrCDG Model: MULE DEER---COVER

11-06-1987

CoverType	SubArea	Area	HSI
M	R67	5.6	1.000

Overall:		5.6	1.000
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Study name: RPPrCDG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	5.6	0.236
MULE DEER---COVER	5.6	1.000

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: M SubArea: R67

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
25.67	0.47	0.236
COPSHB-----grf-----		
3.53	0.20	
COPHERB-----grf-----^		
0.83	0.02	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: M SubArea: R67

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
44.87	1.00	1.000
DT-----msu-----^		
4.00	1.00	

GMDM HABITAT DATA

11-06-1987

GORGE, POST PROJECT
HABITAT: *Mixed Forest*
SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	M
DEWV	66.900
COFHRE	1.500
COFSHR	13.000
COSHR	28.400
DT	4.000

Study: GMDM Model: MULE DEER--WINTER FOOD 11-06-1987

CoverType	SubArea	Area	HSI
M	D17	8.6	0.352

Overall: 8.6 0.352

Study: GMDM Model: MULE DEER---COVER 11-06-1987

CoverType	SubArea	Area	HSI
M	D17	8.6	1.000

Overall: 8.6 1.000

Study name: GMDM 11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	8.6	0.352
MULE DEER---COVER	8.6	1.000

Study: GMDM

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: M SubArea: D17

LEV 3	LEV 2	LEV 1
COSHB	grf	usf--HSI
28.40	0.55	0.352
COPSHB	grf	
13.00	0.37	
COPHERB	grf	^
1.50	0.05	

Study: GMDM

11-06-1987

Model: MULE DEER---COVER

CoverType: M SubArea: D17

LEV 3	LEV 2	LEV 1
COEWV	grf	usf--HSI
66.90	1.00	1.000
DT	msu	^
4.00	1.00	

RPMDM HABITAT DATA

11-03-1987

ROSS - POST PROJECT

HABITAT: *Mixed Forest*

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:		
VARIABLE:	M	M	M
	H24	P42	RB3
COEWV	81.100	77.000	66.200
COFHRS	1.000	7.000	0.000
COFSHR	15.100	12.800	4.433
COSSH	37.400	47.800	31.900
DT	4.000	4.000	4.000

Study: RPMDM Model: MULE DEER--WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	0.470
M	P42	6.4	0.508
M	R83	4.7	0.276
Overall:		13.8	0.421

Study: RPMDM Model: MULE DEER---COVER

11-12-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	1.000
M	P42	6.4	1.000
M	R83	4.7	1.000
Overall:		13.8	1.000

Study name: RPMDM

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	13.8	0.421
MULE DEER---COVER	13.8	1.000

Study: RPMDM

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: M SubArea: H24

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
37.40	0.90	0.470
COPSHB-----grf-----		
15.10	0.43	
COPHERB-----grf-----^		
1.00	0.03	

Study: RPMDM

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: M SubArea: P42

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
47.80	1.00	0.508
COPSHB-----grf-----		
12.80	0.37	
COPHERB-----grf-----^		
7.00	0.21	

Study: RPMDM

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: M SubArea: R83

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
31.90	0.68	0.276
COPSHB-----grf-----		
4.43	0.20	
COPHERB-----grf-----^		
0.00	0.00	

Study: RPFMDM

11-03-1987

Model: MULE DEER---COVER

CoverType: M SubArea: H24

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
81.10	1.00	1.000
DT	mnv	^
4.00	1.00	

Study: RPFMDM

11-03-1987

Model: MULE DEER---COVER

CoverType: M SubArea: P42

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
77.00	1.00	1.000
DT	mnv	^
4.00	1.00	

Study: RPFMDM

11-03-1987

Model: MULE DEER---COVER

CoverType: M SubArea: R83

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
66.20	1.00	1.000
DT	mnv	^
4.00	1.00	

LRMDM HABITAT DATA

11-12-1987

EAST ROSS - *POST PROJECT*
 HABITAT: *Mixed Forest*
 SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:	
	M	M
VARIABLE:	H24	P42
COEWV	81.100	77.000
COFHERB	1.000	7.000
COPSHB	15.100	12.800
COSHB	37.400	47.800
DT	4.000	4.000

Study: ERMDM Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	0.470
M	P42	6.4	0.508

Overall: 9.1 0.497

Study: ERMDM Model: MULE DEER---COVER

11-06-1987

CoverType	SubArea	Area	HSI
M	H24	2.7	1.000
M	P42	6.4	1.000

Overall: 9.1 1.000

Study name: ERMDM

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	9.1	0.497
MULE DEER---COVER	9.1	1.000

Study: ERMDM

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: M SubArea: H24

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
37.40	0.90	0.470
COPSHB-----grf-----		
15.10	0.43	
COPHERB-----grf-----^		
1.00	0.03	

Study: ERMDM

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: M SubArea: P42

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
47.80	1.00	0.508
COPSHB-----grf-----		
12.80	0.37	
COPHERB-----grf-----^		
7.00	0.21	

Study: ERMDM

11-06-1987

Model: MULE DEER---COVER

CoverType: M SubArea: H24

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
81.10	1.00	1.000
DT-----mru-----^		
4.00	1.00	

Study: ERMDM

11-06-1987

Model: MULE DEER---COVER

CoverType: M SubArea: P42

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
77.00	1.00	1.000
DT-----mru-----^		
4.00	1.00	

ERMDS HABITAT DATA

11-06-1987

ROSS - POST PROJECT + PRE PROJECT
HABITAT: *Regenerative Mixed Forest*
SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	RM H15	RM H64=H85	RM P80
COEWV	13.800	41.200	6.000
COPHERB	6.500	1.667	1.500
COPSHB	40.800	19.867	41.800
COSHE	83.500	64.567	84.900
DT	4.000	4.000	4.000

Study: RPDORM Model: MULE DEER--WINTER FOOD

11-12-1987

CoverType	SubArea	Area	HSI
RM	H15	4.3	0.733
RM	H54	16.2	0.560
RM	P80	10.0	0.631

Overall: 30.5 0.627

Study: RPDORM Model: MULE DEER---COVER

11-12-1987

CoverType	SubArea	Area	HSI
RM	H15	4.3	0.498
RM	H54	16.2	1.000
RM	P80	10.0	0.413

Overall: 30.5 0.737

Study name: RPDORM

11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	30.5	0.627
MULE DEER---COVER	30.5	0.737

Study: RPNDRM

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RM SubArea: H15

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
83.50	0.83	0.733
COPSHB-----grf-----		
40.80	1.00	
COPHERB-----grf-----^		
6.50	0.20	

Study: RPNDRM

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RM SubArea: H64

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
64.57	1.00	0.560
COPSHB-----grf-----		
19.87	0.53	
COPHERB-----grf-----^		
1.67	0.05	

Study: RPNDRM

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: RM SubArea: P80

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
84.90	0.82	0.691
COPSHB-----grf-----		
41.80	1.00	
COPHERB-----grf-----^		
1.50	0.05	

Study: RPDARM

11-03-1987

Model: MULE DEER---COVER

CoverType: RM SubArea: H15

LEV 3	LEV 2	LEV 1
COEWV	grf	usf--HSI
13.80	0.25	0.498
DT	mnw	
4.00	1.00	

Study: RPDARM

11-03-1987

Model: MULE DEER---COVER

CoverType: RM SubArea: H14

LEV 3	LEV 2	LEV 1
COEWV	grf	usf--HSI
41.20	1.00	1.000
DT	mnw	
4.00	1.00	

Study: RPDARM

11-03-1987

Model: MULE DEER---COVER

CoverType: RM SubArea: F80

LEV 3	LEV 2	LEV 1
COEWV	grf	usf--HSI
6.00	0.12	0.413
DT	mnw	
4.00	1.00	

EAST ROSS - PRE & POST PROJECT

HABITAT: Regenerative Mixed Forest

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

	RM
VARIABLE:	H15
COEWV	13.800
COPHERB	6.500
COPSHB	40.800
COSHE	83.500
DT	4.000

Study: ERMDRM Model: MULE DEER--WINTER FOOD 11-06-1987

CoverType	SubArea	Area	HSI
RM	H15	4.3	0.733

Overall:		4.3	0.733
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Study: ERMDRM Model: MULE DEER---COVER 11-06-1987

CoverType	SubArea	Area	HSI
RM	H15	4.3	0.498

Overall:		4.3	0.498
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Study name: ERMDRM 11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	4.3	0.733
MULE DEER---COVER	4.3	0.498

Study: ERMDRM

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: RM SubArea: H15

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
83.50	0.83	0.733
COPSHB-----grf-----		
40.80	1.00	
COPHERB-----grf-----^		
6.50	0.20	

Study: ERMDRM

11-06-1987

Model: MULE DEER---COVER

CoverType: RM SubArea: H15

LEV 3	LEV 2	LEV 1
COENV-----grf-----usf--HSI		
13.80	0.25	0.498
DT-----grf-----^		
4.00	1.00	

RPP-006 HABITAT DATA

11-06-1987

DIABLO, PRE & POST PROJECT

HABITAT: *Broodleaf*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	B R51	B R60
CDEWV	23.600	41.000
COPHERB	0.000	0.000
COPSHR	0.300	0.300
COSHR	51.400	50.700
DT	4.000	4.000

Study: RPPrCOG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
B	R51	9.2	0.335
B	R60	3.8	0.335

Overall: 13.0 0.335

Study: RPPrCOG Model: MULE DEER---COVER

11-06-1987

CoverType	SubArea	Area	HSI
B	R51	9.2	0.672
B	R60	3.8	1.000

Overall: 13.0 0.769

Study name: RPPrCOG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	13.0	0.335
MULE DEER---COVER	13.0	0.769

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: B SubArea: R51

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
51.40	1.00	0.335
COPSHB-----grf-----		
0.30	0.20	
COPHERB-----grf-----^		
0.00	0.00	

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: B SubArea: R60

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
50.70	1.00	0.335
COPSHB-----grf-----		
0.90	0.20	
COPHERB-----grf-----^		
0.00	0.00	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: B SubArea: R51

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
23.60	0.51	0.672
DT-----mnu-----		
4.00	1.00	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: B SubArea: R50

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
41.00	1.00	1.000
DT-----mnu-----		
4.00	1.00	

ROSS - POST PROJECT + PRE PROJECT

HABITAT: Broadleaf

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:		
	B	B	B
VARIABLE:	H44	H54	P55
CGENV	31.000	7.333	49.900
COFHERB	0.000	7.500	1.000
COFSHP	40.000	7.667	12.800
COSSH2	67.600	61.833	49.700
DT	4.000	4.000	4.000

Study: RPMD8 Model: MULE DEER--WINTER FOOD

11-03-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.740
B	H54	10.7	0.421
B	P55	5.6	0.463
Overall:		18.9	0.479

Study: RPMD8 Model: MULE DEER---COVER

11-03-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.860
B	H54	10.7	0.431
B	P55	5.6	1.000
Overall:		18.9	0.660

Study name: RPMD8

11-03-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	18.9	0.479
MULE DEER---COVER	18.9	0.660

Study: RPMDB

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: B SubArea: H44

LEV 3	LEV 2	LEV 1
COSHB----	grf-----	usf--HSI
67.60	0.97	0.740
COPSHB----	grf-----	
40.00	1.00	
COPHERB----	grf-----	^
0.00	0.00	

Study: RPMDB

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: B SubArea: H54

LEV 3	LEV 2	LEV 1
COSHB----	grf-----	usf--HSI
61.93	1.00	0.421
COPSHB----	grf-----	
7.67	0.24	
COPHERB----	grf-----	^
7.50	0.22	

Study: RPMDB

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: B SubArea: P55

LEV 3	LEV 2	LEV 1
COSHB----	grf-----	usf--HSI
49.70	1.00	0.463
COPSHB----	grf-----	
12.80	0.37	
COPHERB----	grf-----	^
1.00	0.03	

Study: RPD2

11-03-1987

Model: MULE DEER---COVER

CoverType: B SubArea: H44

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
31.00	0.79	0.860
DT-----mru-----		
4.00	1.00	

Study: RPD2

11-03-1987

Model: MULE DEER---COVER

CoverType: B SubArea: H54

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
7.33	0.15	0.431
DT-----mru-----		
4.00	1.00	

Study: RPD2

11-03-1987

Model: MULE DEER---COVER

CoverType: B SubArea: P55

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
48.80	1.00	1.000
DT-----mru-----		
4.00	1.00	

ERMOR HABITAT DATA

11-06-1987

EAST ROSS — PRE & POST PROJECT

HABITAT: Broadleaf

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	B H44	B P55
COEW	31.000	48.800
COHERB	0.000	1.000
COPSHB	40.000	12.800
COSSH	67.600	49.700
DT	4.000	4.000

Study: ERMDB Model: MULE DEER--WINTER FOOD 11-06-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.740
B	P55	5.6	0.463

Overall: 8.2 0.553

Study: ERMDB Model: MULE DEER---COVER 11-06-1987

CoverType	SubArea	Area	HSI
B	H44	2.7	0.860
B	P55	5.6	1.000

Overall: 8.2 0.955

Study name: ERMDB 11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	8.2	0.553
MULE DEER---COVER	8.2	0.955

Study: ERMDB

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: B SubArea: H44

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
67.60	0.97	0.740
COPSHB-----grf-----		
40.00	1.00	
COPHERB-----grf-----^		
0.00	0.00	

Study: ERMDB

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: B SubArea: P55

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
49.70	1.00	0.463
COPSHB-----grf-----		
12.80	0.37	
COPHERB-----grf-----^		
1.00	0.03	

Study: ERMDE

11-06-1987

Model: MULE DEER---COVER

CoverType: B SubArea: H44

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
31.00	0.79	0.860
		1
DT-----mnu-----		
4.00	1.00	

Study: ERMDE

11-06-1987

Model: MULE DEER---COVER

CoverType: B SubArea: P55

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
48.80	1.00	1.000
		1
DT-----mnu-----		
4.00	1.00	

RPPS HABITAT DATA

11-06-1987

ROSS, PRE-PROJECT + POST PROJECT + DIABLO POST PROJECT

HABITAT: Shrub

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

	S	S
VARIABLE:	LC1	LC2
CDEWV	12.300	11.300
COPHERB	32.750	17.750
COPSHE	48.900	40.900
COSHE	56.000	50.800
DT	4.000	4.000

Study: RPPS

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: S SubArea: LC1

LEV 3	LEV 2	LEV 1
COSHR-----grf-----usf--HSI		
56.00	1.00	1.000
COPSHR-----grf-----		
48.90	1.00	
COPHER-----grf-----^		
32.75	1.00	

Study: RPPS

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: S SubArea: LC2

LEV 3	LEV 2	LEV 1
COSHR-----grf-----usf--HSI		
50.80	1.00	0.916
COPSHR-----grf-----		
40.90	1.00	
COPHER-----grf-----^		
17.75	0.67	

Study: RPPS

11-06-1987

Model: MULE DEER---COVER

CoverType: S SubArea: LC1

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
12.30	0.23	0.486
DT-----mnu-----^		
4.00	1.00	

Study: RPPS

11-06-1987

Model: MULE DEER---COVER

CoverType: S SubArea: LC2

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
11.30	0.22	0.478
DT-----mnu-----^		
4.00	1.00	

EAST ROSS - PRE & POST PROJECT

HABITAT: Shrub

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:		
VARIABLE:	S	S
	LC1	LC2
COEWV	12.300	11.300
COPHERB	32.750	17.750
COPSHB	48.900	40.900
COSHB	56.000	50.800
DT	4.000	4.000

Study: ERMDS Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
S	LC1	1.0	1.000
S	LC2	1.0	0.916

Overall:		2.0	0.958
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Study: ERMDS Model: MULE DEER---COVER

11-06-1987

CoverType	SubArea	Area	HSI
S	LC1	1.0	0.486
S	LC2	1.0	0.478

Overall:		2.0	0.482
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Study name: ERMDS

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	2.0	0.958
MULE DEER---COVER	2.0	0.482

Study: ERMDS

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: S SubArea: LC1

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
56.00	1.00	1.000
COPSHB-----grf-----		
48.90	1.00	
COPHERB-----grf-----^		
32.75	1.00	

Study: ERMDS

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: S SubArea: LC2

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
50.80	1.00	0.916
COPSHB-----grf-----		
40.90	1.00	
COPHERB-----grf-----^		
17.75	0.67	

Study: ERMDS

11-06-1987

Model: MULE DEER---COVER

CoverType: S SubArea: LC1

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf-HSI		
12.30	0.23	0.486
DT-----mnu-----		
4.00	1.00	

Study: ERMDS

11-06-1987

Model: MULE DEER---COVER

CoverType: S SubArea: LC2

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf-HSI		
11.30	0.22	0.478
DT-----mnu-----		
4.00	1.00	

DIABLO, PRE+POST PROJECT & GORGE PRE-PROJECT
HABITAT: *Riparian Conifer Old Growth*
SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	rCOG R120
CDEWV	61.300
COPHERB	30.500
COPSHB	12.175
COSHB	57.800
DT	4.000

Study: RPPrCOG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
rCOG	R120	18.0	0.696

Overall:		18.0	0.696
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Study: RPPrCOG Model: MULE DEER--COVER

11-06-1987

CoverType	SubArea	Area	HSI
rCOG	R120	18.0	1.000

Overall:		18.0	1.000
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Study name: RPPrCOG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	18.0	0.696
MULE DEER--COVER	18.0	1.000

Study: RPPrC06

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rC06 SubArea: R120

LEV 3	LEV 2	LEV 1
COSSH	grf	usf-HSI
57.80	1.00	0.696
COSSH	grf	
12.18	0.35	
COHERB	grf	^
30.50	1.00	

Study: RPPrC06

11-06-1987

Model: MULE DEER--COVER

CoverType: rC06 SubArea: R120

LEV 3	LEV 2	LEV 1
COEW	grf	usf-HSI
61.30	1.00	1.000
DT	nu	^
4.00	1.00	

11-06-1987

ROSS, PRE-PROJECT

HABITAT: *Riparian Conifer Old Growth*

SPECIES: MULE DEER

	COVER TYPE / SUB-AREA:		
VARIABLE:	rCDG BWS	rCDG P94	rCDG R120
COEUV	56.200	100.000	61.300
COHERB	4.000	13.500	30.500
COPSHB	20.950	1.400	12.175
COSHB	44.300	26.200	57.800
DT	4.000	4.000	4.000

Study: RPPrC06 Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
rC06	BV6	3.6	0.590
rC06	P94	1.5	0.344
rC06	R120	18.0	0.696

Overall:		23.2	0.656
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Study: RPPrC06 Model: MULE DEER--COVER

11-06-1987

CoverType	SubArea	Area	HSI
rC06	BV6	3.6	1.000
rC06	P94	1.5	1.000
rC06	R120	18.0	1.000

Overall:		23.2	1.000
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Study name: RPPrC06

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	23.2	0.656
MULE DEER--COVER	23.2	1.000

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rCOG SubArea: BV6

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
44.30	1.00	0.590
COPSHB	grf	
20.95	0.56	
COPHERB	grf	^
4.00	0.12	

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rCOG SubArea: P94

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
26.20	0.49	0.344
COPSHB	grf	
1.40	0.20	
COPHERB	grf	^
13.50	0.44	

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rCOG SubArea: R120

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
57.80	1.00	0.696
COPSHB	grf	
12.18	0.35	
COPHERB	grf	^
30.50	1.00	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: rCOG SubArea: BV6

LEV 3	LEV 2	LEV 1
CDEWV	grf	usf-HSI
56.20	1.00	1.000
DT	anu	
4.00	1.00	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: rCOG SubArea: P94

LEV 3	LEV 2	LEV 1
CDEWV	grf	usf-HSI
100.00	1.00	1.000
DT	anu	
4.00	1.00	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: rCOG SubArea: R120

LEV 3	LEV 2	LEV 1
CDEWV	grf	usf-HSI
61.30	1.00	1.000
DT	anu	
4.00	1.00	

RMWDRCOG HABITAT DATA

11-03-1987

ROSS - POST PROJECT

HABITAT: *Riparian Conifer Old Growth*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

rCOG

VARIABLE: POSA = *P94*

CDEWV 100.000

COPHERB 13.500

COPSHB 1.400

COSHB 26.200

DT 4.000

Study: RPDRCOG Model: MULE DEER--WINTER FOOD 11-12-1987

CoverType	SubArea	Area	HSI
rcog	POSA	1.5	0.344

Overall:		1.5	0.344
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Study: RPDRCOG Model: MULE DEER---COVER 11-12-1987

CoverType	SubArea	Area	HSI
rcog	POSA	1.5	1.000

Overall:		1.5	1.000
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Study name: RPDRCOG 11-12-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	1.5	0.344
MULE DEER---COVER	1.5	1.000

Study: RAMDPC06

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: R006 SubArea: P05A

LEV 3	LEV 2	LEV 1
COSEH-----grf-----usf--H61		
36.20	0.49	0.344
COSEH-----grf-----		
1.40	0.20	
COSEH-----grf-----^		
13.50	0.44	

Study: RAMDPC06

11-03-1987

Model: MULE DEER---COVER

CoverType: R006 SubArea: P05A

LEV 3	LEV 2	LEV 1
DOEW-----grf-----usf--H61		
100.00	1.00	1.000
DT-----grf-----		
4.00	1.00	

ROSS, PRE-PROJECT + POST PROJECT + DIABLO PRE & POST + GORGE PRE-PROJECT

HABITAT: *Riparian Closed Canopy Conifer*
SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	RCC
COEWV	70.700
CDPHERB	18.300
CDPSHR	17.400
COSHE	30.950
DT	4.000

Study: RPPrCOG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
rCC	R121	1.4	0.588

Overall:		1.4	0.588
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Study: RPPrCOG Model: MULE DEER---COVER

11-06-1987

CoverType	SubArea	Area	HSI
rCC	R121	1.4	1.000

Overall:		1.4	1.000
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Study name: RPPrCOG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	1.4	0.588
MULE DEER---COVER	1.4	1.000

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rCC SubArea: R121

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
30.95	0.64	0.588
COPSHB-----grf-----		
17.40	0.48	
COPHERB-----grf-----^		
18.30	0.70	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: rCC SubArea: R121

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
70.70	1.00	1.000
DT-----mnu-----^		
4.00	1.00	

DIABLO, POST PROJECT

HABITAT: *Riparian Broodleaf*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	rB R117	rB R14
COEWV	0.000	14.000
COPHERB	5.500	23.439
COPSHB	10.800	13.600
COSHE	34.300	21.233
DT	4.000	4.000

Study: RPPrCOG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
rB	R117	1.6	0.413
rB	R14	14.4	0.489

Overall:		16.0	0.482
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Study: RPPrCOG Model: MULE DEER---COVER

11-06-1987

CoverType	SubArea	Area	HSI
rB	R117	1.6	0.333
rB	R14	14.4	0.500

Overall:		16.0	0.484
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Study name: RPPrCOG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	16.0	0.482
MULE DEER---COVER	16.0	0.484

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rB SubArea: R117

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
34.30	0.77	0.413
COPSHB-----grf-----		
10.80	0.32	
COPHERB-----grf-----^		
5.50	0.17	

Study: RPPrCOG

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rB SubArea: R14

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
21.23	0.34	0.489
COPSHB-----grf-----		
13.60	0.39	
COPHERB-----grf-----^		
23.44	0.87	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: nB SubArea: R117

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
0.00	0.00	0.333
DT-----mru-----		
4.00	1.00	

Study: RPPrCOG

11-06-1987

Model: MULE DEER---COVER

CoverType: nE SubArea: R14

LEV 3	LEV 2	LEV 1
COEWV-----grf-----usf--HSI		
14.00	0.25	0.500
DT-----mru-----		
4.00	1.00	

NEARR HABITAT DATA

11-19-1987

RASS, PRE-PROJECT

HABITAT: Riparian Broadleaf

COVER TYPE / SUB-AREA:

VARIABLE:	rB CS1	rB R117	rB R14
COEWV	31.500	0.000	14.000
COPIERB	2.500	5.500	23.429
COPEHB	21.500	10.800	13.500
COSHB	61.400	34.300	21.233
DT	4.000	4.000	4.000

Study: MDPRR Model: MULE DEER--WINTER FOOD 11-19-1987

CoverType	SubArea	Area	HSI
rB	CS1	15.7	0.589
rB	R117	1.6	0.413
rB	R14	14.4	0.489

Overall: 31.6 0.535

Study: MDPRR Model: MULE DEER---COVER 11-19-1987

CoverType	SubArea	Area	HSI
rB	CS1	15.7	0.878
rB	R117	1.6	0.333
rB	R14	14.4	0.500

Overall: 31.6 0.679

Study name: MDPRR 11-19-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	31.6	0.535
MULE DEER---COVER	31.6	0.679

Model: MULE DEER--WINTER FOOD

CoverType: rB SubArea: CS1

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
61.40	1.00	0.589
COPSHB-----grf-----		
21.80	0.58	
COPHERB-----grf-----^		
2.50	0.08	

Study: MDPRR

11-19-1987

Model: MULE DEER--WINTER FOOD

CoverType: rB SubArea: R117

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
34.30	0.77	0.413
COPSHB-----grf-----		
10.80	0.32	
COPHERB-----grf-----^		
5.50	0.17	

Study: MDPRR

11-19-1987

Model: MULE DEER--WINTER FOOD

CoverType: rB SubArea: R14

LEV 3	LEV 2	LEV 1
COSHB-----grf-----usf--HSI		
21.23	0.34	0.489
COPSHB-----grf-----		
13.60	0.39	
COPHERB-----grf-----^		
23.44	0.87	

Model: MULE DEER---COVER

CoverType: rB SubArea: CS1

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
31.80	0.82	0.878
DT	gru	
4.00	1.00	

Study: MDPRR

11-19-1987

Model: MULE DEER---COVER

CoverType: rB SubArea: R17

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
0.00	0.00	0.333
DT	gru	
4.00	1.00	

Study: MDPRR

11-19-1987

Model: MULE DEER---COVER

CoverType: rB SubArea: R14

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
14.00	0.25	0.500
DT	gru	
4.00	1.00	

ROSS - POST PROJECT

HABITAT: *Riparian Mixed Forest*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	RM
COEUV	62.000
COPHERB	0.500
COPSHR	9.800
COSHR	37.000
DT	4.000

Study: RPMD RM Model: MULE DEER--WINTER FOOD

11-03-1987

CoverType	SubArea	Area	HSI
RM	H59	9.0	0.384

Overall:		9.0	0.384
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Study: RPMD RM Model: MULE DEER--COVER

11-03-1987

CoverType	SubArea	Area	HSI
RM	H59	9.0	1.000

Overall:		9.0	1.000
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Study name: RPMD RM

11-03-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	9.0	0.384
MULE DEER--COVER	9.0	1.000

Study: RPMD RM

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: rM SubArea: H59

LEV 3	LEV 2	LEV 1	
CDSHB	grf	usf	HSI
37.00	0.88	0.384	
COPSHB	grf		
9.80	0.29		
COPHERB	grf		^
0.50	0.02		

Study: RPMD RM

11-03-1987

Model: MULE DEER--COVER

CoverType: rM SubArea: H59

LEV 3	LEV 2	LEV 1	
COEMV	grf	usf	HSI
62.00	1.00	1.000	
DT	mnv		^
4.00	1.00		

ROSS, PRE-PROJECT

HABITAT: *Riparian Mixed Forest*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	rM BV7	rM HS9
CDEW	42.867	62.000
COPHERB	2.000	0.500
COPSHB	2.467	9.800
COSHB	32.733	37.000
DT	4.000	4.000

Study: RPPrCDG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
RM	BV7	4.8	0.297
RM	H59	9.0	0.384

Overall:		13.8	0.354
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Study: RPPrCDG Model: MULE DEER---COVER

11-06-1987

CoverType	SubArea	Area	HSI
RM	BV7	4.8	1.000
RM	H59	9.0	1.000

Overall:		13.8	1.000
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Study name: RPPrCDG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	13.8	0.354
MULE DEER---COVER	13.8	1.000

Study: RPPrC06

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rH SubArea: BV7

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
32.73	0.71	0.297
COPSHB	grf	
2.47	0.20	
COPHERB	grf	^
2.00	0.06	

Study: RPPrC06

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rH SubArea: H59

LEV 3	LEV 2	LEV 1
COSHB	grf	usf HSI
37.00	0.88	0.384
COPSHB	grf	
9.80	0.29	
COPHERB	grf	^
0.50	0.02	

Study: RPPrC06

11-06-1987

Model: MULE DEER---COVER

CoverType: rM SubArea: BV7

LEV 3	LEV 2	LEV 1
COEWV	grf	usf HSI
42.87	1.00	1.000
DT	mu	
4.00	1.00	

Study: RPPrC06

11-06-1987

Model: MULE DEER---COVER

CoverType: rM SubArea: H59

LEV 3	LEV 2	LEV 1
COEWV	grf	usf HSI
62.00	1.00	1.000
DT	mu	
4.00	1.00	

GMDRS HABITAT DATA

11-06-1987

GORGE, PRE & POST PROJECT

HABITAT: *Riparian Shrub*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	rS
COEMV	15.600
COPIHERB	1.250
COPSHB	0.700
COSHB	41.600
DT	4.000

Study: GMDRS Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
r5	D13	2.1	0.345

Overall:		2.1	0.345
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Study: GMDRS Model: MULE DEER--COVER

11-06-1987

CoverType	SubArea	Area	HSI
r5	D13	2.1	0.513

Overall:		2.1	0.513
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Study name: GMDRS

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	2.1	0.345
MULE DEER--COVER	2.1	0.513

Study: GMDRS

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rS SubArea: D13

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
41.60	1.00	0.345
COPSHB	grf	
0.70	0.20	
COPHERB	grf	
1.25	0.04	

Study: GMDRS

11-06-1987

Model: MULE DEER--COVER

CoverType: rS SubArea: D13

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
15.60	0.27	0.513
DT	nu	
4.00	1.00	

ROSS - POST PROJECT

HABITAT: *Riparian Shrub*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	rS P74
COEWV	6.600
COPHERB	0.000
COPSHB	4.600
COSHB	51.700
DT	4.000

Study: RPNDRS Model: MULE DEER--WINTER FOOD 11-03-1987

CoverType	SubArea	Area	HSI
rS	P74	2.1	0.335

Overall: 2.1 0.335

Study: RPNDRS Model: MULE DEER---COVER 11-03-1987

CoverType	SubArea	Area	HSI
rS	P74	2.1	0.421

Overall: 2.1 0.421

Study name: RPNDRS 11-03-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	2.1	0.335
MULE DEER---COVER	2.1	0.421

Study: RPDORS

11-03-1987

Model: MULE DEER--WINTER FOOD

CoverType: rS SubArea: P74

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
51.70	1.00	0.335
COPSHB	grf	
4.60	0.20	
COPHERB	grf	^
0.00	0.00	

Study: RPDORS

11-03-1987

Model: MULE DEER--COVER

CoverType: rS SubArea: P74

LEV 3	LEV 2	LEV 1
COEWV	grf	usf-HSI
6.60	0.13	0.421
DT	nu	^
4.00	1.00	

RPP-COG HABITAT DATA

11-06-1987

ROSS, PRE-PROJECT

HABITAT: *Riparian Shrub*

SPECIES: MULE DEER

COVER TYPE / SUB-AREA:

VARIABLE:	rS BV9	rS P74
COEW	4.000	6.600
COPHERB	1.228	0.000
COPSHB	34.700	4.600
COSHB	102.500	51.700
DT	4.000	4.000

Study: RPPrCOG Model: MULE DEER--WINTER FOOD

11-06-1987

CoverType	SubArea	Area	HSI
rS	BV9	2.4	0.594
rS	P74	2.1	0.335

Overall:		4.5	0.473
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Study: RPPrCOG Model: MULE DEER--COVER

11-06-1987

CoverType	SubArea	Area	HSI
rS	BV9	2.4	0.387
rS	P74	2.1	0.421

Overall:		4.5	0.403
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Study name: RPPrCOG

11-06-1987

HSI Values For The Entire Study Area:

	Area	HSI
MULE DEER--WINTER FOOD	4.5	0.473
MULE DEER--COVER	4.5	0.403

Study: RPPrC06

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rS SubArea: BV9

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
102.50	0.70	0.594
COPSHB	grf	
34.70	0.87	
COPHERB	grf	^
1.23	0.04	

Study: RPPrC06

11-06-1987

Model: MULE DEER--WINTER FOOD

CoverType: rS SubArea: P74

LEV 3	LEV 2	LEV 1
COSHB	grf	usf-HSI
51.70	1.00	0.335
COPSHB	grf	
4.60	0.20	
COPHERB	grf	^
0.00	0.00	

Study: RPPrC06

11-06-1987

Model: MULE DEER---COVER

CoverType: rS SubArea: BV9

LEV 3	LEV 2	LEV 1
COEWV	grf	usf HSI
4.00	0.08	0.387
DT	mnv	
4.00	1.00	

Study: RPPrC06

11-06-1987

Model: MULE DEER---COVER

CoverType: rS SubArea: P74

LEV 3	LEV 2	LEV 1
COEWV	grf	usf HSI
6.60	0.13	0.421
DT	mnv	
4.00	1.00	



APPENDIX F

GORGE RESERVOIR
HABITAT UNITS AND AVERAGE
ANNUAL HABITAT UNIT CALCULATIONS

TARGET YEAR ACREAGES AND HSIs
SKAGIT DAMS ORIGINAL IMPACTS

WITH-PROJECT
GORGE--TYO (1918) PRE-PROJECT

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	3.28		0.00		0.00		0.00	0.636	2.09	0.520	1.71		0.00
closed mature conifer	353.96	0.000	0.00	0.781	276.44	0.780	276.09	0.000	0.00		0.00		0.00
conifer regeneration	17.05		0.00		0.00	0.220	3.75	0.818	13.95		0.00		0.00
exposed rock	2.44		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.780	0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.000	0.00	0.668	0.00	0.780	0.00		0.00		0.00		0.00
open canopy conifer	35.53	0.000	0.00	0.712	25.30	1.000	35.53	0.000	0.00		0.00		0.00
riparian mature conifer	16.59	1.000	16.59	0.842	13.97	1.000	16.59	0.157	2.60	0.998	16.56		0.00
riparian old growth conifer	11.34	0.500	5.67	0.870	9.87	0.000	0.00	0.000	0.00	0.659	7.47		0.00
riverine, gradient < 1%	43.42		0.00		0.00		0.00		0.00		0.00	0.100	4.34
riverine, gradient 1-6%	17.69		0.00		0.00		0.00		0.00		0.00	0.600	10.61
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	12.02		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	513.32		22.26		325.57		331.96		18.64		25.74		14.96

WITH-PROJECT
GORGE TY1 (1919) PRE-PROJECT

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	3.28		0.00		0.00		0.00	0.636	2.09	0.520	1.71		0.00
closed mature conifer	353.96	0.000	0.00	0.781	276.44	0.780	276.09	0.000	0.00		0.00		0.00
conifer regeneration	17.05		0.00		0.00	0.220	3.75	0.818	13.95		0.00		0.00
exposed rock	2.44		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.780	0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.000	0.00	0.668	0.00	0.780	0.00		0.00		0.00		0.00
open canopy conifer	35.53	0.000	0.00	0.712	25.30	1.000	35.53	0.000	0.00		0.00		0.00
riparian mature conifer	16.59	1.000	16.59	0.842	13.97	1.000	16.59	0.157	2.60	0.998	16.56		0.00
riparian old growth conifer	11.34	0.500	5.67	0.870	9.87	0.000	0.00	0.000	0.00	0.659	7.47		0.00
riverine, gradient < 1%	43.42		0.00		0.00		0.00		0.00		0.00	0.100	4.34
riverine, gradient 1-6%	17.69		0.00		0.00		0.00		0.00		0.00	0.600	10.61
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	12.02		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	513.32		22.26		325.57		331.96		18.64		25.74		14.96

WITH-PROJECT

GORGE TY6 (1924) 780 ft 12 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	3.30		0.00		0.00		0.00	0.636	2.10	0.520	1.72		0.00
closed mature conifer	341.50	0.000	0.00	0.781	266.71	0.780	266.37	0.000	0.00		0.00		0.00
conifer regeneration	16.90		0.00		0.00	0.220	3.72	0.818	13.82		0.00		0.00
exposed rock	2.40		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.780	0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.000	0.00	0.668	0.00	0.780	0.00		0.00		0.00		0.00
open canopy conifer	35.10	0.000	0.00	0.712	24.99	1.000	35.10	0.000	0.00		0.00		0.00
riparian mature conifer	16.60	1.000	16.60	0.842	13.98	1.000	16.60	0.157	2.61	0.998	16.57		0.00
riparian old growth conifer	11.10	0.500	5.55	0.870	9.66	0.000	0.00	0.000	0.00	0.659	7.31		0.00
riverine, gradient < 1%	43.60		0.00		0.00		0.00		0.00		0.00	0.100	4.36
riverine, gradient 1-6%	8.40		0.00		0.00		0.00		0.00		0.00	0.600	5.04
lacustrine	20.40		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	11.90		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	511.20		22.15		315.34		321.79		18.53		25.60		9.40

WITH-PROJECT

GORGE T443 (1961) 880 ft 240 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	3.00		0.00		0.00		0.00	0.636	1.91	0.520	1.56		0.00
closed mature conifer	233.00	0.000	0.00	0.781	181.97	0.780	181.74	0.000	0.00		0.00		0.00
conifer regeneration	13.80		0.00		0.00	0.220	3.04	0.818	11.29		0.00		0.00
exposed rock	2.10		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.780	0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.000	0.00	0.668	0.00	0.780	0.00		0.00		0.00		0.00
open canopy conifer	30.60	0.000	0.00	0.712	21.79	1.000	30.60	0.000	0.00		0.00		0.00
riparian mature conifer	16.10	1.000	16.10	0.842	13.56	0.870	14.01	0.157	2.53	0.998	16.07		0.00
riparian old growth conifer	0.00	0.500	0.00	0.870	0.00	0.000	0.00	0.000	0.00	0.659	0.00		0.00
riverine, gradient < 1%	0.60		0.00		0.00		0.00		0.00		0.00	0.100	0.06
riverine, gradient 1-6%	0.20		0.00		0.00		0.00		0.00		0.00	0.600	0.12
lacustrine	216.70		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	8.30		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	524.40		16.10		217.32		229.38		15.72		17.63		0.18

WITH-PROJECT
GORGE T669 (1987) 880 ft 240 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	2.11		0.00		0.00		0.00	0.636	1.34	0.520	1.10		0.00
closed mature conifer	167.02	0.000	0.00	0.781	130.44	0.780	130.28	0.000	0.00		0.00		0.00
conifer regeneration	0.00		0.00		0.00	0.220	0.00	0.818	0.00		0.00		0.00
exposed rock	3.91		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	1.34		0.00		0.00	0.780	1.05		0.00		0.00		0.00
mixed conifer/broadleaf	25.79	0.000	0.00	0.668	17.23	0.780	20.12		0.00		0.00		0.00
open canopy conifer	17.45	0.000	0.00	0.712	12.42	1.000	17.45	0.000	0.00		0.00		0.00
riparian mature conifer	0.00	1.000	0.00	0.842	0.00	0.870	0.00	0.157	0.00	0.998	0.00		0.00
riparian old growth conifer	0.00	0.500	0.00	0.870	0.00	0.000	0.00	0.000	0.00	0.659	0.00		0.00
riverine, gradient < 1%	0.00		0.00		0.00		0.00		0.00		0.00	0.100	0.00
riverine, gradient 1-6%	0.00		0.00		0.00		0.00		0.00		0.00	0.600	0.00
lacustrine	213.13		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	3.86		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	32.57		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	467.18		0.00		160.09		168.89		1.34		1.10		0.00



WITH-PROJECT
GORGE--AAHU SUMMARY

Community Type	Pileated Woodpecker					Pine Marten					Black-capped Chickadee				
	TY0-1	TY1-6	TY6-43	TY43-69	total	TY0-1	TY1-6	TY6-43	TY43-69	total	TY0-1	TY1-6	TY6-43	TY43-69	total
avalanche tracks	0.00	0.00	0.00	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 mature conifer	0.00	0.00	0.00	0.00	0.00	276.44	1357.89	8300.66	4061.40	202.85	276.09	1356.15	8290.04	4056.20	202.59
conifer regeneration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.75	18.67	64.58	39.47	1.83
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.59	0.20
mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	223.96	3.25	0.00	0.00	0.00	261.51	3.79
open canopy conifer	0.00	0.00	0.00	0.00	0.00	25.30	125.72	865.40	444.75	21.18	35.53	176.58	1215.45	624.65	29.74
riparian mature conifer	16.59	82.98	604.95	209.30	13.24	13.97	69.86	509.37	176.23	11.15	16.59	82.98	565.83	182.09	12.28
riparian old growth conifer	5.67	28.05	102.60	0.00	1.98	9.87	48.81	178.65	0.00	3.44	0.00	0.00	0.00	0.00	0.00
riverine, gradient < 1%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine, gradient 1-6%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	22.26	111.03	707.63	209.30	15.22	325.57	1602.28	9854.09	4906.34	241.86	331.96	1634.37	10135.90	5177.51	250.43
				check	15.22				check	241.86				check	250.43

WITH-PROJECT
GORGE--AAHU SUMMARY

Community Type	Ruffed Grouse					Yellow Warbler					American Dipper				
	TY0-1	TY1-6	TY6-43	TY43-69	total	TY0-1	TY1-6	TY6-43	TY43-69	total	TY0-1	TY1-6	TY6-43	TY43-69	total
avalanche tracks	2.09	10.46	74.13	42.25	1.87	1.71	8.55	60.61	34.54	1.53	0.00	0.00	0.00	0.00	0.00
closed mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
conifer regeneration	13.95	69.43	464.58	146.75	10.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	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 conifer/broadleaf	0.00	0.00	0.00	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 canopy conifer	0.00	0.00	0.00	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 mature conifer	2.60	13.03	94.98	32.86	2.08	16.56	82.81	603.74	208.88	13.22	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	0.00	0.00	0.00	0.00	0.00	7.47	36.97	135.33	0.00	2.61	0.00	0.00	0.00	0.00	0.00
riverine, gradient < 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.34	21.76	81.77	0.78	1.57
riverine, gradient 1-6%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.61	39.14	95.46	1.56	2.13
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	18.64	92.92	633.69	221.86	14.02	25.74	128.33	799.67	243.43	17.35	14.96	60.89	177.23	2.34	3.70
				check	14.02				check	17.35				check	3.70

WITHOUT-PROJECT
GORGE--TYO (1918) PRE-PROJECT

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	3.28		0.00		0.00		0.00	0.636	2.09	0.520	1.71		0.00
closed mature conifer	353.96	0.000	0.00	0.781	276.44	0.780	276.09	0.000	0.00		0.00		0.00
conifer regeneration	17.05		0.00		0.00	0.215	3.67	0.818	13.95		0.00		0.00
exposed rock	2.44		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00		0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.000	0.00	0.670	0.00	0.780	0.00	0.000	0.00		0.00		0.00
open canopy conifer	35.53	0.000	0.00	0.712	25.30	1.000	35.53	0.000	0.00		0.00		0.00
riparian mature conifer	16.59	1.000	16.59	0.842	13.97	1.000	16.59	0.157	2.60	0.998	16.56		0.00
riparian old growth conifer	11.34	0.500	5.67	0.870	9.87	0.000	0.00	0.000	0.00	0.659	7.47		0.00
riverine, gradient < 1%	43.42		0.00		0.00		0.00		0.00		0.00	0.100	4.34
riverine, gradient 1-6%	17.69		0.00		0.00		0.00		0.00		0.00	0.600	10.61
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	12.02		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	513.32		22.26		325.57		331.87		18.64		25.74		14.96

WITHOUT-PROJECT
GORGE TY1 (1919) PRE-PROJECT

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	3.28		0.00		0.00		0.00	0.636	2.09	0.520	1.71		0.00
closed mature conifer	353.96	0.000	0.00	0.781	276.44	0.780	276.09	0.000	0.00		0.00		0.00
conifer regeneration	17.05		0.00		0.00	0.215	3.67	0.818	13.95		0.00		0.00
exposed rock	2.44		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00		0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.000	0.00	0.670	0.00	0.780	0.00	0.000	0.00		0.00		0.00
open canopy conifer	35.53	0.000	0.00	0.712	25.30	1.000	35.53	0.000	0.00		0.00		0.00
riparian mature conifer	16.59	1.000	16.59	0.842	13.97	1.000	16.59	0.157	2.60	0.998	16.56		0.00
riparian old growth conifer	11.34	0.500	5.67	0.870	9.87	0.000	0.00	0.000	0.00	0.659	7.47		0.00
riverine, gradient < 1%	43.42		0.00		0.00		0.00		0.00		0.00	0.100	4.34
riverine, gradient 1-6%	17.69		0.00		0.00		0.00		0.00		0.00	0.600	10.61
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	12.02		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	513.32		22.26		325.57		331.87		18.64		25.74		14.96



WITHOUT-PROJECT
GORGE TY69 (1987)

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
avalanche tracks	3.30		0.00		0.00		0.00	0.636	2.10	0.520	1.72		0.00
closed mature conifer	372.30	0.000	0.00	0.781	290.77	0.780	290.39	0.000	0.00		0.00		0.00
conifer regeneration	0.00		0.00		0.00	0.215	0.00	0.818	0.00		0.00		0.00
exposed rock	2.00		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00		0.00		0.00		0.00		0.00
mixed conifer/broadleaf	4.60	0.000	0.00	0.670	3.08	0.780	3.59	0.000	0.00		0.00		0.00
open canopy conifer	26.20	0.000	0.00	0.712	18.65	1.000	26.20	0.000	0.00		0.00		0.00
riparian mature conifer	16.60	1.000	16.60	0.842	13.98	1.000	16.60	0.157	2.61	0.998	16.57		0.00
riparian old growth conifer	11.10	0.500	5.55	0.870	9.66	0.000	0.00	0.000	0.00	0.659	7.31		0.00
riverine, gradient < 1%	43.42		0.00		0.00		0.00		0.00		0.00	0.100	4.34
riverine, gradient 1-6%	17.69		0.00		0.00		0.00		0.00		0.00	0.600	10.61
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00
talus	7.30		0.00		0.00		0.00		0.00		0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	504.51		22.15		336.14		336.78		4.71		25.60		14.96

WITHOUT-PROJECT
GORGE--AAHU SUMMARY

Community Type	Pileated Woodpecker			Pine Marten			Black-capped Chickadee		
	TY0-1	TY1-69	total	TY0-1	TY1-69	total	TY0-1	TY1-69	total
avalanche tracks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	0.00	0.00	0.00	276.44	19285.11	283.50	276.09	19260.42	283.14
conifer regeneration	0.00	0.00	0.00	0.00	0.00	0.00	3.67	124.64	1.86
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.00	0.00	0.00	104.79	1.52	0.00	121.99	1.77
open canopy conifer	0.00	0.00	0.00	25.30	1494.36	22.02	35.53	2098.82	30.93
riparian mature conifer	16.59	1128.46	16.59	13.97	950.16	13.97	16.59	1128.46	16.59
riparian old growth conifer	5.67	381.48	5.61	9.87	663.78	9.76	0.00	0.00	0.00
riverine, gradient < 1%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine, gradient 1-6%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	22.26	1509.94	22.21	325.57	22498.19	330.78	331.87	22734.32	334.29
		check	22.21		check	330.78		check	334.29

WITHOUT-PROJECT
BORGE--AAWJ SUMMARY

Community Type	Ruffed Grouse			Yellow Warbler			American Dipper		
	TY0-1	TY1-69	total	TY0-1	TY1-69	total	TY0-1	TY1-69	total
avalanche tracks	2.09	142.29	2.09	1.71	116.33	1.71	0.00	0.00	0.00
closed mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
conifer regeneration	13.95	474.19	7.07	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
open canopy conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian mature conifer	2.60	177.17	2.61	16.56	1126.20	16.56	0.00	0.00	0.00
riparian old growth conifer	0.00	0.00	0.00	7.47	502.79	7.40	0.00	0.00	0.00
riverine, gradient < 1%	0.00	0.00	0.00	0.00	0.00	0.00	4.34	295.26	4.34
riverine, gradient 1-6%	0.00	0.00	0.00	0.00	0.00	0.00	10.61	721.75	10.61
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	18.64	793.65	11.77	25.74	1745.33	25.67	14.96	1017.01	14.96
		check	11.77		check	25.67		check	14.96

NET CHANGE IN AAHU'S
(WITH-WITHOUT PROJECT)

SPECIES	WITH-PROJECT	WITHOUT-PROJECT	NET CHANGE
Pileated Woodpecker	15.22	22.21	-6.99
Pine Marten	241.86	330.78	-88.92
Chickadee	250.43	334.29	-83.86
Ruffed Grouse	14.02	11.77	2.24
Yellow Warbler	17.35	25.67	-8.32
American Dipper	3.70	14.96	-11.25

SPREADSHEET FOR CALCULATING THE HSI FOR RED-TAILED HAWK----GORGE

GORGE TYO AND TYI (1918 & 1919) WITH AND WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC		1.000	1.000	0.000	1.000	353.60	0.819	0.000	0.819
DC	0.492	0.000	1.000	0.492	0.000	35.53	0.082	0.041	0.000
M				0.000	0.000	0.00	0.000	0.000	0.000
TL*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	12.02	0.028	0.021	0.000
ER*	0.750		1.000	0.750	0.000	2.44	0.006	0.004	0.000
rCOG		1.000	1.000	0.000	1.000	11.34	0.026	0.000	0.026
rCC		1.000	1.000	0.000	1.000	16.59	0.038	0.000	0.038

* HSI value assigned by NEP

TOTAL HABITAT AVAILABLE 431.52

AVAILABLE HABITAT FOR FOOD 6.56

AVAILABLE HABITAT FOR REPRODUCTION 88.42

FOOD HSI= 0.090 (from graph) FOOD HU= 38.84

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 431.52

GORGE TY6 (1924) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD	ADJUSTED HSI REPR.	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC		1.000	1.000	0.000	1.000	341.50	0.816	0.000	0.816
OC	0.492	0.000	1.000	0.492	0.000	35.10	0.084	0.041	0.000
N				0.000	0.000	0.00	0.000	0.000	0.000
TL*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	11.90	0.028	0.021	0.000
ER*	0.750		1.000	0.750	0.000	2.40	0.006	0.004	0.000
rCDG		1.000	1.000	0.000	1.000	11.10	0.027	0.000	0.027
rCC		1.000	1.000	0.000	1.000	16.60	0.040	0.000	0.040

* HSI value assigned by HEP

TOTAL HABITAT AVAILABLE 418.60

AVAILABLE HABITAT FOR FOOD 6.69

AVAILABLE HABITAT FOR REPRODUCTION 88.20

FOOD HSI= 0.090 (from graph) FOOD HU= 37.67

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 418.60

SORGE TY43 (1961) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC		1.000	1.000	0.000	1.000	233.00	0.803	0.000	0.803
OC	0.492	0.000	1.000	0.492	0.000	30.60	0.105	0.052	0.000
M			1.000	0.000	0.000	0.00	0.000	0.000	0.000
TL*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	8.30	0.029	0.021	0.000
ER*	0.750		1.000	0.750	0.000	2.10	0.007	0.005	0.000
rCOG				0.000	0.000	0.00	0.000	0.000	0.000
rCC		1.000		0.000	0.000	16.10	0.055	0.000	0.000

* HSI value assigned by HEP

TOTAL HABITAT AVAILABLE 290.10

AVAILABLE HABITAT FOR FOOD 7.88

AVAILABLE HABITAT FOR REPRODUCTION 80.32

FOOD HSI= 0.100 (from graph) FOOD HU= 29.01

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 290.10

GORGE TY 69 (1987) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSON INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC		1.000	1.000	0.000	1.000	167.02	0.666	0.000	0.666
DC	0.492	0.000	1.000	0.492	0.000	17.45	0.070	0.034	0.000
M		0.312	1.000	0.000	0.312	25.79	0.103	0.000	0.032
TL*	0.803		1.000	0.803	0.000	32.57	0.130	0.104	0.000
R/T*	0.750		1.000	0.750	0.000	3.86	0.015	0.012	0.000
ER*	0.750		1.000	0.750	0.000	3.91	0.016	0.012	0.000
rCDG				0.000	0.000	0.00	0.000	0.000	0.000
rCC				0.000	0.000	0.00	0.000	0.000	0.000

* HSI value assigned by HEP

TOTAL HABITAT AVAILABLE 250.60

AVAILABLE HABITAT FOR FOOD 16.19

AVAILABLE HABITAT FOR REPRODUCTION 69.86

FOOD HSI= 0.240 (from graph) FOOD HU= 60.14

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 250.60

GORGE TY 69 (1987) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC		1.000	1.000	0.000	1.000	372.30	0.846	0.000	0.846
DC	0.492	0.000	1.000	0.492	0.000	26.20	0.060	0.029	0.000
M		0.312	1.000	0.000	0.312	4.60	0.010	0.000	0.003
TL*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	7.30	0.017	0.012	0.000
ER*	0.750		1.000	0.750	0.000	2.00	0.005	0.003	0.000
rCDB		1.000	1.000	0.000	1.000	11.10	0.025	0.000	0.025
rCC		1.000	1.000	0.000	1.000	16.60	0.038	0.000	0.038

* HSI value assigned by HEP

TOTAL HABITAT AVAILABLE 440.10

AVAILABLE HABITAT FOR FOOD 4.51

AVAILABLE HABITAT FOR REPRODUCTION 91.21

FOOD HSI= 0.070 (from graph) FOOD HU= 30.81

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 440.10

COMPARISON OF TARGET YEAR AAHU'S

GORGE WITH-PROJECT---HAWK AAHU'S

	TY0-1	TY1-6	TY6-43	TY43-69	total
FOOD	38.84	191.28	1241.58	1182.97	38.47
REPROD	431.52	2125.30	13110.95	7029.10	328.94

GORGE WITHOUT-PROJECT---HAWK AAHU'S

	TY0-1	TY1-69	total
FOOD	38.84	2369.83	34.91
REPROD	431.52	29635.08	435.75

NET CHANGE (AAHU'S)

FOOD	3.57
REPROD	-106.81

SPREADSHEET FOR CALCULATING THE HSI FOR OSPREY----GORGE

GORGE TY0 AND TY1 (1918 & 1919) WITH AND WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE*	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC	0.196	0.361	0.150	1.00	353.60	0.848	0.196	0.306
OC	0.935	0.000	0.000	0.00	35.53	0.085	0.000	0.000
rCOG		0.371	0.000	0.00	11.34	0.027	0.000	0.010
rCC		0.361	0.000	0.00	16.59	0.040	0.000	0.000

0.15

417.06

3.64 **

FOOD HSI= 0.20

FOOD HU= 0.71

REPRODUCTIVE HSI=

0.32 REPRODUCTIVE HU= 131.74

HSI, Reproduction for rCOG come from Ross COG.

Assumes no difference between upland and riparian types for HSI

* measured in miles

** based on miles of shoreline and 200 ft adjacent to shore

GORGE TY6 (1924) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE*	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC	0.196	0.361	0.150	1.00	341.50	0.845	0.196	0.305
OC	0.935	0.000	0.000	0.00	35.10	0.087	0.000	0.000
rCDG		0.371	0.000	0.00	11.10	0.027	0.000	0.010
rCC		0.361	0.000	0.00	16.60	0.041	0.000	0.015
-----			0.15		404.30			
			3.64 **					
					FOOD HSI	0.20	FOOD HU=	0.71
					REPRODUCTIVE HSI=	0.33	REPRODUCTIVE HU=	133.39

HSI, Reproduction for rCDG come from Ross CDG.

Assumes no difference between upland and riparian types for HSI

Assumes no significant difference in relative shoreline length between TY0 and TY6.

* measured in miles

** based on miles of shoreline and 200 ft adjacent to shore

BORGE TY43 (1961) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE*	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC	0.196	0.361	4.100	0.87	233.00	0.833	0.171	0.301
OC	0.935	0.000	0.600	0.13	30.60	0.109	0.119	0.000
rCDB			0.000	0.00	0.00	0.000	0.000	0.000
rCC		0.361	0.000	0.00	16.10	0.058	0.000	0.021

4.70

279.70

113.94 **

FOOD HSI= 0.29

FOOD HU= 33.08

REPRODUCTIVE HSI=

0.32 REPRODUCTIVE HU= 89.93

Assumes no difference between upland and riparian types for HSI

Assumes no significant difference in relative shoreline length between TY43 and TY69 (1987).

* measured in miles

** based on miles of shoreline and 200 ft adjacent to shore

GORGE TY 69 (1987) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE*	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC	0.196	0.361	4.100	0.87	167.02	0.905	0.171	0.327
DC	0.935	0.000	0.600	0.13	17.45	0.095	0.119	0.000
rCDG			0.000	0.00	0.00	0.000	0.000	0.000
rCC			0.000	0.00	0.00	0.000	0.000	0.000

4.70

184.47

113.94 **

FOOD HSI= 0.29

FOOD HU= 33.08

REPRODUCTIVE HSI=

0.33 REPRODUCTIVE HU= 60.29

* measured in miles

** based on miles of shoreline and 200 ft adjacent to shore

GORGE TY 69 (1987) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE*	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CC	0.196	0.361	0.150	1.00	372.30	0.874	0.196	0.315
OC	0.935	0.000	0.000	0.00	26.20	0.061	0.000	0.000
rCOG		0.371	0.000	0.00	11.10	0.026	0.000	0.010
rCC		0.361	0.000	0.00	16.60	0.039	0.000	0.014
			0.15		426.20			
			3.64 **					
						FOOD HSI= 0.20	FOOD HU= 0.71	
						REPRODUCTIVE HSI= 0.34	REPRODUCTIVE HU= 144.51	

^Assumes shoreline lengths are equal to pre-project (TY0) shoreline lengths

* measured in miles

** based on miles of shoreline and 200 ft adjacent to shore

COMPARISON OF TARGET YEAR AAHU'S

GORGE WITH-PROJECT---OSPREY AAHU'S

	TY0-1	TY1-6	TY6-43	TY43-69	total
FOOD	0.71	3.57	552.23	860.11	20.53
REPRODUCTION	131.74	548.32	4124.89	1955.06	97.97

GORGE WITHOUT-PROJECT---OSPREY AAHU'S

	TY0-1	TY1-69	total
FOOD	0.71	48.47	0.71
REPRODUCTION	131.74	9390.25	138.00

NET CHANGE (AAHU'S)

FOOD	19.82
REPRODUCTION	-40.03

SPREADSHEET FOR CALCULATING THE HSI FOR MULE DEER----GORGE

GORGE TYO AND TYI (1918 & 1919) WITH AND WITHOUT PROJECT

COVER TYPE	SLOPE CATAGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		COVER- TYPE	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
					FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI			
CC	0-39	0.276	0.809	1.00	1.00	0.28	0.81	192.50	45.08	12.44
	40-79	0.276	0.809	1.00	0.50	0.14	0.81	156.00	36.53	5.04
DC	0-39	0.506	1.000	1.00	1.00	0.51	1.00	8.50	1.99	1.01
	40-79	0.506	1.000	1.00	0.50	0.25	1.00	23.90	5.60	1.42
RC	0-39	0.635	0.996	1.00	1.00	0.64	1.00	12.20	2.86	1.81
	40-79	0.635	0.996	1.00	0.50	0.32	1.00	2.90	0.68	0.22
rCOB	0-39	0.696	1.000	1.00	1.00	0.70	1.00	11.10	2.60	1.81
	40-79	0.696	1.000	1.00	0.50	0.35	1.00	0.00	0.00	0.00
rCC	0-39	0.588	1.000	1.00	1.00	0.59	1.00	16.50	3.86	2.27
	40-79	0.588	1.000	1.00	0.50	0.29	1.00	0.10	0.02	0.01
rS/A	0-39	0.345	0.513	1.00	1.00	0.35	0.51	3.30	0.77	0.27
	40-79	0.345	0.513	1.00	0.50	0.17	0.51	0.00	0.00	0.00

TOTAL AREA USED BY DEER 427.00

AVAILABLE HABITAT FOR FOOD 26.29

AVAILABLE HABITAT FOR COVER 84.02

FOOD HSI= 0.44 FOOD HU= 187.11

COVER HSI= 1.00 COVER HU= 427.00

GORSE TY6 (1924) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE				COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
					FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER HSI				
CC	0-39	0.276	0.809	1.00	1.00	0.28	0.81	181.50	43.64	12.04	35.31	
	40-79	0.276	0.809	1.00	0.50	0.14	0.81	155.90	37.48	5.17	30.33	
DC	0-39	0.506	1.000	1.00	1.00	0.51	1.00	8.50	2.04	1.03	2.04	
	40-79	0.506	1.000	1.00	0.50	0.25	1.00	23.90	5.75	1.45	5.75	
RC	0-39	0.635	0.996	1.00	1.00	0.64	1.00	12.20	2.93	1.86	2.92	
	40-79	0.635	0.996	1.00	0.50	0.32	1.00	2.90	0.70	0.22	0.69	
rCG	0-39	0.696	1.000	1.00	1.00	0.70	1.00	11.10	2.67	1.86	2.67	
	40-79	0.696	1.000	1.00	0.50	0.35	1.00	0.00	0.00	0.00	0.00	
rCC	0-39	0.588	1.000	1.00	1.00	0.59	1.00	16.50	3.97	2.33	3.97	
	40-79	0.588	1.000	1.00	0.50	0.29	1.00	0.10	0.02	0.01	0.02	
rS/A	0-39	0.345	0.513	1.00	1.00	0.35	0.51	3.30	0.79	0.27	0.41	
	40-79	0.345	0.513	1.00	0.50	0.17	0.51	0.00	0.00	0.00	0.00	

TOTAL AREA USED BY DEER 415.90

AVAILABLE HABITAT FOR FOOD 26.26

AVAILABLE HABITAT FOR COVER 84.10

FOOD HSI= 0.44 FOOD HU= 182.03

COVER HSI= 1.00 COVER HU= 415.90

GORGE TY43 (1981) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
					FACTOR	(FOOD)						
CC	0-39	0.276	0.809	1.00	1.00	0.28	0.81	25.25	11.82	3.26	9.56	
	40-79	0.276	0.809	1.00	0.50	0.14	0.81	129.10	60.43	8.34	48.88	
DC	0-39	0.506	1.000	1.00	1.00	0.51	1.00	5.60	2.62	1.33	2.62	
	40-79	0.506	1.000	1.00	0.50	0.25	1.00	22.30	10.44	2.64	10.44	
RC	0-39	0.635	0.996	1.00	1.00	0.64	1.00	9.40	4.40	2.79	4.38	
	40-79	0.635	0.996	1.00	0.50	0.32	1.00	2.90	1.36	0.43	1.35	
rCC	0-39	0.588	1.000	1.00	1.00	0.59	1.00	16.00	7.49	4.40	7.49	
	40-79	0.588	1.000	1.00	0.50	0.29	1.00	0.10	0.05	0.01	0.05	
rS/A	0-39	0.345	0.513	1.00	1.00	0.59	1.00	3.00	1.40	0.83	1.40	
	40-79	0.345	0.513	1.00	0.50	0.29	1.00	0.00	0.00	0.00	0.00	

TOTAL AREA USED BY DEER 213.65

AVAILABLE HABITAT FOR FOOD 24.04

AVAILABLE HABITAT FOR COVER 86.18

FOOD HSI= 0.40 FOOD HU= 85.59

COVER HSI= 1.00 COVER HU= 213.65

GORGE TY 69 (1987) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED	
					FACTOR (FDD)						FOOD HSI	COVER HSI
CC	0-39	0.276	0.809	1.00	1.00	0.28	0.81	61.00	25.52	7.04	20.65	
	40-79	0.276	0.809	1.00	0.50	0.14	0.81	99.10	41.46	5.72	33.54	
OC	0-39	0.506	1.000	1.00	1.00	0.51	1.00	2.90	1.21	0.61	1.21	
	40-79	0.506	1.000	1.00	0.50	0.25	1.00	14.60	6.11	1.55	6.11	
N	0-39	0.352	1.000	1.00	1.00	0.35	1.00	16.10	6.74	2.37	6.74	
	40-79	0.352	1.000	1.00	0.50	0.18	1.00	9.40	3.93	0.69	3.93	
FC	0-39	0.276	0.809	1.00	1.00	0.28	0.81	0.50	0.21	0.06	0.17	
	40-79	0.276	0.809	1.00	0.50	0.14	0.81	0.70	0.29	0.04	0.24	
TL	0-39	0.958	0.482	1.00	1.00	0.96	0.48	23.10	9.67	9.26	4.66	
	40-79	0.958	0.482	1.00	0.50	0.48	0.48	9.50	3.97	1.90	1.92	
rS/A	0-39	0.345	0.513	1.00	1.00	0.35	0.51	2.10	0.88	0.30	0.45	
	40-79	0.345	0.513	1.00	0.50	0.17	0.51	0.00	0.00	0.00	0.00	

TOTAL AREA USED BY DEER 239.00

AVAILABLE HABITAT FOR FOOD 29.55

AVAILABLE HABITAT FOR COVER 79.62

FOOD HSI= 0.49 FOOD HU= 117.72

COVER HSI= 1.00 COVER HU= 239.00

GORGE TY 69 (1987) WITHOUT PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
CC	0-39	0.276	0.809	1.00	1.00	0.28	0.81	192.67	46.81	12.92	37.87
	40-79	0.276	0.809	1.00	0.50	0.14	0.81	162.24	39.42	5.44	31.89
DC	0-39	0.506	1.000	1.00	1.00	0.51	1.00	6.53	1.59	0.80	1.59
	40-79	0.506	1.000	1.00	0.50	0.25	1.00	17.82	4.33	1.10	4.33
RC	0-39	0.635	0.996	1.00	1.00	0.64	1.00	0.00	0.00	0.00	0.00
	40-79	0.635	0.996	1.00	0.50	0.32	1.00	0.00	0.00	0.00	0.00
M	0-39	0.352	1.000	1.00	1.00	0.35	1.00	2.96	0.72	0.25	0.72
	40-79	0.352	1.000	1.00	0.50	0.18	1.00	1.68	0.41	0.07	0.41
FC	0-39	0.276	0.809	1.00	1.00	0.28	0.81	0.00	0.00	0.00	0.00
	40-79	0.276	0.809	1.00	0.50	0.14	0.81	0.00	0.00	0.00	0.00
TL	0-39	0.958	0.482	1.00	1.00	0.96	0.48	0.00	0.00	0.00	0.00
	40-79	0.958	0.482	1.00	0.50	0.48	0.48	0.00	0.00	0.00	0.00
rCOB	0-39	0.696	1.000	1.00	1.00	0.70	1.00	11.10	2.70	1.88	2.70
	40-79	0.696	1.000	1.00	0.50	0.35	1.00	0.00	0.00	0.00	0.00
rCC	0-39	0.588	1.000	1.00	1.00	0.59	1.00	16.50	4.01	2.36	4.01
	40-79	0.588	1.000	1.00	0.50	0.29	1.00	0.10	0.02	0.01	0.02
rs/A	0-39	0.345	0.513	1.00	1.00	0.35	0.51	0.00	0.00	0.00	0.00
	40-79	0.345	0.513	1.00	0.50	0.17	0.51	0.00	0.00	0.00	0.00

TOTAL AREA USED BY DEER 411.60

AVAILABLE HABITAT FOR FOOD 24.82

AVAILABLE HABITAT FOR COVER 83.53

FOOD HSI= 0.41 FOOD HU= 170.29

COVER HSI= 1.00 COVER HU= 411.60

COMPARISON OF TARGET YEAR AAHU'S

GORGE WITH-PROJECT---DEER AAHU'S

	TY0-1	TY1-6	TY6-43	TY43-69	total
FOOD	187.11	922.86	4904.66	2632.91	125.33
COVER	427.00	2107.25	11646.68	5884.45	290.80

GORGE WITHOUT-PROJECT---DEER AAHU'S

	TY0-1	TY1-69	total
FOOD	187.11	12147.45	178.76
COVER	427.00	28512.40	419.41

NET CHANGE (AAHU'S)

FOOD	-53.43
COVER	-128.61

DIABLO RESERVOIR
HABITAT UNITS AND AVERAGE
ANNUAL HABITAT UNIT CALCULATIONS

TARGET YEAR ACREAGES AND HSI's
SKAGIT DAMS ORIGINAL IMPACTS

WITH-PROJECT
DIABLO--TV0 (1927)

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee *		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	99.34	0.357	35.46	0.827	82.15	0.370	36.76	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	694.35	0.614	426.33	0.813	564.51	0.770	534.65	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
open mature conifer	55.22	0.000	0.00	0.569	31.42	0.280	15.46	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	264.21		0.00	0.670	177.02	0.390	103.04	0.600	160.64	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (d reg. lodgepole)	166.62		0.00		0.00	0.220	36.66	0.820	136.63	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	37.05	0.000	0.00		0.00	0.810	30.01	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.670	0.00	0.790	0.00	0.800	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00		0.00		0.00		0.00	0.040	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	10.50		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00		0.00		0.00	0.770	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	20.34	0.500	10.17	0.870	17.70	0.000	0.00		0.00	0.659	13.40	0.00	0.00	0.00	0.00
riparian mature conifer	1.39	1.000	1.39	0.842	1.17	1.000	1.39	0.157	0.22	0.990	1.33	0.00	0.00	0.00	0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.700	0.00	0.000	0.00	0.330	0.00	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.930	0.00	0.950	0.00	1.000	0.00	0.315	0.00	0.00	0.00	0.00	0.00
riverine gradient (1%)	24.26		0.00		0.00		0.00		0.00		0.00	0.100	2.43	0.00	0.00
riverine gradient 1-6%	70.72		0.00		0.00		0.00		0.00		0.00	0.600	47.23	0.00	0.00
riverine, tributary	43.09		0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.890	38.35
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00	0.00	0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
TOTALS	1495.09		473.36		873.97		757.97		297.49		14.79		49.66		38.35

* Black-capped Chickadee limiting life requisites change

WITH-PROJECT
DIABLO TVI (1928)

Community Type	Deverage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	99.34	0.357	35.46	0.827	82.15	0.370	36.76	0.000	0.00		0.00	0.00	0.00	0.00	0.00
closed mature conifer	694.35	0.614	426.33	0.813	564.51	0.770	534.65	0.000	0.00		0.00	0.00	0.00	0.00	0.00
open mature conifer	55.22	0.000	0.00	0.569	31.42	0.280	15.46	0.000	0.00		0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	264.21	0.00	0.00	0.670	177.02	0.330	103.04	0.608	160.64		0.00	0.00	0.00	0.00	0.00
regenerative conifer (lodgepole)	166.62	0.00	0.00	0.00	0.00	0.220	36.66	0.820	136.63		0.00	0.00	0.00	0.00	0.00
broadleaf	37.05	0.000	0.00	0.00	0.00	0.810	30.01	0.000	0.00		0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.678	0.00	0.790	0.00	0.000	0.00	0.000	0.00		0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00		0.00	0.00	0.00	0.00	0.00
exposed rock	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00		0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00		0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.770	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	20.34	0.500	10.17	0.070	17.70	0.000	0.00	0.00	0.00	0.659	13.10	0.00	0.00	0.00	0.00
riparian mature conifer	1.39	1.000	1.39	0.842	1.17	1.000	1.39	0.157	0.22	0.990	1.39	0.00	0.00	0.00	0.00
riparian broadleaf	0.00	0.000	0.00	0.00	0.00	0.780	0.00	0.000	0.00	0.333	0.00	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.330	0.00	0.250	0.00	1.000	0.00	0.315	0.00	0.00	0.00	0.00	0.00
riverine gradient (lodgepole)	24.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.100	2.43	0.00	0.00
riverine gradient (lodgepole)	70.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.600	47.23	0.00	0.00
riverine gradient (lodgepole)	43.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
riverine, tributary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
TOTALS	1495.03		473.36		873.97		757.97		297.49		14.79		49.66		38.35

* Black-capped Chickadee limiting life requisites change

WITH-PROJECT
DIABLO IV2 (1929) 1205 ft. 760 acres

Community Type	Acreage	Pileated Woodpecker		Pine Martin		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	99.70	0.357	35.59	0.827	82.45	0.370	36.89	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	377.50	0.614	231.79	0.813	206.91	0.770	230.68	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
open mature conifer	29.70	0.000	0.00	0.563	16.30	0.280	8.32	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	83.20		0.00	0.670	55.74	0.390	32.45	0.600	50.59	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (& reg. lodgepole)	50.60		0.00		0.00	0.220	11.13	0.820	41.49	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	4.90	0.000	0.00		0.00	0.810	3.97	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.678	0.00	0.790	0.00	0.800	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00		0.00		0.00		0.00	0.040	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	5.50		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00		0.00		0.00	0.770	0.00		0.00		0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	20.00	0.500	10.00	0.870	17.40	0.000	0.00		0.00	0.659	13.18	0.00	0.00	0.00	0.00
riparian mature conifer	1.30	1.000	1.30	0.842	1.09	1.000	1.30	0.157	0.20	0.998	1.30	0.00	0.00	0.00	0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.790	0.00	0.000	0.00	0.333	0.00	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.930	0.00	0.950	0.00	1.000	0.00	0.315	0.00	0.00	0.00	0.00	0.00
riverine gradient 1-1%	0.20		0.00		0.00		0.00		0.00		0.00	0.100	0.02	0.00	0.00
riverine gradient 1-6%	16.50		0.00		0.00		0.00		0.00		0.00	0.600	3.90	0.00	0.00
riverine, tributary	25.82		0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.900	23.24
lacustrine	760.70		0.00		0.00		0.00		0.00		0.00	0.000	0.00	0.00	0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
TOTALS	1475.62		278.68		480.50		384.73		92.20		14.48		9.92		23.24

* Black-capped Chickadee limiting life requisites change

WITH-PROJECT
 DIABLO TY30 (1957) 1205 ft. 760 acres
 Succession

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	99.70	0.357	35.59	0.827	82.45	0.370	36.89	0.000	0.00		0.00		0.00		0.00
closed mature conifer	428.10	0.614	262.85	0.913	348.05	0.770	329.64	0.000	0.00		0.00		0.00		0.00
open mature conifer	23.70	0.000	0.00	0.569	16.70	0.280	8.32	0.000	0.00		0.00		0.00		0.00
lodgepole pine (open & closed)	83.20		0.00	0.670	55.74	0.390	32.45	0.608	50.59		0.00		0.00		0.00
regenerative conifer (lodgepole)	0.00		0.00		0.00	0.220	0.00	0.820	0.00		0.00		0.00		0.00
broadleaf	4.90	0.000	0.00		0.00	0.810	3.97	0.000	0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.670	0.00	0.790	0.00	0.000	0.00	0.000	0.00		0.00		0.00		0.00
shrubland	0.00		0.00		0.00		0.00	0.240	0.00		0.00		0.00		0.00
exposed rock	5.50		0.00		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.770	0.00		0.00		0.00		0.00		0.00
riparian old growth conifer	20.00	0.500	10.00	0.870	17.40	0.000	0.00		0.00	0.659	13.18		0.00		0.00
riparian mature conifer	1.30	1.000	1.30	0.842	1.09	1.000	1.30	0.157	0.20	0.938	1.30		0.00		0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.780	0.00	0.000	0.00	0.333	0.00		0.00		0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.930	0.00	0.350	0.00	1.000	0.00	0.315	0.00		0.00		0.00
riverine gradient < 1%	0.20		0.00		0.00		0.00		0.00		0.00	0.100	0.02		0.00
riverine gradient 1-6%	16.50		0.00		0.00		0.00		0.00		0.00	0.600	9.90		0.00
riverine, tributary	25.02		0.00		0.00		0.00		0.00		0.00		0.00	0.900	23.24
lacustrine	760.70		0.00		0.00		0.00		0.00		0.00	0.000	0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	1475.62		309.75		521.64		412.56		50.79		14.40		9.92		23.24

* Black-capped Chickadee limiting life requisites change

WITH-PROJECT
 DTABLE TV60 (1987) 1205 ft. 760 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	92.75	0.357	33.11	0.827	76.70	0.370	34.32	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	253.23	0.614	155.40	0.813	205.88	0.770	194.99	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
open mature conifer	25.02	0.000	0.00	0.569	14.24	0.300	7.01	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	67.44		0.00	0.670	45.10	0.390	26.30	0.600	41.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (& reg. lodgepole)	1.71		0.00		0.00	0.220	0.38	0.820	1.40	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	18.55	0.000	0.00		0.00	0.810	15.03	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	20.13	0.670	13.65	0.790	15.90	0.000	16.10	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	1.96		0.00		0.00		0.00	0.040	0.08	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	10.40		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	8.70		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	79.67		0.00		0.00	0.770	61.35		0.00		0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	20.50	0.500	10.29	0.870	17.90	0.000	0.00		0.00	0.659	13.56	0.00	0.00	0.00	0.00
riparian mature conifer	1.44	1.000	1.44	0.842	1.21	1.000	1.44	0.157	0.23	0.990	1.44	0.00	0.00	0.00	0.00
riparian broadleaf	19.56	0.000	0.00		0.00	0.780	15.26	0.000	0.00	0.333	6.51	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	6.46	0.000	0.00	0.930	6.01	0.950	6.14	1.000	6.46	0.315	2.03	0.00	0.00	0.00	0.00
riverine gradient (1%)	0.00		0.00		0.00		0.00		0.00		0.00	0.100	0.00	0.00	0.00
riverine gradient 1-6%	25.82		0.00		0.00		0.00		0.00		0.00	0.600	15.43	0.00	0.00
riverine, tributary	25.82		0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.900	23.24
lacustrine	760.70		0.00		0.00		0.00		0.00		0.00	0.000	0.00	0.00	0.00
transmission line	4.00		0.00		0.00		0.00		0.20		0.00	0.00	0.00	0.00	0.00
TOTALS	1443.94		212.97		383.03		378.30		49.17		23.55		15.43		23.24

* Black-capped Chickadee limiting life requisites change

WITH-PROJECT
DIABLO - ARIAU SUMMARY

Community Type	Pileated Woodpecker					Pine Marten					Black-capped Chickadee				
	TY0-1	TY1-2	TY2-30	TY30-60	total	TY0-1	TY1-2	TY2-30	TY30-60	total	TY0-1	TY1-2	TY2-30	TY30-60	total
old growth conifer	35.46	35.53	396.64	1030.57	34.97	82.15	82.30	2308.65	2387.34	81.01	36.76	36.82	1032.89	1068.10	36.24
closed mature conifer	426.33	320.06	6324.34	6275.05	232.59	564.51	435.71	9169.34	8308.82	307.97	534.65	412.66	8684.37	7869.36	291.68
open mature conifer	0.00	0.00	0.00	0.00	0.00	31.42	24.16	473.18	467.04	16.60	15.46	11.89	332.85	329.82	8.17
lodgepole pine (open & closed)	0.00	0.00	0.00	0.00	0.00	177.02	116.38	1560.83	1513.93	56.14	103.04	67.74	908.54	881.24	32.68
regenerative conifer (lodgepole)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.66	23.89	155.85	5.64	3.70
broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.01	16.99	111.13	284.92	7.38
mixed conifer/broadleaf	0.00	0.00	0.00	204.72	3.41	0.00	0.00	0.00	238.54	3.98	0.00	0.00	0.00	241.56	4.83
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	920.19	15.34
riparian old growth conifer	10.17	10.08	200.00	304.35	10.08	17.70	17.55	487.20	529.57	17.53	0.00	0.00	0.00	0.00	0.00
riparian mature conifer	1.39	1.35	36.40	41.10	1.34	1.17	1.13	30.65	34.61	1.13	1.39	1.35	36.40	41.10	1.34
riparian broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	228.85	3.81
riparian mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.12	1.50	0.00	0.00	0.00	32.05	1.53
riverine gradient (1X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine gradient 1-6X	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine, tributary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	473.36	376.02	8237.94	7855.79	282.39	873.97	677.23	14029.85	13569.96	485.85	757.97	571.35	11162.83	11862.84	485.90
				check	282.39				check	485.85				check	485.90

WITH-PROJECT
DIRBLQ--ARRU SUMMARY

Community Type	Ruffed Grouse				Yellow Warbler				American Dipper				Beaver			
	TY0-1	TY1-2	TY2-30	TY30-60	total	TY0-1	TY1-2	TY2-30	TY30-60	total	TY0-1	TY1-2	TY2-30	TY30-60	total	
old growth conifer	0.00	0.00	0.00	0.00	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 mature conifer	0.00	0.00	0.00	0.00	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 mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lodgepole pine (open & closed)	160.64	185.61	1416.40	1373.94	50.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (11 reg. lodgepole)	136.63	89.06	500.00	21.03	13.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	0.00	0.00	0.00	0.00	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 conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	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 old growth conifer	0.22	0.21	5.71	6.45	0.21	1.39	1.34	36.33	41.02	1.33	0.00	0.00	0.00	0.00	0.00	0.00
riparian mature conifer	0.00	0.00	0.00	0.00	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 broadleaf	0.00	0.00	0.00	0.00	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 mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine gradient 1-1x	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine gradient 1-5x	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine, tributary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	297.49	194.08	2003.00	1499.40	66.58	14.79	14.63	405.37	570.38	16.75	43.66	23.79	277.76	381.18	12.31	23.62
					check				check	16.75				check	12.31	23.62

WITHOUT-PROJECT
DIALEO--TYO (1927) PRE PROJECT

Community Type	Acreage	Pileated Woodpecker		Pine Martin		Black-capped Chickadee		Puffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	93.34	0.357	35.46	0.827	82.15	0.370	36.76	0.000	0.00		0.00		0.00		0.00
closed mature conifer	694.35	0.614	426.33	0.813	564.51	0.770	534.65	0.000	0.00		0.00		0.00		0.00
open mature conifer	55.22	0.000	0.00	0.569	31.42	0.280	15.40	0.000	0.00		0.00		0.00		0.00
lodgepole pine (open & closed)	354.21		0.00	0.670	177.02	0.390	123.04	0.606	160.64		0.00		0.00		0.00
regenerative conifer (& reg. lodgepole)	166.62		0.00		0.00	0.220	36.66	0.920	136.62		0.00		0.00		0.00
broadleaf	37.05	0.000	0.00		0.00	0.810	30.01	0.000	0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.678	0.00	0.790	0.00	0.800	0.00	0.000	0.00		0.00		0.00		0.00
shrubland	0.00		0.00		0.00		0.00	0.040	0.00		0.00		0.00		0.00
exposed rock	10.50		0.00		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.770	0.00		0.00		0.00		0.00		0.00
riparian old growth conifer	20.34	0.500	10.17	0.870	17.70	0.000	0.00		0.00	0.659	13.40		0.00		0.00
riparian mature conifer	1.39	1.000	1.39	0.842	1.17	1.000	1.39	0.157	0.22	0.938	1.39		0.00		0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.780	0.00	0.000	0.00	0.333	0.00		0.00		0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.930	0.00	0.950	0.00	1.000	0.00	0.315	0.00		0.00		0.00
riverine gradient (< 1%)	24.26		0.00		0.00		0.00		0.00		0.00	0.100	2.43		0.00
riverine gradient 1-6%	78.72		0.00		0.00		0.00		0.00		0.00	0.600	47.23		0.00
riverine, tributary	43.09		0.00		0.00		0.00		0.00		0.00		0.00	0.890	30.35
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	1495.09		473.36		873.97		757.97		227.49		14.79		49.66		38.25

* Black-capped Chickadee limiting life requisites change

WITHOUT-PROJECT
DIRTLO TV (1928) PRE-PROJECT

Community Type	Area	Pileated Woodpecker		Pine Martin		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	99.34	0.357	35.46	0.827	82.15	0.378	36.76	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	694.35	0.614	426.33	0.813	564.51	0.778	534.65	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
open mature conifer	55.22	0.000	0.00	0.563	31.42	0.298	15.46	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	264.21		0.00	0.678	177.82	0.338	183.44	0.688	168.64	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (lodgepole)	166.62		0.00		0.00	0.228	36.66	0.828	136.63	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	37.65	0.000	0.00		0.00	0.818	38.81	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.678	0.00	0.758	0.00	0.888	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00		0.00		0.00		0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	10.58		0.00		0.00		0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	28.34	0.500	18.17	0.878	17.78	0.000	0.00	0.00	0.00	0.659	13.48	0.00	0.00	0.00	0.00
riparian mature conifer	1.33	1.000	1.33	0.842	1.17	1.000	1.33	0.157	0.22	0.598	1.33	0.00	0.00	0.00	0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.788	0.00	0.000	0.00	0.333	0.00	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.338	0.00	0.758	0.00	1.000	0.00	0.315	0.00	0.00	0.00	0.00	0.00
riverine gradient (lx)	24.26		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.188	2.43	0.00	0.00
riverine gradient 1-6x	78.72		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.688	47.23	0.00	0.00
riverine, tributary	43.89		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.898	38.35
lacustrine	0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
transmission line	0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	1495.09		473.36		873.97		757.37		297.49		14.79		49.66		38.35

* Black-capped Chickadee listing life requisites change

WITHOUT-PROJECT
DIABLO TV30 (1957) SUCCESSION

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	99.34	0.357	35.46	0.827	82.15	0.370	36.76	0.000	0.00		0.00		0.00		0.00
closed mature conifer	868.45	0.614	528.32	0.813	699.55	0.770	662.55	0.000	0.00		0.00		0.00		0.00
open mature conifer	55.72	0.000	0.00	0.569	31.70	0.280	15.60	0.000	0.00		0.00		0.00		0.00
lodgepole pine (open & closed)	264.21		0.00	0.570	177.82	0.390	103.04	0.600	160.64		0.00		0.00		0.00
regenerative conifer (lodgepole)	0.00		0.00		0.00	0.220	0.00	0.820	0.00		0.00		0.00		0.00
broadleaf	37.05	0.000	0.00		0.00	0.810	30.01	0.000	0.00		0.00		0.00		0.00
mixed conifer/broadleaf	0.00	0.678	0.00	0.790	0.00	0.800	0.00	0.000	0.00		0.00		0.00		0.00
shrubland	0.00		0.00		0.00		0.00	0.040	0.00		0.00		0.00		0.00
exposed rock	10.50		0.00		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.770	0.00		0.00		0.00		0.00		0.00
riparian old growth conifer	20.34	0.500	10.17	0.870	17.70	0.000	0.00		0.00	0.659	13.40		0.00		0.00
riparian mature conifer	1.39	1.000	1.39	0.842	1.17	1.000	1.39	0.157	0.22	0.998	1.39		0.00		0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.780	0.00	0.000	0.00	0.333	0.00		0.00		0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.930	0.00	0.950	0.00	1.000	0.00	0.315	0.00		0.00		0.00
riverine gradient 1-14	24.26		0.00		0.00		0.00		0.00		0.00	0.100	2.43		0.00
riverine gradient 1-64	78.72		0.00		0.00		0.00		0.00		0.00	0.600	47.23		0.00
riverine, tributary	43.09		0.00		0.00		0.00		0.00		0.00		0.00	0.890	38.35
lacustrine	0.00		0.00		0.00		0.00		0.00		0.00	0.000	0.00		0.00
transmission line	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
TOTALS	1495.07		575.34		1005.29		843.35		160.86		14.79		49.66		38.35

* Black-capped Chickadee limiting life requisites change

WITHOUT-PROJECT
DIABLO TYES (1987)

Community Type	Acreage	Pileated Woodpecker		Pine Martin		Chickadee		Ruffed Grouse		Yellow Warbler		American Dipper		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	105.93	0.357	37.82	0.827	87.60	0.370	39.19	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	989.35	0.614	558.34	0.813	739.30	0.770	700.20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
open mature conifer	42.84	0.000	0.00	0.569	24.36	0.280	12.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	222.03	0.00	0.00	0.670	148.76	0.390	86.57	0.608	134.99	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (l reg. lodgepole)	0.00	0.00	0.00	0.00	0.00	0.220	0.00	0.020	0.00	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	36.70	0.000	0.00	0.00	0.00	0.810	29.73	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.678	0.00	0.790	0.00	0.800	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.040	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.770	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	20.00	0.500	10.00	0.870	17.40	0.000	0.00	0.00	0.00	0.659	13.18	0.00	0.00	0.00	0.00
riparian mature conifer	1.30	1.000	1.30	0.842	1.09	1.000	1.30	0.157	0.20	0.990	1.30	0.00	0.00	0.00	0.00
riparian broadleaf	0.00	0.000	0.00	0.00	0.00	0.780	0.00	0.000	0.00	0.333	0.00	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	0.00	0.000	0.00	0.930	0.00	0.950	0.00	1.000	0.00	0.315	0.00	0.00	0.00	0.00	0.00
riverine gradient (1%)	24.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.100	2.43	0.00	0.00	0.00
riverine gradient 1-6%	78.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.600	47.23	0.00	0.00	0.00
riverine, tributary	43.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.090	38.35	0.00
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	1492.77		607.46		1010.54		869.01		135.20		14.48		49.66		38.35

* Black-capped Chickadee limiting life requisites change

WITHOUT-PROJECT
DIRBLD--AAHU SUMMARY

Community Type	Pileated Woodpecker			Pine Marten			Black-capped Chickadee		
	TV0-1	TV1-30	TV30-60	TV0-1	TV1-30	TV30-60	TV0-1	TV1-30	TV30-60
old growth conifer	35.46	1628.47	1699.22	82.15	2382.47	2546.37	36.76	1865.92	1139.25
closed mature conifer	426.33	13812.38	16299.86	564.51	18328.76	21382.71	534.65	17359.34	28441.19
open mature conifer	0.00	0.00	0.00	31.42	915.31	841.21	15.46	458.42	413.95
lodgepole pine (open & closed)	0.00	0.00	0.00	177.82	5133.68	4886.71	183.84	2988.22	2844.50
regenerative conifer (a reg. lodgepole)	0.00	0.00	0.00	0.00	0.00	0.00	36.66	531.52	0.00
broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	38.81	878.38	836.06
mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian old growth conifer	10.17	294.31	382.35	17.78	513.18	526.44	17.62	48.00	0.00
riparian mature conifer	1.39	48.31	48.35	1.17	33.94	33.97	1.33	48.31	48.35
riparian broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine gradient (1x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine gradient 1-6x	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine, tributary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	473.36	15246.89	17741.98	873.97	27387.26	38417.42	976.64	23386.82	25775.31
			557.82			976.64			838.65
			check			check			check

WITHOUT-PROJECT
DIABLO-AAMU SUMMARY

Community Type	Ruffed Grouse				Yellow Warbler				Oregon Dipper				Beaver			
	TY0-1	TY1-30	TY30-60	total	TY0-1	TY1-30	TY30-60	total	TY0-1	TY1-30	TY30-60	total	TY0-1	TY1-30	TY30-60	total
old growth conifer	0.00	0.00	0.00	0.00	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 mature conifer	0.00	0.00	0.00	0.00	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 mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	160.64	4658.55	4434.51	154.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (l reg. lodgepole)	136.63	1981.11	0.00	35.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	0.00	0.00	0.00	0.00	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 conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	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 old growth conifer	0.00	0.00	0.00	0.00	13.40	388.72	398.76	13.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian mature conifer	0.22	6.33	6.33	0.21	1.39	40.23	40.27	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian broadleaf	0.00	0.00	0.00	0.00	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 mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine gradient (1%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.43	70.35	72.78	2.43	0.00	0.00	0.00	0.00
riverine gradient 1-6%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.23	1369.73	1416.96	47.23	0.00	0.00	0.00	0.00
riverine, tributary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.35	1112.15	1150.50	38.35
lacustrine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
transmission line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	297.43	6645.39	4440.84	189.74	14.79	428.95	439.03	14.71	49.66	1440.08	1489.74	49.66	38.35	1112.15	1150.50	38.35
			check	189.74			check	14.71			check	49.66			check	38.35

NET CHANGE IN AAHU'S
(WITH-WITHOUT PROJECT)

SPECIES	WITH-PROJECT	WITHOUT-PROJECT	NET CHANGE
Pileated Woodpecker	282.385	557.024	-274.639
Pine Marten	485.850	976.644	-490.794
Chickadee	405.903	830.655	-424.752
Ruffed Grouse	66.579	189.739	-123.159
Yellow Warbler	16.753	14.713	2.040
American Dipper	12.306	49.658	-37.352
Beaver	23.616	38.350	-14.734

SPREADSHEET TO CALCULATE HSIs, HUs, AND AAHUs FOR THE RED-TAILED HAWK
DIABLO TYO AND TY1 (1927 & 1928) WITH AND WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG		1.000	1.000	0.000	1.000	99.34	0.107	0.000	0.107
CC		1.000	1.000	0.000	1.000	694.35	0.748	0.000	0.748
DC	0.582	0.663	1.000	0.582	0.663	55.22	0.059	0.035	0.039
M				0.000	0.000	0.00	0.000	0.000	0.000
B		0.890	1.000	0.000	0.890	37.05	0.040	0.000	0.036
S			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
ER*	0.750		1.000	0.750	0.000	10.50	0.011	0.008	0.000
TL*	0.803		1.000	0.803	0.000	10.50	0.011	0.009	0.000
rCOG		1.000	1.000	0.000	1.000	20.34	0.022	0.000	0.022
rCC		1.000	1.000	0.000	1.000	1.39	0.001	0.000	0.001
rM				0.000	0.000	0.00	0.000	0.000	0.000
rB				0.000	0.000	0.00	0.000	0.000	0.000

* HSI values assigned by the HEP team

928.69

AVAILABLE HABITAT FOR FOOD 5.22

AVAILABLE HABITAT FOR REPRODUCTION 95.30

FOOD HSI= 0.073 (from graph) FOOD HUs=67.79437

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HUs= 928.69

DIABLO TY2 (1929) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD	ADJUSTED HSI REPR.	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG		1.000	1.000	0.000	1.000	99.70	0.185	0.000	0.185
CC		1.000	1.000	0.000	1.000	377.50	0.701	0.000	0.701
OC	0.582	0.663	1.000	0.582	0.663	29.70	0.055	0.032	0.037
M			1.000	0.000	0.000	0.00	0.000	0.000	0.000
B		0.890	1.000	0.000	0.890	4.90	0.009	0.000	0.008
S			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
ER*	0.750		1.000	0.750	0.000	5.50	0.010	0.008	0.000
TL*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
rCOG		1.000	1.000	0.000	1.000	20.00	0.037	0.000	0.037
rCC		1.000	0.960	0.000	0.960	1.30	0.002	0.000	0.002
rM			1.000	0.000	0.000	0.00	0.000	0.000	0.000
rB			1.000	0.000	0.000	0.00	0.000	0.000	0.000

* HSI values assigned by the HEP team

538.60

AVAILABLE HABITAT FOR FOOD 3.98

AVAILABLE HABITAT FOR REPRODUCTION 97.01

FOOD HSI= 0.056 (from graph) FOOD HUs= 30.1616

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HUs= 538.6

DIABLO TY30 (1957) WITH PROJECT (SUCCESSION)

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COB		1.000	1.000	0.000	1.000	99.70	0.169	0.000	0.169
CC		1.000	1.000	0.000	1.000	428.10	0.727	0.000	0.727
OC	0.582	0.663	1.000	0.582	0.663	29.70	0.050	0.029	0.033
M			1.000	0.000	0.000	0.00	0.000	0.000	0.000
B		0.890	1.000	0.000	0.890	4.90	0.008	0.000	0.007
S			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
ER*	0.750		1.000	0.750	0.000	5.50	0.009	0.007	0.000
TL*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
rCOB		1.000	1.000	0.000	1.000	20.00	0.034	0.000	0.034
rCC		1.000	0.960	0.000	0.960	1.30	0.002	0.000	0.002
rM			1.000	0.000	0.000	0.00	0.000	0.000	0.000
rB			1.000	0.000	0.000	0.00	0.000	0.000	0.000

* HSI values assigned by the HEP team

589.20

AVAILABLE HABITAT FOR FOOD 3.63

AVAILABLE HABITAT FOR REPRODUCTION 97.27

FOOD HSI= 0.051 (from graph) FOOD HUs= 30.0492

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HUs= 589.2

DIABLO TY60 (1987) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD	ADJUSTED REPR.	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG		1.000	1.000	0.000	1.000	92.75	0.192	0.000	0.192
CC		1.000	1.000	0.000	1.000	253.23	0.525	0.000	0.525
OC	0.582	0.663	1.000	0.582	0.663	25.02	0.052	0.030	0.034
M		1.000	1.000	0.000	1.000	20.13	0.042	0.000	0.042
B		0.890	1.000	0.000	0.890	18.55	0.038	0.000	0.034
S	0.803		1.000	0.803	0.000	1.96	0.004	0.003	0.000
R/T*	0.750		1.000	0.750	0.000	8.70	0.018	0.014	0.000
ER*	0.750		1.000	0.750	0.000	10.40	0.022	0.016	0.000
TL*	0.803		1.000	0.803	0.000	4.00	0.008	0.007	0.000
rCOG		1.000	1.000	0.000	1.000	20.58	0.043	0.000	0.043
rCC		1.000	0.960	0.000	0.960	1.44	0.003	0.000	0.003
rM		0.000	1.000	0.000	0.000	6.46	0.013	0.000	0.000
rB		0.000	1.000	0.000	0.000	19.56	0.041	0.000	0.000

* HSI values assigned by the HEP team

482.78

AVAILABLE HABITAT FOR FOOD 6.97

AVAILABLE HABITAT FOR REPRODUCTION 87.24

FOOD HSI= 0.098 (from graph) FOOD HU= 47.31244

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION= 482.78

DIALED TY30 (1957) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
DOG		1.000	1.000	0.000	1.000	99.34	0.092	0.000	0.092
CC		1.000	1.000	0.000	1.000	860.45	0.793	0.000	0.793
DC	0.582	0.663	1.000	0.582	0.663	55.57	0.051	0.030	0.034
M				0.000	0.000	0.00	0.000	0.000	0.000
B		0.890	1.000	0.000	0.890	37.05	0.034	0.000	0.030
S			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/Tk			1.000	0.000	0.000	0.00	0.000	0.000	0.000
ERt	0.750		1.000	0.750	0.000	10.50	0.010	0.007	0.000
TLt	0.803		1.000	0.803	0.000	0.00	0.000	0.000	0.000
rDOG		1.000	1.000	0.000	1.000	20.34	0.019	0.000	0.019
rCC		1.000	1.000	0.000	1.000	1.39	0.001	0.000	0.001
rM				0.000	0.000	0.00	0.000	0.000	0.000
rB				0.000	0.000	0.00	0.000	0.000	0.000

* HSI values assigned by the NEP team

1084.64

AVAILABLE HABITAT FOR FOOD 3.71

AVAILABLE HABITAT FOR REPRODUCTION 96.93

FOOD HSI= 0.062 (from graph) FOOD HUs=67.24768

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HUs= 1084.64

DIABLO TY60 (1987) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR. HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COB		1.000	1.000	0.000	1.000	105.93	0.094	0.000	0.094
CC		1.000	1.000	0.000	1.000	909.35	0.809	0.000	0.809
OC	0.582	0.663	1.000	0.582	0.663	42.84	0.038	0.022	0.025
M				0.000	0.000	0.00	0.000	0.000	0.000
B		0.890	1.000	0.000	0.890	36.70	0.033	0.000	0.029
S			1.000	0.000	0.000	0.00	0.000	0.000	0.000
R/T*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
ER*	0.750		1.000	0.750	0.000	8.55	0.008	0.006	0.000
TL*			1.000	0.000	0.000	0.00	0.000	0.000	0.000
rCOB		1.000	1.000	0.000	1.000	20.00	0.018	0.000	0.018
rCC		1.000	1.000	0.000	1.000	1.30	0.001	0.000	0.001
rM				0.000	0.000	0.00	0.000	0.000	0.000
rB				0.000	0.000	0.00	0.000	0.000	0.000

* HSI values assigned by the HEP team

1124.67

AVAILABLE HABITAT FOR FOOD 2.79

AVAILABLE HABITAT FOR REPRODUCTION 97.60

FOOD HSI= 0.039 (from graph) FOOD HU= 43.86213

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION= 1124.67

COMPARISON OF TARGET YEAR AARU'S

DIABLO WITH-PROJECT---HAWK AARU'S

	TY0-1	TY1-2	TY2-30	TY30-60	total
FOOD	67.03	47.52	844.13	1185.43	35.74
REPROD	918.19	728.40	15789.20	16079.70	558.59

DIABLO WITHOUT-PROJECT---HAWK AARU'S

	TY0-1	TY1-30	TY30-60	total
FOOD	67.03	1955.85	1671.25	61.97
REPROD	918.19	29041.04	33139.65	1031.65

NET CHANGE (AARU'S)

FOOD	-25.83
REPROD	-493.06

SPREADSHEET FOR CALCULATING THE HSI FOR OSPREY---DIABLO

DIABLO TY0 AND TY1 (1927 & 1928) WITH AND WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE*	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	0.13	0.011	99.34	0.114	0.011	0.042
CC	0.967	0.299	9.95	0.861	694.35	0.798	0.833	0.238
OC	0.817	0.898	1.10	0.095	55.22	0.063	0.078	0.057
rCOG	1.000	0.371	0.37	0.032	20.34	0.023	0.032	0.009
rCC		0.299	0.00	0.000	1.39	0.002	0.000	0.000

11.55

870.64

280.00 **

FOOD HSI= 0.95

FOOD HUs= 267.76

REPRODUCTION HSI=

0.35 REPRODUCTION HUs= 302.02

assumed that riparian and upland types are similar in quality

COG HSIs are from Ross (none available to measure on Diablo).

* measured in miles

** acres, given shoreline length and 200ft adjacent to the shore

DIABLO TY2 (1929) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CDG	1.000	0.371	2.70	0.255	99.70	0.189	0.255	0.070
CC	0.967	0.299	6.62	0.625	377.50	0.715	0.604	0.214
OC	0.817	0.898	0.97	0.092	29.70	0.056	0.075	0.050
rCDG	1.000	0.371	0.30	0.028	20.00	0.038	0.028	0.014
rCC	0.967	0.299	0.01	0.001	1.30	0.002	0.001	0.001

10.60

528.20

256.97 **

FOOD HSI= 0.96

FOOD HUs= 247.36

REPRODUCTION HSI=

0.35 REPRODUCTION HUs= 184.34

assumed that relative length of shoreline by cover type is not significantly different from 1987

assumed that riparian and upland types are similar in quality

CDG HSIs are from Ross (none available to measure on Diablo).

* measured in miles

** acres, given shoreline length and 200ft adjacent to the shore

DIABLO TY30 (1957) WITH PROJECT (SUCCESSION)

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	2.70	0.255	99.70	0.172	0.255	0.064
CC	0.967	0.299	6.62	0.625	428.10	0.740	0.604	0.221
OC	0.817	0.898	0.97	0.092	29.70	0.051	0.075	0.046
rCOG	1.000	0.371	0.30	0.028	20.00	0.035	0.028	0.013
rCC	0.967	0.299	0.01	0.001	1.30	0.002	0.001	0.001

10.60

578.80

256.97 **

FOOD HSI= 0.96

FOOD HUs= 247.36

REPRODUCTION HSI=

0.34 REPRODUCTION HUs= 199.47

assumed that relative length of shoreline by cover type is not significantly different from 1987

assumed that riparian and upland types are similar in quality

COG HSIs are from Ross (none available to measure on Diablo).

* measured in miles

** acres, given shoreline length and 200ft adjacent to the shore

DIABLO TY60 (1987) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CDG	1.000	0.371	2.70	0.25	92.75	0.236	0.255	0.088
CC	0.967	0.299	6.62	0.62	253.23	0.644	0.604	0.193
OC	0.817	0.898	0.97	0.09	25.02	0.064	0.075	0.057
rCDG	1.000	0.371	0.30	0.03	20.58	0.052	0.028	0.019
rCC	0.967	0.299	0.01	0.00	1.44	0.004	0.001	0.001

10.60

393.02

256.97 **

FOOD HSI= 0.96

FOOD HUs= 247.36

REPRODUCTION HSI=

0.36 REPRODUCTION HUs= 140.66

assumed that riparian and upland types are similar in quality

CDG HSIs are from Ross (none available to measure on Diablo).

* measured in miles

** acres, given shoreline length and 200ft adjacent to the shore

DIABLO TY30 (1957) WITHOUT PROJECT (SUCCESSION)

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	0.13	0.011	99.34	0.096	0.011	0.036
CC	0.967	0.299	9.95	0.861	860.45	0.830	0.833	0.248
OC	0.817	0.898	1.10	0.095	55.72	0.054	0.078	0.048
rCOG	1.000	0.371	0.37	0.032	20.34	0.020	0.032	0.007
rCC		0.299	0.00	0.000	1.39	0.001	0.000	0.000

11.55

1037.24

280.00 **

FOOD HSI= 0.95

FOOD HUs= 267.16

REPRODUCTION HSI=

0.34 REPRODUCTION HUs= 352.13

assumed that riparian and upland types are similar in quality

COG HSIs are from Ross (none available to measure on Diablo).

assumed that shoreline lengths are not significantly different from TY0

* measured in miles

** acres, given shoreline length and 200ft adjacent to the shore

DIABLO TY60 (1987) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	0.13	0.011	105.93	0.098	0.011	0.036
CC	0.967	0.299	9.95	0.861	909.35	0.842	0.833	0.252
OC	0.817	0.898	1.10	0.095	42.84	0.040	0.078	0.036
rCOG	1.000	0.371	0.37	0.032	20.00	0.019	0.032	0.007
rCC	0.967	0.299	0.00	0.000	1.30	0.001	0.000	0.000

11.55

1079.42

280.00 **

FOOD HSI= 0.95

FOOD HUs= 267.16

REPRODUCTION HSI=

0.33 REPRODUCTION HUs= 357.47

assumed that riparian and upland types are similar in quality

COG HSIs are from Ross (none available to measure on Diablo).

assumed that shoreline lengths are not significantly different from TYO

* measured in miles

** acres, given shoreline length and 200ft adjacent to the shore

COMPARISON OF TARGET YEAR AAHU'S

DIABLO WITH-PROJECT---OSPREY AAHU'S

	TY0-1	TY1-2	TY2-30	TY30-60	total
FOOD	267.16	257.29	6926.15	7420.87	247.86
REPRODUCTION	302.02	243.30	5374.38	5114.27	183.90

DIABLO WITHOUT-PROJECT---OSPREY AAHU'S

	TY0-1	TY1-30	TY30-60	total
FOOD	267.16	7747.64	8014.80	267.16
REPRODUCTION	302.02	9491.04	10645.79	340.65

NET CHANGE (AAHU'S)

FOOD	-19.30
REPRODUCTION	-156.75

SPREADSHEET FOR CALCULATING THE HSI FOR MULE DEER----DIABLO

DIABLO TYO AND TY1 (1927 & 1928) WITH AND WITHOUT PROJECT

COVER TYPE	SLOPE CATAGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
					FACTOR (FOOD)	ADJUSTED FOOD HSI				
C06	0-39	0.389	1.000	1.000	1.0	0.389	1.000	42.20	3.577	3.577
	40-79	0.389	1.000	1.000	0.5	0.195	1.000	27.80	2.356	2.356
CC	0-39	0.334	1.000	1.000	1.0	0.334	1.000	486.80	41.261	41.261
	40-79	0.334	1.000	1.000	0.5	0.167	1.000	112.70	9.552	9.552
OC	0-39	0.054	0.984	1.000	1.0	0.054	0.984	16.60	1.407	1.385
	40-79	0.054	0.984	1.000	0.5	0.027	0.984	27.80	2.356	2.319
LP	0-39	0.200	0.997	1.000	1.0	0.200	0.997	173.2	14.680	14.636
	40-79	0.200	0.997	1.000	0.5	0.100	0.997	71.9	6.094	6.076
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	85.00	7.205	7.176
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	81.60	6.916	6.889
B	0-39	0.335	0.769	1.000	1.0	0.335	0.769	29.50	2.500	1.923
	40-79	0.335	0.769	1.000	0.5	0.168	0.769	3.40	0.288	0.222
rC06	0-39	0.696	1.000	1.000	1.0	0.696	1.000	20.00	1.695	1.695
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	1.30	0.110	0.110
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000

TOTAL AREA USED BY DEER 1179.80

AVAILABLE HABITAT FOR FOOD 29.81

AVAILABLE HABITAT FOR COVER 99.18

FOOD HSI= 0.497 FOOD HUs= 586.22

COVER HSI= 1.000 COVER HU= 1179.80

DIABLO TY2 (1929) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		COVER- TYPE	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
					FACTOR (FOOD)	ADJUSTED FOOD HSI				
COG	0-39	0.389	1.000	1.00	1.0	0.389	1.000	42.20	8.562	8.562
	40-79	0.389	1.000	1.00	0.5	0.195	1.000	57.50	11.666	11.666
CC	0-39	0.334	1.000	1.00	1.0	0.334	1.000	228.50	46.358	46.358
	40-79	0.334	1.000	1.00	0.5	0.167	1.000	87.60	17.772	17.772
DC	0-39	0.054	0.984	1.00	1.0	0.054	0.984	0.50	0.101	0.100
	40-79	0.054	0.984	1.00	0.5	0.027	0.984	24.60	4.991	4.911
LP	0-39	0.200	0.997	1.00	1.0	0.200	0.997	50.40	10.225	10.195
	40-79	0.200	0.997	1.00	0.5	0.100	0.997	26.50	5.376	5.360
RC	0-39	0.635	0.996	1.00	1.0	0.635	0.996	20.00	4.058	4.041
	40-79	0.635	0.996	1.00	0.5	0.318	0.996	30.60	6.208	6.183
B	0-39	0.335	0.769	1.00	1.0	0.335	0.769	0.70	0.142	0.109
	40-79	0.335	0.769	1.00	0.5	0.168	0.769	2.20	0.446	0.343
rCOG	0-39	0.696	1.000	1.00	1.0	0.696	1.000	20.00	4.058	4.058
	40-79			1.00	0.5	0.000	0.000	0.00	0.000	0.000
rCC	0-39	0.588	1.000	1.00	1.0	0.588	1.000	1.30	0.264	0.264
	40-79			1.00	0.5	0.000	0.000	0.00	0.000	0.000

TOTAL AREA USED BY DEER 492.90

AVAILABLE HABITAT FOR FOOD 28.82

AVAILABLE HABITAT FOR COVER 99.69

FOOD HSI= 0.480 FOOD HUs= 236.79

COVER HSI= 1.000 COVER HU= 492.90

DIABLO TY30 (1957) WITH PROJECT (SUCCESSION)

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		COVER- TYPE	AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
					FACTOR	ADJUSTED (FOOD)					
COG	0-39	0.389	1.000	1.00	1.0	0.389	1.000	42.20	8.562	3.330	8.562
	40-79	0.389	1.000	1.00	0.5	0.195	1.000	57.50	11.666	2.269	11.666
CC	0-39	0.334	1.000	1.00	1.0	0.334	1.000	248.50	50.416	16.839	50.416
	40-79	0.334	1.000	1.00	0.5	0.167	1.000	118.20	23.981	4.005	23.981
OC	0-39	0.054	0.984	1.00	1.0	0.054	0.984	0.50	0.101	0.005	0.100
	40-79	0.054	0.984	1.00	0.5	0.027	0.984	24.60	4.991	0.135	4.911
LP	0-39	0.200	0.997	1.00	1.0	0.200	0.997	50.40	10.225	2.045	10.195
	40-79	0.200	0.997	1.00	0.5	0.100	0.997	26.50	5.376	0.538	5.360
B	0-39	0.335	0.769	1.00	1.0	0.335	0.769	0.70	0.142	0.048	0.109
	40-79	0.335	0.769	1.00	0.5	0.168	0.769	2.20	0.446	0.075	0.343
rCOG	0-39	0.696	1.000	1.00	1.0	0.696	1.000	20.00	4.058	2.824	4.058
	40-79			1.00	0.5	0.000	0.000	0.00	0.000	0.000	0.000
rCC	0-39	0.588	1.000	1.00	1.0	0.588	1.000	1.30	0.264	0.155	0.264
	40-79			1.00	0.5	0.000	0.000	0.00	0.000	0.000	0.000

TOTAL AREA USED BY DEER 492.90

AVAILABLE HABITAT FOR FOOD 26.67

AVAILABLE HABITAT FOR COVER 99.74

FOOD HSI= 0.444 FOOD HUs= 219.08

COVER HSI= 1.000 COVER HU= 492.90

DIABLO TY60 (1987) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		COVER- TYPE	AREA	RELATIVE AREA	WEIGHTED	
					FACTOR	ADJUSTED				FOOD HSI	COVER HSI
CDS	0-39	0.389	1.000	1.000	1.0	0.389	1.000	40.10	7.400	2.879	7.400
	40-79	0.389	1.000	1.000	0.5	0.195	1.000	52.80	9.743	1.895	9.743
CC	0-39	0.334	1.000	1.000	1.0	0.334	1.000	116.80	21.554	7.199	21.554
	40-79	0.334	1.000	1.000	0.5	0.167	1.000	91.90	16.959	2.832	16.959
OC	0-39	0.054	0.984	1.000	1.0	0.054	0.984	1.00	0.185	0.010	0.182
	40-79	0.054	0.984	1.000	0.5	0.027	0.984	16.80	3.100	0.084	3.051
LP	0-39	0.200	0.997	1.000	1.0	0.200	0.997	32.7	6.034	1.207	6.016
	40-79	0.200	0.997	1.000	0.5	0.100	0.997	30.4	5.610	0.561	5.593
M	0-39	0.236	1.000	1.000	1.0	0.236	1.000	0.50	0.092	0.022	0.092
	40-79	0.236	1.000	1.000	0.5	0.118	1.000	14.50	2.676	0.316	2.676
B	0-39	0.335	0.769	1.000	1.0	0.335	0.769	12.80	2.362	0.791	1.816
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000
S	0-39			1.000	1.0	0.000	0.000	0.00	0.000	0.000	0.000
	40-79	0.958	0.482	1.000	0.5	0.479	0.482	2.00	0.369	0.177	0.178
FC	0-39	0.334	1.000	1.000	1.0	0.334	1.000	77.10	14.228	4.752	14.228
	40-79	0.334	1.000	1.000	0.5	0.167	1.000	2.40	0.443	0.074	0.443
TL	0-39	0.958	0.482	1.000	1.0	0.958	0.482	2.80	0.517	0.495	0.249
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000
rCDS	0-39	0.696	1.000	1.000	1.0	0.696	1.000	20.40	3.765	2.620	3.765
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	1.30	0.240	0.141	0.240
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000
rM	0-39	0.354	1.000	1.000	1.0	0.354	1.000	6.40	1.181	0.418	1.181
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000
rB	0-39	0.482	0.484	1.000	1.0	0.482	0.484	19.20	3.543	1.708	1.715
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000

TOTAL AREA USED BY DEER 541.90

AVAILABLE HABITAT FOR FOOD 28.18

AVAILABLE HABITAT FOR COVER 97.08

FOOD HSI= 0.470 FOOD HUs= 254.51

COVER HSI= 1.000 COVER HU= 541.90

DIABLO TY30 (1957) WITHOUT PROJECT (SUCCESSION)

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED	
					FACTOR	(FOOD)					FOOD HSI	COVER HSI
COG	0-39	0.389	1.000	1.000	1.0	0.389	1.000	42.20	3.577	1.391	3.577	
	40-79	0.389	1.000	1.000	0.5	0.195	1.000	27.80	2.356	0.458	2.356	
CC	0-39	0.334	1.000	1.000	1.0	0.334	1.000	571.30	48.423	16.173	48.423	
	40-79	0.334	1.000	1.000	0.5	0.167	1.000	194.30	16.469	2.750	16.469	
DC	0-39	0.054	0.984	1.000	1.0	0.054	0.984	17.10	1.449	0.078	1.426	
	40-79	0.054	0.984	1.000	0.5	0.027	0.984	27.80	2.356	0.064	2.319	
LP	0-39	0.200	0.997	1.000	1.0	0.200	0.997	173.2	14.680	2.936	14.636	
	40-79	0.200	0.997	1.000	0.5	0.100	0.997	71.9	6.094	0.609	6.076	
B	0-39	0.335	0.769	1.000	1.0	0.335	0.769	29.50	2.500	0.838	1.923	
	40-79	0.335	0.769	1.000	0.5	0.168	0.769	3.40	0.288	0.048	0.222	
rCOG	0-39	0.696	1.000	1.000	1.0	0.696	1.000	20.00	1.695	1.180	1.695	
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000	
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	1.30	0.110	0.065	0.110	
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000	

TOTAL AREA USED BY DEER 1179.80

AVAILABLE HABITAT FOR FOOD 26.59

AVAILABLE HABITAT FOR COVER 99.23

FOOD HSI= 0.443 FOOD HU= 522.88

COVER HSI= 1.000 COVER HU= 1179.80

DIABLO TY60 (1987) WITHOUT PROJECT (SUCCESSION)

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED	
					FACTOR	(FOOD)					FOOD HSI	COVER HSI
CDG	0-39	0.389	1.000	1.000	1.0	0.389	1.000	46.58	3.847	1.496	3.847	
	40-79	0.389	1.000	1.000	0.5	0.195	1.000	58.51	4.832	0.940	4.832	
CC	0-39	0.334	1.000	1.000	1.0	0.334	1.000	598.48	49.426	16.508	49.426	
	40-79	0.334	1.000	1.000	0.5	0.167	1.000	213.07	17.597	2.939	17.597	
DC	0-39	0.054	0.984	1.000	1.0	0.054	0.984	12.95	1.069	0.058	1.052	
	40-79	0.054	0.984	1.000	0.5	0.027	0.984	21.42	1.769	0.048	1.741	
LP	0-39	0.200	0.997	1.000	1.0	0.200	0.997	146.34	12.086	2.417	12.049	
	40-79	0.200	0.997	1.000	0.5	0.100	0.997	59.30	4.897	0.490	4.883	
B	0-39	0.335	0.769	1.000	1.0	0.335	0.769	29.50	2.436	0.816	1.874	
	40-79	0.335	0.769	1.000	0.5	0.168	0.769	3.40	0.281	0.047	0.216	
rCDG	0-39	0.696	1.000	1.000	1.0	0.696	1.000	20.00	1.652	1.150	1.652	
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000	
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	1.30	0.107	0.063	0.107	
	40-79			1.000	0.5	0.000	0.000	0.00	0.000	0.000	0.000	

TOTAL AREA USED BY DEER 1210.85

AVAILABLE HABITAT FOR FOOD 26.97

AVAILABLE HABITAT FOR COVER 99.28

FOOD HSI= 0.450 FOOD HUs= 544.31

COVER HSI= 1.000 COVER HU= 1210.85

SPREADSHEET TO COMPARE TARGET YEAR AAHU'S

MULE DEER

DIABLO WITH-PROJECT AAHU'S

	TY0-1	TY1-2	TY2-30	TY30-60	total
FOOD	586.22	409.62	6382.12	7097.68	241.26
COVER	1179.80	836.35	13801.20	14016.79	497.24

DIABLO WITHOUT-PROJECT AAHU'S

	TY0-1	TY1-30	TY30-60	total
FOOD	586.22	16081.88	16006.83	544.56
COVER	1179.80	34214.20	35659.75	1187.56

NET CHANGE (AAHU'S)

FOOD	-303.32
COVER	-690.33

ROSS RESERVOIR
HABITAT UNITS AND AVERAGE
ANNUAL HABITAT UNIT CALCULATIONS

TARGET YEAR ACRESSES AND HSIs
SKAGIT DAMS ORIGINAL IMPACTS

WITH-PROJECT
ROSS--TY0 (1936) PRE-PROJECT

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	957.96	0.913	874.62	0.629	794.15	0.788	747.21	0.000	0.00	0.00	0.00	0.00	0.00
closed mature conifer	3485.43	0.017	59.25	0.773	2694.24	0.588	2821.55	0.094	327.63	0.00	0.00	0.00	0.00
open mature conifer	637.88	0.000	0.00	0.283	188.27	0.582	378.73	0.000	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	528.91		0.00	0.637	336.32	0.738	386.18	0.066	34.91	0.00	0.00	0.00	0.00
regenerative conifer (& reg. lodgepole)	1521.53		0.00		0.00	0.215	327.13	0.818	1244.61	0.00	0.00	0.00	0.00
regenerative broadleaf/mixed	3.56		0.00		0.00	0.538	1.89	0.828	2.95	0.00	0.00	0.00	0.00
broadleaf	3.33	0.000	0.00		0.00	0.868	2.86	0.357	1.19	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.232	0.00	0.788	0.00	0.928	0.00	0.000	0.00	0.00	0.00	0.00	0.00
shrubland	361.77		0.00		0.00		0.00	0.848	14.47	0.00	0.00	0.00	0.00
grassland	8.84		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
agriculture	9.46		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
exposed rock	23.92		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
rock talus	21.88		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
forest campground	8.00		0.00		0.00	0.588	0.00		0.00	0.00	0.00	0.00	0.00
riparian regenerative conifer	25.38		0.00		0.00	0.228	5.57	0.828	28.75	0.528	13.16	0.00	0.00
wet meadow/marsh	7.07		0.00		0.00		0.00		0.00	0.00	0.00	0.878	6.15
shrub swamp	385.81		0.00		0.00		0.00		0.00	0.748	284.91	0.968	369.61
conifer swamp	38.31		0.00		0.00	0.138	4.98		0.00	0.698	26.43	0.968	36.78
broadleaf swamp	32.41		0.00		0.00	0.878	2.27		0.00	0.818	26.25	0.968	31.11
mixed swamp	44.89		0.00		0.00	0.138	5.84		0.00	0.698	38.97	0.968	43.89
pond	53.82		0.00		0.00		0.00		0.00		0.00	0.938	58.85
riverine	628.32		0.00		0.00		0.00		0.00		0.00	0.938	584.34
riparian old growth conifer	3875.84	0.545	1675.98	0.988	2767.54	0.168	492.81	0.000	0.00	0.568	1722.82		0.00
riparian mature conifer	687.71	1.008	687.71	0.842	511.69	1.008	687.71	0.157	95.41	1.008	687.71		0.00
riparian open canopy conifer	16.85	0.00	0.00	0.288	4.49	0.588	9.31	0.000	0.00	0.528	8.35		0.00
riparian broadleaf	551.47	0.000	0.00		0.00	0.837	461.58	0.000	0.00	0.588	275.74		0.00
riparian mixed conifer/broadleaf	458.48	0.358	157.64	0.984	487.16	0.954	429.68	0.658	292.76	0.328	144.13		0.00
riparian/avalanche shrubland	217.74		0.00		0.00		0.00	0.458	97.98	0.528	113.22		0.00
TOTALS	13697.13		3375.12		7696.46		5876.41		2132.66		3252.89		1121.14

WITH-PROJECT
ROSS TVI (1937) PRE-PROJECT

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	957.96	0.913	874.62	0.829	794.15	0.788	747.21	0.000	0.00		0.00		0.00
closed mature conifer	3485.43	0.817	59.25	0.773	2634.24	0.588	2821.55	0.094	327.63		0.00		0.00
open mature conifer	637.00	0.000	0.00	0.283	188.27	0.582	378.73	0.000	0.00		0.00		0.00
lodgepole pine (open & closed)	528.91		0.00	0.637	336.92	0.730	386.18	0.066	34.91		0.00		0.00
regenerative conifer (4 reg. lodgepole)	1521.53		0.00		0.00	0.215	327.13	0.818	1244.61		0.00		0.00
regenerative broadleaf/mixed	3.56		0.00		0.00	0.538	1.89	0.828	2.95		0.00		0.00
broadleaf	3.33	0.000	0.00		0.00	0.868	2.86	0.357	1.19		0.00		0.00
mixed conifer/broadleaf	0.00	0.232	0.00	0.788	0.00	0.328	0.00	0.000	0.00		0.00		0.00
shrubland	361.77		0.00		0.00		0.00	0.048	14.47		0.00		0.00
grassland	8.84		0.00		0.00		0.00		0.00		0.00		0.00
agriculture	9.46		0.00		0.00		0.00		0.00		0.00		0.00
exposed rock	23.92		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	21.88		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.588	0.00		0.00		0.00		0.00
riparian regenerative conifer	25.38		0.00		0.00	0.228	5.57	0.828	28.75	0.528	13.16		0.00
wet meadow/marsh	7.87		0.00		0.00		0.00		0.00		0.00	0.878	6.15
shrub swamp	385.81		0.00		0.00		0.00		0.00	0.748	284.91	0.968	369.61
conifer swamp	38.31		0.00		0.00	0.138	4.98		0.00	0.698	26.43	0.968	36.78
broadleaf swamp	32.41		0.00		0.00	0.878	2.27		0.00	0.818	26.25	0.968	31.11
mixed swamp	44.89		0.00		0.00	0.138	5.84		0.00	0.698	38.97	0.968	43.89
pond	53.82		0.00		0.00		0.00		0.00		0.00	0.938	58.85
riverine	628.32		0.00		0.00		0.00		0.00		0.00	0.938	584.34
riparian old growth conifer	3875.84	0.545	1675.98	0.988	2767.54	0.168	492.81	0.000	0.00	0.568	1722.82		0.00
riparian mature conifer	687.71	1.000	687.71	0.842	511.69	1.000	687.71	0.157	95.41	1.000	687.71		0.00
riparian open canopy conifer	16.85	0.00	0.00	0.288	4.49	0.588	9.31	0.000	0.00	0.528	8.35		0.00
riparian broadleaf	551.47	0.000	0.00		0.00	0.837	461.58	0.000	0.00	0.588	275.74		0.00
riparian mixed conifer/broadleaf	458.48	0.358	157.64	0.984	487.16	0.954	429.68	0.658	292.76	0.328	144.13		0.00
riparian/avalanche shrubland	217.74		0.00		0.00		0.00	0.458	97.98	0.528	113.22		0.00
TOTALS	13697.13		3375.12		7696.46		5876.41		2132.66		3252.89		1121.14

WITH-PROJECT
RDS TY4 (1940) 1300 ft. 1950 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	862.60	0.913	787.55	0.829	715.10	0.780	672.83	0.000	0.00	0.00	0.00	0.00	0.00
closed mature conifer	3042.20	0.817	51.72	0.773	2351.62	0.500	1764.48	0.094	285.97	0.00	0.00	0.00	0.00
open mature conifer	595.00	0.000	0.00	0.283	160.61	0.582	346.76	0.000	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	427.20		0.00	0.637	272.13	0.730	311.86	0.066	28.20	0.00	0.00	0.00	0.00
regenerative conifer (& reg. lodgepole)	1408.50		0.00		0.00	0.215	302.83	0.818	1152.15	0.00	0.00	0.00	0.00
regenerative broadleaf/mixed	0.00		0.00		0.00	0.530	0.00	0.828	0.00	0.00	0.00	0.00	0.00
broadleaf	2.90	0.000	0.00		0.00	0.860	2.49	0.357	1.04	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.23	0.00	0.700	0.00	0.920	0.00	0.000	0.00	0.00	0.00	0.00	0.00
shrubland	361.50		0.00		0.00		0.00	0.040	14.46	0.00	0.00	0.00	0.00
grassland	0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
agriculture	0.00		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
exposed rock	23.30		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
rock talus	14.70		0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00
forest campground	0.00		0.00		0.00	0.500	0.00		0.00	0.00	0.00	0.00	0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00	0.820	0.00	0.520	0.00	0.00	0.00
wet meadow/marsh	7.10		0.00		0.00		0.00		0.00	0.00	0.00	0.870	6.18
shrub swamp	377.90		0.00		0.00		0.00		0.00	0.740	279.65	0.960	362.78
conifer swamp	37.50		0.00		0.00	0.130	4.80		0.00	0.690	25.87	0.960	36.00
broadleaf swamp	32.60		0.00		0.00	0.070	2.28		0.00	0.810	26.41	0.960	31.30
mixed swamp	44.80		0.00		0.00	0.130	5.82		0.00	0.690	30.91	0.960	43.01
pond	41.10		0.00		0.00		0.00		0.00		0.00	0.930	38.22
riverine	371.60		0.00		0.00		0.00		0.00		0.00	0.930	345.59
riparian old growth conifer	2046.20	0.545	1551.10	0.900	2561.50	0.160	455.39	0.000	0.00	0.560	1593.87		0.00
riparian mature conifer	303.10	1.000	303.10	0.842	322.57	1.000	303.10	0.157	60.15	1.000	303.10		0.00
riparian open canopy conifer	3.40	0.00	0.00	0.200	0.95	0.500	1.97	0.000	0.00	0.520	1.77		0.00
riparian broadleaf	517.30	0.000	0.00		0.00	0.837	432.90	0.000	0.00	0.500	250.65		0.00
riparian mixed conifer/broadleaf	372.90	0.350	130.52	0.904	337.10	0.954	355.75	0.650	242.39	0.320	119.33		0.00
riparian/avalanche shrubland	128.00		0.00		0.00		0.00	0.450	57.96	0.520	66.90		0.00
TOTALS	11911.00		2904.07		6729.66		5043.41		1842.30		2706.53		863.00

WITH-PROJECT
ROSS TYP (1947) 1500 ft. 5800 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	636.50	0.913	581.12	0.829	527.66	0.780	496.47	0.000	0.00		0.00		0.00
closed mature conifer	1984.00	0.817	33.73	0.773	1533.63	0.500	1150.72	0.094	186.50		0.00		0.00
open mature conifer	354.70	0.000	0.00	0.283	100.38	0.582	206.44	0.000	0.00		0.00		0.00
lodgepole pine (open & closed)	304.10		0.00	0.637	193.71	0.730	221.99	0.066	20.07		0.00		0.00
regenerative conifer (& reg. lodgepole)	1018.40		0.00		0.00	0.215	218.96	0.818	833.05		0.00		0.00
regenerative broadleaf/mixed	0.00		0.00		0.00	0.530	0.00	0.828	0.00		0.00		0.00
broadleaf	1.90	0.000	0.00		0.00	0.060	1.63	0.357	0.68		0.00		0.00
mixed conifer/broadleaf	0.00	0.23	0.00	0.780	0.00	0.920	0.00	0.000	0.00		0.00		0.00
shrubland	234.70		0.00		0.00		0.00	0.040	9.39		0.00		0.00
grassland	8.00		0.00		0.00		0.00		0.00		0.00		0.00
agriculture	0.00		0.00		0.00		0.00		0.00		0.00		0.00
exposed rock	20.10		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	8.00		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.580	0.00		0.00		0.00		0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00	0.820	0.00	0.520	0.00		0.00
wet meadow/marsh	4.20		0.00		0.00		0.00		0.00		0.00	0.870	3.65
shrub swamp	249.00		0.00		0.00		0.00		0.00	0.740	104.85	0.960	239.81
conifer swamp	22.10		0.00		0.00	0.130	2.07		0.00	0.690	15.25	0.960	21.22
broadleaf swamp	18.90		0.00		0.00	0.070	1.32		0.00	0.810	15.31	0.960	18.14
mixed swamp	44.00		0.00		0.00	0.130	5.82		0.00	0.690	30.91	0.960	43.01
pond	17.60		0.00		0.00		0.00		0.00		0.00	0.930	16.37
riverine	159.30		0.00		0.00		0.00		0.00		0.00	0.930	148.15
riparian old growth conifer	1968.40	0.545	1068.42	0.900	1764.36	0.160	313.66	0.000	0.00	0.560	1097.82		0.00
riparian mature conifer	263.60	1.000	263.60	0.842	221.95	1.000	263.60	0.157	41.39	1.000	263.60		0.00
riparian open canopy conifer	0.00	0.00	0.00	0.280	0.00	0.580	0.00	0.000	0.00	0.520	0.00		0.00
riparian broadleaf	367.00	0.000	0.00		0.00	0.837	307.85	0.000	0.00	0.500	183.90		0.00
riparian mixed conifer/broadleaf	314.90	0.350	110.21	0.904	284.67	0.954	300.41	0.650	204.69	0.320	100.77		0.00
riparian/avalanche shrubland	55.70		0.00		0.00		0.00	0.450	25.07	0.520	28.96		0.00
TOTALS	8051.10		2057.09		4626.36		3491.76		1320.82		1921.38		490.35

WITH-PROJECT
 RDSS--TV 12 1560 ft. 9550 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	499.90	0.913	456.41	0.829	414.42	0.780	389.92	0.000	0.00			0.00	0.00
closed mature conifer	1545.20	0.017	26.27	0.773	1194.44	0.580	896.22	0.094	145.25			0.00	0.00
open mature conifer	219.80	0.000	0.00	0.283	62.20	0.582	127.92	0.000	0.00			0.00	0.00
lodgepole pine (open & closed)	151.00		0.00	0.637	96.19	0.730	110.23	0.066	9.97			0.00	0.00
regenerative conifer (& reg. lodgepole)	704.50		0.00		0.00	0.215	151.47	0.818	576.28			0.00	0.00
regenerative broadleaf/mixed	0.00		0.00		0.00	0.530	0.00	0.828	0.00			0.00	0.00
broadleaf	1.50	0.000	0.00		0.00	0.060	1.29	0.357	0.54			0.00	0.00
mixed conifer/broadleaf	0.00	0.232	0.00	0.780	0.00	0.920	0.00	0.000	0.00			0.00	0.00
shrubland	56.50		0.00		0.00		0.00	0.040	2.26			0.00	0.00
grassland	6.90		0.00		0.00		0.00		0.00			0.00	0.00
agriculture	0.00		0.00		0.00		0.00		0.00			0.00	0.00
exposed rock	17.30		0.00		0.00		0.00		0.00			0.00	0.00
rock talus	8.30		0.00		0.00		0.00		0.00			0.00	0.00
forest campground	0.00		0.00		0.00	0.580	0.00	0.820	0.00			0.00	0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00		0.00	0.520	0.00		0.00
wet meadow/marsh	0.00		0.00		0.00		0.00		0.00			0.870	0.00
shrub swamp	109.60		0.00		0.00		0.00		0.00	0.740	81.10	0.960	105.22
conifer swamp	0.00		0.00		0.00	0.130	0.00		0.00	0.690	0.00	0.960	0.00
broadleaf swamp	11.60		0.00		0.00	0.070	0.81		0.00	0.810	9.40	0.960	11.14
mixed swamp	0.00		0.00		0.00	0.130	0.00		0.00	0.690	0.00	0.960	0.00
pond	0.00		0.00		0.00		0.00		0.00		0.00	0.930	0.00
riverine	48.20		0.00		0.00		0.00		0.00		0.00	0.930	44.83
riparian old growth conifer	574.70	0.545	313.21	0.900	517.23	0.160	91.95	0.000	0.00	0.560	321.83		0.00
riparian mature conifer	45.50	1.000	45.50	0.842	38.31	1.000	45.50	0.157	7.14	1.000	45.50		0.00
riparian open canopy conifer	0.00	0.00	0.00	0.280	0.00	0.580	0.00	0.000	0.00	0.520	0.00		0.00
riparian broadleaf	211.70	0.000	0.00		0.00	0.837	177.19	0.000	0.00	0.500	105.85		0.00
riparian mixed conifer/broadleaf	180.10	0.350	63.04	0.904	162.81	0.954	171.82	0.650	117.07	0.320	57.63		0.00
riparian/avalanche shrubland	27.90		0.00		0.00		0.00	0.450	12.56	0.520	14.51		0.00
TOTALS	4420.20		904.42		2485.60		2164.32		871.05		635.82		161.18

WITH-PROJECT
ROSS--TV 13 1682 ft. 11,700 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	161.30	0.913	147.27	0.829	133.72	0.780	125.81	0.000	0.00		0.00		0.00
closed mature conifer	1017.40	0.017	17.30	0.773	786.45	0.500	530.09	0.094	95.64		0.00		0.00
open mature conifer	146.50	0.000	0.00	0.283	41.46	0.582	85.26	0.000	0.00		0.00		0.00
lodgepole pine (open & closed)	103.50		0.00	0.637	65.93	0.730	75.55	0.066	6.83		0.00		0.00
regenerative conifer (& reg. lodgepole)	797.70		0.00		0.00	0.215	171.51	0.818	652.52		0.00		0.00
regenerative broadleaf/mixed	0.00		0.00		0.00	0.530	0.00	0.828	0.00		0.00		0.00
broadleaf	1.20	0.000	0.00		0.00	0.860	1.03	0.357	0.43		0.00		0.00
mixed conifer/broadleaf	0.00	0.232	0.00	0.779	0.00	0.920	0.00	0.000	0.00		0.00		0.00
shrubland	28.50		0.00		0.00		0.00	0.040	1.14		0.00		0.00
grassland	6.30		0.00		0.00		0.00		0.00		0.00		0.00
agriculture	0.00		0.00		0.00		0.00		0.00		0.00		0.00
exposed rock	11.00		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	7.70		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00	0.580	0.00		0.00		0.00		0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00	0.820	0.00	0.520	0.00		0.00
wet meadow/marsh	0.00		0.00		0.00		0.00		0.00		0.00	0.870	0.00
shrub swamp	2.60		0.00		0.00		0.00		0.00	0.740	1.92	0.930	2.42
conifer swamp	0.00		0.00		0.00	0.130	0.00		0.00	0.690	0.00	0.960	0.00
broadleaf swamp	11.60		0.00		0.00	0.070	0.01		0.00	0.810	3.40	0.830	9.63
mixed swamp	0.00		0.00		0.00	0.130	0.00		0.00	0.690	0.00	0.960	0.00
pond	0.00		0.00		0.00		0.00		0.00		0.00	0.930	0.00
riverine	17.50		0.00		0.00		0.00		0.00		0.00	0.890	15.58
riparian old growth conifer	38.10	0.000	0.00	1.000	38.10	0.000	0.00	0.000	0.00	0.350	13.33		0.00
riparian mature conifer	12.50	1.000	12.50	0.842	10.53	1.000	12.50	0.157	1.96	1.000	12.50		0.00
riparian open canopy conifer	0.00	0.00	0.00	0.200	0.00	0.580	0.00	0.000	0.00	0.520	0.00		0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.837	0.00	0.000	0.00	0.500	0.00		0.00
riparian mixed conifer/broadleaf	4.00	0.000	0.00	0.925	3.70	0.954	3.82	1.000	4.00	0.310	1.24		0.00
riparian/avalanche shrubland	6.60		0.00		0.00		0.00	0.970	6.40	0.280	1.85		0.00
TOTALS	2374.00		177.06		1079.88		1066.38		768.92		40.24		27.62

WTH-PROJECT
ROSS--TY 30 1682 ft. 11,700 acres

Community Type	Acreage	Pileated Woodpecker		Pine Martin		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs
old growth conifer	244.50	0.913	253.23	0.829	202.69	0.768	190.71	0.000	0.00	0.00	0.00	0.00	0.00
closed mature conifer	1404.60	0.917	23.00	0.773	1005.76	0.560	814.67	0.094	132.03	0.00	0.00	0.00	0.00
open mature conifer	147.00	0.000	0.00	0.283	41.83	0.582	86.02	0.000	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	140.70		0.00	0.637	89.63	0.730	102.71	0.066	9.29	0.00	0.00	0.00	0.00
regenerative conifer (a reg. lodgepole)	330.00		0.00		0.00	0.215	71.12	0.818	270.59	0.00	0.00	0.00	0.00
regenerative broadleaf/mixed	0.00		0.00		0.00	0.530	0.00	0.828	0.00	0.00	0.00	0.00	0.00
broadleaf	1.20	0.000	0.00		0.00	0.060	1.03	0.357	0.43	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.232	0.00	0.779	0.00	0.940	0.00	0.000	0.00	0.00	0.00	0.00	0.00
shrubland	28.50		0.00		0.00	0.00	0.00	0.000	1.14	0.00	0.00	0.00	0.00
grassland	6.30		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agriculture	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	11.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	7.70		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00		0.00		0.00	0.560	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00	0.820	0.00	0.520	0.00	0.870	0.00
wet meadow/marsh	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.930	2.42
shrub swamp	2.60		0.00		0.00	0.00	0.00	0.00	0.00	0.740	1.92	0.930	0.00
conifer swamp	0.00		0.00		0.00	0.130	0.00	0.00	0.00	0.690	0.00	0.960	0.00
broadleaf swamp	11.60		0.00		0.00	0.070	0.01	0.00	0.00	0.810	9.40	0.830	9.63
mixed swamp	0.00		0.00		0.00	0.130	0.00	0.00	0.00	0.690	0.00	0.960	0.00
pond	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.930	0.00
riverine	17.50		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.890	15.50
riparian old growth conifer	30.10	0.000	0.00	1.000	30.10	0.000	0.00	0.000	0.00	0.350	13.33	0.00	0.00
riparian mature conifer	12.50	1.000	12.50	0.042	10.53	1.000	12.50	0.157	1.96	1.000	12.50	0.00	0.00
riparian open canopy conifer	0.00	0.00	0.00	0.200	0.00	0.500	0.00	0.000	0.00	0.520	0.00	0.00	0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.837	0.00	0.000	0.00	0.500	0.00	0.00	0.00
riparian mixed conifer/broadleaf	4.00	0.000	0.00	0.325	3.70	0.954	3.02	1.000	4.00	0.310	1.24	0.00	0.00
riparian/avalanche shrubland	6.60		0.00		0.00	0.00	0.00	0.970	5.40	0.200	1.05	0.00	0.00
TOTALS	2416.00		259.61		1472.22		1283.37		425.05		40.24		27.62

WITH-PROJECT
ROSS--TV 51 1602 ft. 11,700 acres

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	99.17	0.913	90.54	0.829	82.21	0.700	77.35	0.000	0.00		0.00		0.00
closed mature conifer	1367.60	0.017	23.25	0.773	1037.15	0.580	793.21	0.094	128.55		0.00		0.00
open mature conifer	100.28	0.000	0.00	0.283	30.64	0.582	63.02	0.000	0.00		0.00		0.00
lodgepole pine (open & closed)	117.12		0.00	0.637	74.61	0.730	85.50	0.066	7.73		0.00		0.00
regenerative conifer (& reg. lodgepole)	201.64		0.00		0.00	0.215	43.35	0.818	164.94		0.00		0.00
regenerative broadleaf/mixed	45.33		0.00		0.00	0.530	24.02	0.820	37.53		0.00		0.00
broadleaf	67.90	0.000	0.00		0.00	0.860	50.39	0.357	24.24		0.00		0.00
mixed conifer/broadleaf	80.56	0.232	18.69	0.779	62.76	0.920	74.42	0.000	0.00		0.00		0.00
shrubland	0.00		0.00		0.00		0.00	0.040	0.00		0.00		0.00
grassland	8.53		0.00		0.00		0.00		0.00		0.00		0.00
agriculture	0.00		0.00		0.00		0.00		0.00		0.00		0.00
exposed rock	15.83		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	14.52		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	132.44		0.00		0.00	0.500	76.82		0.00		0.00		0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00	0.820	0.00	0.520	0.00	0.870	0.00
wet meadow/marsh	0.00		0.00		0.00		0.00		0.00		0.00	0.930	1.96
shrub swamp	2.11		0.00		0.00		0.00		0.00	0.740	1.56	0.960	0.00
conifer swamp	0.00		0.00		0.00	0.130	0.00		0.00	0.690	0.00	0.960	0.00
broadleaf swamp	9.31		0.00		0.00	0.070	0.65		0.00	0.810	7.54	0.830	7.73
mixed swamp	0.00		0.00		0.00	0.130	0.00		0.00	0.690	0.00	0.960	0.00
pond	0.00		0.00		0.00		0.00		0.00		0.00	0.930	0.00
riverine	7.47		0.00		0.00		0.00		0.00		0.00	0.890	6.65
riparian old growth conifer	8.97	0.000	0.00	1.000	8.97	0.000	0.00	0.000	0.00	0.350	3.14		0.00
riparian mature conifer	0.00	1.000	0.00	0.842	0.00	1.000	0.00	0.157	0.00	1.000	0.00		0.00
riparian open canopy conifer	0.00	0.00	0.00	0.200	0.00	0.580	0.00	0.000	0.00	0.520	0.00		0.00
riparian broadleaf	0.00	0.000	0.00		0.00	0.837	0.00	0.000	0.00	0.500	0.00		0.00
riparian mixed conifer/broadleaf	8.96	0.000	0.00	0.325	8.29	0.954	8.55	1.000	0.96	0.310	2.78		0.00
riparian/avalanche shrubland	12.37		0.00		0.00		0.00	0.970	12.00	0.200	3.46		0.00
TOTALS	2300.11		132.48		1324.63		1304.70		383.96		18.40		16.34

Community Type	Pileated Woodpecker						Pine Marten									
	TVE-1	TVI-4	TYA-11	TYII-12	TYI2-13	TVI3-30	TV30-51	total	TVE-1	TVI-4	TYA-11	TYII-12	TYI2-13	TVI3-30	TV30-51	total
old growth conifer	874.62	2493.26	4790.37	516.77	301.04	3149.21	3294.59	302.41	794.15	2853.87	4349.64	471.84	274.07	2859.47	2991.48	274.58
closed mature conifer	59.25	166.45	299.86	30.00	21.78	349.98	434.84	27.87	3594.24	7558.79	13598.38	1364.84	994.44	15913.75	22500.56	1867.26
open mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.27	523.32	941.47	81.29	51.63	787.94	768.94	63.67
lodgepole pine (open & closed)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	336.92	913.56	1538.43	144.95	81.86	1322.22	1724.43	130.66
regenerative conifer (& reg. lodgepole)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative broadleaf/mixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	0.00	0.00	0.00	0.00	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 conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	196.24	3.85	0.00	0.00	0.00	0.00	0.00	0.00	658.94	12.92
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
grassland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	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 regenerative conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
wet meadow/marsh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
conifer swamp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf swamp	0.00	0.00	0.00	0.00	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 swamp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine	0.00	0.00	0.00	0.00	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 old growth conifer	1675.90	4840.61	9168.59	690.81	187.86	0.00	0.00	323.21	2767.54	7993.67	15140.79	1140.80	286.61	647.78	494.24	558.26
riparian mature conifer	687.71	1486.22	2263.45	154.35	29.80											

WITH-PROJECT
ROSS--AAMU SUMMARY

Community Type	Black-capped Chickadee								Ruffed Grouse								TY0-1	TY1-4
	TY0-1	TY1-4	TY4-11	TY11-12	TY12-13	TY13-30	TY30-51	total	TY0-1	TY1-4	TY4-11	TY11-12	TY12-13	TY13-30	TY30-51	total		
old growth conifer	747.21	2130.06	4092.54	443.20	257.87	2599.05	2814.66	256.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	2021.55	5679.04	10203.19	1023.47	743.15	11946.23	16882.78	950.97	327.63	920.40	1653.62	165.87	120.44	1935.18	2736.16	154.10	0.00	0.00
open mature conifer	370.73	1076.23	1936.17	167.18	106.59	1517.33	1564.90	132.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	386.10	1046.94	1860.47	166.11	92.89	1364.24	1976.19	135.31	34.91	94.65	168.93	15.02	8.40	137.00	178.67	12.50	0.00	0.00
regenerative conifer (& reg. lodgepole)	327.13	944.93	1826.24	185.21	161.49	2774.28	1201.98	145.52	1244.61	3595.15	6948.21	704.67	614.40	7846.46	4573.13	500.52	0.00	0.00
regenerative broadleaf/mixed	1.89	2.83	0.00	0.00	0.00	0.00	252.26	5.04	2.95	4.42	0.00	0.00	0.00	0.00	394.10	7.87	0.00	0.00
broadleaf	2.86	8.04	14.45	1.46	1.16	17.54	623.97	13.13	1.19	3.34	6.00	0.61	0.48	7.28	259.02	5.45	0.00	0.00
mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	779.21	15.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.47	43.40	83.47	5.82	1.70	19.38	11.97	3.53	0.00	0.00
grassland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.00	806.56	15.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian regenerative conifer	5.57	8.35	0.00	0.00	0.00	0.00	0.00	0.27	20.75	31.12	0.00	0.00	0.00	0.00	0.00	1.02	13.16	19.73
wet meadow/marsh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	284.91	846.83
conifer swamp	4.98	14.78	27.12	1.44	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.43	78.46
broadleaf swamp	2.27	6.83	12.62	1.07	0.01	15.78	15.37	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	78.99
mixed swamp	5.84	17.49	40.77	2.91	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.97	92.83
pond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine	0.00	0.00	0.00	0.00	0.00	0.00	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 old growth conifer	492.01	1421.10	2691.70	202.81	31.67	107.95	0.00	97.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1722.02	4973.84
riparian mature conifer	607.71	1486.22	2263.45	154.55	29.00	197.63	131.25	95.49	95.41	233.34	355.36	24.26	4.55	33.36	20.61	15.04	607.71	1486.22
riparian open canopy conifer	9.31	16.92	6.90	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.35	15.17
riparian broadleaf	461.58	1341.84	2592.90	242.52	88.68	0.00	0.00	92.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	275.74	801.58
riparian mixed conifer/broadleaf	429.68	1178.14	2296.56	236.11	87.82	54.06	129.82	86.51	292.76	802.72	1564.75	160.88	70.80	68.00	136.00	60.71	144.13	395.18
riparian/avalanche shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.98	233.91	290.59	18.81	11.32	108.83	193.21	18.72	113.22	270.30
TOTALS	5876.41	16379.73	29873.00	2828.04	1601.05	20595.05	27177.87	2045.57	2132.66	5962.44	11070.92	1095.94	832.10	10155.49	8502.94	779.46	3252.89	9059.13
						CHECK		2045.57							CHECK	779.46		

WITH-PROJECT
ROSS--AAHU SUMMARY

Community Type	Yellow Warbler						American Beaver							
	TY4-11	TY11-12	TY12-13	TY13-30	TY30-51	total	TY0-1	TY1-4	TY4-11	TY11-12	TY12-13	TY13-30	TY30-51	total
old growth conifer	0.00	0.00	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 mature conifer	0.00	0.00	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 mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (8 reg. lodgepole)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative broadleaf/mixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	0.00	0.00	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 conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
grassland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	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 regenerative conifer	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
wet meadow/marsh	0.00	0.00	0.00	0.00	0.00	0.00	5.15	18.49	34.41	1.83	0.00	0.00	0.00	1.19
shrub swamp	1625.74	132.98	41.51	32.71	36.60	58.85	369.61	1098.59	2109.07	172.51	53.20	41.11	45.99	76.28
conifer swamp	143.93	7.62	0.00	0.00	0.00	5.03	36.78	109.17	200.26	10.61	0.00	0.00	0.00	7.00
broadleaf swamp	146.00	12.35	9.40	159.73	177.84	11.97	31.11	93.61	173.04	14.64	10.38	163.68	182.23	13.11
mixed swamp	216.38	15.46	0.00	0.00	0.00	6.97	43.09	129.15	301.06	21.50	0.00	0.00	0.00	9.70
pond	0.00	0.00	0.00	0.00	0.00	0.00	50.05	132.41	191.07	8.18	0.00	0.00	0.00	7.48
riverine	0.00	0.00	0.00	0.00	0.00	0.00	534.34	1394.09	1728.08	96.49	30.00	264.78	233.34	84.94
riparian old growth conifer	9420.94	709.83	148.80	226.70	172.98	340.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian mature conifer	2263.45	154.55	29.00	212.50	131.25	95.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian open canopy conifer	6.19	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian broadleaf	1548.93	144.88	52.93	0.00	0.00	55.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	770.34	79.20	29.14	21.08	42.18	29.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian/avalanche shrubland	335.79	21.74	7.33	31.42	55.77	16.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	16477.69	1278.60	318.11	684.13	616.63	621.32	1121.14	2976.32	4736.98	325.76	93.66	469.56	461.57	199.71
					CHECK	621.32						CHECK		199.71

TARGET YEAR ACREAGES AND HSI's
SKAGIT DAMS ORIGINAL IMPACTS

WITHOUT-PROJECT
ROSS--TY0 (1936)

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	957.96	0.913	874.62	0.829	794.15	0.780	747.21	0.000	0.00		0.00		0.00
closed mature conifer	3485.43	0.017	59.25	0.773	2694.24	0.580	2021.55	0.034	327.63		0.00		0.00
open mature conifer	637.00	0.000	0.00	0.283	180.27	0.582	370.73	0.000	0.00		0.00		0.00
lodgepole pine (open & closed)	528.91		0.00	0.637	336.92	0.730	386.10	0.066	34.91		0.00		0.00
regenerative conifer (l reg. lodgepole)	1521.53		0.00		0.00	0.215	327.13	0.818	1244.61		0.00		0.00
regenerative broadleaf/mixed	3.56		0.00		0.00	0.530	1.89	0.828	2.95		0.00		0.00
broadleaf	3.33	0.000	0.00		0.00	0.860	2.86	0.357	1.19		0.00		0.00
mixed conifer/broadleaf	0.00	0.232	0.00	0.780	0.00	0.920	0.00	0.000	0.00		0.00		0.00
shrubland	361.77		0.00		0.00		0.00	0.040	14.47		0.00		0.00
grassland	0.04		0.00		0.00		0.00		0.00		0.00		0.00
agriculture	3.46		0.00		0.00		0.00		0.00		0.00		0.00
exposed rock	23.92		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	21.88		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00		0.00		0.00		0.00		0.00
riparian regenerative conifer	25.30		0.00		0.00	0.220	5.57	0.820	20.75	0.520	13.16		0.00
wet meadow/marsh	7.07		0.00		0.00		0.00		0.00		0.00	0.870	6.15
shrub swamp	385.01		0.00		0.00		0.00		0.00	0.740	204.91	0.960	369.61
conifer swamp	38.31		0.00		0.00	0.130	4.98		0.00	0.690	26.43	0.960	36.78
broadleaf swamp	32.41		0.00		0.00	0.070	2.27		0.00	0.810	26.25	0.960	31.11
mixed swamp	44.89		0.00		0.00	0.130	5.84		0.00	0.690	30.97	0.960	43.09
pond	53.82		0.00		0.00		0.00		0.00		0.00	0.930	50.05
riverine	628.32		0.00		0.00		0.00		0.00		0.00	0.930	504.34
riparian old growth conifer	3075.04	0.545	1675.90	0.900	2767.54	0.160	432.01	0.000	0.00	0.560	1722.02		0.00
riparian mature conifer	607.71	1.000	607.71	0.842	511.69	1.000	607.71	0.157	95.41	1.000	607.71		0.00
riparian open canopy conifer	16.05	0.00	0.00	0.280	4.43	0.580	9.31	0.000	0.00	0.520	8.35		0.00
riparian broadleaf	551.47	0.000	0.00		0.00	0.837	461.58	0.000	0.00	0.500	275.74		0.00
riparian mixed conifer/broadleaf	450.40	0.350	157.64	0.904	407.16	0.354	429.68	0.650	232.76	0.320	144.13		0.00
riparian/avalanche shrubland	217.74		0.00		0.00		0.00	0.450	97.98	0.520	113.22		0.00
TOTALS	13697.13		3375.12		7696.46		5876.41		2132.66		3252.89		1121.14

WITHOUT-PROJECT
ROSS TY38

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Black-capped Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	957.20	0.913	873.92	0.829	793.52	0.780	746.62	0.800	0.00		0.00		0.00
closed mature conifer	4818.90	0.017	81.92	0.773	3725.01	0.580	2794.96	0.894	452.98		0.00		0.00
open mature conifer	656.10	0.000	0.00	0.283	185.68	0.582	381.85	0.000	0.00		0.00		0.00
lodgepole pine (open & closed)	708.60		0.00	0.637	451.38	0.730	517.20	0.866	46.77		0.00		0.00
regenerative conifer (& reg. lodgepole)	0.00		0.00		0.00	0.215	0.00	0.818	0.00		0.00		0.00
regenerative broadleaf/mixed	0.00		0.00		0.00	0.530	0.00	0.828	0.00		0.00		0.00
broadleaf	5.10	0.000	0.00		0.00	0.860	4.39	0.357	1.82		0.00		0.00
mixed conifer/broadleaf	1.80	0.232	0.42	0.780	1.40	0.920	1.66	0.000	0.00		0.00		0.00
shrubland	345.90		0.00		0.00		0.00	0.040	13.88		0.00		0.00
grassland	8.00		0.00		0.00		0.00		0.00		0.00		0.00
agriculture	9.60		0.00		0.00		0.00		0.00		0.00		0.00
exposed rock	23.50		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	21.70		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00		0.00		0.00		0.00		0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00	0.820	0.00	0.520	0.00		0.00
wet meadow/marsh	7.10		0.00		0.00		0.00		0.00		0.00	0.870	6.18
shrub swamp	384.70		0.00		0.00		0.00		0.00	0.740	284.68	0.960	369.31
conifer swamp	37.50		0.00		0.00	0.130	4.88	0.00	0.690	25.87	0.960	36.00	
broadleaf swamp	32.60		0.00		0.00	0.070	2.20	0.00	0.810	26.41	0.960	31.30	
mixed swamp	44.00		0.00		0.00	0.130	5.82	0.00	0.690	30.91	0.960	43.01	
pond	54.00		0.00		0.00		0.00		0.00		0.00	0.930	50.22
riverine	628.00		0.00		0.00		0.00		0.00		0.00	0.930	504.78
riparian old growth conifer	3876.00	0.545	1676.42	0.900	2768.40	0.160	492.16	0.000	0.00	0.560	1722.56		0.00
riparian mature conifer	633.80	1.000	633.80	0.842	533.66	1.000	633.80	0.157	99.51	1.000	633.80		0.00
riparian open canopy conifer	16.05	0.00	0.00	0.280	4.49	0.580	9.31	0.000	0.00	0.520	8.35		0.00
riparian broadleaf	551.60	0.000	0.00		0.00	0.837	461.69	0.000	0.00	0.500	275.80		0.00
riparian mixed conifer/broadleaf	449.00	0.350	157.43	0.904	406.62	0.954	429.11	0.650	292.37	0.320	143.94		0.00
riparian/avalanche shrubland	216.60		0.00		0.00		0.00	0.450	97.47	0.520	112.63		0.00
TOTALS	13691.55		3423.91		8870.16		6485.00		1004.79		3264.95		1120.80

WITHOUT-PROJECT
ROSS-TY31 (1987)

Community Type	Acreage	Pileated Woodpecker		Pine Marten		Chickadee		Ruffed Grouse		Yellow Warbler		Beaver	
		HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HUs	HSI	HU
old growth conifer	988.30	0.913	902.32	0.829	819.30	0.780	770.87	0.000	0.00		0.00		0.00
closed mature conifer	5045.50	0.017	85.77	0.773	3900.17	0.580	2926.39	0.094	474.28		0.00		0.00
open mature conifer	498.90	0.000	0.00	0.283	141.19	0.582	290.36	0.000	0.00		0.00		0.00
lodgepole pine (open & closed)	629.00		0.00	0.637	401.18	0.730	459.75	0.066	41.57		0.00		0.00
regenerative conifer (8 reg. lodgepole)	0.00		0.00		0.00	0.215	0.00	0.018	0.00		0.00		0.00
regenerative broadleaf/mixed	0.00		0.00		0.00	0.530	0.00	0.028	0.00		0.00		0.00
broadleaf	5.10	0.000	0.00		0.00	0.060	4.39	0.357	1.82		0.00		0.00
mixed conifer/broadleaf	9.00	0.232	2.27	0.700	7.64	0.920	3.02	0.000	0.00		0.00		0.00
shrubland	329.00		0.00		0.00		0.00	0.040	13.16		0.00		0.00
grassland	0.00		0.00		0.00		0.00		0.00		0.00		0.00
agriculture	9.60		0.00		0.00		0.00		0.00		0.00		0.00
exposed rock	19.60		0.00		0.00		0.00		0.00		0.00		0.00
rock talus	13.70		0.00		0.00		0.00		0.00		0.00		0.00
forest campground	0.00		0.00		0.00		0.00		0.00		0.00		0.00
riparian regenerative conifer	0.00		0.00		0.00	0.220	0.00	0.820	0.00	0.520	0.00		0.00
wet meadow/marsh	7.10		0.00		0.00		0.00		0.00		0.00	0.870	6.18
shrub swamp	384.70		0.00		0.00		0.00		0.00	0.740	284.68	0.960	369.31
conifer swamp	37.50		0.00		0.00	0.130	4.00		0.00	0.690	25.87	0.960	36.00
broadleaf swamp	32.00		0.00		0.00	0.070	2.28		0.00	0.810	26.41	0.960	31.30
mixed swamp	44.00		0.00		0.00	0.130	5.82		0.00	0.690	30.91	0.960	43.01
pond	54.00		0.00		0.00		0.00		0.00		0.00	0.930	50.22
riverine	628.00		0.00		0.00		0.00		0.00		0.00	0.930	504.78
riparian old growth conifer	3081.60	0.545	1679.47	0.900	2773.44	0.160	493.06	0.000	0.00	0.560	1725.70		0.00
riparian mature conifer	628.20	1.000	628.20	0.842	528.94	1.000	628.20	0.157	98.63	1.000	628.20		0.00
riparian open canopy conifer	16.05	0.00	0.00	0.280	4.49	0.580	3.31	0.000	0.00	0.520	8.35		0.00
riparian broadleaf	551.60	0.000	0.00		0.00	0.837	461.69	0.000	0.00	0.500	275.00		0.00
riparian mixed conifer/broadleaf	449.00	0.350	157.43	0.904	406.62	0.954	429.11	0.650	292.37	0.320	143.94		0.00
riparian/avalanche shrubland	216.60		0.00		0.00		0.00	0.450	97.47	0.520	112.63		0.00
TOTALS	13691.45		3455.47		8982.93		6495.12		1019.29		3262.48		1120.00

WITHOUT-PROJECT
ROSS--ANNU SUMMARY

Community Type	Pileated Woodpecker				Pine Marten				Chickadee				Ruffed Grouse			
	TY0-1	TY1-30	TY30-51	total	TY0-1	TY1-30	TY30-51	total	TY0-1	TY1-30	TY30-51	total	TY0-1	TY1-30	TY30-51	total
old growth conifer	874.62	25353.85	18650.54	879.98	794.15	23021.18	18334.60	793.82	747.21	21660.46	15933.65	751.79	0.00	0.00	0.00	0.00
closed mature conifer	59.25	2047.02	1760.00	75.82	2694.24	93079.08	80064.48	3447.98	2021.55	69839.42	60074.20	2586.96	327.63	11318.88	9736.16	419.27
open mature conifer	0.00	0.00	0.00	0.00	180.27	5306.24	3432.00	174.87	370.73	10912.47	7058.21	359.64	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	0.00	0.00	0.00	0.00	336.92	11430.26	8951.89	406.26	386.10	13099.04	10258.84	465.57	34.91	1184.30	927.51	42.09
regenerative conifer (& reg. lodgepole)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	327.13	4743.37	0.00	99.42	1244.61	18046.87	0.00	378.26
regenerative broadleaf/mixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89	27.36	0.00	0.57	2.95	42.74	0.00	0.90
broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06	105.12	92.11	3.92	1.19	43.64	38.23	1.63
mixed conifer/broadleaf	0.00	6.06	28.26	0.67	0.00	20.35	95.00	2.25	0.00	24.01	112.05	2.67	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.47	411.03	283.88	13.91
grassland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	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 regenerative conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	80.71	0.00	1.69	20.75	300.82	0.00	6.31
wet meadow/marsh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrub swamp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
conifer swamp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.98	142.90	102.30	4.91	0.00	0.00	0.00	0.00
broadleaf swamp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.27	65.99	47.92	2.28	0.00	0.00	0.00	0.00
mixed swamp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.84	169.07	122.30	5.83	0.00	0.00	0.00	0.00
pond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riverine	0.00	0.00	0.00	0.00	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 old growth conifer	1675.90	48640.59	35236.87	1676.89	2767.54	80271.07	58189.32	2769.18	492.01	14270.41	10344.77	492.30	0.00	0.00	0.00	0.00
riparian mature conifer	607.71	18001.90	13251.00	624.72	511.69	15157.60	11157.34	526.01	607.71	18001.90	13251.00	624.72	95.41	2826.30	2080.41	98.00
riparian open canopy conifer	0.00	0.00	0.00	0.00	4.49	130.33	94.37	4.49	9.31	269.96	195.49	9.31	0.00	0.00	0.00	0.00
riparian broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	461.58	13387.41	9695.47	461.66	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	157.64	4568.51	3306.03	157.49	407.16	11799.82	8539.00	406.78	429.68	12452.47	9011.29	429.28	292.76	8484.39	6139.77	292.49
riparian/avalanche shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.98	2834.07	2046.87	97.63
TOTALS	3375.12	98585.92	72233.40	3415.58	7696.46	240215.93	187458.02	8536.67	5876.41	179252.06	136299.67	6382.51	2132.66	45492.94	21252.83	1350.56
			check	3415.58			check	8536.67			check	6382.51			check	1350.56

WITHOUT-PROJECT
ROSS--AAHU SUMMARY

Community Type	Yellow Warbler				American Beaver			
	TY0-1	TY1-30	TY30-51	total	TY0-1	TY1-30	TY30-51	total
old growth conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
closed mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
open mature conifer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lodgepole pine (open & closed)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative conifer (& reg. lodgepole)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
regenerative broadleaf/mixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mixed conifer/broadleaf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
shrubland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
grassland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
exposed rock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rock talus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
forest campground	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
riparian regenerative conifer	13.16	190.76	0.00	4.00	0.00	0.00	0.00	0.00
wet meadow/marsh	0.00	0.00	0.00	0.00	6.15	178.75	129.72	6.17
shrub swamp	284.91	8258.99	5978.24	284.75	369.61	10714.36	7755.55	369.40
conifer swamp	26.43	758.48	543.38	26.04	36.78	1055.28	756.00	36.24
broadleaf swamp	26.25	763.54	554.53	26.36	31.11	904.94	657.22	31.24
mixed swamp	30.97	897.35	649.15	30.93	43.09	1248.48	903.17	43.03
pond	0.00	0.00	0.00	0.00	50.05	1453.25	1054.62	50.17
riverine	0.00	0.00	0.00	0.00	584.34	16952.26	12280.46	584.65
riparian old growth conifer	1722.02	49946.44	36206.69	1723.04	0.00	0.00	0.00	0.00
riparian mature conifer	607.71	18001.90	13251.00	624.72	0.00	0.00	0.00	0.00
riparian open canopy conifer	8.35	242.03	175.27	8.35	0.00	0.00	0.00	0.00
riparian broadleaf	275.74	7997.26	5791.80	275.78	0.00	0.00	0.00	0.00
riparian mixed conifer/broadleaf	144.13	4176.93	3022.66	143.99	0.00	0.00	0.00	0.00
riparian/avalanche shrubland	113.22	3274.92	2365.27	112.81	0.00	0.00	0.00	0.00
TOTALS	3252.89	94508.60	68537.97	3260.77	1121.14	32508.03	23536.74	1120.90
			check	3260.77			check	1120.90

NET CHANGE IN AASHU'S
(WITH-WITHOUT PROJECT)

SPECIES	WITH-PROJECT	WITHOUT-PROJECT	NET CHANGE
Pileated Woodpecker	793.31	3415.58	-2632.26
Pine Marten	2460.59	8536.67	-6076.09
Chickadee	2045.57	6302.51	-4256.94
Ruffed Grouse	779.46	1350.56	-571.10
Yellow Warbler	621.32	3260.77	-2639.46
Beaver	199.71	1120.90	-921.19

SPREADSHEET FOR CALCULATING THE HSI FOR OSPREY----ROSS

ROSS TY0 AND TY1 (1936 & 1937) WITH AND WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COS	1.000	0.371	2.74	0.062	957.96	0.109	0.062	0.240
CC	0.849	0.384	16.83	0.363	3485.43	0.397	0.308	0.152
DC	0.857	0.900	0.92	0.021	637.00	0.073	0.010	0.000
rCDS	1.000	0.371	19.30	0.437	3875.04	0.350	0.427	0.130
rCC	0.849	0.384	4.80	0.110	507.71	0.069	0.094	0.027
rDC	0.857	0.900	0.33	0.007	15.05	0.002	0.006	0.002

44.20

3779.19

1071.52

FOOD HSI= 0.92

FOOD HU= 8116.547

REPRODUCTION HSI= 0.42

REPRODUCTION HU= 3659.672

assumes no difference in HSIs for upland and riparian types (no riparian types available for measurement)

ROSS TY4 (1940) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	2.74	0.062	852.60	0.112	0.062	0.041
CC	0.949	0.384	16.03	0.363	3042.20	0.393	0.308	0.151
OC	0.857	0.906	0.92	0.021	595.80	0.077	0.018	0.070
rCOG	1.000	0.371	19.30	0.437	2846.20	0.369	0.437	0.137
rCC	0.849	0.384	4.69	0.110	323.10	0.050	0.094	0.019
rOC	0.557	0.906	0.33	0.007	3.40	0.000	0.006	0.000

44.20

7733.30

1071.52

FOOD HSI= 0.92

FOOD HU= 7149.600

REPRODUCTION HSI= 0.42

REPRODUCTION HU= 3234.155

assumed no difference in relative shoreline length by cover type

assumes no difference in HSIs for upland and riparian types (no riparian types available for measurement)

ROSS TY11 (1947) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	1.91	0.043	636.50	0.122	0.043	0.045
CC	0.849	0.384	24.59	0.557	1984.00	0.382	0.473	0.147
DC	0.857	0.906	1.25	0.028	354.70	0.060	0.024	0.062
rCOG	1.000	0.371	13.12	0.297	1960.40	0.377	0.397	0.140
rCC	0.849	0.384	3.31	0.075	263.50	0.051	0.064	0.019
rDC			0.00	0.000	0.00	0.000	0.000	0.000

44.18

5199.20

1071.03

FOOD HSI= 0.90

FOOD HU= 4582.390

REPRODUCTION HSI= 0.41

REPRODUCTION HU= 2147.986

Between TY4 and TY11, the area of COG was reduced by 30%, rCOG and rCC were both reduced by 32%.

These percentages were used to reduce the shoreline lengths for each of these habitat types and to increase the amount of sh

The loss of rDC was added to DC.

assumes no difference in HSIs for upland and riparian types (no riparian types available for measurement)

ROSS TY12 (1948) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	1.46	0.033	499.90	0.173	0.033	0.064
CC	0.849	0.384	35.85	0.807	1545.20	0.535	0.685	0.296
OC	0.857	0.906	1.25	0.020	219.80	0.076	0.024	0.069
rCOG	1.000	0.371	5.24	0.119	574.70	0.199	0.119	0.074
rCC	0.849	0.384	0.56	0.013	45.50	0.016	0.011	0.006
rOC			0.00	0.000	0.00	0.000	0.000	0.000

44.16

2095.10

1070.55

FOOD HSI= 0.87

FOOD HU= 2516.200

REPRODUCTION HSI= 0.42

REPRODUCTION HU= 1208.644

Between T11 and TY12, the area of COG was reduced by 21%, rCOG was reduced by 60% and rCC was reduced by 94%. These percentages were used to reduce the shoreline lengths for each of these habitat types and to increase the amount of sh assumes no difference in HSIs for upland and riparian types (no riparian types available for measurement)

ROSE TY13 (1949) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	0.91	0.021	161.30	0.117	0.021	0.043
CC	0.849	0.384	38.68	0.876	1817.40	0.739	0.744	0.284
DC	0.857	0.906	4.12	0.093	146.20	0.106	0.000	0.096
rCOG	1.000	0.371	0.31	0.007	38.10	0.028	0.007	0.010
rCC	0.849	0.384	0.14	0.003	12.50	0.009	0.003	0.003
rDC				0.000	2.00	0.000	0.000	0.000

44.16

1375.80

1070.55

FOOD HSI= 0.85

FOOD HU= 1174.820

REPRODUCTION HSI= 0.44

REPRODUCTION HU= 602.188

Between T12 and TY13, the area of COG was reduced by 30%, rCOG was reduced by 94% and rCC was reduced by 75%. These percentages were used to reduce the shoreline lengths for each of these habitat types and to increase the amount of sh assumes no difference in HSIs for upland and riparian types (no riparian types available for measurement)

ROSS TY20 (1956) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CBS	1.000	0.371	0.91	0.021	244.50	0.132	0.021	0.049
CC	0.849	0.384	38.68	0.876	1404.60	0.750	0.744	0.292
OC	0.857	0.906	4.12	0.093	147.80	0.050	0.020	0.072
rCBS	1.000	0.371	0.31	0.007	30.10	0.021	0.007	0.006
rCC	0.849	0.384	0.14	0.023	12.50	0.007	0.003	0.003
rOC			0.00	0.000	0.00	0.000	0.000	0.000

44.16

1947.50

1070.55

FOOD HSI= 0.05

FOOD HU= 1577.613

REPRODUCTION HSI= 0.42

REPRODUCTION HU= 782.9178

assumes no difference in HSIs for upland and riparian types (no riparian types available for measurement)

ROSS TYSI (1987) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	0.97	0.023	95.17	0.063	0.023	0.023
CC	0.849	0.384	37.06	0.894	1367.60	0.868	0.759	0.333
OC	0.857	0.906	3.37	0.091	100.20	0.064	0.070	0.058
rCCG	1.000	0.371	0.04	0.001	8.97	0.006	0.001	0.002
rCC	0.849	0.384	0.00	0.000	0.00	0.000	0.000	0.000
rOC			0.00	0.000	0.00	0.000	0.000	0.000

41.44

1576.02

1004.61

FOOD HSI= 0.85

FOOD HU= 1344.866

REPRODUCTION HSI= 0.42

REPRODUCTION HU= 656.1320

assumes no difference in HSIs for upland and riparian types (no riparian types available for measurement)

ROSS TY30 (1966) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	2.74	0.062	957.20	0.093	0.062	0.235
CC	0.849	0.384	16.03	0.363	4818.90	0.470	0.308	0.180
DC	0.857	0.906	0.92	0.021	656.10	0.064	0.018	0.050
rCOG	1.000	0.371	19.30	0.437	3076.00	0.320	0.437	0.111
rCC	0.849	0.384	4.93	0.110	633.80	0.062	0.094	0.024
rDC	0.857	0.906	0.33	0.007	16.05	0.002	0.006	0.001

44.20

10158.05

1071.52

FOOD HSI= 0.92

FOOD HU= 9391.333

REPRODUCTION HSI= 0.41

REPRODUCTION HU= 4157.984

RGSS TY51 (1987) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	COVER-TYPE SHORELINE	RELATIVE SHORELINE	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG	1.000	0.371	2.74	0.062	988.30	0.096	0.062	0.036
CC	0.849	0.384	16.03	0.363	5045.50	0.492	0.368	0.189
OC	0.857	0.906	0.92	0.021	498.90	0.049	0.018	0.044
rCOG	1.000	0.371	19.30	0.437	3081.60	0.300	0.437	0.111
rCC	0.849	0.384	4.88	0.110	628.20	0.061	0.094	0.024
rOC	0.857	0.906	0.33	0.007	16.05	0.002	0.006	0.001

44.20

10258.55

1071.52

FOOD HSI= 0.92

FOOD HU= 3484.247

REPRODUCTION HSI= 0.41

REPRODUCTION HU= 4155.178

COMPARISON OF TARGET YEARS

ROSS WITH-PROJECT--DSPREY

	TY0-1	TY1-4	TY4-11	TY11-12	TY12-13	TY13-30	TY30-51	total
FOOD	990.6385	2971.915	6843.202	949.1115	923.9098	15543.69	18539.76	918.3241
REPROD	3659.672	10341.44	18822.08	1680.505	910.1386	11792.01	15162.94	1221.741

ROSS WITHOUT-PROJECT---DSPREY

	TY0-1	TY1-30	TY30-51	total
FOOD	990.6385	28723.51	20823.40	990.6385
REPROD	3659.672	113399.7	87289.71	4006.846

NET CHANGE

FOOD	-72.6143
REPROD	-2785.10

SPREADSHEET FOR CALCULATING THE HSI FOR RED-TAILED HAWK-----ROSS

ROSS TY0 AND TY1 (1936 & 1937) WITH AND WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CCS		1.000	1.000	0.000	1.000	557.96	0.094	0.000	0.094
CC		0.466	0.900	0.000	0.419	3485.43	0.341	0.000	0.143
OC	0.488	0.455	1.000	0.488	0.455	637.00	0.062	0.032	0.028
M				0.000	0.000	3.00	0.000	0.000	0.000
B		0.417	1.000	0.000	0.417	3.33	0.000	0.000	0.000
G	0.803		1.000	0.803	0.000	351.77	0.035	0.329	0.000
Q*	1.000		1.000	1.000	0.000	0.84	0.001	0.001	0.000
A*	1.000		1.000	1.000	0.000	9.46	0.001	0.001	0.000
R/T*	0.750		1.000	0.750	0.000	21.50	0.002	0.002	0.000
ER*	0.750		1.000	0.750	0.000	23.92	0.002	0.002	0.000
PK	0.172		1.000	0.172	0.000	7.07	0.001	0.000	0.000
rCCG		1.000	0.970	0.000	0.970	3075.04	0.301	0.000	0.262
rCC		1.000	0.950	0.000	0.950	607.71	0.059	0.000	0.057
rOC^	0.488	0.455	1.000	0.488	0.455	15.05	0.002	0.001	0.001
rM		0.350	0.430	0.000	0.151	450.40	0.044	0.000	0.007
rB		0.496	0.730	0.000	0.362	551.47	0.054	0.000	0.020

* HSI values assigned by HEP team

10217.33

^ Assumes HSI is equal to HSI in OC habitats

AVAILABLE HABITAT FOR FOOD 6.49

AVAILABLE HABITAT FOR REPRODUCTION 61.06

FOOD HSI= 0.295 (from graph) FOOD HU= 970.6463

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 10217.33

ROSS TY4 (1940) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CDG		1.000	1.000	0.000	1.000	902.00	0.095	0.000	0.095
CC		0.466	0.900	0.000	0.419	3342.20	0.336	0.000	0.141
DC	0.488	0.455	1.000	0.488	0.455	595.00	0.056	0.032	0.030
M				0.000	0.000	0.30	0.000	0.000	0.000
B		0.417	1.000	0.000	0.417	2.90	0.000	0.000	0.002
S	0.803		1.000	0.803	0.300	361.50	0.040	0.032	0.000
S*	1.000		1.000	1.000	0.000	2.90	0.001	0.001	0.000
A*			1.000	0.000	0.000	0.30	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	14.70	0.002	0.001	0.000
ER*	0.750		1.000	0.750	0.000	23.30	0.003	0.002	0.000
PM	0.172		1.000	0.172	0.000	7.10	0.001	0.000	0.000
rCDG		1.000	0.970	0.000	0.970	2946.20	0.315	0.000	0.274
rCC		1.000	0.950	0.000	0.950	303.10	0.042	0.000	0.040
rDC^	0.488	0.455	1.000	0.488	0.455	3.40	0.000	0.000	0.000
rM		0.350	0.430	0.000	0.151	372.90	0.041	0.000	0.006
rB		0.496	0.730	0.000	0.352	317.30	0.057	0.000	0.021

* HSI values assigned by HEP team

^ Assumes HSI is equal to HSI in DC habitats

3041.00

AVAILABLE HABITAT FOR FOOD 6.07

AVAILABLE HABITAT FOR REPRODUCTION 60.70

FOOD HSI= 0.036 (from graph)

FOOD HU= 858.0120

REPRODUCTION HSI= 1.000 (from graph)

REPRODUCTION HU= 3041.0

ROSS TY11 (1947) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG		1.000	1.000	0.000	1.000	636.50	0.103	2.000	0.103
CC		0.466	0.910	0.000	0.424	1984.00	0.320	0.000	0.137
OC	0.488	0.455	1.000	0.488	0.455	354.70	0.058	0.028	0.026
M			1.000	0.000	0.000	0.00	0.000	0.000	0.000
B		0.417	1.000	0.000	0.417	1.90	0.000	0.000	0.000
S	0.803		1.000	0.803	0.000	234.70	0.038	0.031	0.000
G*	1.000		1.000	1.000	0.000	6.00	0.001	0.001	0.000
A*			1.000	0.000	0.000	3.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	8.80	0.001	0.001	0.000
ER*	0.750		1.000	0.750	0.000	20.10	0.003	0.002	0.000
PM	0.172		1.000	0.172	0.000	4.20	0.001	0.000	0.000
rCOG		1.000	1.000	0.000	1.000	1960.40	0.318	0.000	0.318
rCC		1.000	1.000	0.000	1.000	263.60	0.043	0.000	0.043
rOC*				0.000	0.000	0.00	0.000	0.000	0.000
rM		0.350	1.000	0.000	0.350	314.90	0.051	0.000	0.018
rB		0.496	1.000	0.000	0.496	367.80	0.060	0.000	0.030

* HSI values assigned by HEP team

^ Assumes HSI is equal to HSI in OC habitats

6160.43

AVAILABLE HABITAT FOR FOOD 6.38

AVAILABLE HABITAT FOR REPRODUCTION 67.47

FOOD HSI= 0.095 (from graph) FOOD HU= 585.238

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 6160.4

ROSS TY12 (1948) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG		1.000	1.000	0.000	1.000	409.50	0.148	0.000	0.148
CC		0.466	0.910	0.000	0.424	1545.20	0.459	0.000	0.195
OC	0.488	0.455	1.000	0.488	0.455	219.80	0.065	0.032	0.030
M			1.000	0.000	0.000	0.00	0.000	0.000	0.000
B		0.417	1.000	0.000	0.417	1.50	0.002	0.000	0.000
S	0.803		1.000	0.803	0.000	36.50	0.017	0.013	0.000
E*	1.000		1.000	1.000	0.000	6.30	0.002	0.002	0.000
A*			1.000	0.000	0.000	0.20	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	9.30	0.002	0.002	0.000
ER*	0.750		1.000	0.750	0.000	17.30	0.005	0.004	0.000
PK	0.172		1.000	0.172	0.000	0.20	0.000	0.000	0.000
rCOG		1.000	1.000	0.000	1.000	574.70	0.171	0.000	0.171
rCC		1.000	1.000	0.000	1.000	45.50	0.014	0.000	0.014
rOC*				0.000	0.000	0.00	0.000	0.000	0.000
rM		0.350	1.000	0.000	0.350	100.10	0.032	0.000	0.019
rB		0.496	1.000	0.000	0.496	211.70	0.063	0.000	0.031

* HSI values assigned by HEP team

^ Assumes HSI is equal to HSI in OC habitats

3367.40

AVAILABLE HABITAT FOR FOOD 5.31

AVAILABLE HABITAT FOR REPRODUCTION 60.70

FOOD HSI= 0.075 (from graph) FOOD HU= 252.555

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 3367.4

ROSS TY13 (1949) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COG		1.000	1.000	0.000	1.000	161.30	0.112	0.000	0.112
CC		0.465	0.910	0.300	0.424	1017.40	0.709	0.000	0.301
OC	0.488	0.455	1.000	0.400	0.455	140.50	0.102	0.050	0.046
M			1.300	0.000	0.000	0.00	0.000	0.000	0.000
B		0.417	1.000	0.000	0.417	1.20	0.001	0.000	0.000
S	0.803		1.000	0.000	0.000	20.50	0.020	0.016	0.000
G*	1.000		1.000	1.000	0.000	6.30	0.004	0.004	0.000
A*				0.000	0.000	0.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	7.70	0.025	0.004	0.000
ER*	0.750		1.000	0.750	0.000	11.00	0.008	0.006	0.000
PM				0.000	0.000	0.00	0.000	0.000	0.000
rCOG		1.000	1.000	0.000	1.000	38.10	0.027	0.000	0.027
rCC		1.000	1.000	0.000	1.000	12.50	0.009	0.000	0.009
rOC*				0.000	0.000	0.00	0.000	0.000	0.000
rM		0.000	1.000	0.000	0.000	4.00	0.003	0.000	0.000
rB				0.000	0.000	2.30	0.000	0.000	0.000

* HSI values assigned by HEP team

^ Assumes HSI is equal to HSI in OC habitats

1434.50

AVAILABLE HABITAT FOR FOOD 0.00

AVAILABLE HABITAT FOR REPRODUCTION 49.53

FOOD HSI= 0.130 (from graph) FOOD HU= 195.485

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 1434.5

ROSS TV30 (1965) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CG		1.000	1.000	0.000	1.000	244.50	0.170	0.000	0.170
CC		0.466	0.910	0.000	0.424	1424.02	0.979	0.000	0.415
OC	0.488	0.455	1.000	0.488	0.455	147.90	0.103	0.050	0.047
M			1.000	0.000	0.000	2.00	0.000	0.000	0.000
D		0.417	1.000	0.000	0.417	1.20	0.001	0.000	0.000
S	0.803		1.000	0.803	0.000	28.53	0.020	0.316	0.000
G*	1.000		1.000	1.000	0.000	6.30	0.004	0.004	0.000
A*				0.000	0.000	2.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	7.70	0.005	0.004	0.000
ER*	0.750		1.000	0.750	0.000	11.20	0.008	0.006	0.000
PM				0.000	0.000	0.00	0.000	0.000	0.000
rCG		1.000	1.000	0.000	1.000	23.10	0.027	0.000	0.027
rCC		1.000	1.000	0.000	1.000	12.50	0.009	0.000	0.009
rOC^				0.000	0.000	0.00	0.000	0.000	0.000
rM		0.000	1.000	0.000	0.000	4.00	0.003	0.000	0.000
rB				0.000	0.000	3.00	0.000	0.000	0.000

* HSI values assigned by HEP team

1906.20

^ Assumes HSI is equal to HSI in OC habitats

AVAILABLE HABITAT FOR FOOD 8.24

AVAILABLE HABITAT FOR REPRODUCTION 66.82

FOOD HSI= 0.130 (from graph)

FOOD HU= 247.806

REPRODUCTION HSI= 1.000 (from graph)

REPRODUCTION HU= 1906.2

ROSS TY51 (1987) WITH PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CGG		1.000	1.000	0.000	1.000	99.17	0.056	0.000	0.056
CC		0.465	0.910	0.000	0.424	1367.60	0.768	0.000	0.328
DC	0.488	0.455	1.000	0.488	0.455	106.28	0.061	0.030	0.028
M		0.463	1.000	0.000	0.463	30.56	0.045	0.000	0.021
B		0.417	1.000	0.000	0.417	57.90	0.038	0.000	0.016
S			1.000	0.000	0.000	0.20	0.000	0.000	0.000
G*	1.000		1.000	1.000	0.000	0.53	0.005	0.005	0.000
A*				0.000	0.000	0.00	0.000	0.000	0.000
R/T*	0.750		1.000	0.750	0.000	14.52	0.008	0.006	0.000
ER*	0.750		1.000	0.750	0.000	15.93	0.009	0.007	0.000
PX				0.000	0.000	0.00	0.000	0.000	0.000
rCOG		1.000	1.000	0.000	1.000	8.97	0.005	0.000	0.005
rCC			1.000	0.000	0.000	0.00	0.000	0.000	0.000
rDC^				0.000	0.000	0.00	0.000	0.000	0.000
rM		0.000	1.000	0.000	0.000	8.95	0.005	0.000	0.000
rB				0.000	0.000	0.00	0.000	0.000	0.000

* HSI values assigned by HEP team

^ Assumes HSI is equal to HSI in DC habitats

1780.32

AVAILABLE HABITAT FOR FOOD 4.73

AVAILABLE HABITAT FOR REPRODUCTION 45.10

FOOD HSI= 0.060 (from graph) FOOD HU= 106.8192

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 1780.32

ROSS TY30 (1965) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
CG		1.000	1.000	0.000	1.000	597.20	0.002	0.000	0.002
CC		0.466	0.900	0.000	0.419	4018.90	0.412	0.000	0.173
GC	0.488	0.455	1.000	0.488	0.455	656.10	0.056	0.027	0.026
M		0.463	1.000	0.000	0.463	1.00	0.000	0.000	0.000
E		0.417	1.000	0.000	0.417	5.10	0.000	0.000	0.000
S	0.803		1.000	0.803	0.300	345.50	0.030	0.024	0.000
G*	1.000		1.000	1.000	0.000	6.80	0.001	0.001	0.000
A*	1.000		1.000	1.000	0.000	9.00	0.001	0.001	0.000
R/T*	0.750		1.000	0.750	0.000	21.70	0.002	0.001	0.000
ER*	0.750		1.000	0.750	0.000	23.50	0.002	0.002	0.000
PM	0.172		1.000	0.172	0.000	7.10	0.001	0.000	0.000
rCG		1.000	0.870	0.000	0.870	3076.00	0.263	0.000	0.229
rCC		1.000	0.950	0.000	0.950	633.80	0.054	0.000	0.052
rCC^	0.488	0.455	1.000	0.488	0.455	16.05	0.001	0.001	0.001
rX		0.350	0.430	0.000	0.151	449.80	0.038	0.000	0.006
rB		0.496	0.730	0.000	0.362	531.60	0.047	0.000	0.017

* HSI values assigned by HEP team

^ Assumes HSI is equal to HSI in GC habitats

11583.95

AVAILABLE HABITAT FOR FOOD 5.65

AVAILABLE HABITAT FOR REPRODUCTION 58.45

FOOD HSI= 0.070 (from graph) FOOD HU= 810.8765

REPRODUCTION HSI= 1.000 (from graph) REPRODUCTION HU= 11583.95

ROSS TYSI (1987) WITHOUT PROJECT

COVER TYPE	HSI FOOD	HSI REPROD.	INTERSPERSION INDEX	ADJUSTED FOOD HSI	ADJUSTED REPR HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED REPR. HSI
COB		1.000	1.000	0.000	1.000	988.30	0.085	0.000	0.085
CC		0.466	0.900	0.000	0.413	5045.50	0.432	0.000	0.191
OC	0.488	0.455	1.000	0.480	0.455	498.90	0.243	0.021	0.019
M		0.453	1.000	0.000	0.463	5.80	0.001	0.000	0.000
E		0.417	1.000	0.000	0.417	32.60	0.003	0.000	0.001
S	0.803		1.000	0.803	0.000	329.00	0.028	0.023	0.000
G*	1.000		1.000	1.000	0.000	8.80	0.001	0.001	0.000
A*	1.000		1.000	1.000	0.000	9.60	0.001	0.001	0.000
R/T*	0.750		1.000	0.750	0.000	13.70	0.001	0.001	0.000
ER*	0.750		1.000	0.750	0.000	19.50	0.002	0.001	0.000
PM	0.172		1.000	0.172	0.000	7.10	0.001	0.000	0.000
rCOB		1.000	0.870	0.000	0.870	3081.50	0.264	0.000	0.229
rCC		1.000	0.950	0.000	0.950	628.20	0.054	0.000	0.051
rOC^	0.488	0.455	1.000	0.488	0.455	16.05	0.001	0.001	0.001
rM		0.350	0.430	0.000	0.151	449.80	0.038	0.000	0.006
rB		0.496	0.730	0.000	0.362	551.60	0.047	0.000	0.017

* HSI values assigned by HEP team

^ Assumes HSI is equal to HSI in OC habitats

11690.15

AVAILABLE HABITAT FOR FOOD 4.79

AVAILABLE HABITAT FOR REPRODUCTION 59.04

FOOD HSI= 0.260 (from graph)

FOOD HU= 701.409

REPRODUCTION HSI= 1.000 (from graph)

REPRODUCTION HU= 11690.15

COMPARISON OF TARGET YEAR AMOUNTS

ROSS WITH-PROJECT---HAWK

	TY0-1	TY1-4	TY4-11	TY11-12	TY12-13	TY13-30	TY30-51	total
FOOD	970.6453	2752.575	5082.016	429.5585	237.2382	3291.473	3692.724	332.2520
REPROD	10217.33	28888.69	52227.7	4762.9	2400.95	28325.95	38706.46	3266.333

ROSS WITHOUT-PROJECT---HAWK

	TY0-1	TY1-30	TY30-51	total
FOOD	970.6453	25997.21	15892.71	840.2075
REPROD	10217.33	319112.2	244378.0	11190.46

NET CHANGE

FOOD	-526.947
REPROD	-7924.13

SPREADSHEET FOR CALCULATING THE HSI FOR MULE DEER—ROSS

ROSS FY0 AND FY1 (1936 & 1937) WITH AND WITHOUT PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	SLOPE		COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
					FACTOR (FOOD)	ADJUSTED FOOD HSI				
C06	0-39	0.214	1.000	1.000	1.0	0.214	1.000	832.10	6.719	1.438
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	117.9	0.952	0.952
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	2394.50	19.335	6.206
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	1055.70	8.524	1.368
OC	0-39	0.389	0.616	1.000	1.0	0.389	0.616	463.00	3.739	1.155
	40-79	0.389	0.616	1.000	0.5	0.195	0.616	151.90	1.227	0.189
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	376.6	3.041	0.870
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	146.9	1.186	0.170
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	1100.00	8.882	5.640
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	417.40	3.370	1.070
RH	0-39	0.627	0.737	1.000	1.0	0.627	0.737	3.60	0.029	0.018
	40-79	0.627	0.737	1.000	0.5	0.314	0.737	0.00	0.000	0.000
B	0-39	0.479	0.660	1.000	1.0	0.479	0.660	0.00	0.000	0.000
	40-79	0.479	0.660	1.000	0.5	0.240	0.660	1.40	0.011	0.003
S	0-39	0.950	0.482	1.000	1.0	0.950	0.482	337.90	2.728	2.614
	40-79	0.950	0.482	1.000	0.5	0.479	0.482	23.60	0.191	0.091
B*	0-39	0.250	0.330	1.000	1.0	0.250	0.330	8.80	0.071	0.018
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000
A*	0-39	0.250	0.330	1.000	1.0	0.250	0.330	9.60	0.078	0.019
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000
rC06	0-39	0.656	1.000	1.000	1.0	0.656	1.000	3047.00	24.603	16.140
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	29.00	0.234	0.077
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	596.30	4.815	2.831
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	12.10	0.098	0.029
rOC*	0-39	0.473	0.616	1.000	1.0	0.473	0.616	16.10	0.130	0.061
	40-79	0.473	0.616	1.000	0.5	0.237	0.616	0.00	0.000	0.000
rH	0-39	0.354	1.000	1.000	1.0	0.354	1.000	430.70	3.542	1.254
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	11.10	0.090	0.016
rB	0-39	0.535	0.679	1.000	1.0	0.535	0.679	550.30	4.443	2.377
	40-79	0.535	0.679	1.000	0.5	0.268	0.679	1.30	0.010	0.003
rRC**	0-39	0.635	0.996	1.000	1.0	0.635	0.996	25.40	0.205	0.130
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	0.00	0.000	0.000
rS/A	0-39	0.473	0.403	1.000	1.0	0.473	0.403	204.30	1.650	0.700
	40-79	0.473	0.403	1.000	0.5	0.237	0.403	12.00	0.097	0.023

TOTAL AREA USED BY DEER 12384.50

AVAILABLE HABITAT FOR FOOD 44.69

AVAILABLE HABITAT FOR COVER 93.90

* food HSI=food HSI of rS/A, cover HSI=cover HSI of OC

** food and cover HSI=food and cover HSI of RC

^ calculated assuming 100% herbaceous canopy cover

FOOD HSI= 0.745 FOOD HU= 9225.005

COVER HSI= 1.000 COVER HU= 12384.5

ROSS TY4 (1940) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
CG	0-39	0.214	1.000	1.000	1.0	0.214	1.000	776.7	7.128	1.525	7.128
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	82.8	0.768	0.081	0.768
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	2046.40	18.781	6.029	18.781
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	967.40	8.878	1.425	8.878
DC	0-39	0.309	0.616	1.000	1.0	0.309	0.616	435.40	3.996	1.235	2.461
	40-79	0.309	0.616	1.000	0.5	0.155	0.616	146.30	1.343	0.207	0.827
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	303.6	2.786	0.797	2.786
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	119.2	1.094	0.156	1.094
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	979.70	8.991	5.709	8.955
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	427.70	3.925	1.246	3.909
E	0-39	0.479	0.660	1.000	1.0	0.479	0.660	0.00	0.000	0.000	0.000
	40-79	0.479	0.660	1.000	0.5	0.240	0.660	1.10	0.010	0.002	0.007
S	0-39	0.958	0.482	1.000	1.0	0.958	0.482	337.90	3.101	2.971	1.495
	40-79	0.958	0.482	1.000	0.5	0.479	0.482	23.60	0.217	0.104	0.104
B*	0-39	0.250	0.330	1.000	1.0	0.250	0.330	0.00	0.001	0.020	0.027
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000	0.000
rCG	0-39	0.656	1.000	1.000	1.0	0.656	1.000	2818.60	25.867	16.969	25.867
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	27.60	0.253	0.083	0.253
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	371.00	3.405	2.082	3.405
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	12.10	0.111	0.033	0.111
rCC*	0-39	0.473	0.616	1.000	1.0	0.473	0.616	3.40	0.031	0.015	0.019
	40-79	0.473	0.616	1.000	0.5	0.237	0.616	0.00	0.000	0.000	0.000
rH	0-39	0.354	1.000	1.000	1.0	0.354	1.000	364.60	3.346	1.185	3.346
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	8.30	0.076	0.013	0.076
rB	0-39	0.535	0.679	1.000	1.0	0.535	0.679	516.00	4.736	2.534	3.215
	40-79	0.535	0.679	1.000	0.5	0.268	0.679	1.30	0.012	0.003	0.008
rS/A	0-39	0.473	0.483	1.000	1.0	0.473	0.483	100.90	0.999	0.473	0.483
	40-79	0.473	0.483	1.000	0.5	0.237	0.483	7.90	0.073	0.017	0.029

TOTAL AREA USED BY DEER 10096.30

AVAILABLE HABITAT FOR FOOD 44.83

AVAILABLE HABITAT FOR COVER 93.95

* food HSI=food HSI of rS/A, cover HSI=cover HSI of CC

^ calculated assuming 100% herbaceous canopy cover

FOOD HSI= 0.747 FOOD HU= 8142.207

COVER HSI= 1.000 COVER HU= 10096.3

ROSS TY11 (1947) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
CDE	0-35	0.214	1.000	1.000	1.0	0.214	1.000	556.90	7.458	1.596	7.458
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	78.8	1.055	0.113	1.055
CC	0-35	0.321	1.000	1.000	1.0	0.321	1.000	1160.60	15.542	4.989	15.542
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	802.60	10.748	1.725	10.748
DC	0-35	0.389	0.616	1.000	1.0	0.389	0.616	213.40	2.858	0.883	1.768
	40-79	0.389	0.616	1.000	0.5	0.195	0.616	130.70	1.750	0.278	1.078
LP	0-35	0.286	1.000	1.000	1.0	0.286	1.000	211.6	2.834	0.810	2.834
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	89.5	1.199	0.171	1.199
RC	0-35	0.635	0.996	1.000	1.0	0.635	0.996	651.00	8.718	5.536	8.683
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	366.30	4.905	1.557	4.886
E	0-35	0.479	0.660	1.000	1.0	0.479	0.660	0.00	0.000	0.000	0.000
	40-79	0.479	0.660	1.000	0.5	0.240	0.660	0.20	0.003	0.001	0.002
S	0-35	0.958	0.482	1.000	1.0	0.958	0.482	211.60	2.834	2.715	1.366
	40-79	0.958	0.482	1.000	0.5	0.479	0.482	23.10	0.309	0.148	0.149
G^	0-35	0.250	0.330	1.000	1.0	0.250	0.330	0.00	0.118	0.029	0.039
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000	0.000
rCDE	0-35	0.656	1.000	1.000	1.0	0.656	1.000	1939.70	25.975	17.040	25.975
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	20.70	0.277	0.091	0.277
rCC	0-35	0.588	1.000	1.000	1.0	0.588	1.000	251.50	3.368	1.900	3.368
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	12.10	0.162	0.048	0.162
rM	0-35	0.354	1.000	1.000	1.0	0.354	1.000	300.00	4.125	1.460	4.125
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	6.90	0.092	0.016	0.092
rR	0-35	0.535	0.679	1.000	1.0	0.535	0.679	366.50	4.908	2.626	3.332
	40-79	0.535	0.679	1.000	0.5	0.268	0.679	1.30	0.017	0.005	0.012
rS/A	0-35	0.473	0.403	1.000	1.0	0.473	0.403	46.10	0.617	0.292	0.249
	40-79	0.473	0.403	1.000	0.5	0.237	0.403	9.60	0.129	0.030	0.052

TOTAL AREA USED BY DEER 7467.50

AVAILABLE HABITAT FOR FOOD 44.13

AVAILABLE HABITAT FOR COVER 94.44

^ calculated assuming 100% herbaceous canopy cover

FOOD HSI= 0.736

FOOD HU= 5492.680

COVER HSI= 1.000

COVER HU= 7467.5

ROSS TY12 (1948) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
CDG	0-39	0.214	1.000	1.000	1.0	0.214	1.000	431.30	10.286	2.201	10.286
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	68.00	1.622	0.174	1.622
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	906.30	21.614	6.938	21.614
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	621.00	14.829	2.380	14.829
CC	0-39	0.309	0.616	1.000	1.0	0.309	0.616	77.90	2.335	0.721	1.438
	40-79	0.309	0.616	1.000	0.5	0.155	0.616	112.50	2.683	0.415	1.653
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	81.6	1.946	0.557	1.946
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	66.4	1.584	0.226	1.584
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	379.20	9.043	5.743	9.007
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	324.70	7.744	2.459	7.713
R	0-39	0.479	0.660	1.000	1.0	0.479	0.660	0.00	0.000	0.000	0.000
	40-79	0.479	0.660	1.000	0.5	0.240	0.660	0.10	0.002	0.001	0.002
S	0-39	0.950	0.482	1.000	1.0	0.950	0.482	35.50	0.847	0.811	0.486
	40-79	0.950	0.482	1.000	0.5	0.479	0.482	21.00	0.501	0.240	0.241
G	0-39	0.250	0.330	1.000	1.0	0.250	0.330	6.90	0.165	0.041	0.054
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000	0.000
PCOG	0-39	0.656	1.000	1.000	1.0	0.656	1.000	550.10	13.310	8.731	13.310
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	16.60	0.396	0.130	0.396
PC	0-39	0.580	1.000	1.000	1.0	0.580	1.000	30.30	0.913	0.537	0.913
	40-79	0.580	1.000	1.000	0.5	0.294	1.000	7.20	0.172	0.050	0.172
PM	0-39	0.354	1.000	1.000	1.0	0.354	1.000	174.60	4.164	1.474	4.164
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	5.50	0.131	0.023	0.131
PF	0-39	0.535	0.679	1.000	1.0	0.535	0.679	211.50	5.044	2.699	3.425
	40-79	0.535	0.679	1.000	0.5	0.268	0.679	0.20	0.005	0.001	0.003
PS/A	0-39	0.473	0.403	1.000	1.0	0.473	0.403	21.20	0.506	0.239	0.204
	40-79	0.473	0.403	1.000	0.5	0.237	0.403	6.70	0.160	0.038	0.064

TOTAL AREA USED BY DEER 4193.10

AVAILABLE HABITAT FOR FOOD 36.83

AVAILABLE HABITAT FOR COVER 95.18

FOOD HSI= 0.614 FOOD HU= 2573.762

COVER HSI= 1.000 COVER HU= 4193.1

^ calculated assuming 100% herbaceous canopy cover

ROSS TY13 (1949) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
COG	0-39	0.214	1.000	1.000	1.0	0.214	1.000	107.00	4.750	1.016	4.750
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	53.50	2.375	0.254	2.375
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	519.70	23.070	7.406	23.070
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	485.10	21.534	3.456	21.534
CC	0-39	0.309	0.616	1.000	1.0	0.309	0.616	53.40	2.370	0.732	1.462
	40-79	0.309	0.616	1.000	0.5	0.155	0.616	85.00	3.809	0.588	2.346
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	50.60	2.246	0.642	2.246
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	41.00	1.820	0.260	1.820
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	538.70	23.914	15.185	23.818
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	259.00	11.497	3.650	11.451
E	0-39	0.479	0.660	1.000	1.0	0.479	0.660	0.00	0.000	0.000	0.000
	40-79	0.479	0.660	1.000	0.5	0.240	0.660	0.10	0.004	0.001	0.003
S	0-39	0.958	0.482	1.000	1.0	0.958	0.482	13.10	0.582	0.557	0.260
	40-79	0.958	0.482	1.000	0.5	0.479	0.482	15.40	0.684	0.327	0.338
6*	0-39	0.250	0.330	1.000	1.0	0.250	0.330	6.30	0.280	0.070	0.092
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000	0.000
rCOG	0-39	0.656	1.000	1.000	1.0	0.656	1.000	11.10	0.493	0.323	0.493
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	5.00	0.257	0.084	0.257
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	0.00	0.000	0.000	0.000
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	0.00	0.000	0.000	0.000
Y	0-39	0.354	1.000	1.000	1.0	0.354	1.000	0.00	0.000	0.000	0.000
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	0.50	0.022	0.004	0.022
rS/A	0-39	0.473	0.483	1.000	1.0	0.473	0.483	2.60	0.115	0.055	0.047
	40-79	0.473	0.483	1.000	0.5	0.237	0.483	4.00	0.178	0.042	0.072

TOTAL AREA USED BY DEER 2252.70

AVAILABLE HABITAT FOR FOOD 34.66

AVAILABLE HABITAT FOR COVER 96.47

FOOD HSI= 0.578 FOOD HU= 1301.127

COVER HSI= 1.000 COVER HU= 2252.7

* calculated assuming 100% herbaceous canopy cover

ROSS TY38 (1966) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
COG	0-39	0.214	1.000	1.000	1.0	0.214	1.000	134.80	5.984	1.281	5.984
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	107.20	4.759	0.509	4.759
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	689.30	30.599	9.822	30.599
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	704.40	31.269	5.019	31.269
OC	0-39	0.389	0.616	1.000	1.0	0.389	0.616	53.40	2.370	0.732	1.460
	40-79	0.389	0.616	1.000	0.5	0.195	0.616	87.10	3.866	0.597	2.382
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	76.70	3.405	0.974	3.405
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	61.50	2.730	0.390	2.730
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	315.20	13.992	8.885	13.936
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	15.60	0.693	0.220	0.690
B	0-39	0.479	0.660	1.000	1.0	0.479	0.660	0.00	0.000	0.000	0.000
	40-79	0.479	0.660	1.000	0.5	0.240	0.660	0.10	0.004	0.001	0.003
S	0-39	0.958	0.482	1.000	1.0	0.958	0.482	13.10	0.582	0.557	0.280
	40-79	0.958	0.482	1.000	0.5	0.479	0.482	15.40	0.684	0.327	0.330
G*	0-39	0.250	0.330	1.000	1.0	0.250	0.330	6.30	0.280	0.070	0.092
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000	0.000
rCCG	0-39	0.656	1.000	1.000	1.0	0.656	1.000	11.10	0.493	0.323	0.493
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	5.80	0.257	0.004	0.257
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	0.00	0.000	0.000	0.000
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	0.00	0.000	0.000	0.000
r*	0-39	0.354	1.000	1.000	1.0	0.354	1.000	0.00	0.000	0.000	0.000
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	0.50	0.022	0.004	0.022
rS/A	0-39	0.473	0.403	1.000	1.0	0.473	0.403	2.60	0.115	0.055	0.047
	40-79	0.473	0.403	1.000	0.5	0.237	0.403	4.00	0.178	0.042	0.072

TOTAL AREA USED BY DEER 2304.10

AVAILABLE HABITAT FOR FOOD 29.89

AVAILABLE HABITAT FOR COVER 98.81

FOOD HSI= 0.498 FOOD HU= 1147.951

COVER HSI= 1.000 COVER HU= 2304.1

* calculated assuming 100% herbaceous canopy cover

COVER HS1= 1.000

COVER HU= 12396.4

COMPARISON OF TARGET YEARS, *Roads, Deer*

WITH-PROJECT

	TY0-1	TY1-4	TY4-11	TY11-12	TY12-13	TY13-30	TY30-51	total
FOOD	9225.005	26052.57	47675.01	3966.755	1925.730	20828.73	23061.90	2602.661
COVER	12384.5	34921.2	64273.3	5830.3	3222.9	38732.8	47534.55	4056.853

WITHOUT-PROJECT

	TY0-1	TY1-30	TY30-51	total
FOOD	9225.005	253334.6	173293.1	8546.133
COVER	12384.5	359151.9	260200.5	12386.99

NET CHANGE (WITH-WITHOUT PROJECT)

FOOD	-5943.47
COVER	-8330.14

COVER HSI= 1.000

COVER HU= 12384.6

ROSS TYS1 (1987) WITHOUT PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
CDG	0-39	0.214	1.000	1.000	1.0	0.214	1.000	653.70	6.887	1.474	6.887
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	127.40	1.028	0.110	1.028
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	3500.50	28.238	9.064	28.238
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	1510.00	12.187	1.956	12.187
DC	0-39	0.309	0.616	1.000	1.0	0.309	0.616	360.20	2.906	0.890	1.790
	40-79	0.309	0.616	1.000	0.5	0.155	0.616	115.90	0.935	0.144	0.575
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	464	3.904	1.117	3.904
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	139.5	1.126	0.161	1.126
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	0.00	0.000	0.000	0.000
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	0.00	0.000	0.000	0.000
RM	0-39	0.627	0.737	1.000	1.0	0.627	0.737	0.00	0.000	0.000	0.000
	40-79	0.627	0.737	1.000	0.5	0.314	0.737	0.00	0.000	0.000	0.000
M	0-39	0.421	1.000	1.000	1.0	0.421	1.000	5.30	0.043	0.018	0.043
	40-79	0.421	1.000	1.000	0.5	0.211	1.000	4.50	0.036	0.000	0.036
B	0-39	0.479	0.660	1.000	1.0	0.479	1.000	1.00	0.015	0.006	0.015
	40-79	0.479	0.660	1.000	0.5	0.211	1.000	1.40	0.011	0.002	0.011
S	0-39	0.958	0.482	1.000	1.0	0.479	0.660	307.50	2.481	1.186	1.637
	40-79	0.958	0.482	1.000	0.5	0.240	0.660	21.50	0.173	0.042	0.114
G	0-39	0.250	0.330	1.000	1.0	0.250	0.482	0.00	0.071	0.068	0.034
	40-79	0.250	0.330	1.000	0.5	0.125	0.482	0.00	0.000	0.000	0.000
A	0-39	0.250	0.330	1.000	1.0	0.250	0.330	9.60	0.077	0.019	0.026
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000	0.000
FC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	0.00	0.000	0.000	0.000
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	0.00	0.000	0.000	0.000
rCDG	0-39	0.656	1.000	1.000	1.0	0.656	1.000	3052.60	24.625	16.154	24.625
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	29.00	0.234	0.077	0.234
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	616.10	4.970	2.922	4.970
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	12.10	0.098	0.029	0.098
rDC	0-39	0.473	0.616	1.000	1.0	0.473	0.616	16.10	0.130	0.061	0.080
	40-79	0.473	0.616	1.000	0.5	0.237	0.616	0.00	0.000	0.000	0.000
rM	0-39	0.354	1.000	1.000	1.0	0.354	1.000	438.70	3.539	1.253	3.539
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	11.10	0.090	0.016	0.090
rB	0-39	0.535	0.679	1.000	1.0	0.535	0.679	550.30	4.439	2.375	3.014
	40-79	0.535	0.679	1.000	0.5	0.268	0.679	1.30	0.010	0.003	0.007
rRC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	0.00	0.000	0.000	0.000
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	0.00	0.000	0.000	0.000
rS/A	0-39	0.473	0.483	1.000	1.0	0.473	0.483	204.60	1.650	0.781	0.665
	40-79	0.473	0.483	1.000	0.5	0.237	0.483	12.00	0.097	0.023	0.039

TOTAL AREA USED BY DEER 12396.40

AVAILABLE HABITAT FOR FOOD 39.97

AVAILABLE HABITAT FOR COVER 95.01

FOOD HSI= 0.666

FOOD HSI= 8257.765

ROSS TYSI (1987) WITH PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
COG	0-39	0.214	1.000	1.000	1.0	0.214	1.000	96.50	4.341	0.929	4.341
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	2.50	0.112	0.012	0.112
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	655.10	29.469	9.468	29.469
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	699.30	31.457	5.049	31.457
DC	0-39	0.309	0.616	1.000	1.0	0.309	0.616	40.90	1.840	0.563	1.133
	40-79	0.309	0.616	1.000	0.5	0.155	0.616	57.60	2.591	0.400	1.596
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	77.6	3.491	0.958	3.491
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	27.4	1.233	0.176	1.233
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	139.30	6.266	3.973	6.241
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	62.00	2.789	0.886	2.778
RM	0-39	0.627	0.737	1.000	1.0	0.627	0.737	29.40	1.323	0.829	0.975
	40-79	0.627	0.737	1.000	0.5	0.314	0.737	15.70	0.706	0.221	0.521
R	0-39	0.421	1.000	1.000	1.0	0.421	1.000	37.10	1.669	0.703	1.669
	40-79	0.421	1.000	1.000	0.5	0.211	1.000	43.30	1.948	0.410	1.948
E	0-39	0.479	0.660	1.000	1.0	0.479	0.660	52.40	2.357	1.129	1.556
	40-79	0.479	0.660	1.000	0.5	0.240	0.660	15.90	0.715	0.171	0.472
S	0-39	0.958	0.482	1.000	1.0	0.958	0.482	0.00	0.000	0.000	0.000
	40-79	0.958	0.482	1.000	0.5	0.479	0.482	0.00	0.000	0.000	0.000
6^	0-39	0.250	0.330	1.000	1.0	0.250	0.330	8.40	0.378	0.094	0.125
	40-79	0.250	0.330	1.000	0.5	0.125	0.330	0.00	0.000	0.000	0.000
FD*	0-39	0.321	1.000	1.000	1.0	0.321	1.000	124.90	5.619	1.804	5.619
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	7.30	0.328	0.053	0.328
rCOG	0-39	0.334	1.000	1.000	1.0	0.334	1.000	9.00	0.405	0.135	0.405
	40-79	0.334	1.000	1.000	0.5	0.167	1.000	0.00	0.000	0.000	0.000
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	0.00	0.000	0.000	0.000
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	0.00	0.000	0.000	0.000
rM	0-39	0.384	1.000	1.000	1.0	0.384	1.000	9.10	0.409	0.157	0.409
	40-79	0.384	1.000	1.000	0.5	0.192	1.000	0.00	0.000	0.000	0.000
rS/A	0-39	0.335	0.421	1.000	1.0	0.335	0.421	7.90	0.355	0.119	0.150
	40-79	0.335	0.421	1.000	0.5	0.168	0.421	4.40	0.198	0.033	0.083

TOTAL AREA USED BY DEER 2223.00

AVAILABLE HABITAT FOR FOOD 28.32

AVAILABLE HABITAT FOR COVER 96.11

* HSIs=those for CC

^ calculated assuming 100% herbaceous canopy cover

FOOD HSI= 0.472

FOOD HU= 1046.130

COVER HSI= 1.000

COVER HU= 2223

ROSS TY38 (1966) WITHOUT PROJECT

COVER TYPE	SLOPE CATEGORY	HSI FOOD	HSI COVER	INTERSPERSION INDEX	FACTOR (FOOD)	ADJUSTED FOOD HSI	ADJUSTED COVER HSI	COVER- TYPE AREA	RELATIVE AREA	WEIGHTED FOOD HSI	WEIGHTED COVER HSI
COG	0-39	0.214	1.000	1.000	1.0	0.214	1.000	832.10	6.712	1.436	6.712
	40-79	0.214	1.000	1.000	0.5	0.107	1.000	117.90	0.951	0.182	0.951
CC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	3328.90	26.854	8.628	26.854
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	1455.80	11.744	1.885	11.744
CC	0-39	0.389	0.616	1.000	1.0	0.389	0.616	479.30	3.866	1.195	2.382
	40-79	0.389	0.616	1.000	0.5	0.195	0.616	154.00	1.242	0.192	0.755
LP	0-39	0.286	1.000	1.000	1.0	0.286	1.000	539.4	4.351	1.244	4.351
	40-79	0.286	1.000	1.000	0.5	0.143	1.000	163	1.315	0.188	1.315
RC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	0.00	0.000	0.000	0.000
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	0.00	0.000	0.000	0.000
RM	0-39	0.627	0.737	1.000	1.0	0.627	0.737	0.00	0.000	0.000	0.000
	40-79	0.627	0.737	1.000	0.5	0.314	0.737	0.00	0.000	0.000	0.000
M	0-39	0.421	1.000	1.000	1.0	0.421	1.000	1.00	0.015	0.006	0.015
	40-79	0.421	1.000	1.000	0.5	0.211	1.000	0.00	0.000	0.000	0.000
B	0-39	0.479	0.660	1.000	1.0	0.479	0.660	1.00	0.015	0.006	0.015
	40-79	0.479	0.660	1.000	0.5	0.211	0.660	1.40	0.011	0.002	0.011
S	0-39	0.958	0.482	1.000	1.0	0.958	0.482	324.40	2.617	1.253	1.727
	40-79	0.958	0.482	1.000	0.5	0.248	0.482	22.50	0.182	0.043	0.120
G	0-39	0.250	0.338	1.000	1.0	0.250	0.338	0.00	0.071	0.068	0.034
	40-79	0.250	0.338	1.000	0.5	0.125	0.338	0.00	0.000	0.000	0.000
A	0-39	0.250	0.338	1.000	1.0	0.250	0.338	9.60	0.077	0.019	0.026
	40-79	0.250	0.338	1.000	0.5	0.125	0.338	0.00	0.000	0.000	0.000
FC	0-39	0.321	1.000	1.000	1.0	0.321	1.000	0.00	0.000	0.000	0.000
	40-79	0.321	1.000	1.000	0.5	0.161	1.000	0.00	0.000	0.000	0.000
rCOG	0-39	0.656	1.000	1.000	1.0	0.656	1.000	3047.00	24.580	16.124	24.580
	40-79	0.656	1.000	1.000	0.5	0.328	1.000	29.00	0.234	0.077	0.234
rCC	0-39	0.588	1.000	1.000	1.0	0.588	1.000	621.70	5.015	2.949	5.015
	40-79	0.588	1.000	1.000	0.5	0.294	1.000	12.10	0.098	0.029	0.098
rOC	0-39	0.473	0.616	1.000	1.0	0.473	0.616	16.10	0.130	0.061	0.080
	40-79	0.473	0.616	1.000	0.5	0.237	0.616	0.00	0.000	0.000	0.000
rM	0-39	0.354	1.000	1.000	1.0	0.354	1.000	438.70	3.539	1.253	3.539
	40-79	0.354	1.000	1.000	0.5	0.177	1.000	11.10	0.090	0.016	0.090
rB	0-39	0.535	0.679	1.000	1.0	0.535	0.679	558.30	4.439	2.375	3.014
	40-79	0.535	0.679	1.000	0.5	0.268	0.679	1.30	0.010	0.003	0.007
rRC	0-39	0.635	0.996	1.000	1.0	0.635	0.996	0.00	0.000	0.000	0.000
	40-79	0.635	0.996	1.000	0.5	0.318	0.996	0.00	0.000	0.000	0.000
rS/A	0-39	0.473	0.483	1.000	1.0	0.473	0.483	204.60	1.650	0.781	0.565
	40-79	0.473	0.483	1.000	0.5	0.237	0.483	12.00	0.097	0.023	0.039

TOTAL AREA USED BY DEER 12384.68

AVAILABLE HABITAT FOR FOOD 39.95

AVAILABLE HABITAT FOR COVER 94.38

FOOD HSI= 0.666

FOOD HU= 8246.345