LITERATURE CITED

Allen, D. B., B. J. Flatter, K. Fite, and S. P. Yundt. 1994. Redband trout (*Oncorhynchusmykiss*) population and habitat inventory in Owyhee County, Idaho. Idaho Department of Fish and Game, Bureau of Land anagement Challenge Cost Share Project, ID013-435001-25-9Z.

Allen, D. B., B. J. Flatter, K. Fite. 1995. Redband trout (*Oncorhynchus mykiss gairdneri*) population and habitat surveys in Jump, Reynolds, and Sheep Creeks, and sections of the Owyhee River in Owyhee County, Idaho. Idaho Bureau of Land Management, Technical Bulletin No. 95-6.

Allen, D. B., K. Fite, J. Nelson, and B. J. Flatter. 1997a. Redband trout (*Oncorhynchus mykiss gairdneri*) population and habitat surveys in southern Owyhee County, Idaho. Idaho Bureau of Land Management, Technical Bulletin No. 97-10.

Allen, D. B., K. Fite, J. Nelson, B. J. Flatter. 1997b. Redband trout (*Oncorhynchus mykiss gairdneri*) population and stream habitat surveys in Western Owyhee County, Idaho. Idaho Bureau of Land Management, Technical Bulletin No. 97-9.

Behnke, R.J. 1992. Native trout of western North America. American Fisheries Society Monograph 6.

Petrosky, C. E. and T. Holubetz. 1988. Idaho habitat evaluation for offsite mitigation record. Annual Report, 1987, Project 83-7 Dept. of Energy, BPA, Division of Fish and Wildlife.

Platts, W. S., C. Armour, G. D. Booth, M. Bryant, L. L. Bufford, P. Culpin, S. Jensen, G. W. Lienkaemper, G. W. Minshall, S. B. Monsen, R. L. Nelson, J. R. Sedell, and J. S. Tuhy. 1987. Methods for evaluating riparian habitats with applications to management. Gen. Tech. Report INT-221. U.S.D.A. Forest Service, Intermountain Research Station,Ogden, UT. 177pp.

Van Deventer, J. S. and W. S. Platts. 1989. Microcomputer software system for generating population statistics from electrofishing data-users guide for MicroFish 3.0. U.S.D.A. Forest Service, Intermountain Research Station, Gen. Tech. Report INT-254.

Table 1. Location and site descriptions of sites sampled in Owyhee County, Idaho in 1997.

SITE	LOCATION	LATITUDE/ LONGITUDE	SITE DESCRIPTION
JORDA095.4	T4S R3W S31	N 43 1.98 W 116 44.75	Above first bridge below Silver City
JORDA088.3	T4S R4W S31	N 43 1.61 W 116 51	Just down stream from Sage Hen Creek mouth
JORDA075.9	T6S R5W S1	N 42 56.04 W 116 52.69	In canyon
FLINT003.9	T6S R4W S22	N 42 53.64 W 116 48.38	Above Triangle Road crossing
SQUAW008.7	T1N R5W S35 NESE	N 43 22.49 W 116 53.512	1/4 mile below private fence
SQUAW004.8	T1N R4W S8 NWSE	N 43 26.287 W 116 50.062	Above canyon near only large cottonwood
LSQUA000.2	T1N R5W S35 NENE	N 43 23.169 W 116 53.516	100 yds above confluence into Squaw Cr.
SALMO000.6	T2S R4W S13 NWNE	N 43 15.204 W 116 45.373	1/4 mile upstream of gaging station
MACKS002.0	T2S R4W S27 NWNE	N 43 13.62 W 116 47.758	50 m above diversion
REYNO019.5	T3S R4W S24 NESW	N 43 8.596 W 116 45.715	150 m below upper gaging station
REYNO011.3	T2S R4W S12 SWNE	N 43 15.847 W 116 45.102	150 m below lower gaging station
SCBOB000.7	T4S R3W S24 NESW	N 43 3.456 W 116 38.71	0.7 mi upstream of Sinker Creek
SINKE016.0	T4S R2W S19 NENW	N 43 3.882 W 116 37.551	1/2 mi downstream of upper road crossing
DEEP_034.4	T10S R3W S3 NWSE	N 42 34.82 W 116 40.65	200 m below bridge on Mud Flat road
DEEP_000.1	T13S R3W S25 NWSW	N/A	Mouth of Deep Creek upstream
REDCA000.1	T13S R4W S20 NWNW	N 42 16.96 W 116 50.36	From Owyhee River upstream
NFOWY011.8	T9S R5W S36 SESE	N 42 35.695 W 116 59.043	150m below bridge at the campground

Table 2. Redband trout population estimates and densities for stream sites sampled in Owyhee County, Idaho in 1997.

SITE	DATE COLLECTED	POPULATION ESTIMATE (se)	DENSITY Number of Trout/100M ^{2}	DENSITY Number of Trout >100mm/ 100M ^{2}
JORDA095.4	9/4/97	86 (3.3)	40.7	24.15
JORDA095.4	7/93	54 (4.9)	15.5	
JORDA095.4	6/77	86 (16.2)	10.2	
JORDA088.3	9/4/97	73 (2.2)	20.9	14.4
JORDA088.3	8/93	4 (0.6)	0.9	
JORDA088.3	8/76	29 (0)	13.9	
JORDA075.9	9/5/97	30 (2.6)	16.4	14.7
JORDA075.9	8/93	4 (0)	1.2	
JORDA075.9	8/77	6 (0.9)	3.2	
FLINT003.9	9/5/97	94 (8.7)	104.1	31.0
FLINT003.9	9/93	70 (0.9)	40.0	
FLINT003.9	7/77	62 (46.3)	11.7	
SQUAW008.7	7/8/97	0	0	0
SQUAW004.8	7/3/97	0	0	0
LSQUA000.2	7/8/97	0	0	0
SALMO000.6	7/9/97	189 (2.7)	110.7	8.8
MACKS002.0	7/9/97	0	0	0
REYNO023.7	7/16/97	44 (1.9)	20.0	20.0
REYNO023.7	9/27/94	0 Dry		
REYNO023.7	7/13/77	48 (18.0)	17.0	
REYNO006.6	7/16/97	36 (9.4)	19.7	14.7
REYNO006.6	9/27/94	0	0	0

SCBOB000.7	7/15/97	2.0	2.0	2.0
SINKE016.0	7/15/97	29 (0.9)	18.3	2.5
DEEP_034.4	8/25/97	0	0	0
DEEP_034.4	10/93	0	0	0
DEEP_034.4	7/20/77	19 (4.4)	13.0	
DEEP_000.1	7/9/97	0	0	0
REDCA000.1	7/11/97	11 (1.1)	5.7	1.6
NFOWY011.8	7/10/97	0	0	0
NFOWY011.8	7/12/91	2 (0)	1.0	

Table 3. Presence (X) of fish species at sample sites in Owyhee County, Idaho in 1997.

SITE	BLS	CSL	LND	MTS	RSS	SCP	SMB	SPD	SUK	WRB
JORDA095.4										X
JORDA088.3	X							X		X
JORDA075.9	X	X	X	X	X			X		X
FLINT003.9				X						X
SQUAW008.7			X							
SQUAW004.8	X		X							
LSQUA000.2										
SALMO000.6										X
MACKS002.0										
REYNO019.5								X		X
REYNO011.3								X		X
SCBOB000.7										X
SINKE016.0										X
DEEP_034.4	X				X	X		X		
DEEP_000.1		X	X			X	X		X	
REDCA000.1	X		X			X				X
NFOWY011.8			X			X		X		

BLS = Bridgelip sucker, CSL = Chislemouth, LND = Longnose dace, MTS = Mottled sculpin, RSS = Redside shiner, SCP = Sculpin spp., SMB = Smallmouth bass, SPD = Speckled dace, SUK = Sucker spp., WRB = Redband trout.

Table 4. Stream sample site length, average width, average depth, percent gradient, and percent composition of substrate in stream sections sampled in Owyhee County, Idaho in 1997.

SITE	LEN (m)	AVE WIDTH (m)	AVE DEPTH (m)	% GRAD-IENT	% SAND	% GRA-VEL	% RUBBLE	% BOUL-DER	% BED ROCK
JORDA095.4	66	3.2	0.1	nd	26	12	54	7	0
JORDA088.3	66	5.3	0.1	nd	11	7	71	11	0
JORDA075.9	61	3.0	0.2	nd	15	28	49	9	0
FLINT003.9	43	2.1	0.2	nd	7	13	80	0	0
SQUAW008.7	61	1.9	0.1	1.02	21	13	47	19	0
SQUAW004.8	61	2.4	0.2	1.83	9	30	57	4	0
LSQUA000.2	61	1.0	0.1	2.11	17	12	72	0	0
SALMO000.6	61	2.8	0.1	1.76	14	3	74	10	0
MACKS002.0	61	2.0	0.1	1.31	11	24	42	23	0
REYNO019.5	61	3.6	0.2	1.81	0	19	62	16	3
REYNO011.3	61	3.0	0.2	0.73	12	30	43	16	0
SCBOB000.7	61	1.6	0.1	2.95	26	21	43	4	7
SINKE016.0	61	2.6	0.1	0.89	33	18	26	18	3
DEEP_034.4	61	3.9	0.1	nd	46	54	0	0	0
DEEP_000.1	300	nd	nd	nd	nd	nd	nd	nd	nd
REDCA000.1	53	nd	nd	nd	nd	nd	nd	nd	nd
NFOWY011.8	61	5.5	0.2	0.85	7	7	84	1	0

nd = no data

Table 5. Percent habitat type and percent trout cover at stream sample sites in Owyhee County, Idaho in 1997.

SITE	% POOL	% RIFFLE	% RUN	% POCKET WATER	% TROUT COVER
JORDA095.4	0.0	53.3	46.7	0.0	10.0
JORDA088.3	26.7	53.3	20.0	0.0	17.0
JORDA075.9	40.0	60.0	0.0	0.0	32.0
FLINT003.9	40.0	26.7	33.3	0.0	0.0
SQUAW008.7	0.0	13.3	86.7	0.0	33.0
SQUAW004.8	0.0	50.0	50.0	0.0	50.0
LSQUA000.2	25.0	50.0	25.0	0.0	21.0
SALMO000.6	20.0	36.7	43.3	0.0	58.0
MACKS002.0	0.0	46.7	53.3	0.0	17.0
REYNO019.5	0.0	10.0	53.3	36.7	38.0
REYNO011.3	13.3	36.7	50.0	0.0	35.0
SCBOB000.7	10.0	30.0	20.0	40.0	20.0
SINKE016.0	0.0	20.0	50.0	30.0	7.0
DEEP_034.4	0.0	0.0	100.0	0.0	0.0
DEEP_000.1	nd	nd	nd	nd	nd
REDCA000.1	nd	nd	nd	nd	nd
NFOWY011.8	0.0	29.6	70.4	0.0	25.0

nd = no data

Table 6. Percent stream shading on stream sites sampled in Owyhee County, Idaho in 1997.

SITE	PERCENT SHADE
JORDA095.4	nd
JORDA088.3	nd
JORDA075.9	nd
FLINT003.9	nd
SQUAW008.7	44.1
SQUAW004.8	53.8
LSQUA000.2	27.0
SALMO000.6	9.7
MACKS002.0	9.3
REYNO019.5	nd
REYNO011.3	nd
SCBOB000.7	53.7
SINKE016.0	18.7
DEEP_034.4	11.3
DEEP_000.1	nd
REDCA000.1	nd
NFOWY011.8	6.42

nd = no data

Table 7. Water quality results for stream sites sampled in Owyhee County, Idaho in 1997.

SITE	DATE	WATER TEMP C	pH	CONDUC-TIVITY Us/cm	HARD-NESS mg/l as $CaCO_3$
JORDA095.4	9/4/97	17	nd	nd	nd
JORDA088.3	9/4/97	20	nd	nd	nd
JORDA075.9	9/5/97	12	nd	nd	nd
FLINT003.9	9/5/97	16	nd	nd	nd
SQUAW008.7	7/8/97	21	9.5	290	160
SQUAW004.8	7/3/97	11	9.0	260	140
LSQUA000.2	7/8/97	17.5	9.2	600	160
SALMO000.6	7/9/97	19.5	9.6	330	187
MACKS002.0	7/9/97	16	9.2	240	140
REYNO019.5	7/16/97	17	9.3	90	85
REYNO011.3	7/16/97	22	9.5	950	340
SCBOB000.7	7/15/97	17	9.1	90	100
SINKE016.0	7/15/97	18	8.9	100	102
DEEP_034.4	8/25/97	20	9.3	50	60
DEEP_000.1	7/9/97	18	nd	nd	nd
REDCA000.1	7/11/97	17	nd	nd	nd
NFOWY011.8	7/10/97	17	9.8	70	85

nd = no data