APPENDIX 2.A

Anadromous Fish Size, Price, and Per Unit Economic Assumptions

POUNDS PER FISH

Oregon

Weights	Troll Chinook	Troll Coho	Troll Pink	Troll Chum	Net Chinook	Net Coho	Net Chum	Net Sockeye	Net Steelhead
1990	10.4	6.0	4.5		20.9	6.6	11.8	3.8	10.2
1991	10.7	5.3	4.5		18.7	6.6	10.5	3.8	8.3
1992	10.6	4.8	4.5		17.9	5.2	9.9	3.8	9.0
1993	10.7	6.2	4.5		17.3	7.3	10.0	3.8	9.5
1994	13.0	6.2	4.5		18.0	7.8	10.0	3.8	8.5
1995	10.3	6.2	4.5		18.7	8.4	10.0	3.8	7.9
1996	12.5	6.2	4.5		17.0	10.4	10.0	3.8	8.0
avg.	11.2	5.8	4.5	12.0	18.4	7.5	10.3	3.8	8.8

Washington

Weights	Troll					
	Chinook	Coho	Pink	Sockeye	Chum	Steelhead
1990	12.8	6.4	5.2	6.9	9.3	
1991	12.2	5.9	3.8	5.5	8.0	
1992	13.3	4.7	4.0	5.7	9.4	
1993	12.6	5.5	3.6	5.7	7.3	
1994	10.7	(5.5)	2.7	5.2	7.7	
1995	9.7	5.1	3.7	3.8	8.6	
1996	14.3	4.6	5.2	6.9	9.3	
avg.	12.2	3.8	4.0	5.7	8.5	7.0

Weights	Gillnet/Setnet, Columbia River					
	Chinook	Coho	Pink	Sockeye	Chum	Steelhead
1990	20.9	6.6		3.8	11.8	10.2
1991	18.7	6.6		3.8	10.5	8.3
1992	17.9	5.2		3.8	9.9	9.0
1993	17.3	7.3		3.8	10.0	9.5
1994	18.0	7.8		3.8	10.0	8.5
1995	18.7	8.4		3.8	10.0	7.9
1996	17.0	10.4		3.8	10.0	8.0
avg.	18.4	7.5		3.8	10.3	8.8

Weights	Gillnet/Setnet, All Washington					
	Chinook	Coho	Pink	Sockeye	Chum	Steelhead
1990	17.2	6.5	5.7	5.7	10.8	9.0
1991	17.1	6.8	3.9	5.4	9.5	9.0
1992	15.7	5.6	4.8	5.7	9.8	9.0
1993	15.5	5.5	3.9	5.2	8.5	9.0
1994	15.8	6.9	3.8	5.7	10.0	9.0
1995	15.7	6.7	3.6	5.6	9.3	9.0
1996	16.3	8.1	4.8	5.9	9.4	9.0
avg.	16.2	6.6	4.4	5.6	9.6	9.0

Weights	Seine, All Washington					
	Chinook	Coho	Pink	Sockeye	Chum	Steelhead
1990	16.1	6.3	5.6	5.7	10.8	9.0
1991	14.7	5.7	5.3	4.1	8.5	9.0
1992	16.7	4.9	3.0	5.6	9.3	9.0
1993	14.8	4.2	3.9	5.0	8.1	9.0
1994	13.8	6.0	3.2	10.4	5.7	9.0
1995	15.6	11.1	3.7	5.5	8.4	9.0
1996	13.7	5.5	2.3	4.7	9.4	9.0
avg.	15.1	6.2	3.9	5.9	8.6	9.0

Weights	Average of all 3 net categories					
	Chinook	Coho	Pink	Sockeye	Chum	Steelhead
avg.	16.5	6.8	4.1	5.1	9.5	8.9

California

Weights (lbs per fish)

	Chinook	(sample)		Coho	(sample)
1990	11.2		1990	5.9	
1991	12.6		1991	6.4	
1992	11.5		1992	5.2	
1993	10.4		1993	5.9	
1994	12.1		1994	5.9	
1995	11.2		1995	5.9	
1996	12.4	10	1996	5.9	6
avg.	11.6	10		5.9	6

Alaska

Representative weights per fish

	Chinook	Coho	Pink	Sockeye	Chum	Steelhead
			Troll			
	17.5	6.5	2.7	5.2	7.0	7.0
			Gillnet/setnet			
	13.8	8.5	3.7	6.3	9.5	
			Seine			
	20.0	7.2	2.8	5.6	8.4	
			Average of net categories			
	16.9	7.9	3.3	6.0	9.0	7.0

Canada

Weights (lb Troll

	Chinook	Coho	Chum	Pink	Sockeye	Steelhead
1990	17.5	5.8	11.4	3.3	6.0	5.3
1991	17.5	6.2	10.3	3.7	5.5	5.9
1992	17.3	5.1	8.9	3.4	5.4	5.3
1993	16.9	4.5	7.3	3.7	5.0	4.6
1994	18.8	6.3	9.7	3.3	6.1	5.2
1995	18.0	5.3	9.6	3.7	5.7	5.8
1996	18.0	5.6	9.5	3.3	6.3	5.9
avg.	17.7	5.5	9.5	3.5	5.7	5.4

Weights Gillnet

	Chinook	Coho	Chum	Pink	Sockeye	Steelhead
1990	15.9	7.3	11.3	3.7	5.9	8.8
1991	13.3	7.5	10.9	3.9	5.4	8.5
1992	15.1	6.8	10.0	3.7	5.7	8.2
1993	16.1	6.1	9.5	3.6	5.2	9.3
1994	15.7	6.1	9.9	3.5	5.8	8.9
1995	16.7	6.4	9.7	3.6	5.6	8.8
1996	16.1	6.6	11.6	3.7	5.7	10.1
avg.	15.6	6.7	10.4	3.7	5.6	8.9

Weights Seine

	Chinook	Coho	Chum	Pink	Sockeye	Steelhead
1990	11.9	7.1	9.8	3.1	5.4	7.8
1991	8.5	6.3	11.2	3.7	4.8	6.2
1992	13.2	7.3	10.8	3.3	5.9	6.5
1993	13.6	6.1	9.0	3.4	5.2	8.0
1994	12.8	5.6	9.9	3.1	5.4	7.6
1995	13.3	5.7	9.6	3.1	5.1	7.3
1996	12.7	6.1	12.1	3.3	5.7	8.7
avg.	12.3	6.3	10.3	3.3	5.4	7.4

Weights Average of net categories

	Chinook	Coho	Chum	Pink	Sockeye	Steelhead
avg.	13.9	6.5	10.4	3.5	5.5	8.2

STATE OF OREGON												
			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Oregon	1.30	2.03	2.99	2.69	2.16	0.83	1.42	0.91	0.51	33.37	15.88
Area:	State	1.40	2.14	3.16	2.84	2.32	0.83	1.50	0.98	0.52	35.27	16.71
Gear:	Troll	1.50	2.24	3.33	3.00	2.49	0.84	1.57	1.05	0.52	37.18	17.53
Species:	Chinook	1.60	2.35	3.50	3.15	2.66	0.84	1.64	1.12	0.52	39.09	18.35
Lbs/fish:	11.2	1.70	2.45	3.67	3.30	2.83	0.84	1.72	1.19	0.53	41.00	19.18
		1.80	2.56	3.84	3.46	2.99	0.85	1.79	1.26	0.53	42.90	20.00
		1.90	2.66	4.01	3.61	3.16	0.85	1.86	1.33	0.53	44.81	20.82
		2.00	2.77	4.18	3.76	3.33	0.85	1.94	1.40	0.54	46.72	21.65
		2.10	2.87	4.35	3.92	3.50	0.86	2.01	1.47	0.54	48.63	22.47
		2.20	2.98	4.52	4.07	3.66	0.86	2.08	1.54	0.54	50.53	23.29
		2.30	3.08	4.69	4.22	3.83	0.86	2.16	1.61	0.55	52.44	24.11
		2.40	3.19	4.87	4.38	4.00	0.87	2.23	1.68	0.55	54.35	24.94
		2.50	3.29	5.04	4.53	4.17	0.87	2.31	1.75	0.56	56.26	25.76
		2.60	3.40	5.21	4.69	4.33	0.87	2.38	1.82	0.56	58.16	26.58
		2.70	3.50	5.38	4.84	4.50	0.88	2.45	1.89	0.56	60.07	27.41
State:	Oregon	0.10	0.91	0.93	0.84	0.05	0.88	0.63	0.07	0.56	17.12	11.64
Area:	State	0.20	1.01	1.11	1.00	0.21	0.89	0.71	0.14	0.57	20.31	12.96
Gear:	Net	0.30	1.11	1.28	1.15	0.38	0.90	0.78	0.21	0.57	23.50	14.28
Species:	Chinook	0.40	1.21	1.45	1.31	0.54	0.91	0.85	0.28	0.57	26.68	15.60
Lbs/fish:	18.4	0.50	1.32	1.63	1.46	0.70	0.92	0.92	0.35	0.57	29.87	16.93
		0.60	1.42	1.80	1.62	0.87	0.93	0.99	0.42	0.57	33.06	18.25
		0.70	1.52	1.97	1.78	1.03	0.94	1.07	0.49	0.58	36.24	19.57
		0.80	1.63	2.15	1.93	1.19	0.95	1.14	0.56	0.58	39.43	20.89
		0.90	1.73	2.32	2.09	1.36	0.96	1.21	0.63	0.58	42.62	22.21
		1.00	1.83	2.50	2.25	1.52	0.97	1.28	0.70	0.58	45.80	23.53
		1.10	1.93	2.67	2.40	1.68	0.98	1.35	0.77	0.58	48.99	24.85
		1.20	2.04	2.84	2.56	1.85	0.99	1.43	0.84	0.59	52.18	26.17
		1.30	2.14	3.02	2.71	2.01	1.00	1.50	0.91	0.59	55.37	27.49
		1.40	2.24	3.19	2.87	2.17	1.01	1.57	0.98	0.59	58.55	28.81
		1.50	2.35	3.36	3.03	2.34	1.03	1.64	1.05	0.59	61.74	30.13
		1.60	2.45	3.54	3.18	2.50	1.04	1.71	1.12	0.59	64.93	31.45
		1.70	2.55	3.71	3.34	2.66	1.05	1.79	1.19	0.60	68.11	32.78
		1.80	2.65	3.88	3.50	2.83	1.06	1.86	1.26	0.60	71.30	34.10
		1.90	2.76	4.06	3.65	2.99	1.07	1.93	1.33	0.60	74.49	35.42
		2.00	2.86	4.23	3.81	3.15	1.08	2.00	1.40	0.60	77.67	36.74
		2.10	2.96	4.40	3.96	3.32	1.09	2.07	1.47	0.60	80.86	38.06
		2.20	3.06	4.58	4.12	3.48	1.10	2.15	1.54	0.61	84.05	39.38
		2.30	3.17	4.75	4.28	3.64	1.11	2.22	1.61	0.61	87.24	40.70
		2.40	3.27	4.93	4.43	3.81	1.12	2.29	1.68	0.61	90.42	42.02
		2.50	3.37	5.10	4.59	3.97	1.13	2.36	1.75	0.61	93.61	43.34
		2.60	3.48	5.27	4.75	4.13	1.14	2.43	1.82	0.61	96.80	44.66
		2.70	3.58	5.45	4.90	4.30	1.15	2.50	1.89	0.61	99.98	45.98
		2.80	3.68	5.62	5.06	4.46	1.16	2.58	1.96	0.62	103.17	47.30
		2.90	3.78	5.79	5.21	4.62	1.17	2.65	2.03	0.62	106.36	48.63
		3.00	3.89	5.97	5.37	4.79	1.18	2.72	2.10	0.62	109.54	49.95
		3.10	3.99	6.14	5.53	4.95	1.19	2.79	2.17	0.62	112.73	51.27
		3.20	4.09	6.31	5.68	5.11	1.20	2.86	2.24	0.62	115.92	52.59
		3.30	4.20	6.49	5.84	5.28	1.21	2.94	2.31	0.63	119.10	53.91
		3.40	4.30	6.66	6.00	5.44	1.22	3.01	2.38	0.63	122.29	55.23
		3.50	4.40	6.84	6.15	5.60	1.23	3.08	2.45	0.63	125.48	56.55
		3.60	4.50	7.01	6.31	5.77	1.24	3.15	2.52	0.63	128.67	57.87
		3.70	4.61	7.18	6.46	5.93	1.25	3.22	2.59	0.63	131.85	59.19
		3.80	4.71	7.36	6.62	6.09	1.26	3.30	2.66	0.64	135.04	60.51
		3.90	4.81	7.53	6.78	6.26	1.27	3.37	2.73	0.64	138.23	61.83
		4.00	4.91	7.70	6.93	6.42	1.28	3.44	2.80	0.64	141.41	63.16
		4.10	5.02	7.88	7.09	6.58	1.29	3.51	2.87	0.64	144.60	64.48
		4.20	5.12	8.05	7.25	6.75	1.30	3.58	2.94	0.64	147.79	65.80
		4.30	5.22	8.22	7.40	6.91	1.31	3.66	3.01	0.65	150.97	67.12
		4.40	5.33	8.40	7.56	7.07	1.32	3.73	3.08	0.65	154.16	68.44
		4.50	5.43	8.57	7.71	7.24	1.33	3.80	3.15	0.65	157.35	69.76
		4.60	5.53	8.75	7.87	7.40	1.34	3.87	3.22	0.65	160.54	71.08
		4.70	5.63	8.92	8.03	7.56	1.35	3.94	3.29	0.65	163.72	72.40
		4.80	5.74	9.09	8.18	7.73	1.36	4.02	3.36	0.66	166.91	73.72
		4.90	5.84	9.27	8.34	7.89	1.37	4.09	3.43	0.66	170.10	75.04
		5.00	5.94	9.44	8.50	8.05	1.38	4.16	3.50	0.66	173.28	76.36

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Oregon	0.90	1.61	2.25	2.02	1.43	0.82	1.13	0.63	0.50	13.13	6.59
Area:	State	1.00	1.72	2.43	2.18	1.60	0.82	1.20	0.70	0.50	14.17	7.02
Gear:	Troll	1.10	1.82	2.60	2.34	1.78	0.82	1.28	0.77	0.51	15.21	7.45
Species:	Coho	1.20	1.93	2.78	2.50	1.95	0.83	1.35	0.84	0.51	16.25	7.88
Lbs/fish:	5.8	1.30	2.03	2.96	2.66	2.13	0.83	1.42	0.91	0.51	17.29	8.31
		1.40	2.14	3.14	2.82	2.30	0.83	1.50	0.98	0.52	18.33	8.74
		1.50	2.24	3.31	2.98	2.48	0.84	1.57	1.05	0.52	19.37	9.17
		1.60	2.35	3.49	3.14	2.65	0.84	1.64	1.12	0.52	20.41	9.60
		1.70	2.45	3.67	3.30	2.83	0.84	1.72	1.19	0.53	21.44	10.03
State:	Oregon	0.20	1.07	1.17	1.05	0.28	0.88	0.75	0.14	0.61	8.71	5.57
Area:	State	0.30	1.15	1.32	1.19	0.42	0.89	0.80	0.21	0.59	9.85	6.00
Gear:	Net	0.40	1.23	1.47	1.32	0.56	0.91	0.86	0.28	0.58	10.99	6.43
Species:	Coho	0.50	1.31	1.62	1.46	0.70	0.92	0.92	0.35	0.57	12.13	6.85
Lbs/fish:	7.5	0.60	1.39	1.78	1.60	0.84	0.93	0.97	0.42	0.55	13.27	7.28
		0.70	1.47	1.93	1.74	0.98	0.95	1.03	0.49	0.54	14.41	7.71
		0.80	1.56	2.08	1.87	1.12	0.96	1.09	0.56	0.53	15.55	8.13
		0.90	1.64	2.23	2.01	1.26	0.97	1.15	0.63	0.52	16.69	8.56
		1.10	1.80	2.54	2.28	1.54	1.00	1.26	0.77	0.49	18.97	9.42
		1.20	1.88	2.69	2.42	1.68	1.01	1.32	0.84	0.48	20.11	9.84
		1.30	1.96	2.84	2.56	1.82	1.02	1.37	0.91	0.46	21.25	10.27
		1.40	2.05	3.00	2.70	1.96	1.03	1.43	0.98	0.45	22.39	10.70
State:	Oregon	0.40	1.11	1.36	1.22	0.54	0.82	0.78	0.28	0.50	6.12	3.50
Area:	State	0.50	1.22	1.53	1.38	0.71	0.82	0.85	0.35	0.50	6.89	3.84
Gear:	Troll	0.60	1.33	1.70	1.53	0.88	0.82	0.93	0.42	0.51	7.65	4.19
Species:	Pink											
Lbs/fish:	4.5											
State:	Oregon	1.30	2.03	2.94	2.65	2.11	0.83	1.42	0.91	0.51	35.28	17.05
Area:	State	1.40	2.10	3.13	2.82	2.30	0.83	1.47	0.98	0.49	37.56	17.64
Gear:	Troll											
Species:	Chum											
Lbs/fish:	12.0											
State:	Oregon	0.20	1.01	1.12	1.01	0.24	0.88	0.71	0.14	0.57	11.52	7.30
Area:	State	0.30	1.11	1.29	1.16	0.39	0.89	0.78	0.21	0.57	13.28	8.04
Gear:	Net	0.40	1.22	1.46	1.31	0.55	0.91	0.85	0.28	0.57	15.04	8.78
Species:	Chum	0.50	1.32	1.63	1.47	0.71	0.92	0.92	0.35	0.57	16.81	9.52
Lbs/fish:	10.3	0.60	1.42	1.80	1.62	0.87	0.93	0.99	0.42	0.57	18.57	10.26
		0.70	1.52	1.97	1.77	1.02	0.95	1.07	0.49	0.58	20.33	11.00
		0.80	1.63	2.14	1.93	1.18	0.96	1.14	0.56	0.58	22.10	11.74
		0.90	1.73	2.31	2.08	1.34	0.97	1.21	0.63	0.58	23.86	12.48
		1.00	1.83	2.48	2.24	1.50	0.99	1.28	0.70	0.58	25.62	13.22
		1.10	1.93	2.66	2.39	1.65	1.00	1.35	0.77	0.58	27.39	13.96
		1.20	2.04	2.83	2.54	1.81	1.01	1.43	0.84	0.59	29.15	14.70
		1.30	2.14	3.00	2.70	1.97	1.03	1.50	0.91	0.59	30.91	15.44
		1.40	2.24	3.17	2.85	2.13	1.04	1.57	0.98	0.59	32.67	16.18
State:	Oregon	0.20	1.01	1.12	1.01	0.25	0.87	0.71	0.14	0.57	9.82	6.20
Area:	State	0.30	1.11	1.29	1.16	0.40	0.89	0.78	0.21	0.57	11.32	6.83
Gear:	Net	0.40	1.22	1.46	1.31	0.56	0.90	0.85	0.28	0.57	12.81	7.46
Species:	Steelhead	0.50	1.32	1.63	1.47	0.71	0.92	0.92	0.35	0.57	14.30	8.10
Lbs/fish:	8.8	0.60	1.42	1.80	1.62	0.86	0.94	0.99	0.42	0.57	15.79	8.73
		0.70	1.52	1.97	1.77	1.01	0.96	1.07	0.49	0.58	17.28	9.36
		0.80	1.63	2.14	1.93	1.17	0.97	1.14	0.56	0.58	18.77	9.99
		0.90	1.73	2.31	2.08	1.32	0.99	1.21	0.63	0.58	20.26	10.62
		1.00	1.83	2.48	2.23	1.47	1.01	1.28	0.70	0.58	21.75	11.25

STATE OF WASHINGTON												
			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Washington	1.00	1.71	2.32	2.09	1.37	0.95	1.20	0.70	0.50	28.41	14.64
Area:	State	1.10	1.82	2.53	2.28	1.58	0.95	1.27	0.77	0.50	30.94	15.55
Gear:	Troll	1.20	1.92	2.74	2.46	1.78	0.96	1.35	0.84	0.51	33.47	16.45
Species:	Chinook	1.30	2.03	2.94	2.65	1.98	0.96	1.42	0.91	0.51	36.00	17.35
Lbs/fish:	12.2	1.40	2.13	3.15	2.84	2.18	0.97	1.49	0.98	0.51	38.52	18.26
		1.50	2.24	3.36	3.02	2.38	0.97	1.57	1.05	0.52	41.05	19.16
		1.60	2.34	3.56	3.21	2.58	0.98	1.64	1.12	0.52	43.58	20.06
		1.70	2.45	3.77	3.39	2.79	0.98	1.71	1.19	0.52	46.10	20.97
		1.80	2.56	3.98	3.58	2.99	0.99	1.79	1.26	0.53	48.63	21.87
		1.90	2.66	4.18	3.77	3.19	0.99	1.86	1.33	0.53	51.16	22.77
		2.00	2.77	4.39	3.95	3.39	1.00	1.94	1.40	0.54	53.68	23.68
		2.10	2.87	4.60	4.14	3.59	1.01	2.01	1.47	0.54	56.21	24.58
		2.20	2.98	4.80	4.32	3.79	1.01	2.08	1.54	0.54	58.74	25.49
		2.30	3.08	5.01	4.51	3.99	1.02	2.16	1.61	0.55	61.26	26.39
		2.40	3.19	5.22	4.69	4.20	1.02	2.23	1.68	0.55	63.79	27.29
		2.50	3.29	5.42	4.88	4.40	1.03	2.31	1.75	0.56	66.32	28.20
		2.60	3.40	5.63	5.07	4.60	1.03	2.38	1.82	0.56	68.84	29.10
		2.70	3.51	5.84	5.25	4.80	1.04	2.45	1.89	0.56	71.37	30.00
		2.80	3.61	6.04	5.44	5.00	1.04	2.53	1.96	0.57	73.90	30.91
		2.90	3.72	6.25	5.62	5.20	1.05	2.60	2.03	0.57	76.43	31.81
		3.00	3.82	6.46	5.81	5.41	1.05	2.68	2.10	0.58	78.95	32.72
State:	Washington	0.70	1.40	1.99	1.79	1.06	0.93	0.98	0.49	0.49	7.59	3.74
Area:	State	0.80	1.51	2.20	1.98	1.26	0.94	1.05	0.56	0.49	8.38	4.02
Gear:	Troll	0.90	1.61	2.40	2.16	1.46	0.94	1.13	0.63	0.50	9.17	4.30
Species:	Coho	1.00	1.72	2.61	2.35	1.66	0.95	1.20	0.70	0.50	9.95	4.59
Lbs/fish:	3.8	1.10	1.82	2.82	2.53	1.86	0.95	1.28	0.77	0.51	10.74	4.87
		1.20	1.93	3.02	2.72	2.06	0.96	1.35	0.84	0.51	11.52	5.15
		1.30	2.03	3.23	2.90	2.26	0.97	1.42	0.91	0.51	12.31	5.43
		1.40	2.14	3.43	3.09	2.46	0.97	1.50	0.98	0.52	13.09	5.71
		1.50	2.24	3.64	3.28	2.66	0.98	1.57	1.05	0.52	13.88	5.99
		1.60	2.35	3.84	3.46	2.86	0.98	1.64	1.12	0.52	14.67	6.27
		1.70	2.45	4.05	3.65	3.06	0.99	1.72	1.19	0.53	15.45	6.55
		1.80	2.56	4.26	3.83	3.26	1.00	1.79	1.26	0.53	16.24	6.83
		1.90	2.66	4.46	4.02	3.46	1.00	1.86	1.33	0.53	17.02	7.11
		2.00	2.77	4.67	4.20	3.66	1.01	1.94	1.40	0.54	17.81	7.39
State:	Washington	0.20	0.82	0.96	0.86	0.04	0.92	0.57	0.14	0.43	3.87	2.31
Area:	State	0.30	0.93	1.17	1.05	0.24	0.92	0.65	0.21	0.44	4.70	2.62
Gear:	Troll	0.40	1.04	1.37	1.23	0.45	0.93	0.73	0.28	0.45	5.52	2.93
Species:	Pink	0.50	1.15	1.58	1.42	0.65	0.93	0.81	0.35	0.46	6.35	3.24
Lbs/fish:	4.0	0.60	1.26	1.78	1.60	0.85	0.93	0.88	0.42	0.46	7.18	3.55
		0.70	1.37	1.99	1.79	1.05	0.94	0.96	0.49	0.47	8.00	3.86
		0.80	1.48	2.19	1.97	1.25	0.94	1.04	0.56	0.48	8.83	4.17
		0.90	1.59	2.40	2.16	1.45	0.95	1.11	0.63	0.48	9.66	4.48
		1.00	1.70	2.60	2.34	1.65	0.95	1.19	0.70	0.49	10.48	4.79
		1.10	1.81	2.81	2.53	1.85	0.95	1.27	0.77	0.50	11.31	5.10
		1.20	1.92	3.01	2.71	2.05	0.96	1.34	0.84	0.50	12.13	5.41
		1.30	2.03	3.22	2.90	2.26	0.96	1.42	0.91	0.51	12.96	5.72
		1.40	2.14	3.42	3.08	2.46	0.97	1.50	0.98	0.52	13.79	6.03

		Nominal Ex-vessel Price	Per Round Pound Ex-Processor	Marginal Economic Impact Per #	Average Economic Impact Per #	Marginal Harvester Impact Per #	Marginal Processor Impact Per #	NEV Total Per Round #	NEV Harvest Per Round #	NEV Processor Per Round #	Marginal Economic Impact Per Fish	NEV Total Per Fish
State:	Washington	0.30	0.94	1.28	1.15	0.36	0.92	0.66	0.21	0.45	10.86	5.62
Area:	State	0.40	1.05	1.48	1.33	0.56	0.92	0.73	0.28	0.45	12.61	6.26
Gear:	Troll	0.50	1.16	1.69	1.52	0.76	0.93	0.81	0.35	0.46	14.35	6.90
Species:	Chum	0.60	1.26	1.89	1.70	0.96	0.93	0.89	0.42	0.47	16.10	7.54
Lbs/fish:	8.5	0.70	1.37	2.10	1.89	1.16	0.94	0.96	0.49	0.47	17.85	8.18
		0.80	1.48	2.30	2.07	1.36	0.94	1.04	0.56	0.48	19.60	8.82
		0.90	1.59	2.51	2.26	1.56	0.95	1.11	0.63	0.48	21.34	9.46
		1.00	1.70	2.71	2.44	1.76	0.95	1.19	0.70	0.49	23.09	10.10
		1.10	1.80	2.92	2.63	1.96	0.96	1.26	0.77	0.49	24.84	10.74
		1.20	1.91	3.12	2.81	2.16	0.96	1.34	0.84	0.50	26.58	11.38
		1.30	2.02	3.33	2.99	2.36	0.97	1.41	0.91	0.50	28.33	12.02
		1.40	2.13	3.53	3.18	2.56	0.97	1.49	0.98	0.51	30.08	12.67
		1.50	2.23	3.74	3.36	2.76	0.98	1.56	1.05	0.51	31.82	13.31
		1.60	2.34	3.94	3.55	2.96	0.98	1.64	1.12	0.52	33.57	13.95
		1.70	2.45	4.15	3.73	3.16	0.99	1.71	1.19	0.52	35.32	14.59
		1.80	2.56	4.35	3.92	3.36	0.99	1.79	1.26	0.53	37.07	15.23
		1.90	2.66	4.56	4.10	3.56	1.00	1.86	1.33	0.53	38.81	15.87
		2.00	2.77	4.76	4.29	3.76	1.00	1.94	1.40	0.54	40.56	16.51
		2.10	2.88	4.97	4.47	3.96	1.01	2.01	1.47	0.54	42.31	17.15
		2.20	2.99	5.17	4.66	4.16	1.01	2.09	1.54	0.55	44.05	17.79
		2.30	3.09	5.38	4.84	4.36	1.02	2.16	1.61	0.55	45.80	18.43
		2.40	3.20	5.58	5.03	4.56	1.02	2.24	1.68	0.56	47.55	19.07
State:	Washington	0.80	1.29	2.11	1.90	1.17	0.94	0.91	0.56	0.35	11.99	5.14
Area:	State	0.90	1.41	2.32	2.09	1.38	0.94	0.98	0.63	0.35	13.16	5.58
Gear:	Troll	1.00	1.52	2.53	2.27	1.58	0.95	1.06	0.70	0.36	14.33	6.03
Species:	Sockeye	1.10	1.63	2.73	2.46	1.78	0.95	1.14	0.77	0.37	15.50	6.48
Lbs/fish:	5.7	1.20	1.75	2.94	2.65	1.98	0.96	1.22	0.84	0.38	16.67	6.93
		1.30	1.86	3.15	2.83	2.18	0.96	1.30	0.91	0.39	17.84	7.38
		1.40	1.97	3.35	3.02	2.38	0.97	1.38	0.98	0.40	19.01	7.83
		1.50	2.08	3.56	3.20	2.58	0.97	1.46	1.05	0.41	20.18	8.27
		1.60	2.20	3.77	3.39	2.79	0.98	1.54	1.12	0.42	21.35	8.72
		1.70	2.31	3.97	3.57	2.99	0.98	1.62	1.19	0.43	22.52	9.17
		1.80	2.42	4.18	3.76	3.19	0.99	1.70	1.26	0.44	23.69	9.62
		1.90	2.54	4.38	3.95	3.39	0.99	1.77	1.33	0.44	24.87	10.07
		2.00	2.65	4.59	4.13	3.59	1.00	1.85	1.40	0.45	26.04	10.51
		2.10	2.76	4.80	4.32	3.79	1.00	1.93	1.47	0.46	27.21	10.96
		2.20	2.87	5.00	4.50	3.99	1.01	2.01	1.54	0.47	28.38	11.41
		2.30	2.99	5.21	4.69	4.19	1.02	2.09	1.61	0.48	29.55	11.86
		2.40	3.10	5.42	4.87	4.40	1.02	2.17	1.68	0.49	30.72	12.31
		2.50	3.21	5.62	5.06	4.60	1.03	2.25	1.75	0.50	31.89	12.76
		2.60	3.33	5.83	5.25	4.80	1.03	2.33	1.82	0.51	33.06	13.20
		2.70	3.44	6.04	5.43	5.00	1.04	2.41	1.89	0.52	34.23	13.65
		2.80	3.55	6.24	5.62	5.20	1.04	2.49	1.96	0.53	35.40	14.10
		2.90	3.66	6.45	5.80	5.40	1.05	2.57	2.03	0.54	36.57	14.55
		3.00	3.78	6.65	5.99	5.60	1.05	2.64	2.10	0.54	37.74	15.00
State:	Washington	0.80	1.48	2.31	2.08	1.37	0.94	1.04	0.56	0.48	16.18	7.25
Area:	State	0.90	1.59	2.52	2.27	1.57	0.94	1.11	0.63	0.48	17.62	7.79
Gear:	Troll	1.00	1.70	2.72	2.45	1.78	0.95	1.19	0.70	0.49	19.05	8.33
Species:	Steelhead	1.10	1.81	2.93	2.63	1.98	0.95	1.27	0.77	0.50	20.49	8.87
Lbs/fish:	**7.0**	1.20	1.92	3.13	2.82	2.18	0.95	1.34	0.84	0.50	21.92	9.41

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Washington	0.10	0.91	0.92	0.83	-0.15	1.06	0.63	0.07	0.56	15.17	10.47
Area:	State	0.20	1.01	1.12	1.01	0.05	1.07	0.71	0.14	0.57	18.57	11.67
Gear:	Net	0.30	1.11	1.33	1.20	0.25	1.08	0.78	0.21	0.57	21.98	12.86
Species:	Chinook	0.40	1.21	1.54	1.38	0.45	1.09	0.85	0.28	0.57	25.38	14.05
Lbs/fish:	16.5	0.50	1.32	1.74	1.57	0.65	1.09	0.92	0.35	0.57	28.78	15.24
		0.60	1.42	1.95	1.75	0.85	1.10	0.99	0.42	0.57	32.19	16.43
		0.70	1.52	2.15	1.94	1.04	1.11	1.07	0.49	0.58	35.59	17.62
		0.80	1.63	2.36	2.12	1.24	1.12	1.14	0.56	0.58	39.00	18.81
		0.90	1.73	2.56	2.31	1.44	1.12	1.21	0.63	0.58	42.40	20.00
		1.00	1.83	2.77	2.49	1.64	1.13	1.28	0.70	0.58	45.80	21.19
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	49.21	22.38
		1.20	2.04	3.18	2.86	2.04	1.15	1.43	0.84	0.59	52.61	23.57
		1.30	2.14	3.39	3.05	2.23	1.15	1.50	0.91	0.59	56.02	24.76
		1.40	2.24	3.59	3.23	2.43	1.16	1.57	0.98	0.59	59.42	25.95
		1.50	2.35	3.80	3.42	2.63	1.17	1.64	1.05	0.59	62.82	27.14
		1.60	2.45	4.01	3.61	2.83	1.18	1.71	1.12	0.59	66.23	28.33
		1.70	2.55	4.21	3.79	3.03	1.18	1.79	1.19	0.60	69.63	29.52
		1.80	2.65	4.42	3.98	3.23	1.19	1.86	1.26	0.60	73.04	30.71
		1.90	2.76	4.62	4.16	3.43	1.20	1.93	1.33	0.60	76.44	31.90
		2.00	2.86	4.83	4.35	3.62	1.21	2.00	1.40	0.60	79.84	33.09
		2.10	2.96	5.04	4.53	3.82	1.21	2.07	1.47	0.60	83.25	34.28
		2.20	3.07	5.24	4.72	4.02	1.22	2.15	1.54	0.61	86.65	35.47
		2.30	3.17	5.45	4.90	4.22	1.23	2.22	1.61	0.61	90.06	36.66
		2.40	3.27	5.65	5.09	4.42	1.24	2.29	1.68	0.61	93.46	37.86
		2.50	3.37	5.86	5.27	4.62	1.24	2.36	1.75	0.61	96.86	39.05
		2.60	3.48	6.06	5.46	4.81	1.25	2.43	1.82	0.61	100.27	40.24
		2.70	3.58	6.27	5.64	5.01	1.26	2.51	1.89	0.62	103.67	41.43
		2.80	3.68	6.48	5.83	5.21	1.27	2.58	1.96	0.62	107.08	42.62
		2.90	3.79	6.68	6.01	5.41	1.27	2.65	2.03	0.62	110.48	43.81
		3.00	3.89	6.89	6.20	5.61	1.28	2.72	2.10	0.62	113.88	45.00
		3.10	3.99	7.09	6.38	5.81	1.29	2.79	2.17	0.62	117.29	46.19
		3.20	4.09	7.30	6.57	6.00	1.30	2.87	2.24	0.63	120.69	47.38
		3.30	4.20	7.51	6.76	6.20	1.30	2.94	2.31	0.63	124.09	48.57
		3.40	4.30	7.71	6.94	6.40	1.31	3.01	2.38	0.63	127.50	49.76
		3.50	4.40	7.92	7.13	6.60	1.32	3.08	2.45	0.63	130.90	50.95
		3.60	4.51	8.12	7.31	6.80	1.33	3.15	2.52	0.63	134.31	52.14
		3.70	4.61	8.33	7.50	7.00	1.33	3.23	2.59	0.64	137.71	53.33
		3.80	4.71	8.54	7.68	7.19	1.34	3.30	2.66	0.64	141.11	54.52
		3.90	4.81	8.74	7.87	7.39	1.35	3.37	2.73	0.64	144.52	55.71
		4.00	4.92	8.95	8.05	7.59	1.36	3.44	2.80	0.64	147.92	56.90
		4.10	5.02	9.15	8.24	7.79	1.36	3.51	2.87	0.64	151.33	58.09
		4.20	5.12	9.36	8.42	7.99	1.37	3.59	2.94	0.65	154.73	59.28
		4.30	5.23	9.56	8.61	8.19	1.38	3.66	3.01	0.65	158.13	60.47
		4.40	5.33	9.77	8.79	8.39	1.39	3.73	3.08	0.65	161.54	61.66
		4.50	5.43	9.98	8.98	8.58	1.39	3.80	3.15	0.65	164.94	62.86
		4.60	5.53	10.18	9.16	8.78	1.40	3.87	3.22	0.65	168.35	64.05
		4.70	5.64	10.39	9.35	8.98	1.41	3.95	3.29	0.66	171.75	65.24
		4.80	5.74	10.59	9.53	9.18	1.42	4.02	3.36	0.66	175.15	66.43
		4.90	5.84	10.80	9.72	9.38	1.42	4.09	3.43	0.66	178.56	67.62
		5.00	5.95	11.01	9.91	9.58	1.43	4.16	3.50	0.66	181.96	68.81

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Washington	0.20	1.01	1.14	1.03	0.09	1.05	0.71	0.14	0.57	7.75	4.79
Area:	State	0.30	1.11	1.35	1.21	0.28	1.06	0.78	0.21	0.57	9.12	5.28
Gear:	Net	0.40	1.22	1.55	1.40	0.48	1.07	0.85	0.28	0.57	10.50	5.76
Species:	Coho	0.50	1.32	1.76	1.58	0.67	1.08	0.92	0.35	0.57	11.88	6.25
Lbs/fish:	6.8	0.60	1.42	1.96	1.76	0.87	1.09	0.99	0.42	0.57	13.26	6.73
		0.70	1.52	2.16	1.95	1.06	1.10	1.07	0.49	0.58	14.64	7.22
		0.80	1.63	2.37	2.13	1.26	1.11	1.14	0.56	0.58	16.02	7.70
		0.90	1.73	2.57	2.31	1.45	1.12	1.21	0.63	0.58	17.40	8.19
		1.00	1.83	2.78	2.50	1.65	1.13	1.28	0.70	0.58	18.78	8.67
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	20.16	9.16
		1.20	2.04	3.18	2.86	2.03	1.15	1.43	0.84	0.59	21.54	9.64
		1.30	2.14	3.39	3.05	2.23	1.16	1.50	0.91	0.59	22.92	10.13
		1.40	2.24	3.59	3.23	2.42	1.17	1.57	0.98	0.59	24.30	10.61
		1.50	2.34	3.79	3.42	2.62	1.18	1.64	1.05	0.59	25.68	11.10
		1.60	2.45	4.00	3.60	2.81	1.19	1.71	1.12	0.59	27.05	11.58
		1.70	2.55	4.20	3.78	3.01	1.20	1.78	1.19	0.59	28.43	12.07
		1.80	2.65	4.41	3.97	3.20	1.20	1.86	1.26	0.60	29.81	12.56
		1.90	2.75	4.61	4.15	3.40	1.21	1.93	1.33	0.60	31.19	13.04
		2.00	2.86	4.81	4.33	3.59	1.22	2.00	1.40	0.60	32.57	13.53
		2.10	2.96	5.02	4.52	3.78	1.23	2.07	1.47	0.60	33.95	14.01
		2.20	3.06	5.22	4.70	3.98	1.24	2.14	1.54	0.60	35.33	14.50
		2.30	3.16	5.43	4.88	4.17	1.25	2.21	1.61	0.60	36.71	14.98
		2.40	3.27	5.63	5.07	4.37	1.26	2.29	1.68	0.61	38.09	15.47
		2.50	3.37	5.83	5.25	4.56	1.27	2.36	1.75	0.61	39.47	15.95
		2.60	3.47	6.04	5.43	4.76	1.28	2.43	1.82	0.61	40.85	16.44
		2.70	3.57	6.24	5.62	4.95	1.29	2.50	1.89	0.61	42.23	16.92
		2.80	3.68	6.44	5.80	5.15	1.30	2.57	1.96	0.61	43.61	17.41
State:	Washington	0.10	0.91	0.93	0.84	-0.10	1.03	0.63	0.07	0.56	8.87	6.04
Area:	State	0.20	1.01	1.14	1.02	0.10	1.04	0.71	0.14	0.57	10.81	6.72
Gear:	Net	0.30	1.11	1.34	1.21	0.29	1.05	0.78	0.21	0.57	12.76	7.40
Species:	Chum	0.40	1.21	1.55	1.39	0.48	1.06	0.85	0.28	0.57	14.71	8.09
Lbs/fish:	9.5	0.50	1.32	1.75	1.58	0.68	1.07	0.92	0.35	0.57	16.66	8.77
		0.60	1.42	1.96	1.76	0.87	1.08	0.99	0.42	0.57	18.61	9.45
		0.70	1.52	2.16	1.95	1.07	1.10	1.07	0.49	0.58	20.56	10.14
		0.80	1.63	2.37	2.13	1.26	1.11	1.14	0.56	0.58	22.51	10.82
		0.90	1.73	2.57	2.31	1.46	1.12	1.21	0.63	0.58	24.46	11.50
		1.00	1.83	2.78	2.50	1.65	1.13	1.28	0.70	0.58	26.41	12.19
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	28.35	12.87
		1.20	2.04	3.19	2.87	2.04	1.15	1.43	0.84	0.59	30.30	13.55
		1.30	2.14	3.39	3.05	2.23	1.16	1.50	0.91	0.59	32.25	14.23
		1.40	2.24	3.60	3.24	2.43	1.17	1.57	0.98	0.59	34.20	14.92
		1.50	2.34	3.80	3.42	2.62	1.18	1.64	1.05	0.59	36.15	15.60
		1.60	2.45	4.01	3.61	2.82	1.19	1.71	1.12	0.59	38.10	16.28
		1.70	2.55	4.21	3.79	3.01	1.20	1.78	1.19	0.59	40.05	16.97
		1.80	2.65	4.42	3.97	3.20	1.21	1.86	1.26	0.60	42.00	17.65
		1.90	2.75	4.62	4.16	3.40	1.22	1.93	1.33	0.60	43.95	18.33
		2.00	2.86	4.83	4.34	3.59	1.23	2.00	1.40	0.60	45.89	19.02
		2.10	2.96	5.03	4.53	3.79	1.24	2.07	1.47	0.60	47.84	19.70
		2.20	3.06	5.24	4.71	3.98	1.25	2.14	1.54	0.60	49.79	20.38
		2.30	3.16	5.44	4.90	4.18	1.27	2.22	1.61	0.61	51.74	21.07
		2.40	3.27	5.65	5.08	4.37	1.28	2.29	1.68	0.61	53.69	21.75
		2.50	3.37	5.85	5.27	4.56	1.29	2.36	1.75	0.61	55.64	22.43
State:	Washington	0.20	1.01	1.14	1.02	0.10	1.03	0.71	0.14	0.57	10.15	6.31
Area:	State	0.30	1.11	1.34	1.21	0.30	1.05	0.78	0.21	0.57	11.98	6.95
Gear:	Net	0.40	1.22	1.55	1.39	0.49	1.06	0.85	0.28	0.57	13.80	7.60

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
Species:	Steelhead	0.50	1.32	1.75	1.58	0.68	1.07	0.92	0.35	0.57	15.63	8.24
Lbs/fish:	**8.9**	0.60	1.42	1.96	1.76	0.87	1.08	0.99	0.42	0.57	17.45	8.88
		0.70	1.52	2.16	1.94	1.07	1.10	1.07	0.49	0.58	19.28	9.52
		0.80	1.63	2.36	2.13	1.26	1.11	1.14	0.56	0.58	21.10	10.16
		0.90	1.73	2.57	2.31	1.45	1.12	1.21	0.63	0.58	22.93	10.80
		1.00	1.83	2.77	2.50	1.64	1.13	1.28	0.70	0.58	24.75	11.44
		1.10	1.93	2.98	2.68	1.83	1.14	1.35	0.77	0.58	26.58	12.08
		1.20	2.04	3.18	2.86	2.03	1.16	1.43	0.84	0.59	28.40	12.72
		1.30	2.14	3.39	3.05	2.22	1.17	1.50	0.91	0.59	30.23	13.36
		1.40	2.24	3.59	3.23	2.41	1.18	1.57	0.98	0.59	32.06	14.00
		1.50	2.34	3.80	3.42	2.60	1.19	1.64	1.05	0.59	33.88	14.64
		1.60	2.45	4.00	3.60	2.79	1.21	1.71	1.12	0.59	35.71	15.28
		1.70	2.55	4.21	3.79	2.99	1.22	1.78	1.19	0.59	37.53	15.92
		1.80	2.65	4.41	3.97	3.18	1.23	1.86	1.26	0.60	39.36	16.56
		1.90	2.75	4.61	4.15	3.37	1.24	1.93	1.33	0.60	41.18	17.20
		2.00	2.86	4.82	4.34	3.56	1.26	2.00	1.40	0.60	43.01	17.84
State:	Washington	0.10	0.90	0.96	0.86	-0.04	0.99	0.63	0.07	0.56	3.93	2.60
Area:	State	0.20	1.01	1.16	1.04	0.15	1.01	0.71	0.14	0.57	4.75	2.90
Gear:	Net	0.30	1.11	1.36	1.22	0.33	1.03	0.78	0.21	0.57	5.57	3.19
Species:	Pink	0.40	1.21	1.56	1.40	0.51	1.04	0.85	0.28	0.57	6.40	3.49
Lbs/fish:	4.1	0.50	1.32	1.76	1.58	0.70	1.06	0.92	0.35	0.57	7.22	3.79
		0.60	1.42	1.96	1.76	0.88	1.08	0.99	0.42	0.57	8.04	4.08
		0.70	1.52	2.16	1.94	1.06	1.10	1.07	0.49	0.58	8.86	4.38
State:	Washington	0.50	1.32	1.74	1.56	0.64	1.10	0.92	0.35	0.57	8.83	4.69
Area:	State	0.60	1.42	1.94	1.75	0.84	1.11	0.99	0.42	0.57	9.88	5.06
Gear:	Net	0.70	1.52	2.15	1.93	1.03	1.12	1.07	0.49	0.58	10.93	5.42
Species:	Sockeye	0.80	1.63	2.36	2.12	1.23	1.12	1.14	0.56	0.58	11.98	5.79
Lbs/fish:	5.1	0.90	1.73	2.56	2.31	1.43	1.13	1.21	0.63	0.58	13.03	6.15
		1.00	1.83	2.77	2.49	1.63	1.14	1.28	0.70	0.58	14.08	6.52
		1.10	1.93	2.97	2.68	1.82	1.15	1.35	0.77	0.58	15.12	6.88
		1.20	2.04	3.18	2.86	2.02	1.16	1.43	0.84	0.59	16.17	7.25
		1.30	2.14	3.39	3.05	2.22	1.17	1.50	0.91	0.59	17.22	7.61
		1.40	2.24	3.59	3.23	2.41	1.18	1.57	0.98	0.59	18.27	7.98
		1.50	2.34	3.80	3.42	2.61	1.19	1.64	1.05	0.59	19.32	8.34
		1.60	2.45	4.00	3.60	2.81	1.19	1.71	1.12	0.59	20.36	8.71
		1.70	2.55	4.21	3.79	3.01	1.20	1.78	1.19	0.59	21.41	9.07
		1.80	2.65	4.42	3.97	3.20	1.21	1.86	1.26	0.60	22.46	9.44
		1.90	2.75	4.62	4.16	3.40	1.22	1.93	1.33	0.60	23.51	9.80
		2.00	2.86	4.83	4.35	3.60	1.23	2.00	1.40	0.60	24.56	10.17
		2.10	2.96	5.03	4.53	3.80	1.24	2.07	1.47	0.60	25.61	10.53
		2.20	3.06	5.24	4.72	3.99	1.25	2.14	1.54	0.60	26.65	10.90
		2.30	3.16	5.45	4.90	4.19	1.26	2.21	1.61	0.60	27.70	11.26
		2.40	3.27	5.65	5.09	4.39	1.26	2.29	1.68	0.61	28.75	11.63
		2.50	3.37	5.86	5.27	4.59	1.27	2.36	1.75	0.61	29.80	11.99

STATE OF CALIFORNIA												
			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	California	1.00	1.72	3.03	2.73	1.91	1.13	1.20	0.70	0.50	35.27	13.98
Area:	State	1.10	1.82	3.24	2.92	2.12	1.13	1.28	0.77	0.51	37.72	14.84
Gear:	Troll	1.20	1.93	3.45	3.11	2.32	1.13	1.35	0.84	0.51	40.17	15.69
Species:	Chinook	1.30	2.03	3.67	3.30	2.53	1.13	1.42	0.91	0.51	42.62	16.55
Lbs/fish:	11.6	1.40	2.14	3.88	3.49	2.74	1.13	1.50	0.98	0.52	45.07	17.40
		1.50	2.24	4.09	3.68	2.95	1.14	1.57	1.05	0.52	47.52	18.25
		1.60	2.35	4.30	3.87	3.16	1.14	1.64	1.12	0.52	49.97	19.11
		1.70	2.45	4.51	4.06	3.37	1.14	1.72	1.19	0.53	52.42	19.96
		1.80	2.56	4.72	4.25	3.58	1.14	1.79	1.26	0.53	54.87	20.82
		1.90	2.66	4.93	4.44	3.79	1.14	1.86	1.33	0.53	57.33	21.67
		2.00	2.77	5.14	4.63	4.00	1.14	1.94	1.40	0.54	59.78	22.53
		2.10	2.87	5.35	4.82	4.21	1.15	2.01	1.47	0.54	62.23	23.38
		2.20	2.98	5.56	5.01	4.41	1.15	2.08	1.54	0.54	64.68	24.24
		2.30	3.08	5.77	5.20	4.62	1.15	2.16	1.61	0.55	67.13	25.09
		2.40	3.19	5.98	5.39	4.83	1.15	2.23	1.68	0.55	69.58	25.95
		2.50	3.29	6.19	5.57	5.04	1.15	2.30	1.75	0.55	72.03	26.80
		2.60	3.40	6.40	5.76	5.25	1.16	2.38	1.82	0.56	74.48	27.66
		2.70	3.50	6.62	5.95	5.46	1.16	2.45	1.89	0.56	76.93	28.51
		2.80	3.61	6.83	6.14	5.67	1.16	2.53	1.96	0.57	79.38	29.37
		2.90	3.71	7.04	6.33	5.88	1.16	2.60	2.03	0.57	81.83	30.22
		3.00	3.82	7.25	6.52	6.09	1.16	2.67	2.10	0.57	84.28	31.08
State:	California	1.00	1.81	3.00	2.70	1.88	1.13	1.27	0.70	0.57	17.63	7.46
Area:	State	1.10	1.91	3.18	2.87	2.06	1.13	1.33	0.77	0.56	18.69	7.84
Gear:	Troll	1.20	2.00	3.36	3.03	2.23	1.13	1.40	0.84	0.56	19.75	8.22
Species:	Coho	1.30	2.09	3.55	3.19	2.41	1.13	1.46	0.91	0.55	20.81	8.59
Lbs/fish:	5.9	1.40	2.18	3.73	3.35	2.59	1.13	1.53	0.98	0.55	21.88	8.97
		1.50	2.28	3.91	3.52	2.77	1.13	1.59	1.05	0.54	22.94	9.35
		1.60	2.37	4.09	3.68	2.95	1.14	1.66	1.12	0.54	24.00	9.73
		1.70	2.46	4.27	3.84	3.13	1.14	1.72	1.19	0.53	25.06	10.11
		1.80	2.55	4.45	4.00	3.31	1.14	1.79	1.26	0.53	26.12	10.49
		1.90	2.64	4.63	4.17	3.49	1.14	1.85	1.33	0.52	27.18	10.87
		2.00	2.74	4.81	4.33	3.67	1.14	1.92	1.40	0.52	28.25	11.25
		2.10	2.83	4.99	4.49	3.85	1.14	1.98	1.47	0.51	29.31	11.63

STATE OF ALASKA												
			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Alaska	1.00	1.71	2.32	2.09	1.37	0.95	1.20	0.70	0.50	40.66	20.95
Area:	State	1.10	1.82	2.53	2.28	1.58	0.95	1.27	0.77	0.50	44.28	22.25
Gear:	Troll	1.20	1.92	2.74	2.46	1.78	0.96	1.35	0.84	0.51	47.90	23.54
Species:	Chinook	1.30	2.03	2.94	2.65	1.98	0.96	1.42	0.91	0.51	51.51	24.83
Lbs/fish:	17.5	1.40	2.13	3.15	2.84	2.18	0.97	1.49	0.98	0.51	55.13	26.13
		1.50	2.24	3.36	3.02	2.38	0.97	1.57	1.05	0.52	58.74	27.42
		1.60	2.34	3.56	3.21	2.58	0.98	1.64	1.12	0.52	62.36	28.71
		1.70	2.45	3.77	3.39	2.79	0.98	1.71	1.19	0.52	65.98	30.01
		1.80	2.56	3.98	3.58	2.99	0.99	1.79	1.26	0.53	69.59	31.30
		1.90	2.66	4.18	3.77	3.19	0.99	1.86	1.33	0.53	73.21	32.59
		2.00	2.77	4.39	3.95	3.39	1.00	1.94	1.40	0.54	76.83	33.89
		2.10	2.87	4.60	4.14	3.59	1.01	2.01	1.47	0.54	80.44	35.18
		2.20	2.98	4.80	4.32	3.79	1.01	2.08	1.54	0.54	84.06	36.47
		2.30	3.08	5.01	4.51	3.99	1.02	2.16	1.61	0.55	87.67	37.77
		2.40	3.19	5.22	4.69	4.20	1.02	2.23	1.68	0.55	91.29	39.06
		2.50	3.29	5.42	4.88	4.40	1.03	2.31	1.75	0.56	94.91	40.35
		2.60	3.40	5.63	5.07	4.60	1.03	2.38	1.82	0.56	98.52	41.65
		2.70	3.51	5.84	5.25	4.80	1.04	2.45	1.89	0.56	102.14	42.94
		2.80	3.61	6.04	5.44	5.00	1.04	2.53	1.96	0.57	105.75	44.23
		2.90	3.72	6.25	5.62	5.20	1.05	2.60	2.03	0.57	109.37	45.53
		3.00	3.82	6.46	5.81	5.41	1.05	2.68	2.10	0.58	112.99	46.82
State:	Alaska	0.70	1.40	1.99	1.79	1.06	0.93	0.98	0.49	0.49	12.94	6.38
Area:	State	0.80	1.51	2.20	1.98	1.26	0.94	1.05	0.56	0.49	14.28	6.86
Gear:	Troll	0.90	1.61	2.40	2.16	1.46	0.94	1.13	0.63	0.50	15.62	7.34
Species:	Coho	1.00	1.72	2.61	2.35	1.66	0.95	1.20	0.70	0.50	16.96	7.81
Lbs/fish:	6.5	1.10	1.82	2.82	2.53	1.86	0.95	1.28	0.77	0.51	18.30	8.29
		1.20	1.93	3.02	2.72	2.06	0.96	1.35	0.84	0.51	19.64	8.77
		1.30	2.03	3.23	2.90	2.26	0.97	1.42	0.91	0.51	20.98	9.25
		1.40	2.14	3.43	3.09	2.46	0.97	1.50	0.98	0.52	22.31	9.73
		1.50	2.24	3.64	3.28	2.66	0.98	1.57	1.05	0.52	23.65	10.20
		1.60	2.35	3.84	3.46	2.86	0.98	1.64	1.12	0.52	24.99	10.68
		1.70	2.45	4.05	3.65	3.06	0.99	1.72	1.19	0.53	26.33	11.16
		1.80	2.56	4.26	3.83	3.26	1.00	1.79	1.26	0.53	27.67	11.64
		1.90	2.66	4.46	4.02	3.46	1.00	1.86	1.33	0.53	29.01	12.12
		2.00	2.77	4.67	4.20	3.66	1.01	1.94	1.40	0.54	30.35	12.59
State:	Alaska	0.20	0.82	0.96	0.86	0.04	0.92	0.57	0.14	0.43	2.59	1.55
Area:	State	0.30	0.93	1.17	1.05	0.24	0.92	0.65	0.21	0.44	3.15	1.76
Gear:	Troll	0.40	1.04	1.37	1.23	0.45	0.93	0.73	0.28	0.45	3.70	1.97
Species:	Pink	0.50	1.15	1.58	1.42	0.65	0.93	0.81	0.35	0.46	4.26	2.17
Lbs/fish:	2.7	0.60	1.26	1.78	1.60	0.85	0.93	0.88	0.42	0.46	4.81	2.38
		0.70	1.37	1.99	1.79	1.05	0.94	0.96	0.49	0.47	5.36	2.59
		0.80	1.48	2.19	1.97	1.25	0.94	1.04	0.56	0.48	5.92	2.80
		0.90	1.59	2.40	2.16	1.45	0.95	1.11	0.63	0.48	6.47	3.01
		1.00	1.70	2.60	2.34	1.65	0.95	1.19	0.70	0.49	7.03	3.21
		1.10	1.81	2.81	2.53	1.85	0.95	1.27	0.77	0.50	7.58	3.42
		1.20	1.92	3.01	2.71	2.05	0.96	1.34	0.84	0.50	8.13	3.63
		1.30	2.03	3.22	2.90	2.26	0.96	1.42	0.91	0.51	8.69	3.84
		1.40	2.14	3.42	3.08	2.46	0.97	1.50	0.98	0.52	9.24	4.04

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Alaska	0.30	0.94	1.28	1.15	0.36	0.92	0.66	0.21	0.45	8.93	4.62
Area:	State	0.40	1.05	1.48	1.33	0.56	0.92	0.73	0.28	0.45	10.37	5.14
Gear:	Troll	0.50	1.16	1.69	1.52	0.76	0.93	0.81	0.35	0.46	11.80	5.67
Species:	Chum	0.60	1.26	1.89	1.70	0.96	0.93	0.89	0.42	0.47	13.24	6.20
Lbs/fish:	7.0	0.70	1.37	2.10	1.89	1.16	0.94	0.96	0.49	0.47	14.67	6.73
		0.80	1.48	2.30	2.07	1.36	0.94	1.04	0.56	0.48	16.11	7.25
		0.90	1.59	2.51	2.26	1.56	0.95	1.11	0.63	0.48	17.55	7.78
		1.00	1.70	2.71	2.44	1.76	0.95	1.19	0.70	0.49	18.98	8.31
		1.10	1.80	2.92	2.63	1.96	0.96	1.26	0.77	0.49	20.42	8.83
		1.20	1.91	3.12	2.81	2.16	0.96	1.34	0.84	0.50	21.86	9.36
		1.30	2.02	3.33	2.99	2.36	0.97	1.41	0.91	0.50	23.29	9.89
		1.40	2.13	3.53	3.18	2.56	0.97	1.49	0.98	0.51	24.73	10.41
		1.50	2.23	3.74	3.36	2.76	0.98	1.56	1.05	0.51	26.16	10.94
		1.60	2.34	3.94	3.55	2.96	0.98	1.64	1.12	0.52	27.60	11.47
		1.70	2.45	4.15	3.73	3.16	0.99	1.71	1.19	0.52	29.04	11.99
		1.80	2.56	4.35	3.92	3.36	0.99	1.79	1.26	0.53	30.47	12.52
		1.90	2.66	4.56	4.10	3.56	1.00	1.86	1.33	0.53	31.91	13.05
		2.00	2.77	4.76	4.29	3.76	1.00	1.94	1.40	0.54	33.35	13.57
		2.10	2.88	4.97	4.47	3.96	1.01	2.01	1.47	0.54	34.78	14.10
		2.20	2.99	5.17	4.66	4.16	1.01	2.09	1.54	0.55	36.22	14.63
		2.30	3.09	5.38	4.84	4.36	1.02	2.16	1.61	0.55	37.65	15.15
		2.40	3.20	5.58	5.03	4.56	1.02	2.24	1.68	0.56	39.09	15.68
State:	Alaska	0.80	1.29	2.11	1.90	1.17	0.94	0.91	0.56	0.35	10.99	4.71
Area:	State	0.90	1.41	2.32	2.09	1.38	0.94	0.98	0.63	0.35	12.07	5.12
Gear:	Troll	1.00	1.52	2.53	2.27	1.58	0.95	1.06	0.70	0.36	13.14	5.53
Species:	Sockeye	1.10	1.63	2.73	2.46	1.78	0.95	1.14	0.77	0.37	14.21	5.94
Lbs/fish:	5.2	1.20	1.75	2.94	2.65	1.98	0.96	1.22	0.84	0.38	15.29	6.35
		1.30	1.86	3.15	2.83	2.18	0.96	1.30	0.91	0.39	16.36	6.76
		1.40	1.97	3.35	3.02	2.38	0.97	1.38	0.98	0.40	17.43	7.18
		1.50	2.08	3.56	3.20	2.58	0.97	1.46	1.05	0.41	18.51	7.59
		1.60	2.20	3.77	3.39	2.79	0.98	1.54	1.12	0.42	19.58	8.00
		1.70	2.31	3.97	3.57	2.99	0.98	1.62	1.19	0.43	20.65	8.41
		1.80	2.42	4.18	3.76	3.19	0.99	1.70	1.26	0.44	21.73	8.82
		1.90	2.54	4.38	3.95	3.39	0.99	1.77	1.33	0.44	22.80	9.23
		2.00	2.65	4.59	4.13	3.59	1.00	1.85	1.40	0.45	23.87	9.64
		2.10	2.76	4.80	4.32	3.79	1.00	1.93	1.47	0.46	24.95	10.05
		2.20	2.87	5.00	4.50	3.99	1.01	2.01	1.54	0.47	26.02	10.46
		2.30	2.99	5.21	4.69	4.19	1.02	2.09	1.61	0.48	27.09	10.87
		2.40	3.10	5.42	4.87	4.40	1.02	2.17	1.68	0.49	28.17	11.28
		2.50	3.21	5.62	5.06	4.60	1.03	2.25	1.75	0.50	29.24	11.70
		2.60	3.33	5.83	5.25	4.80	1.03	2.33	1.82	0.51	30.31	12.11
		2.70	3.44	6.04	5.43	5.00	1.04	2.41	1.89	0.52	31.38	12.52
		2.80	3.55	6.24	5.62	5.20	1.04	2.49	1.96	0.53	32.46	12.93
		2.90	3.66	6.45	5.80	5.40	1.05	2.57	2.03	0.54	33.53	13.34
		3.00	3.78	6.65	5.99	5.60	1.05	2.64	2.10	0.54	34.60	13.75
State:	Alaska	0.80	1.48	2.31	2.08	1.37	0.94	1.04	0.56	0.48	16.18	7.25
Area:	State	0.90	1.59	2.52	2.27	1.57	0.94	1.11	0.63	0.48	17.62	7.79
Gear:	Troll	1.00	1.70	2.72	2.45	1.78	0.95	1.19	0.70	0.49	19.05	8.33
Species:	Steelhead	1.10	1.81	2.93	2.63	1.98	0.95	1.27	0.77	0.50	20.49	8.87
Lbs/fish:	**7.0**	1.20	1.92	3.13	2.82	2.18	0.95	1.34	0.84	0.50	21.92	9.41

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Alaska	0.10	0.91	0.92	0.83	-0.15	1.06	0.63	0.07	0.56	15.50	10.71
Area:	State	0.20	1.01	1.12	1.01	0.05	1.07	0.71	0.14	0.57	18.98	11.92
Gear:	Net	0.30	1.11	1.33	1.20	0.25	1.08	0.78	0.21	0.57	22.46	13.14
Species:	Chinook	0.40	1.21	1.54	1.38	0.45	1.09	0.85	0.28	0.57	25.94	14.36
Lbs/fish:	16.9	0.50	1.32	1.74	1.57	0.65	1.09	0.92	0.35	0.57	29.42	15.57
		0.60	1.42	1.95	1.75	0.85	1.10	0.99	0.42	0.57	32.90	16.79
		0.70	1.52	2.15	1.94	1.04	1.11	1.07	0.49	0.58	36.38	18.01
		0.80	1.63	2.36	2.12	1.24	1.12	1.14	0.56	0.58	39.86	19.22
		0.90	1.73	2.56	2.31	1.44	1.12	1.21	0.63	0.58	43.34	20.44
		1.00	1.83	2.77	2.49	1.64	1.13	1.28	0.70	0.58	46.82	21.66
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	50.30	22.88
		1.20	2.04	3.18	2.86	2.04	1.15	1.43	0.84	0.59	53.78	24.09
		1.30	2.14	3.39	3.05	2.23	1.15	1.50	0.91	0.59	57.26	25.31
		1.40	2.24	3.59	3.23	2.43	1.16	1.57	0.98	0.59	60.74	26.53
		1.50	2.35	3.80	3.42	2.63	1.17	1.64	1.05	0.59	64.22	27.74
		1.60	2.45	4.01	3.61	2.83	1.18	1.71	1.12	0.59	67.70	28.96
		1.70	2.55	4.21	3.79	3.03	1.18	1.79	1.19	0.60	71.18	30.18
		1.80	2.65	4.42	3.98	3.23	1.19	1.86	1.26	0.60	74.66	31.39
		1.90	2.76	4.62	4.16	3.43	1.20	1.93	1.33	0.60	78.13	32.61
		2.00	2.86	4.83	4.35	3.62	1.21	2.00	1.40	0.60	81.61	33.83
		2.10	2.96	5.04	4.53	3.82	1.21	2.07	1.47	0.60	85.09	35.04
		2.20	3.07	5.24	4.72	4.02	1.22	2.15	1.54	0.61	88.57	36.26
		2.30	3.17	5.45	4.90	4.22	1.23	2.22	1.61	0.61	92.05	37.48
		2.40	3.27	5.65	5.09	4.42	1.24	2.29	1.68	0.61	95.53	38.69
		2.50	3.37	5.86	5.27	4.62	1.24	2.36	1.75	0.61	99.01	39.91
		2.60	3.48	6.06	5.46	4.81	1.25	2.43	1.82	0.61	102.49	41.13
		2.70	3.58	6.27	5.64	5.01	1.26	2.51	1.89	0.62	105.97	42.35
		2.80	3.68	6.48	5.83	5.21	1.27	2.58	1.96	0.62	109.45	43.56
		2.90	3.79	6.68	6.01	5.41	1.27	2.65	2.03	0.62	112.93	44.78
		3.00	3.89	6.89	6.20	5.61	1.28	2.72	2.10	0.62	116.41	46.00
		3.10	3.99	7.09	6.38	5.81	1.29	2.79	2.17	0.62	119.89	47.21
		3.20	4.09	7.30	6.57	6.00	1.30	2.87	2.24	0.63	123.37	48.43
		3.30	4.20	7.51	6.76	6.20	1.30	2.94	2.31	0.63	126.85	49.65
		3.40	4.30	7.71	6.94	6.40	1.31	3.01	2.38	0.63	130.33	50.86
		3.50	4.40	7.92	7.13	6.60	1.32	3.08	2.45	0.63	133.81	52.08
		3.60	4.51	8.12	7.31	6.80	1.33	3.15	2.52	0.63	137.29	53.30
		3.70	4.61	8.33	7.50	7.00	1.33	3.23	2.59	0.64	140.76	54.51
		3.80	4.71	8.54	7.68	7.19	1.34	3.30	2.66	0.64	144.24	55.73
		3.90	4.81	8.74	7.87	7.39	1.35	3.37	2.73	0.64	147.72	56.95
		4.00	4.92	8.95	8.05	7.59	1.36	3.44	2.80	0.64	151.20	58.16
		4.10	5.02	9.15	8.24	7.79	1.36	3.51	2.87	0.64	154.68	59.38
		4.20	5.12	9.36	8.42	7.99	1.37	3.59	2.94	0.65	158.16	60.60
		4.30	5.23	9.56	8.61	8.19	1.38	3.66	3.01	0.65	161.64	61.82
		4.40	5.33	9.77	8.79	8.39	1.39	3.73	3.08	0.65	165.12	63.03
		4.50	5.43	9.98	8.98	8.58	1.39	3.80	3.15	0.65	168.60	64.25
		4.60	5.53	10.18	9.16	8.78	1.40	3.87	3.22	0.65	172.08	65.47
		4.70	5.64	10.39	9.35	8.98	1.41	3.95	3.29	0.66	175.56	66.68
		4.80	5.74	10.59	9.53	9.18	1.42	4.02	3.36	0.66	179.04	67.90
		4.90	5.84	10.80	9.72	9.38	1.42	4.09	3.43	0.66	182.52	69.12
		5.00	5.95	11.01	9.91	9.58	1.43	4.16	3.50	0.66	186.00	70.33

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Alaska	0.20	1.01	1.14	1.03	0.09	1.05	0.71	0.14	0.57	8.99	5.56
Area:	State	0.30	1.11	1.35	1.21	0.28	1.06	0.78	0.21	0.57	10.59	6.12
Gear:	Net	0.40	1.22	1.55	1.40	0.48	1.07	0.85	0.28	0.57	12.19	6.68
Species:	Coho	0.50	1.32	1.76	1.58	0.67	1.08	0.92	0.35	0.57	13.79	7.25
Lbs/fish:	7.9	0.60	1.42	1.96	1.76	0.87	1.09	0.99	0.42	0.57	15.39	7.81
		0.70	1.52	2.16	1.95	1.06	1.10	1.07	0.49	0.58	16.99	8.37
		0.80	1.63	2.37	2.13	1.26	1.11	1.14	0.56	0.58	18.59	8.94
		0.90	1.73	2.57	2.31	1.45	1.12	1.21	0.63	0.58	20.19	9.50
		1.00	1.83	2.78	2.50	1.65	1.13	1.28	0.70	0.58	21.79	10.06
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	23.39	10.62
		1.20	2.04	3.18	2.86	2.03	1.15	1.43	0.84	0.59	24.99	11.19
		1.30	2.14	3.39	3.05	2.23	1.16	1.50	0.91	0.59	26.59	11.75
		1.40	2.24	3.59	3.23	2.42	1.17	1.57	0.98	0.59	28.19	12.31
		1.50	2.34	3.79	3.42	2.62	1.18	1.64	1.05	0.59	29.79	12.88
		1.60	2.45	4.00	3.60	2.81	1.19	1.71	1.12	0.59	31.39	13.44
		1.70	2.55	4.20	3.78	3.01	1.20	1.78	1.19	0.59	32.99	14.00
		1.80	2.65	4.41	3.97	3.20	1.20	1.86	1.26	0.60	34.59	14.57
		1.90	2.75	4.61	4.15	3.40	1.21	1.93	1.33	0.60	36.19	15.13
		2.00	2.86	4.81	4.33	3.59	1.22	2.00	1.40	0.60	37.79	15.69
		2.10	2.96	5.02	4.52	3.78	1.23	2.07	1.47	0.60	39.39	16.25
		2.20	3.06	5.22	4.70	3.98	1.24	2.14	1.54	0.60	40.99	16.82
		2.30	3.16	5.43	4.88	4.17	1.25	2.21	1.61	0.60	42.59	17.38
		2.40	3.27	5.63	5.07	4.37	1.26	2.29	1.68	0.61	44.19	17.94
		2.50	3.37	5.83	5.25	4.56	1.27	2.36	1.75	0.61	45.79	18.51
		2.60	3.47	6.04	5.43	4.76	1.28	2.43	1.82	0.61	47.39	19.07
		2.70	3.57	6.24	5.62	4.95	1.29	2.50	1.89	0.61	48.99	19.63
		2.80	3.68	6.44	5.80	5.15	1.30	2.57	1.96	0.61	50.59	20.19
State:	Alaska	0.10	0.91	0.93	0.84	-0.10	1.03	0.63	0.07	0.56	8.34	5.68
Area:	State	0.20	1.01	1.14	1.02	0.10	1.04	0.71	0.14	0.57	10.18	6.33
Gear:	Net	0.30	1.11	1.34	1.21	0.29	1.05	0.78	0.21	0.57	12.01	6.97
Species:	Chum	0.40	1.21	1.55	1.39	0.48	1.06	0.85	0.28	0.57	13.85	7.61
Lbs/fish:	9.0	0.50	1.32	1.75	1.58	0.68	1.07	0.92	0.35	0.57	15.68	8.25
		0.60	1.42	1.96	1.76	0.87	1.08	0.99	0.42	0.57	17.52	8.90
		0.70	1.52	2.16	1.95	1.07	1.10	1.07	0.49	0.58	19.35	9.54
		0.80	1.63	2.37	2.13	1.26	1.11	1.14	0.56	0.58	21.18	10.18
		0.90	1.73	2.57	2.31	1.46	1.12	1.21	0.63	0.58	23.02	10.83
		1.00	1.83	2.78	2.50	1.65	1.13	1.28	0.70	0.58	24.85	11.47
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	26.69	12.11
		1.20	2.04	3.19	2.87	2.04	1.15	1.43	0.84	0.59	28.52	12.75
		1.30	2.14	3.39	3.05	2.23	1.16	1.50	0.91	0.59	30.35	13.40
		1.40	2.24	3.60	3.24	2.43	1.17	1.57	0.98	0.59	32.19	14.04
		1.50	2.34	3.80	3.42	2.62	1.18	1.64	1.05	0.59	34.02	14.68
		1.60	2.45	4.01	3.61	2.82	1.19	1.71	1.12	0.59	35.86	15.33
		1.70	2.55	4.21	3.79	3.01	1.20	1.78	1.19	0.59	37.69	15.97
		1.80	2.65	4.42	3.97	3.20	1.21	1.86	1.26	0.60	39.53	16.61
		1.90	2.75	4.62	4.16	3.40	1.22	1.93	1.33	0.60	41.36	17.25
		2.00	2.86	4.83	4.34	3.59	1.23	2.00	1.40	0.60	43.19	17.90
		2.10	2.96	5.03	4.53	3.79	1.24	2.07	1.47	0.60	45.03	18.54
		2.20	3.06	5.24	4.71	3.98	1.25	2.14	1.54	0.60	46.86	19.18
		2.30	3.16	5.44	4.90	4.18	1.27	2.22	1.61	0.61	48.70	19.83
		2.40	3.27	5.65	5.08	4.37	1.28	2.29	1.68	0.61	50.53	20.47
		2.50	3.37	5.85	5.27	4.56	1.29	2.36	1.75	0.61	52.37	21.11
State:	Alaska	0.20	1.01	1.14	1.02	0.10	1.03	0.71	0.14	0.57	7.96	4.95
Area:	State	0.30	1.11	1.34	1.21	0.30	1.05	0.78	0.21	0.57	9.39	5.46
Gear:	Net	0.40	1.22	1.55	1.39	0.49	1.06	0.85	0.28	0.57	10.83	5.96

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
Species:	Steelhead	0.50	1.32	1.75	1.58	0.68	1.07	0.92	0.35	0.57	12.26	6.46
Lbs/fish:	**7.0**	0.60	1.42	1.96	1.76	0.87	1.08	0.99	0.42	0.57	13.69	6.96
		0.70	1.52	2.16	1.94	1.07	1.10	1.07	0.49	0.58	15.12	7.47
		0.80	1.63	2.36	2.13	1.26	1.11	1.14	0.56	0.58	16.55	7.97
		0.90	1.73	2.57	2.31	1.45	1.12	1.21	0.63	0.58	17.99	8.47
		1.00	1.83	2.77	2.50	1.64	1.13	1.28	0.70	0.58	19.42	8.97
		1.10	1.93	2.98	2.68	1.83	1.14	1.35	0.77	0.58	20.85	9.48
		1.20	2.04	3.18	2.86	2.03	1.16	1.43	0.84	0.59	22.28	9.98
		1.30	2.14	3.39	3.05	2.22	1.17	1.50	0.91	0.59	23.71	10.48
		1.40	2.24	3.59	3.23	2.41	1.18	1.57	0.98	0.59	25.14	10.98
		1.50	2.34	3.80	3.42	2.60	1.19	1.64	1.05	0.59	26.58	11.48
		1.60	2.45	4.00	3.60	2.79	1.21	1.71	1.12	0.59	28.01	11.99
		1.70	2.55	4.21	3.79	2.99	1.22	1.78	1.19	0.59	29.44	12.49
		1.80	2.65	4.41	3.97	3.18	1.23	1.86	1.26	0.60	30.87	12.99
		1.90	2.75	4.61	4.15	3.37	1.24	1.93	1.33	0.60	32.30	13.49
		2.00	2.86	4.82	4.34	3.56	1.26	2.00	1.40	0.60	33.74	14.00
State:	Alaska	0.10	0.90	0.96	0.86	-0.04	0.99	0.63	0.07	0.56	3.11	2.06
Area:	State	0.20	1.01	1.16	1.04	0.15	1.01	0.71	0.14	0.57	3.76	2.29
Gear:	Net	0.30	1.11	1.36	1.22	0.33	1.03	0.78	0.21	0.57	4.41	2.53
Species:	Pink	0.40	1.21	1.56	1.40	0.51	1.04	0.85	0.28	0.57	5.06	2.76
Lbs/fish:	3.3	0.50	1.32	1.76	1.58	0.70	1.06	0.92	0.35	0.57	5.71	3.00
		0.60	1.42	1.96	1.76	0.88	1.08	0.99	0.42	0.57	6.36	3.23
		0.70	1.52	2.16	1.94	1.06	1.10	1.07	0.49	0.58	7.01	3.47
State:	Alaska	0.50	1.32	1.74	1.56	0.64	1.10	0.92	0.35	0.57	10.34	5.49
Area:	State	0.60	1.42	1.94	1.75	0.84	1.11	0.99	0.42	0.57	11.56	5.92
Gear:	Net	0.70	1.52	2.15	1.93	1.03	1.12	1.07	0.49	0.58	12.79	6.35
Species:	Sockeye	0.80	1.63	2.36	2.12	1.23	1.12	1.14	0.56	0.58	14.01	6.77
Lbs/fish:	6.0	0.90	1.73	2.56	2.31	1.43	1.13	1.21	0.63	0.58	15.24	7.20
		1.00	1.83	2.77	2.49	1.63	1.14	1.28	0.70	0.58	16.47	7.63
		1.10	1.93	2.97	2.68	1.82	1.15	1.35	0.77	0.58	17.69	8.05
		1.20	2.04	3.18	2.86	2.02	1.16	1.43	0.84	0.59	18.92	8.48
		1.30	2.14	3.39	3.05	2.22	1.17	1.50	0.91	0.59	20.15	8.91
		1.40	2.24	3.59	3.23	2.41	1.18	1.57	0.98	0.59	21.37	9.33
		1.50	2.34	3.80	3.42	2.61	1.19	1.64	1.05	0.59	22.60	9.76
		1.60	2.45	4.00	3.60	2.81	1.19	1.71	1.12	0.59	23.82	10.19
		1.70	2.55	4.21	3.79	3.01	1.20	1.78	1.19	0.59	25.05	10.62
		1.80	2.65	4.42	3.97	3.20	1.21	1.86	1.26	0.60	26.28	11.04
		1.90	2.75	4.62	4.16	3.40	1.22	1.93	1.33	0.60	27.50	11.47
		2.00	2.86	4.83	4.35	3.60	1.23	2.00	1.40	0.60	28.73	11.90
		2.10	2.96	5.03	4.53	3.80	1.24	2.07	1.47	0.60	29.96	12.32
		2.20	3.06	5.24	4.72	3.99	1.25	2.14	1.54	0.60	31.18	12.75
		2.30	3.16	5.45	4.90	4.19	1.26	2.21	1.61	0.60	32.41	13.18
		2.40	3.27	5.65	5.09	4.39	1.26	2.29	1.68	0.61	33.64	13.61
		2.50	3.37	5.86	5.27	4.59	1.27	2.36	1.75	0.61	34.86	14.03

CANADA												
			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Canada	1.00	1.71	2.32	2.09	1.37	0.95	1.20	0.70	0.50	41.16	21.21
Area:	All	1.10	1.82	2.53	2.28	1.58	0.95	1.27	0.77	0.50	44.82	22.52
Gear:	Troll	1.20	1.92	2.74	2.46	1.78	0.96	1.35	0.84	0.51	48.48	23.83
Species:	Chinook	1.30	2.03	2.94	2.65	1.98	0.96	1.42	0.91	0.51	52.14	25.14
Lbs/fish:	17.7	1.40	2.13	3.15	2.84	2.18	0.97	1.49	0.98	0.51	55.80	26.45
		1.50	2.24	3.36	3.02	2.38	0.97	1.57	1.05	0.52	59.46	27.76
		1.60	2.34	3.56	3.21	2.58	0.98	1.64	1.12	0.52	63.12	29.06
		1.70	2.45	3.77	3.39	2.79	0.98	1.71	1.19	0.52	66.78	30.37
		1.80	2.56	3.98	3.58	2.99	0.99	1.79	1.26	0.53	70.44	31.68
		1.90	2.66	4.18	3.77	3.19	0.99	1.86	1.33	0.53	74.11	32.99
		2.00	2.77	4.39	3.95	3.39	1.00	1.94	1.40	0.54	77.77	34.30
		2.10	2.87	4.60	4.14	3.59	1.01	2.01	1.47	0.54	81.43	35.61
		2.20	2.98	4.80	4.32	3.79	1.01	2.08	1.54	0.54	85.09	36.92
		2.30	3.08	5.01	4.51	3.99	1.02	2.16	1.61	0.55	88.75	38.23
		2.40	3.19	5.22	4.69	4.20	1.02	2.23	1.68	0.55	92.41	39.54
		2.50	3.29	5.42	4.88	4.40	1.03	2.31	1.75	0.56	96.07	40.85
		2.60	3.40	5.63	5.07	4.60	1.03	2.38	1.82	0.56	99.73	42.16
		2.70	3.51	5.84	5.25	4.80	1.04	2.45	1.89	0.56	103.39	43.46
		2.80	3.61	6.04	5.44	5.00	1.04	2.53	1.96	0.57	107.05	44.77
		2.90	3.72	6.25	5.62	5.20	1.05	2.60	2.03	0.57	110.71	46.08
		3.00	3.82	6.46	5.81	5.41	1.05	2.68	2.10	0.58	114.37	47.39
State:	Canada	0.70	1.40	1.99	1.79	1.06	0.93	0.98	0.49	0.49	11.04	5.44
Area:	All	0.80	1.51	2.20	1.98	1.26	0.94	1.05	0.56	0.49	12.18	5.85
Gear:	Troll	0.90	1.61	2.40	2.16	1.46	0.94	1.13	0.63	0.50	13.32	6.26
Species:	Coho	1.00	1.72	2.61	2.35	1.66	0.95	1.20	0.70	0.50	14.46	6.66
Lbs/fish:	5.5	1.10	1.82	2.82	2.53	1.86	0.95	1.28	0.77	0.51	15.60	7.07
		1.20	1.93	3.02	2.72	2.06	0.96	1.35	0.84	0.51	16.75	7.48
		1.30	2.03	3.23	2.90	2.26	0.97	1.42	0.91	0.51	17.89	7.89
		1.40	2.14	3.43	3.09	2.46	0.97	1.50	0.98	0.52	19.03	8.29
		1.50	2.24	3.64	3.28	2.66	0.98	1.57	1.05	0.52	20.17	8.70
		1.60	2.35	3.84	3.46	2.86	0.98	1.64	1.12	0.52	21.31	9.11
		1.70	2.45	4.05	3.65	3.06	0.99	1.72	1.19	0.53	22.45	9.52
		1.80	2.56	4.26	3.83	3.26	1.00	1.79	1.26	0.53	23.60	9.92
		1.90	2.66	4.46	4.02	3.46	1.00	1.86	1.33	0.53	24.74	10.33
		2.00	2.77	4.67	4.20	3.66	1.01	1.94	1.40	0.54	25.88	10.74
State:	Canada	0.20	0.82	0.96	0.86	0.04	0.92	0.57	0.14	0.43	3.35	2.00
Area:	All	0.30	0.93	1.17	1.05	0.24	0.92	0.65	0.21	0.44	4.06	2.27
Gear:	Troll	0.40	1.04	1.37	1.23	0.45	0.93	0.73	0.28	0.45	4.78	2.54
Species:	Pink	0.50	1.15	1.58	1.42	0.65	0.93	0.81	0.35	0.46	5.49	2.81
Lbs/fish:	3.5	0.60	1.26	1.78	1.60	0.85	0.93	0.88	0.42	0.46	6.21	3.07
		0.70	1.37	1.99	1.79	1.05	0.94	0.96	0.49	0.47	6.92	3.34
		0.80	1.48	2.19	1.97	1.25	0.94	1.04	0.56	0.48	7.64	3.61
		0.90	1.59	2.40	2.16	1.45	0.95	1.11	0.63	0.48	8.35	3.88
		1.00	1.70	2.60	2.34	1.65	0.95	1.19	0.70	0.49	9.07	4.15
		1.10	1.81	2.81	2.53	1.85	0.95	1.27	0.77	0.50	9.78	4.42
		1.20	1.92	3.01	2.71	2.05	0.96	1.34	0.84	0.50	10.50	4.68
		1.30	2.03	3.22	2.90	2.26	0.96	1.42	0.91	0.51	11.21	4.95
		1.40	2.14	3.42	3.08	2.46	0.97	1.50	0.98	0.52	11.93	5.22

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Canada	0.30	0.94	1.28	1.15	0.36	0.92	0.66	0.21	0.45	12.15	6.29
Area:	All	0.40	1.05	1.48	1.33	0.56	0.92	0.73	0.28	0.45	14.11	7.00
Gear:	Troll	0.50	1.16	1.69	1.52	0.76	0.93	0.81	0.35	0.46	16.06	7.72
Species:	Chum	0.60	1.26	1.89	1.70	0.96	0.93	0.89	0.42	0.47	18.02	8.44
Lbs/fish:	9.5	0.70	1.37	2.10	1.89	1.16	0.94	0.96	0.49	0.47	19.97	9.15
		0.80	1.48	2.30	2.07	1.36	0.94	1.04	0.56	0.48	21.93	9.87
		0.90	1.59	2.51	2.26	1.56	0.95	1.11	0.63	0.48	23.89	10.59
		1.00	1.70	2.71	2.44	1.76	0.95	1.19	0.70	0.49	25.84	11.31
		1.10	1.80	2.92	2.63	1.96	0.96	1.26	0.77	0.49	27.80	12.02
		1.20	1.91	3.12	2.81	2.16	0.96	1.34	0.84	0.50	29.75	12.74
		1.30	2.02	3.33	2.99	2.36	0.97	1.41	0.91	0.50	31.71	13.46
		1.40	2.13	3.53	3.18	2.56	0.97	1.49	0.98	0.51	33.66	14.17
		1.50	2.23	3.74	3.36	2.76	0.98	1.56	1.05	0.51	35.62	14.89
		1.60	2.34	3.94	3.55	2.96	0.98	1.64	1.12	0.52	37.57	15.61
		1.70	2.45	4.15	3.73	3.16	0.99	1.71	1.19	0.52	39.53	16.33
		1.80	2.56	4.35	3.92	3.36	0.99	1.79	1.26	0.53	41.48	17.04
		1.90	2.66	4.56	4.10	3.56	1.00	1.86	1.33	0.53	43.44	17.76
		2.00	2.77	4.76	4.29	3.76	1.00	1.94	1.40	0.54	45.39	18.48
		2.10	2.88	4.97	4.47	3.96	1.01	2.01	1.47	0.54	47.35	19.19
		2.20	2.99	5.17	4.66	4.16	1.01	2.09	1.54	0.55	49.30	19.91
		2.30	3.09	5.38	4.84	4.36	1.02	2.16	1.61	0.55	51.26	20.63
		2.40	3.20	5.58	5.03	4.56	1.02	2.24	1.68	0.56	53.21	21.35
State:	Canada	0.80	1.29	2.11	1.90	1.17	0.94	0.91	0.56	0.35	12.08	5.18
Area:	All	0.90	1.41	2.32	2.09	1.38	0.94	0.98	0.63	0.35	13.26	5.63
Gear:	Troll	1.00	1.52	2.53	2.27	1.58	0.95	1.06	0.70	0.36	14.44	6.08
Species:	Sockeye	1.10	1.63	2.73	2.46	1.78	0.95	1.14	0.77	0.37	15.62	6.53
Lbs/fish:	5.7	1.20	1.75	2.94	2.65	1.98	0.96	1.22	0.84	0.38	16.80	6.98
		1.30	1.86	3.15	2.83	2.18	0.96	1.30	0.91	0.39	17.98	7.43
		1.40	1.97	3.35	3.02	2.38	0.97	1.38	0.98	0.40	19.16	7.88
		1.50	2.08	3.56	3.20	2.58	0.97	1.46	1.05	0.41	20.34	8.34
		1.60	2.20	3.77	3.39	2.79	0.98	1.54	1.12	0.42	21.52	8.79
		1.70	2.31	3.97	3.57	2.99	0.98	1.62	1.19	0.43	22.69	9.24
		1.80	2.42	4.18	3.76	3.19	0.99	1.70	1.26	0.44	23.87	9.69
		1.90	2.54	4.38	3.95	3.39	0.99	1.77	1.33	0.44	25.05	10.14
		2.00	2.65	4.59	4.13	3.59	1.00	1.85	1.40	0.45	26.23	10.59
		2.10	2.76	4.80	4.32	3.79	1.00	1.93	1.47	0.46	27.41	11.05
		2.20	2.87	5.00	4.50	3.99	1.01	2.01	1.54	0.47	28.59	11.50
		2.30	2.99	5.21	4.69	4.19	1.02	2.09	1.61	0.48	29.77	11.95
		2.40	3.10	5.42	4.87	4.40	1.02	2.17	1.68	0.49	30.95	12.40
		2.50	3.21	5.62	5.06	4.60	1.03	2.25	1.75	0.50	32.13	12.85
		2.60	3.33	5.83	5.25	4.80	1.03	2.33	1.82	0.51	33.31	13.30
		2.70	3.44	6.04	5.43	5.00	1.04	2.41	1.89	0.52	34.49	13.76
		2.80	3.55	6.24	5.62	5.20	1.04	2.49	1.96	0.53	35.67	14.21
		2.90	3.66	6.45	5.80	5.40	1.05	2.57	2.03	0.54	36.85	14.66
		3.00	3.78	6.65	5.99	5.60	1.05	2.64	2.10	0.54	38.03	15.11
State:	Canada	0.80	1.48	2.31	2.08	1.37	0.94	1.04	0.56	0.48	12.55	5.62
Area:	All	0.90	1.59	2.52	2.27	1.57	0.94	1.11	0.63	0.48	13.66	6.04
Gear:	Troll	1.00	1.70	2.72	2.45	1.78	0.95	1.19	0.70	0.49	14.78	6.46
Species:	Steelhead	1.10	1.81	2.93	2.63	1.98	0.95	1.27	0.77	0.50	15.89	6.88
Lbs/fish:	5.4	1.20	1.92	3.13	2.82	2.18	0.95	1.34	0.84	0.50	17.00	7.30

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Canada	0.10	0.91	0.92	0.83	-0.15	1.06	0.63	0.07	0.56	12.77	8.82
Area:	All	0.20	1.01	1.12	1.01	0.05	1.07	0.71	0.14	0.57	15.64	9.82
Gear:	Net	0.30	1.11	1.33	1.20	0.25	1.08	0.78	0.21	0.57	18.50	10.82
Species:	Chinook	0.40	1.21	1.54	1.38	0.45	1.09	0.85	0.28	0.57	21.37	11.83
Lbs/fish:	13.9	0.50	1.32	1.74	1.57	0.65	1.09	0.92	0.35	0.57	24.24	12.83
		0.60	1.42	1.95	1.75	0.85	1.10	0.99	0.42	0.57	27.10	13.83
		0.70	1.52	2.15	1.94	1.04	1.11	1.07	0.49	0.58	29.97	14.83
		0.80	1.63	2.36	2.12	1.24	1.12	1.14	0.56	0.58	32.84	15.84
		0.90	1.73	2.56	2.31	1.44	1.12	1.21	0.63	0.58	35.70	16.84
		1.00	1.83	2.77	2.49	1.64	1.13	1.28	0.70	0.58	38.57	17.84
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	41.43	18.84
		1.20	2.04	3.18	2.86	2.04	1.15	1.43	0.84	0.59	44.30	19.85
		1.30	2.14	3.39	3.05	2.23	1.15	1.50	0.91	0.59	47.17	20.85
		1.40	2.24	3.59	3.23	2.43	1.16	1.57	0.98	0.59	50.03	21.85
		1.50	2.35	3.80	3.42	2.63	1.17	1.64	1.05	0.59	52.90	22.85
		1.60	2.45	4.01	3.61	2.83	1.18	1.71	1.12	0.59	55.76	23.86
		1.70	2.55	4.21	3.79	3.03	1.18	1.79	1.19	0.60	58.63	24.86
		1.80	2.65	4.42	3.98	3.23	1.19	1.86	1.26	0.60	61.50	25.86
		1.90	2.76	4.62	4.16	3.43	1.20	1.93	1.33	0.60	64.36	26.86
		2.00	2.86	4.83	4.35	3.62	1.21	2.00	1.40	0.60	67.23	27.87
		2.10	2.96	5.04	4.53	3.82	1.21	2.07	1.47	0.60	70.10	28.87
		2.20	3.07	5.24	4.72	4.02	1.22	2.15	1.54	0.61	72.96	29.87
		2.30	3.17	5.45	4.90	4.22	1.23	2.22	1.61	0.61	75.83	30.87
		2.40	3.27	5.65	5.09	4.42	1.24	2.29	1.68	0.61	78.69	31.87
		2.50	3.37	5.86	5.27	4.62	1.24	2.36	1.75	0.61	81.56	32.88
		2.60	3.48	6.06	5.46	4.81	1.25	2.43	1.82	0.61	84.43	33.88
		2.70	3.58	6.27	5.64	5.01	1.26	2.51	1.89	0.62	87.29	34.88
		2.80	3.68	6.48	5.83	5.21	1.27	2.58	1.96	0.62	90.16	35.88
		2.90	3.79	6.68	6.01	5.41	1.27	2.65	2.03	0.62	93.03	36.89
		3.00	3.89	6.89	6.20	5.61	1.28	2.72	2.10	0.62	95.89	37.89
		3.10	3.99	7.09	6.38	5.81	1.29	2.79	2.17	0.62	98.76	38.89
		3.20	4.09	7.30	6.57	6.00	1.30	2.87	2.24	0.63	101.62	39.89
		3.30	4.20	7.51	6.76	6.20	1.30	2.94	2.31	0.63	104.49	40.90
		3.40	4.30	7.71	6.94	6.40	1.31	3.01	2.38	0.63	107.36	41.90
		3.50	4.40	7.92	7.13	6.60	1.32	3.08	2.45	0.63	110.22	42.90
		3.60	4.51	8.12	7.31	6.80	1.33	3.15	2.52	0.63	113.09	43.90
		3.70	4.61	8.33	7.50	7.00	1.33	3.23	2.59	0.64	115.96	44.91
		3.80	4.71	8.54	7.68	7.19	1.34	3.30	2.66	0.64	118.82	45.91
		3.90	4.81	8.74	7.87	7.39	1.35	3.37	2.73	0.64	121.69	46.91
		4.00	4.92	8.95	8.05	7.59	1.36	3.44	2.80	0.64	124.55	47.91
		4.10	5.02	9.15	8.24	7.79	1.36	3.51	2.87	0.64	127.42	48.92
		4.20	5.12	9.36	8.42	7.99	1.37	3.59	2.94	0.65	130.29	49.92
		4.30	5.23	9.56	8.61	8.19	1.38	3.66	3.01	0.65	133.15	50.92
		4.40	5.33	9.77	8.79	8.39	1.39	3.73	3.08	0.65	136.02	51.92
		4.50	5.43	9.98	8.98	8.58	1.39	3.80	3.15	0.65	138.89	52.93
		4.60	5.53	10.18	9.16	8.78	1.40	3.87	3.22	0.65	141.75	53.93
		4.70	5.64	10.39	9.35	8.98	1.41	3.95	3.29	0.66	144.62	54.93
		4.80	5.74	10.59	9.53	9.18	1.42	4.02	3.36	0.66	147.48	55.93
		4.90	5.84	10.80	9.72	9.38	1.42	4.09	3.43	0.66	150.35	56.93
		5.00	5.95	11.01	9.91	9.58	1.43	4.16	3.50	0.66	153.22	57.94

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
State:	Canada	0.20	1.01	1.14	1.03	0.09	1.05	0.71	0.14	0.57	7.44	4.60
Area:	All	0.30	1.11	1.35	1.21	0.28	1.06	0.78	0.21	0.57	8.77	5.07
Gear:	Net	0.40	1.22	1.55	1.40	0.48	1.07	0.85	0.28	0.57	10.09	5.53
Species:	Coho	0.50	1.32	1.76	1.58	0.67	1.08	0.92	0.35	0.57	11.42	6.00
Lbs/fish:	6.5	0.60	1.42	1.96	1.76	0.87	1.09	0.99	0.42	0.57	12.74	6.47
		0.70	1.52	2.16	1.95	1.06	1.10	1.07	0.49	0.58	14.06	6.93
		0.80	1.63	2.37	2.13	1.26	1.11	1.14	0.56	0.58	15.39	7.40
		0.90	1.73	2.57	2.31	1.45	1.12	1.21	0.63	0.58	16.71	7.87
		1.00	1.83	2.78	2.50	1.65	1.13	1.28	0.70	0.58	18.04	8.33
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	19.36	8.80
		1.20	2.04	3.18	2.86	2.03	1.15	1.43	0.84	0.59	20.69	9.26
		1.30	2.14	3.39	3.05	2.23	1.16	1.50	0.91	0.59	22.01	9.73
		1.40	2.24	3.59	3.23	2.42	1.17	1.57	0.98	0.59	23.34	10.20
		1.50	2.34	3.79	3.42	2.62	1.18	1.64	1.05	0.59	24.66	10.66
		1.60	2.45	4.00	3.60	2.81	1.19	1.71	1.12	0.59	25.99	11.13
		1.70	2.55	4.20	3.78	3.01	1.20	1.78	1.19	0.59	27.31	11.59
		1.80	2.65	4.41	3.97	3.20	1.20	1.86	1.26	0.60	28.64	12.06
		1.90	2.75	4.61	4.15	3.40	1.21	1.93	1.33	0.60	29.96	12.53
		2.00	2.86	4.81	4.33	3.59	1.22	2.00	1.40	0.60	31.29	12.99
		2.10	2.96	5.02	4.52	3.78	1.23	2.07	1.47	0.60	32.61	13.46
		2.20	3.06	5.22	4.70	3.98	1.24	2.14	1.54	0.60	33.94	13.92
		2.30	3.16	5.43	4.88	4.17	1.25	2.21	1.61	0.60	35.26	14.39
		2.40	3.27	5.63	5.07	4.37	1.26	2.29	1.68	0.61	36.59	14.86
		2.50	3.37	5.83	5.25	4.56	1.27	2.36	1.75	0.61	37.91	15.32
		2.60	3.47	6.04	5.43	4.76	1.28	2.43	1.82	0.61	39.24	15.79
		2.70	3.57	6.24	5.62	4.95	1.29	2.50	1.89	0.61	40.56	16.26
		2.80	3.68	6.44	5.80	5.15	1.30	2.57	1.96	0.61	41.89	16.72
State:	Canada	0.10	0.91	0.93	0.84	-0.10	1.03	0.63	0.07	0.56	9.68	6.59
Area:	All	0.20	1.01	1.14	1.02	0.10	1.04	0.71	0.14	0.57	11.80	7.33
Gear:	Net	0.30	1.11	1.34	1.21	0.29	1.05	0.78	0.21	0.57	13.93	8.08
Species:	Chum	0.40	1.21	1.55	1.39	0.48	1.06	0.85	0.28	0.57	16.06	8.83
Lbs/fish:	10.4	0.50	1.32	1.75	1.58	0.68	1.07	0.92	0.35	0.57	18.18	9.57
		0.60	1.42	1.96	1.76	0.87	1.08	0.99	0.42	0.57	20.31	10.32
		0.70	1.52	2.16	1.95	1.07	1.10	1.07	0.49	0.58	22.44	11.06
		0.80	1.63	2.37	2.13	1.26	1.11	1.14	0.56	0.58	24.57	11.81
		0.90	1.73	2.57	2.31	1.46	1.12	1.21	0.63	0.58	26.69	12.55
		1.00	1.83	2.78	2.50	1.65	1.13	1.28	0.70	0.58	28.82	13.30
		1.10	1.93	2.98	2.68	1.84	1.14	1.35	0.77	0.58	30.95	14.04
		1.20	2.04	3.19	2.87	2.04	1.15	1.43	0.84	0.59	33.07	14.79
		1.30	2.14	3.39	3.05	2.23	1.16	1.50	0.91	0.59	35.20	15.54
		1.40	2.24	3.60	3.24	2.43	1.17	1.57	0.98	0.59	37.33	16.28
		1.50	2.34	3.80	3.42	2.62	1.18	1.64	1.05	0.59	39.45	17.03
		1.60	2.45	4.01	3.61	2.82	1.19	1.71	1.12	0.59	41.58	17.77
		1.70	2.55	4.21	3.79	3.01	1.20	1.78	1.19	0.59	43.71	18.52
		1.80	2.65	4.42	3.97	3.20	1.21	1.86	1.26	0.60	45.83	19.26
		1.90	2.75	4.62	4.16	3.40	1.22	1.93	1.33	0.60	47.96	20.01
		2.00	2.86	4.83	4.34	3.59	1.23	2.00	1.40	0.60	50.09	20.75
		2.10	2.96	5.03	4.53	3.79	1.24	2.07	1.47	0.60	52.22	21.50
		2.20	3.06	5.24	4.71	3.98	1.25	2.14	1.54	0.60	54.34	22.24
		2.30	3.16	5.44	4.90	4.18	1.27	2.22	1.61	0.61	56.47	22.99
		2.40	3.27	5.65	5.08	4.37	1.28	2.29	1.68	0.61	58.60	23.74
		2.50	3.37	5.85	5.27	4.56	1.29	2.36	1.75	0.61	60.72	24.48
State:	Canada	0.20	1.01	1.14	1.02	0.10	1.03	0.71	0.14	0.57	9.32	5.80
Area:	All	0.30	1.11	1.34	1.21	0.30	1.05	0.78	0.21	0.57	10.99	6.38
Gear:	Net	0.40	1.22	1.55	1.39	0.49	1.06	0.85	0.28	0.57	12.67	6.97

			Per	Marginal	Average	Marginal	Marginal	NEV	NEV	NEV	Marginal	
		Nominal	Round	Economic	Economic	Harvester	Processor	Total	Harvest	Processor	Economic	
		Ex-vessel	Pound Ex-	Impact	Impact	Impact	Impact	Per	Per	Per	Impact	NEV Total
		Price	Processor	Per #	Per #	Per #	Per #	Round #	Round #	Round #	Per Fish	Per Fish
Species:	Steelhead	0.50	1.32	1.75	1.58	0.68	1.07	0.92	0.35	0.57	14.35	7.56
Lbs/fish:	8.2	0.60	1.42	1.96	1.76	0.87	1.08	0.99	0.42	0.57	16.02	8.15
		0.70	1.52	2.16	1.94	1.07	1.10	1.07	0.49	0.58	17.70	8.74
		0.80	1.63	2.36	2.13	1.26	1.11	1.14	0.56	0.58	19.37	9.33
		0.90	1.73	2.57	2.31	1.45	1.12	1.21	0.63	0.58	21.05	9.91
		1.00	1.83	2.77	2.50	1.64	1.13	1.28	0.70	0.58	22.73	10.50
		1.10	1.93	2.98	2.68	1.83	1.14	1.35	0.77	0.58	24.40	11.09
		1.20	2.04	3.18	2.86	2.03	1.16	1.43	0.84	0.59	26.08	11.68
		1.30	2.14	3.39	3.05	2.22	1.17	1.50	0.91	0.59	27.75	12.27
		1.40	2.24	3.59	3.23	2.41	1.18	1.57	0.98	0.59	29.43	12.85
		1.50	2.34	3.80	3.42	2.60	1.19	1.64	1.05	0.59	31.11	13.44
		1.60	2.45	4.00	3.60	2.79	1.21	1.71	1.12	0.59	32.78	14.03
		1.70	2.55	4.21	3.79	2.99	1.22	1.78	1.19	0.59	34.46	14.62
		1.80	2.65	4.41	3.97	3.18	1.23	1.86	1.26	0.60	36.13	15.21
		1.90	2.75	4.61	4.15	3.37	1.24	1.93	1.33	0.60	37.81	15.79
		2.00	2.86	4.82	4.34	3.56	1.26	2.00	1.40	0.60	39.49	16.38
State:	Canada	0.10	0.90	0.96	0.86	-0.04	0.99	0.63	0.07	0.56	3.33	2.20
Area:	All	0.20	1.01	1.16	1.04	0.15	1.01	0.71	0.14	0.57	4.02	2.45
Gear:	Net	0.30	1.11	1.36	1.22	0.33	1.03	0.78	0.21	0.57	4.72	2.71
Species:	Pink	0.40	1.21	1.56	1.40	0.51	1.04	0.85	0.28	0.57	5.42	2.96
Lbs/fish:	3.5	0.50	1.32	1.76	1.58	0.70	1.06	0.92	0.35	0.57	6.11	3.21
		0.60	1.42	1.96	1.76	0.88	1.08	0.99	0.42	0.57	6.81	3.46
		0.70	1.52	2.16	1.94	1.06	1.10	1.07	0.49	0.58	7.51	3.71
State:	Canada	0.50	1.32	1.74	1.56	0.64	1.10	0.92	0.35	0.57	9.53	5.06
Area:	All	0.60	1.42	1.94	1.75	0.84	1.11	0.99	0.42	0.57	10.66	5.46
Gear:	Net	0.70	1.52	2.15	1.93	1.03	1.12	1.07	0.49	0.58	11.79	5.85
Species:	Sockeye	0.80	1.63	2.36	2.12	1.23	1.12	1.14	0.56	0.58	12.92	6.24
Lbs/fish:	5.5	0.90	1.73	2.56	2.31	1.43	1.13	1.21	0.63	0.58	14.05	6.64
		1.00	1.83	2.77	2.49	1.63	1.14	1.28	0.70	0.58	15.18	7.03
		1.10	1.93	2.97	2.68	1.82	1.15	1.35	0.77	0.58	16.31	7.43
		1.20	2.04	3.18	2.86	2.02	1.16	1.43	0.84	0.59	17.44	7.82
		1.30	2.14	3.39	3.05	2.22	1.17	1.50	0.91	0.59	18.57	8.21
		1.40	2.24	3.59	3.23	2.41	1.18	1.57	0.98	0.59	19.70	8.61
		1.50	2.34	3.80	3.42	2.61	1.19	1.64	1.05	0.59	20.84	9.00
		1.60	2.45	4.00	3.60	2.81	1.19	1.71	1.12	0.59	21.97	9.39
		1.70	2.55	4.21	3.79	3.01	1.20	1.78	1.19	0.59	23.10	9.79
		1.80	2.65	4.42	3.97	3.20	1.21	1.86	1.26	0.60	24.23	10.18
		1.90	2.75	4.62	4.16	3.40	1.22	1.93	1.33	0.60	25.36	10.58
		2.00	2.86	4.83	4.35	3.60	1.23	2.00	1.40	0.60	26.49	10.97
		2.10	2.96	5.03	4.53	3.80	1.24	2.07	1.47	0.60	27.62	11.36
		2.20	3.06	5.24	4.72	3.99	1.25	2.14	1.54	0.60	28.75	11.76
		2.30	3.16	5.45	4.90	4.19	1.26	2.21	1.61	0.60	29.88	12.15
		2.40	3.27	5.65	5.09	4.39	1.26	2.29	1.68	0.61	31.01	12.54
		2.50	3.37	5.86	5.27	4.59	1.27	2.36	1.75	0.61	32.14	12.94

APPENDIX 2.B

Salmon Harvesting and Processing Expenditure Budgets

Resources

	Resources Name	Delivd Price	Yield Prdct	Raw Cost	Labor Cost	Other Cost	Bad Debt Expen	Varib Costs	Sales Price	Contr Marg.
1	Troll Coho	1.13	0.87	1.30	0.15	0.19	0.01	1.65	2.05	0.40
2	Troll Chinook	1.36	0.87	1.56	0.15	0.20	0.01	1.92	2.32	0.40
3	Troll Pink	0.49	0.87	0.56	0.15	0.17	0.01	0.88	1.28	0.40
4	Albacore Tuna	0.83	0.85	0.98	0.20	0.05	0.01	1.23	1.57	0.34
5	GN/PS Coho	0.62	0.80	0.78	0.25	0.18	0.01	1.21	1.61	0.40
6	GN/PS Chinook	0.56	0.80	0.70	0.25	0.16	0.01	1.12	1.52	0.40
7	GN/PS Tule	0.12	0.75	0.16	0.20	0.16	0.00	0.52	0.92	0.40
8	GN/PS Chum	0.13	0.80	0.16	0.25	0.16	0.00	0.58	0.98	0.40
9	Pink/Steelhead	0.24	0.80	0.30	0.25	0.16	0.01	0.72	1.12	0.40
10	GN/PS Sockeye	0.51	0.80	0.64	0.25	0.17	0.01	1.06	1.46	0.40
11	GN/PS Spring Chinook	2.16	0.77	2.81	0.25	0.23	0.02	3.30	3.70	0.40
12	Sturgeon	1.34	0.64	2.09	0.25	0.12	0.01	2.48	2.87	0.39
13	Halibut	2.27	0.72	3.15	0.15	0.14	0.02	3.46	3.86	0.40
14	Cod/Rockfish	0.44	0.29	1.52	0.25	0.12	0.01	1.90	2.30	0.40
15	Sole/Flounder	0.35	0.24	1.46	0.38	0.12	0.01	1.97	2.37	0.40
16	Blackcod Trawl	1.20	0.55	2.18	0.25	0.12	0.01	2.57	2.97	0.40
17	Blackcod Fixed Gear	1.92	0.55	3.49	0.25	0.14	0.02	3.90	4.30	0.40
18	H&G Whiting (ft)	0.05	0.64	0.08	0.20	0.08	0.00	0.36	0.38	0.02
19	Shrimp	0.60	0.26	2.31	0.25	0.39	0.02	2.96	3.36	0.40
20	Dungeness Crab	1.36	0.46	2.96	0.61	0.14	0.02	3.73	4.13	0.40
21	Scallops	1.12	0.12	9.33	0.25	0.21	0.05	9.84	10.25	0.41
22	Squid	0.16	0.99	0.16	0.12	0.10	0.00	0.39	0.59	0.20
23	Herring	0.77	0.99	0.78	0.13	0.11	0.01	1.02	1.42	0.40
24	Shark (mixed)	0.18	0.60	0.30	0.25	0.10	0.01	0.66	1.06	0.40
25	Smelt Shad Mack	0.07	0.99	0.07	0.15	0.10	0.00	0.33	0.71	0.38
26	Sea Urchin	0.53	0.07	7.57	1.50	0.93	0.05	10.06	10.46	0.40
27	Whiting/Block (ft)	0.05	0.17	0.27	0.25	0.14	0.00	0.66	0.67	0.01
28	AK Joint Venture	0.05	1.00	0.05	0.00	0.00	0.00	0.05	0.05	0.00
29	AK Factory Trawler	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00
30	AK Crab/Groundfish	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00
31	AK Gillnet	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00
32	Shore Shellfish $	1.00	1.00	1.00	0.15	0.11	0.01	1.27	1.67	0.40
33	Whiting-Surimi/shore	0.03	0.16	0.19	0.12	0.30	0.00	0.62	0.92	0.30
34	Whiting Fishmeal(ft)	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	Whiting/Surimi (ft)	0.05	0.16	0.29	0.20	0.25	0.01	0.75	1.01	0.26
36	Whiting Fillet/shore	0.05	0.25	0.20	0.24	0.10	0.00	0.55	0.85	0.30
37	Whiting H&G/shore	0.03	0.61	0.05	0.09	0.10	0.00	0.24	0.40	0.16
38	Whit. G.F.Meal Shore	0.00	0.10	0.01	0.04	0.11	0.00	0.16	0.25	0.10
39	Whiting Block\shore	0.05	0.18	0.26	0.25	0.15	0.00	0.65	0.65	-0.00
40	Whiting Fillet/(ft)	0.05	0.25	0.18	0.24	0.07	0.00	0.50	0.65	0.15
41	Whiting H&G/(ft)	0.05	0.61	0.08	0.09	0.14	0.00	0.31	0.33	0.03
42	Whiting Block/(ms)	0.05	0.18	0.26	0.25	0.14	0.00	0.65	0.85	0.20
43	Whiting Fillet/(ms)	0.05	0.25	0.18	0.24	0.07	0.00	0.50	0.65	0.15
44	Whiting Surimi/(ms)	0.03	0.17	0.18	0.19	0.30	0.00	0.68	0.92	0.24
45	Whiting Meal/(ms)	0.00	1.00	0.00	0.04	0.07	0.00	0.11	0.20	0.09
46	Whiting H&G/(ms)	0.05	0.61	0.08	0.09	0.14	0.00	0.31	0.33	0.02
47	Whiting Meal (ft)	0.00	1.00	0.00	0.04	0.07	0.00	0.11	0.20	0.09

Comment : 1996

State : Oregon
Location : Newport Area
Type MANUFACTURER : Small Processor
Market Value : $1,000,000
Employees for normal operation : 20-35

Product Name	Quantity	Yield	Price	Total Value
Troll Chinook	42,129.4	36652.5	$2.32	$85,034
Albacore Tuna	234,321.2	199173.0	$1.57	$312,702
Sturgeon	186.1	119.1	$2.87	$342
Halibut	2,389.4	1720.3	$3.86	$6,640
Cod/Rockfish	423,004.0	122671.2	$2.30	$282,144
Sole/Flounder	67,425.4	16182.1	$2.37	$38,352
Blackcod Trawl	42,624.8	23443.7	$2.97	$69,628
Blackcod Fixed Gea	31,491.5	17320.3	$4.30	$74,477
Shrimp	92,313.4	24001.5	$3.36	$80,645
Dungeness Crab	186,359.6	85725.4	$4.13	$354,046
Smelt Shad Mack	36,249.0	35886.5	$0.71	$25,479
Totals	1,158,493.8	562895.6		$1,329,488

Variable Expenses

Net Cost after shrink	$890,161	
Processing Labor	$156,304	
Direct Materials Cost	$28,410	
Manufacturing Overhead	$22,170	
Fish Taxes	$13,431	
Bad Debt Expense	$6,633	
Total Variable Expenses		$1,117,109

Fixed Expenses

Admin Salaries	$65,000	
Maint. & Repairs	$25,000	
Utilities	$15,000	
Telephone	$15,000	
Insurance	$12,000	
Bus./Prop. Taxes	$10,000	
Admin. Supplies	$15,000	
Misc. Administr.	$10,000	
Interest Expense	$4,820	
Depreciation	$0	
Total Fixed Expenses		$171,820
Total Expenses		$1,288,929
Net Income		$40,559

Product Inventory - Baseline Case

Product :	Troll Chinook	Quantity	1,404,312
	Large Processor	52 %	
	Medium Processor	30 %	
	Small Processor	18 %	
	Troller	60 %	
	Part-Time Troller	20 %	
	Comb.Troller/Crabber	20 %	
Product :	Albacore Tuna	Quantity	4,686,424
	Large Processor	40 %	
	Medium Processor	30 %	
	Small Processor	30 %	
	Troller	10 %	
	Comb.Troller/Crabber	65 %	
	Longliner	25 %	
Product :	Sturgeon	Quantity	5,582
	Large Processor	60 %	
	Medium Processor	20 %	
	Small Processor	20 %	
	Shrimp/Scallop Drag.	100 %	
Product :	Halibut	Quantity	47,787
	Large Processor	40 %	
	Medium Processor	30 %	
	Small Processor	30 %	
	Troller	10 %	
	Comb.Troller/Crabber	30 %	
	Longliner	60 %	
Product :	Cod/Rockfish	Quantity	10,152,097
	Large Processor	50 %	
	Medium Processor	25 %	
	Small Processor	25 %	
	Groundfish Trawler	78 %	
	Comb.Trawler/Dragger	9 %	
	Troller	1 %	
	Comb.Troller/Crabber	1 %	

Comment : 1996

State : Oregon
Location : State of Oregon
Type of Supplier : Gillnet
Market Value : $15,000
Days per year operating: 60 days

Total number products : 5

Baseline Case

Product Name	Quantity	Price	Total Value
GN/PS Coho	2671.5	$0.62	$1,656
GN/PS Chinook	4804.3	$0.56	$2,690
Pink/Steelhead	155.5	$0.24	$37
Sturgeon	1621.3	$1.34	$2,173
Smelt Shad Mack	1284.4	$0.07	$90
Totals	10537.1		$6,647

Variable Expenses		
Vessel/Engine Repair	$1,174	
Gear Repair/Replace	$1,253	
Fuel & Lubricants	$177	
Food & Supplies	$499	
Ice & Bait	$0	
Dues & Fees	$433	
Transportation	$420	
Miscellaneous	$120	
Crew Shares	$412	
Total Variable Expenses		$4,487

Fixed Expenses		
Insurance	$393	
Moorage	$197	
Interest Expense	$315	
Depreciation	$1,082	
Licenses	$393	
Miscellaneous	$433	
Total Fixed Expenses		$2,813

Total Expenses	$7,300
Net Income	-$654

Comment : 1996

Type of Supplier : Gillnet A
Market Value : $15,000
Days per year operating: 60 days

Total number products : 8

Baseline Case

Product Name	Quantity	Price	Total Value
GN/PS Coho	5315.9	$0.56	$2,977
GN/PS Chinook	5901.5	$0.71	$4,190
GN/PS Chum	15815.1	$0.27	$4,270
GN/PS Pink/Steelhead	812.1	$0.66	$536
GN/PS Sockeye	4342.5	$1.51	$6,557
Sturgeon	747.8	$1.18	$882
Smelt/Shad/Mackerel	1137.2	$0.19	$216
Dogfish	2299.6	$0.13	$299
Totals	36371.7		$19,928

Variable Expenses		
Vessel/Engine Repair	$1,417	
Gear Repair/Replace.	$1,273	
Fuel & Lubricants	$727	
Food & Supplies	$312	
Ice & Bait	$909	
Dues & Fees	$100	
Transportation	$420	
Miscellaneous	$120	
Crew Shares	$7,772	
Total Variable Expenses		$13,050

Fixed Expenses		
Insurance	$6,000	
Moorage	$400	
Interest Expense	$443	
Depreciation	$0	
Licenses	$400	
Miscellaneous	$50	
Total Fixed Expenses		$7,293
Total Expenses		$20,343
Net Income		-$416

Comment : 1996

State : Oregon
Location : Newport Area
Type of Supplier : Comb.Troller/Crabber
Market Value : $45,000
Days per year operating: 110 days

Total number products : 5

Baseline Case

Product Name	Quantity	Price	Total Value
Troll Chinook	9060.1	$1.36	$12,322
Albacore Tuna	98263.7	$0.83	$81,559
Halibut	462.5	$2.27	$1,050
Cod/Rockfish	3274.9	$0.44	$1,441
Smelt Shad Mack	14031.9	$0.07	$982
Totals	125093.0		$97,354

Variable Expenses		
Vessel/Engine Repair	$9,382	
Gear Repair/Replace	$10,007	
Fuel & Lubricants	$12,509	
Food & Supplies	$2,000	
Ice & Bait	$12,509	
Dues & Fees	$400	
Transportation	$1,000	
Miscellaneous	$1,000	
Crew Shares	$37,968	
Total Variable Expenses		$86,776

Fixed Expenses		
Insurance	$8,000	
Moorage	$600	
Interest Expense	$1,975	
Depreciation	$0	
Licenses	$400	
Miscellaneous	$200	
Total Fixed Expenses		$11,175
Total Expenses		$97,951
Net Income		-$597

Comment : 1996

State : Oregon
Location : Newport Area
Type of Supplier : Part-Time Troller
Market Value : $10,000
Days per year operating: 30 days

Total number products : 1

Baseline Case

Product Name	Quantity	Price	Total Value
Troll Chinook	1470.5	$1.36	$2,000
Totals	1470.5		$2,000

Variable Expenses		
Vessel/Engine Repair	$200	
Gear Repair/Replace	$100	
Fuel & Lubricants	$200	
Food & Supplies	$200	
Ice & Bait	$200	
Dues & Fees	$100	
Transportation	$200	
Miscellaneous	$100	
Crew Shares	$780	
Total Variable Expenses		$2,080

Fixed Expenses		
Insurance	$1,000	
Moorage	$500	
Interest Expense	$0	
Depreciation	$0	
Licenses	$400	
Miscellaneous	$200	
Total Fixed Expenses		$2,100
Total Expenses		$4,180
Net Income		-$2,180

Comment : 1996

State : Oregon
Location : Newport Area
Type of Supplier : Troller
Market Value : $25,000
Days per year operating: 100 days

Total number products : 5

Baseline Case

Product Name	Quantity	Price	Total Value
Troll Chinook	12037.0	$1.36	$16,370
Albacore Tuna	6694.9	$0.83	$5,557
Halibut	68.3	$2.27	$155
Cod/Rockfish	1450.3	$0.44	$638
Halibut	68.3	$2.27	$155
Totals	20318.7		$22,875

Variable Expenses

Vessel/Engine Repair	$406	
Gear Repair/Replace	$406	
Fuel & Lubricants	$1,524	
Food & Supplies	$813	
Ice & Bait	$253	
Dues & Fees	$197	
Transportation	$758	
Miscellaneous	$874	
Crew Shares	$8,921	
Total Variable Expenses		$14,152

Fixed Expenses

Insurance	$5,000	
Moorage	$600	
Interest Expense	$798	
Depreciation	$0	
Licenses	$400	
Miscellaneous	$100	
Total Fixed Expenses		$6,898
Total Expenses		$21,050
Net Income		$1,825

Comment : 1996
State : Oregon
Location: State of Oregon

Supplier Category Oregon - State of OregonInput/Output Coefficients

		Direct	Indirect	Induced
Variable Expenses :				
Vessel/Engine Repair	(393)	0.42350	0.15750	0.31220
Gear Repair/Replace	(mix)	0.49200	0.13970	0.44090
Fuel & Lubricants	(mix)	0.25970	0.09360	0.19120
Food & Supplies	(mix)	0.41720	0.19750	0.44630
Ice & Bait	(mix)	0.59320	0.14130	0.34710
Dues & Fees	(503)	0.55300	0.12740	0.35510
Transportation	(mix)	0.40260	0.13140	0.31760
Miscellaneous	(507)	0.51400	0.26620	0.62680
Crew Shares	(mix)	0.50720	0.15560	0.44670
Fixed Expenses :				
Insurance	(460)	0.79770	0.08230	0.59170
Moorage	(488)	0.64170	0.14860	1.04810
Interest Expense	(456)	0.38590	0.25120	0.30470
Licenses	(mix)	0.61200	0.12370	0.50980
Miscellaneous	(507)	0.51400	0.26620	0.62680
Operating Income		0.50720	0.15560	0.44670

Manufacturer Category Oregon - State of OregonInput/Output Coefficients

		Direct	Indirect	Induced
Variable Expenses :				
Processing Labor	(mix)	0.50720	0.15560	0.44670
Direct Materials Cost	(mix)	0.47820	0.11310	0.26400
Manufacturing Overhead	(mix)	0.52910	0.13220	0.27820
Fish Taxes	(mix)	0.61200	0.12370	0.50980
Fixed Expenses :				
Admin Salaries	(mix)	0.50720	0.15560	0.44670
Maint. & Repairs	(056)	0.53970	0.13330	0.32840
Utilities	(mix)	0.44470	0.16330	0.28760
Telephone	(441)	0.42410	0.20640	0.19540
Insurance	(460)	0.79770	0.08230	0.59170
Bus./Prop. Taxes	(mix)	0.61200	0.12370	0.50980
Admin. Supplies	(mix)	0.60620	0.13110	0.58600
Misc. Administr.	(507)	0.51400	0.26620	0.62680
Interest Expense	(456)	0.38590	0.25120	0.30470
Operating Income		0.50720	0.15560	0.44670

APPENDIX 2.C

Columbia River Historical Commercial Landings Since 1866

Appendix 2.C

Columbia River historical commercial landings of chinook, coho, sockeye, chum, and steelhead since 1866 by number of fish estimated total pounds, ex-vessel values, and state level personal income impact.

Notes:

1. Number of fish are taken from Northwest Power Planning Council. Appendix D of the 1987 Columbia River Basin Fish and Wildlife Program, Compilation of Information on Salmon and Steelhead Losses in the Columbia River Basin. March 1986. Portland, Oregon.

2. Number of fish harvested may not indicate the number of fish produced by the Columbia River system. In earlier years, some species were not harvested; in the late 1800's and early 1900's, there was overharvesting of several species and, since the early 1900's, salmon have been harvested in other parts of their range.

3. Total pounds were estimated using a common pounds per fish factor. The factors by species are:

a)	Chinook	20 lbs.
b)	Coho	9 lbs.
c)	Sockeye	3.5 lbs.
d)	Chum	12 lbs.
e)	Steelhead	8.5 lbs.

The pounds per fish are a historical representative of the weight of the species in the Columbia River.

4. The ex-vessel values by species represent prices that may have been received for these fish if they had been harvested during the last few years (since 1990). For chinook, the composition of the species has changed from mostly spring and summer chinook (harvested by June) to mostly fall chinook. In order to represent these shifts in the composition, three separate price levels are used for chinook. The price factors used to report salmon harvested in the Columbia River are:

a1)	Chinook until 1930	3.25
a2)	Chinook from 1930 to 1955	2.50
a3)	Chinook since 1955	1.50
b)	Coho	1.00
c)	Sockeye	2.00
d)	Chum	0.60
e)	Steelhead	0.60

5. Income impacts are estimated at the State level. The amount that the harvesting and processing of these fish would contribute at today's prices, if they were marketed in fresh or frozen form, as whole fish. No added value processing, such as specialty packs, canning, or smoking are included in these estimates. The following are State level income impacts per pound used in these estimates.

a1)	Chinook until 1930	5.75
a2)	Chinook from 1930 to 1955	4.59
a3)	Chinook since 1955	3.03
b)	Coho	2.15
c)	Sockeye	3.80
d)	Chum	1.62
e)	Steelhead	1.62

COLUMBIA RIVER COMMERCIAL LANDINGS OF CHINOOK, COHO, SOCKEYE, CHUM AND STEELHEAD SINCE 1866 BY NUMBER OF FISH, ESTIMATED TOTAL POUNDS, EX-VESSEL VALUES AND STATE LEVEL PERSONAL INCOME IMPACT (IN THOUSANDS)

Date	Chinook	Total Pounds	Total ex-vessel value $	State level income impact $	Coho	Total Pounds	Total ex-vessel value $	State level income impact $	Sockeye	Total Pounds	Total ex-vessel value $	State level income impact $	Chum	Total Pounds	Total ex-vessel value $	State level income impact $	Steelhead	Total Pounds	Total ex-vessel value $	State level income impact $	Total	Total Pounds	Total ex-vessel value $	State level income impact $
1866	15	300	975	1,725																	15	300	975	1,725
1867	66	1,320	4,290	7,590																	66	1,320	4,290	7,590
1868	102	2,040	6,630	11,730																	102	2,040	6,630	11,730
1869	367	7,340	23,855	42,205																	367	7,340	23,855	42,205
1870	550	11,000	35,750	63,250																	550	11,000	35,750	63,250
1871	733	14,660	47,645	84,295																	733	14,660	47,645	84,295
1872	916	18,320	59,540	105,340																	916	18,320	59,540	105,340
1873	916	18,320	59,540	105,340																	916	18,320	59,540	105,340
1874	1,283	25,660	83,395	147,545																	1,283	25,660	83,395	147,545
1875	1,375	27,500	89,375	158,125																	1,375	27,500	89,375	158,125
1876	1,650	33,000	107,250	189,750																	1,650	33,000	107,250	189,750
1877	1,393	27,860	90,545	160,195																	1,393	27,860	90,545	160,195
1878	1,686	33,720	109,590	193,890																	1,686	33,720	109,590	193,890
1879	1,760	35,200	114,400	202,400																	1,760	35,200	114,400	202,400
1880	1,943	38,860	126,295	223,445																	1,943	38,860	126,295	223,445
1881	2,016	40,320	131,040	231,840																	2,016	40,320	131,040	231,840
1882	1,984	39,680	128,960	228,160																	1,984	39,680	128,960	228,160
1883	2,307	46,140	149,955	265,305																	2,307	46,140	149,955	265,305
1884	2,273	45,460	147,745	261,395																	2,273	45,460	147,745	261,395
1885	2,030	40,600	131,950	233,450																	2,030	40,600	131,950	233,450
1886	1,644	32,880	106,860	189,060																	1,644	32,880	106,860	189,060
1887	1,305	26,100	84,825	150,075																	1,305	26,100	84,825	150,075
1888	1,365	27,300	88,725	156,975																	1,365	27,300	88,725	156,975
1889	978	19,560	63,570	112,470					348	1,218	2,436	4628.4					236	2,006	1,204	3,250	1,562	22,784	67,210	120,348
1890	1,230	24,600	79,950	141,450					1,120	3,920	7,840	14,896					399	3,392	2,035	5,494	2,749	31,912	89,825	161,840
1891	1,297	25,940	84,305	155,640					303	1,061	2,121	3,712					275	2,750	1,650	4,813	1,875	29,751	88,076	164,165
1892	1,262	25,240	82,030	145,130	32	288	288	619	1,300	4,550	9,100	17,290					674	5,729	3,437	9,281	3,268	35,807	94,855	172,320
1893	1,059	21,180	68,835	121,785	221	1,989	1,989	4,276	595	2,083	4,165	7,914	13	156	94	252.72	608	5,168	3,101	8,372	2,496	30,576	78,183	142,600
1894	1,287	25,740	83,655	148,005	325	2,925	2,925	6,289	856	2,996	5,992	11,385	0	0	0	0	488	4,148	2,489	6,720	2,956	35,809	95,061	172,398
1895	1,631	32,620	106,015	187,565	758	6,822	6,822	14,667	352	1,232	2,464	4,682	126	1,512	907	2,449	463	3,936	2,361	6,376	3,330	46,122	118,570	215,739
1896	1,360	27,200	88,400	156,400	335	3,015	3,015	6,482	332	1,162	2,324	4,416	0	0	0	0	463	3,936	2,361	6,376	2,490	35,313	96,100	173,673
1897	1,610	32,200	104,650	185,150	463	4,167	4,167	8,959	253	886	1,771	3,365	0	0	0	0	430	3,655	2,193	5,921	2,756	40,908	112,781	203,395
1898	1,250	25,000	81,250	143,750	498	4,482	4,482	9,636	1,303	4,561	9,121	17,330	0	0	0	0	245	2,083	1,250	3,374	3,296	36,125	96,103	174,090
1899	1,012	20,240	65,780	116,380	225	2,025	2,025	4,354	468	1,638	3,276	6,224	63	756	454	1,225	112	952	571	1,542	1,880	25,611	72,106	129,725
1900	1,037	20,740	67,405	119,255	341	3,069	3,069	6,598	257	900	1,799	3,418	99	1,188	713	1,925	192	1,632	979	2,644	1,926	27,529	73,965	133,840
1901	1,037	20,740	67,405	119,255	341	3,069	3,069	6,598	257	900	1,799	3,418	99	1,188	713	1,925	192	1,632	979	2,644	1,926	27,529	73,965	133,840
1902	1,242	24,840	80,730	142,830	80	720	720	1,548	333	1,166	2,331	4,429	58	696	418	1,128	80	680	408	1,102	1,793	28,102	84,607	151,036
1903	1,505	30,100	97,825	173,075	93	837	837	1,800	164	574	1,148	2,181	56	672	403	1,089	66	561	337	909	1,884	32,744	100,550	179,053
1904	1,713	34,260	111,345	196,995	238	2,142	2,142	4,605	252	882	1,764	3,352	115	1,380	828	2,236	92	782	469	1,267	2,410	39,446	116,548	208,454
1905	1,781	35,620	115,765	204,815	204	1,836	1,836	3,947	152	532	1,064	2,022	144	1,728	1,037	2,799	92	782	469	1,267	2,373	40,498	120,171	214,850
1906	1,616	32,320	105,040	185,840	315	2,835	2,835	6,095	153	536	1,071	2,035	155	1,860	1,116	3,013	61	519	311	840	2,300	38,069	110,373	197,823
1907	1,307	26,140	84,955	150,305	242	2,178	2,178	4,683	107	375	749	1,423	126	1,512	907	2,449	55	468	281	757	1,837	30,672	89,070	159,618
1908	1,064	21,280	69,160	122,360	239	2,151	2,151	4,625	168	588	1,176	2,234	94	1,128	677	1,827	100	850	510	1,377	1,665	25,997	73,674	132,423
1909	923	18,460	59,995	106,145	321	2,889	2,889	6,211	490	1,715	3,430	6,517	137	1,644	986	2,663	161	1,369	821	2,217	2,032	26,077	68,122	123,754
1910	1,365	27,300	88,725	156,975	524	4,716	4,716	10,139	122	427	854	1,623	371	4,452	2,671	7,212	51	434	260	702	2,433	37,329	97,226	176,652
1911	1,973	39,460	128,245	226,895	604	5,436	5,436	11,687	117	410	819	1,556	298	3,576	2,146	5,793	80	680	408	1,102	3,072	49,562	137,054	247,033
1912	1,153	23,060	74,945	132,595	242	2,178	2,178	4,683	160	560	1,120	2,128	104	1,248	749	2,022	294	2,499	1,499	4,048	1,953	29,545	80,491	145,476
1913	1,045	20,900	67,925	120,175	312	2,808	2,808	6,037	218	763	1,526	2,899	74	888	533	1,439	297	2,525	1,515	4,090	1,946	27,884	74,307	134,640
1914	1,370	27,400	89,050	157,550	531	4,779	4,779	10,275	690	2,415	4,830	9,177	275	3,300	1,980	5,346	261	2,219	1,331	3,594	3,127	40,113	101,970	185,942
1915	1,732	34,640	112,580	199,180	254	2,286	2,286	4,915	107	375	749	1,423	483	5,796	3,478	9,390	368	3,128	1,877	5,067	2,944	46,225	120,969	219,975
1916	1,725	34,500	112,125	198,375	396	3,564	3,564	7,663	74	259	518	984	434	5,208	3,125	8,437	217	1,845	1,107	2,988	2,846	45,376	120,439	218,447
1917	1,591	31,820	103,415	182,965	489	4,401	4,401	9,462	156	546	1,092	2,075	299	3,588	2,153	5,813	306	2,601	1,561	4,214	2,841	42,956	112,621	204,528
1918	1,577	31,540	102,505	181,355	747	6,723	6,723	14,454	739	2,587	5,173	9,829	166	1,992	1,195	3,227	414	3,519	2,111	5,701	3,643	46,361	117,708	214,566
1919	1,635	32,700	106,275	188,025	690	6,210	6,210	13,352	142	497	994	1,889	421	5,052	3,031	8,184	260	2,210	1,326	3,580	3,148	46,669	117,836	215,030
1920	1,676	33,520	108,940	192,740	206	1,854	1,854	3,986	51	179	357	678	105	1,260	756	2,041	160	1,360	816	2,203	2,198	38,173	112,723	201,649
1921	1,162	23,240	75,530	133,630	261	2,349	2,349	5,050	118	413	826	1,569	27	324	194	525	140	1,190	714	1,928	1,708	27,516	79,613	142,702
1922	966	19,320	62,790	111,090	688	6,192	6,192	13,313	601	2,104	4,207	7,993	49	588	353	953	296	2,516	1,510	4,076	2,600	30,720	75,051	137,425
1923	1,163	23,260	75,595	133,745	779	7,011	7,011	15,074	749	2,622	5,243	9,962	142	1,704	1,022	2,760	368	3,128	1,877	5,067	3,201	37,725	90,748	166,608
1924	1,206	24,120	78,390	138,690	872	7,848	7,848	16,873	144	504	1,008	1,915	322	3,864	2,318	6,260	437	3,715	2,229	6,017	2,981	40,051	91,793	169,756
1925	1,437	28,740	93,405	165,255	888	7,992	7,992	17,183	110	385	770	1,463	311	3,732	2,239	6,046	398	3,383	2,030	5,480	3,144	44,232	106,436	195,427
1926	1,145	22,900	74,425	131,675	739	6,651	6,651	14,300	425	1,488	2,975	5,653	183	2,196	1,318	3,558	526	4,471	2,683	7,243	3,018	37,706	88,051	162,428
1927	1,294	25,880	84,110	148,810	583	5,247	5,247	11,281	134	469	938	1,782	382	4,584	2,750	7,426	431	3,664	2,198	5,935	2,824	39,844	95,244	175,234
1928	978	19,560	63,570	112,470	416	3,744	3,744	8,050	94	329	658	1,250	697	8,364	5,018	13,550	296	2,516	1,510	4,076	2,481	34,513	74,500	139,395
1929	978	19,560	63,570	112,470	750	6,750	6,750	14,513	197	690	1,379	2,620	305	3,660	2,196	5,929	393	3,341	2,004	5,412	2,623	34,000	75,899	140,943

Date	Chinook	Total Pounds	Total ex-vessel value $	State level income impact $	Coho	Total Pounds	Total ex-vessel value $	State level income impact $	Sockeye	Total Pounds	Total ex-vessel value $	State level income impact $	Chum	Total Pounds	Total ex-vessel value $	State level income impact $	Steelhead	Total Pounds	Total ex-vessel value $	State level income impact $	Total	Total Pounds	Total ex-vessel value $	State level income impact $
1930	1,082	21,640	70,330	124,430	865	7,785	7,785	16,738	192	672	1,344	2,554	63	756	454	1,225	329	2,797	1,678	4,530	2,531	33,650	81,591	149,476
1931	1,152	23,040	57,600	105,754	304	2,736	2,736	5,882	81	284	567	1,077	20	240	144	389	291	2,474	1,484	4,007	1,848	28,773	62,531	117,109
1932	863	17,260	43,150	79,223	458	4,122	4,122	8,862	55	193	385	732	96	1,152	691	1,866	196	1,666	1,000	2,699	1,668	24,393	49,348	93,382
1933	1,053	21,060	52,650	96,665	302	2,718	2,718	5,844	135	473	945	1,796	136	1,632	979	2,644	268	2,278	1,367	3,690	1,894	28,161	58,659	110,639
1934	1,013	20,260	50,650	92,993	534	4,806	4,806	10,333	134	469	938	1,782	136	1,632	979	2,644	263	2,236	1,341	3,622	2,080	29,403	58,715	111,374
1935	820	16,400	41,000	75,276	300	2,700	2,700	5,805	13	46	91	173	66	792	475	1,283	242	2,057	1,234	3,332	1,441	21,995	45,500	85,869
1936	860	17,200	43,000	78,948	185	1,665	1,665	3,580	87	305	609	1,157	94	1,128	677	1,827	316	2,686	1,612	4,351	1,542	22,984	47,562	89,864
1937	1,006	20,120	50,300	92,351	206	1,854	1,854	3,986	96	336	672	1,277	157	1,884	1,130	3,052	265	2,253	1,352	3,649	1,730	26,447	55,308	104,315
1938	669	13,380	33,450	61,414	257	2,313	2,313	4,973	122	427	854	1,623	157	1,884	1,130	3,052	242	2,057	1,234	3,332	1,447	20,061	38,982	74,394
1939	728	14,560	36,400	66,830	171	1,539	1,539	3,309	78	273	546	1,037	96	1,152	691	1,866	197	1,675	1,005	2,713	1,270	19,199	40,181	75,756
1940	729	14,580	36,450	66,922	155	1,395	1,395	2,999	104	364	728	1,383	103	1,236	742	2,002	387	3,290	1,974	5,329	1,478	20,865	41,288	78,636
1941	1,253	25,060	62,650	115,025	117	1,053	1,053	2,264	145	508	1,015	1,929	340	4,080	2,448	6,610	293	2,491	1,494	4,035	2,148	33,191	68,660	129,862
1942	1,007	20,140	50,350	92,443	72	648	648	1,393	55	193	385	732	426	5,112	3,067	8,281	200	1,700	1,020	2,754	1,760	27,793	55,470	105,603
1943	616	12,320	30,800	56,549	79	711	711	1,529	42	147	294	559	79	948	569	1,536	167	1,420	852	2,300	983	15,546	33,226	62,471
1944	758	15,160	37,900	69,584	171	1,539	1,539	3,309	15	53	105	200	23	276	166	447	180	1,530	918	2,479	1,147	18,558	40,628	76,018
1945	699	13,980	34,950	64,168	204	1,836	1,836	3,947	3	11	21	40	48	576	346	933	203	1,726	1,035	2,795	1,157	18,128	38,188	71,884
1946	770	15,400	38,500	70,686	118	1,062	1,062	2,283	37	130	259	492	73	876	526	1,419	183	1,556	933	2,520	1,181	19,023	41,280	77,400
1947	933	18,660	46,650	85,649	167	1,503	1,503	3,231	206	721	1,442	2,740	41	492	295	797	179	1,522	913	2,465	1,526	22,898	50,803	94,883
1948	935	18,700	46,750	85,833	131	1,179	1,179	2,535	28	98	196	372	86	1,032	619	1,672	157	1,335	801	2,162	1,337	22,344	49,545	92,574
1949	581	11,620	29,050	53,336	100	900	900	1,935	7	25	49	93	45	540	324	875	88	748	449	1,212	821	13,833	30,772	57,450
1950	562	11,240	28,100	51,592	117	1,053	1,053	2,264	49	172	343	652	58	696	418	1,128	101	859	515	1,391	887	14,019	30,429	57,026
1951	541	10,820	27,050	49,664	108	972	972	2,090	49	172	343	652	44	528	317	855	154	1,309	785	2,121	896	13,801	29,467	55,381
1952	392	7,840	19,600	35,986	120	1,080	1,080	2,322	175	613	1,225	2,328	25	300	180	486	188	1,598	959	2,589	900	11,431	23,044	43,710
1953	376	7,520	18,800	34,517	52	468	468	1,006	42	147	294	559	20	240	144	389	225	1,913	1,148	3,098	715	10,288	20,854	39,569
1954	286	5,720	14,300	26,255	34	306	306	658	70	245	490	931	26	312	187	505	154	1,309	785	2,121	570	7,892	16,069	30,470
1955	463	9,260	23,150	42,503	69	621	621	1,335	57	200	399	758	10	120	72	194	162	1,377	826	2,231	761	11,578	25,068	47,022
1956	441	8,820	13,230	26,725	52	468	468	1,006	82	287	574	1,091	4	48	29	78	108	918	551	1,487	687	10,541	14,852	30,386
1957	319	6,380	9,570	19,331	46	414	414	890	69	242	483	918	3	36	22	58	98	833	500	1,349	535	7,905	10,988	22,547
1958	347	6,940	10,410	21,028	19	171	171	368	208	728	1,456	2,766	7	84	50	136	92	782	469	1,267	673	8,705	12,557	25,565
1959	248	4,960	7,440	15,029	15	135	135	290	183	641	1,281	2,434	4	48	29	78	108	918	551	1,487	558	6,702	9,436	19,318
1960	266	5,320	7,980	16,120	18	162	162	348	120	420	840	1,596	1	12	7	19	94	799	479	1,294	499	6,713	9,469	19,378
1961	254	5,080	7,620	15,392	38	342	342	735	40	140	280	532	1	12	7	19	100	850	510	1,377	433	6,424	8,759	18,056
1962	311	6,220	9,330	18,847	65	585	585	1,258	14	49	98	186	4	48	29	78	99	842	505	1,363	493	7,744	10,547	21,732
1963	251	5,020	7,530	15,211	65	585	585	1,258	14	49	98	186	1	12	7	19	117	995	597	1,611	448	6,661	8,817	18,285
1964	269	5,380	8,070	16,301	206	1,854	1,854	3,986	21	74	147	279	2	24	14	39	56	476	286	771	554	7,808	10,371	21,377
1965	336	6,720	10,080	20,362	235	2,115	2,115	4,547	6	21	42	80	1	12	7	19	64	544	326	881	642	9,412	12,571	25,889
1966	201	4,020	6,030	12,181	424	3,816	3,816	8,204	4	14	28	53	1	12	7	19	47	400	240	647	677	8,262	10,121	21,105
1967	263	5,260	7,890	15,938	382	3,438	3,438	7,392	56	196	392	745	1	12	7	19	50	425	255	689	752	9,331	11,982	24,782
1968	220	4,400	6,600	13,332	133	1,197	1,197	2,574	25	88	175	333	1	12	7	19	45	383	230	620	424	6,079	8,209	16,877
1969	318	6,360	9,540	19,271	198	1,782	1,782	3,831	26	91	182	346	1	12	7	19	48	408	245	661	591	8,653	11,756	24,128
1970	357	7,140	10,710	21,634	536	4,824	4,824	10,372	17	60	119	226	1	12	7	19	33	281	168	454	944	12,316	15,829	32,706
1971	332	6,640	9,960	20,119	277	2,493	2,493	5,360	76	266	532	1,011	1	12	7	19	51	434	260	702	737	9,845	13,252	27,212
1972	319	6,380	9,570	19,331	140	1,260	1,260	2,709	78	273	546	1,037	1	12	7	19	62	527	316	854	600	8,452	11,699	23,951
1973	454	9,080	13,620	27,512	195	1,755	1,755	3,773	4	14	28	53	1	12	7	19	53	451	270	730	707	11,312	15,681	32,088
1974	191	3,820	5,730	11,575	273	2,457	2,457	5,283	0	0	0	0	1	12	7	19	19	162	97	262	484	6,451	8,291	17,138
1975	323	6,460	9,690	19,574	162	1,458	1,458	3,135	0	0	0	0	1	12	7	19	7	60	36	96	493	7,990	11,191	22,824
1976	288	5,760	8,640	17,453	172	1,548	1,548	3,328	0	0	0	0	1	12	7	19	10	85	51	138	471	7,405	10,246	20,938
1977	256	5,120	7,680	15,514	40	360	360	774	0	0	0	0	0	0	0	0	35	298	179	482	331	5,778	8,219	16,770
1978	189	3,780	5,670	11,453	136	1,224	1,224	2,632	0	0	0	0	2	24	14	39	20	170	102	275	347	5,198	7,010	14,399
1979	171	3,420	5,130	10,363	132	1,188	1,188	2,554	0	0	0	0	0	0	0	0	9	77	46	124	312	4,685	6,364	13,041
1980	150	3,000	4,500	9,090	150	1,350	1,350	2,903	0	0	0	0	0	0	0	0	7	60	36	96	307	4,410	5,886	12,089
1981	95	1,900	2,850	5,757	62	558	558	1,200	0	0	0	0	1	12	7	19	10	85	51	138	168	2,555	3,466	7,114
1982	155	3,100	4,650	9,393	206	1,854	1,854	3,986	0	0	0	0	2	24	14	39	9	77	46	124	372	5,055	6,564	13,542
1983	58	1,160	1,740	3,515	7	63	63	135	2	7	14	27	0	0	0	0	19	162	97	262	86	1,392	1,914	3,938
1984	128	2,560	3,840	7,757	204	1,836	1,836	3,947	32	112	224	426	2	24	14	39	75	638	383	1,033	441	5,170	6,297	13,201
1985	151	3,020	4,530	9,151	195	1,755	1,755	3,773	81	284	567	1,077	1	12	7	19	86	731	439	1,184	514	5,802	7,298	15,205
1986	283	5,660	8,490	17,150	998	8,982	8,982	19,311	6	21	42	80	2	24	14	39	72	612	367	991	1,361	15,299	17,896	37,571
1987	484	9,680	14,520	29,330	170	1,530	1,530	3,290	68	238	476	904	1	12	7	19	79	672	403	1,088	802	12,132	16,936	34,632
1988	489	9,780	14,670	29,633	368	3,312	3,312	7,121	49	172	343	652	3	36	22	58	79	672	403	1,088	988	13,971	18,750	38,552
1989	275	5,500	8,250	16,665	392	3,528	3,528	7,585	0	0	0	0	1	12	7	19	61	519	311	840	729	9,559	12,096	25,110
1990	147	2,940	4,410	8,908	76	684	684	1,471	0	0	0	0	1	12	7	19	33	281	168	454	257	3,917	5,270	10,853
1991	107	2,140	3,210	6,484	416	3,744	3,744	8,050	0	0	0	0	0	0	0	0	37	315	189	509	560	6,199	7,143	15,043
1992	53	1,060	1,590	3,212	59	531	531	1,142	0	0	0	0	1	12	7	19	52	442	265	716	165	2,045	2,393	5,089
1993	51	1,020	1,530	3,091	37	333	333	716	0	0	0	0	0	0	0	0	28	238	143	386	116	1,591	2,006	4,192

Appendix 2.C

Historical Columbia River Estimated State Income Impact

Figure 1a
Total Salmon and Steelhead

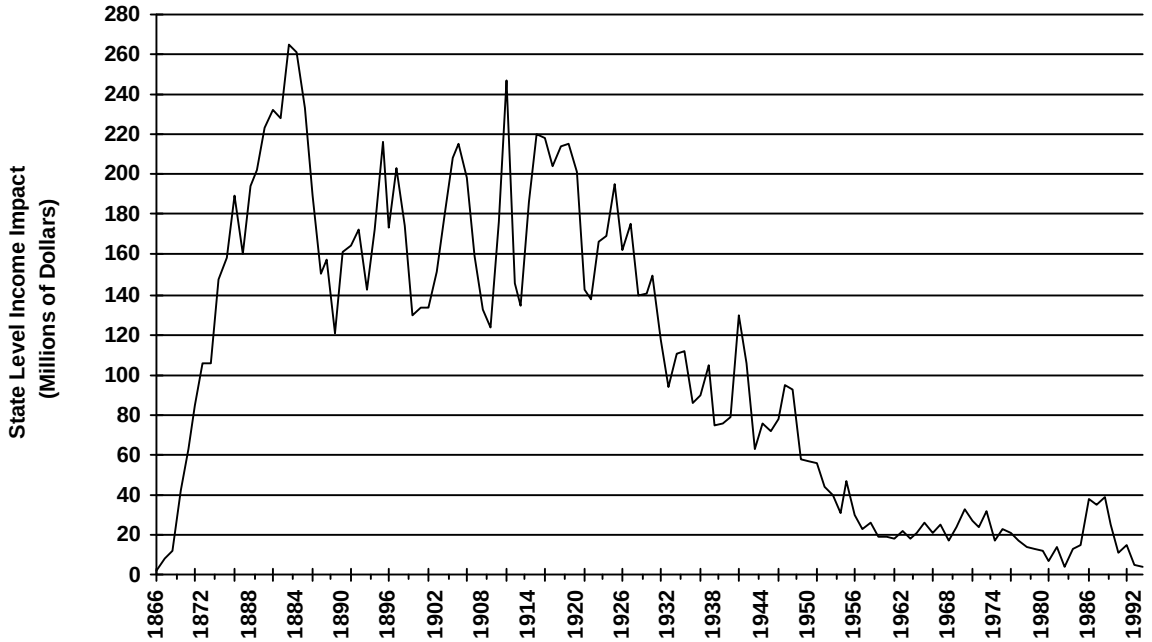
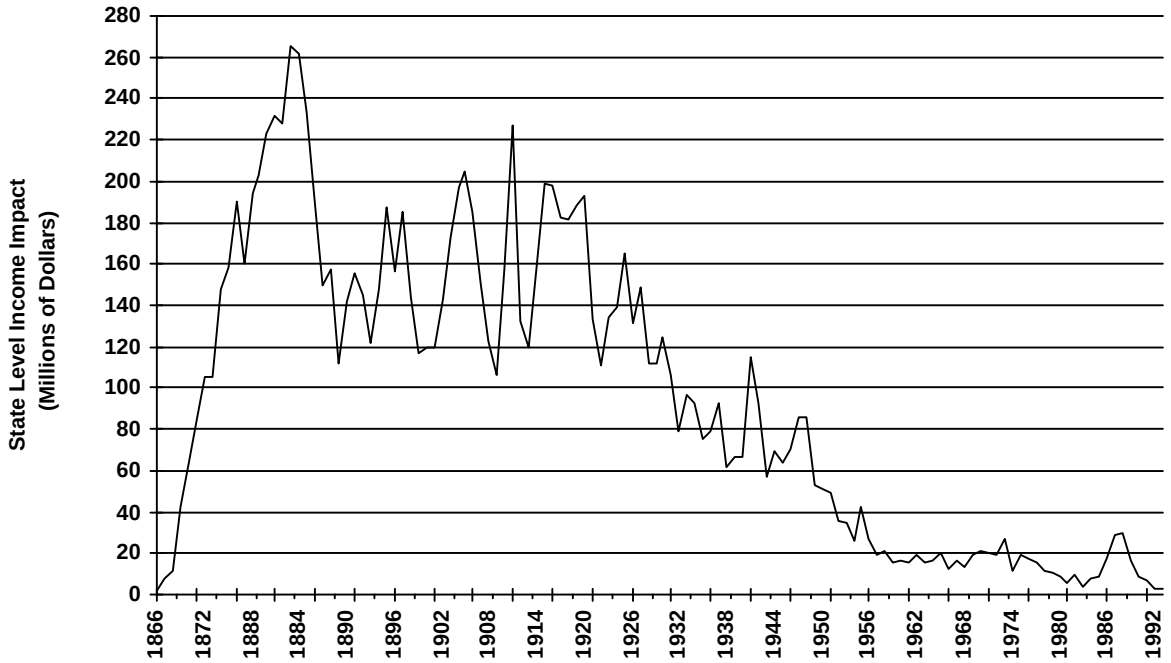


Figure 1b
Chinook



Appendix 2.C

Historical Columbia River Estimated State Income Impact

Figure 1c
Coho

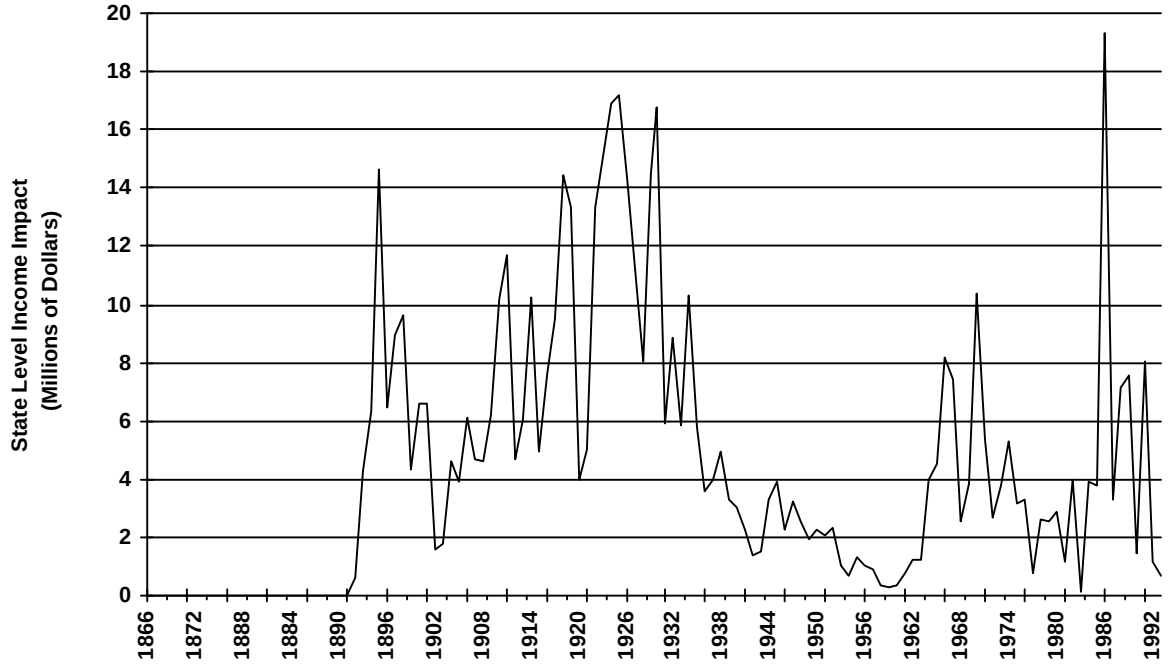
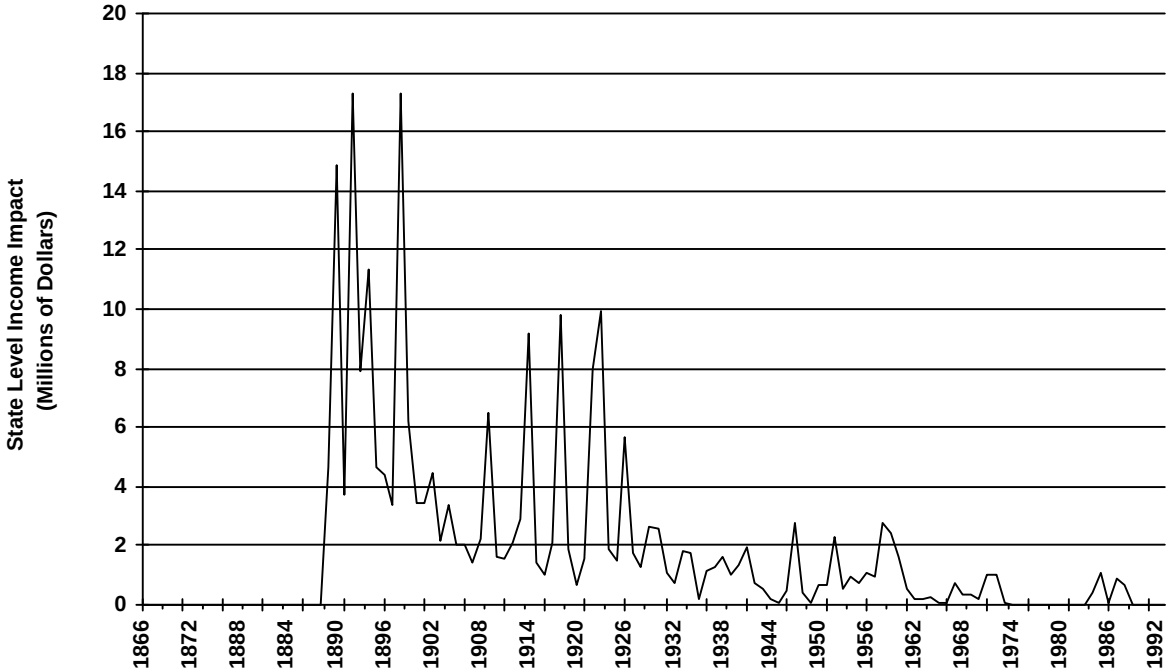


Figure 1d
Sockeye



Appendix 2.C

Historical Columbia River Estimated State Income Impact

Figure 1e
Chum

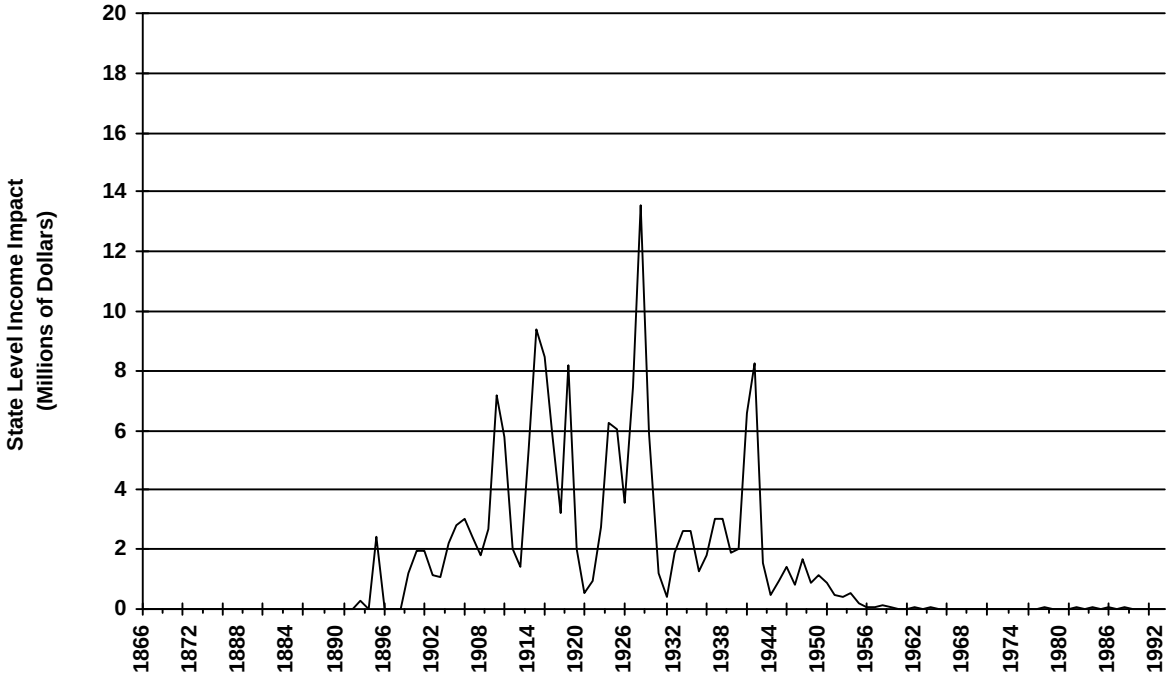
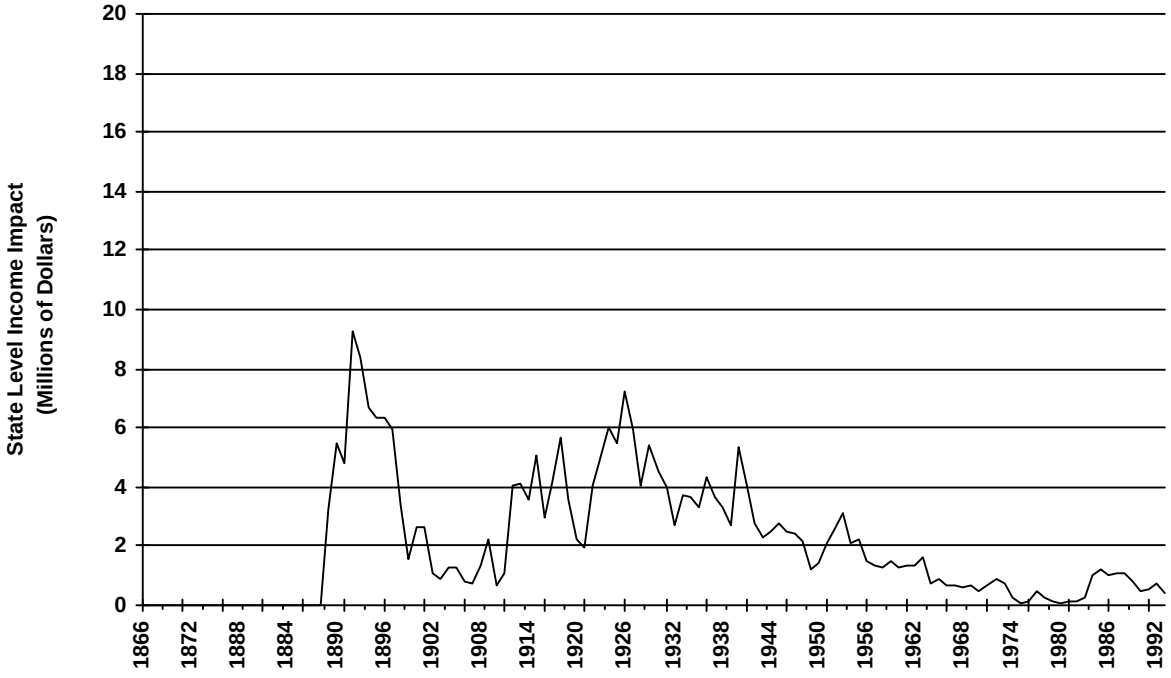


Figure 1f
Steelhead



Appendix 2.C

Historical Columbia River Fish Landed

Figure 2a
Total Salmon and Steelhead

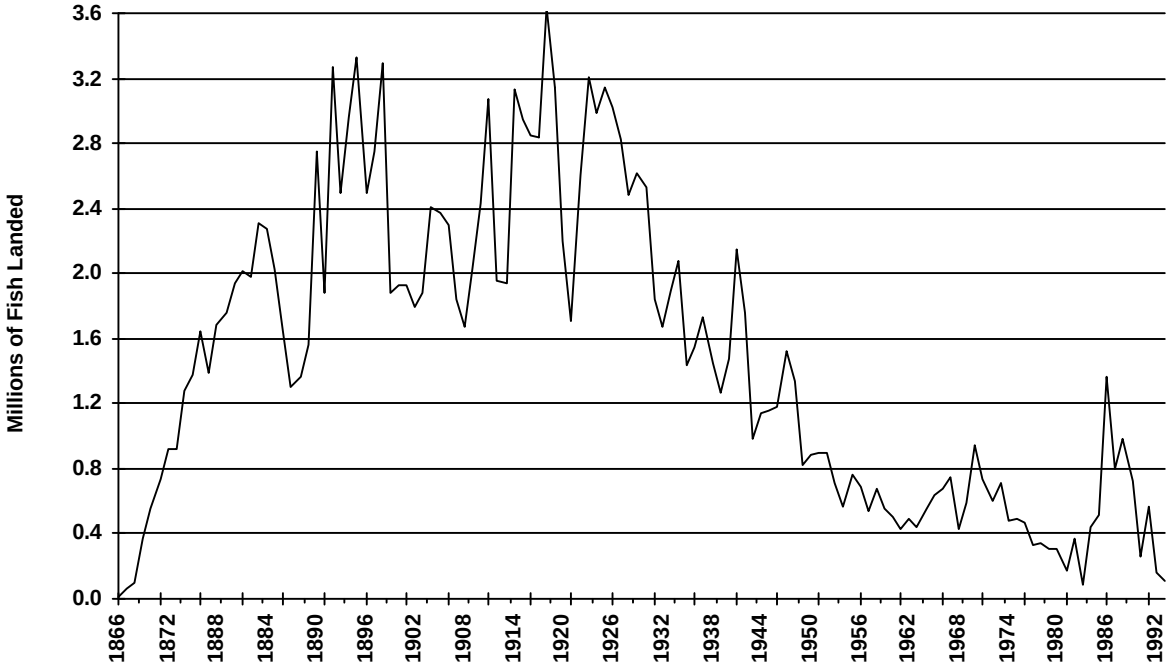
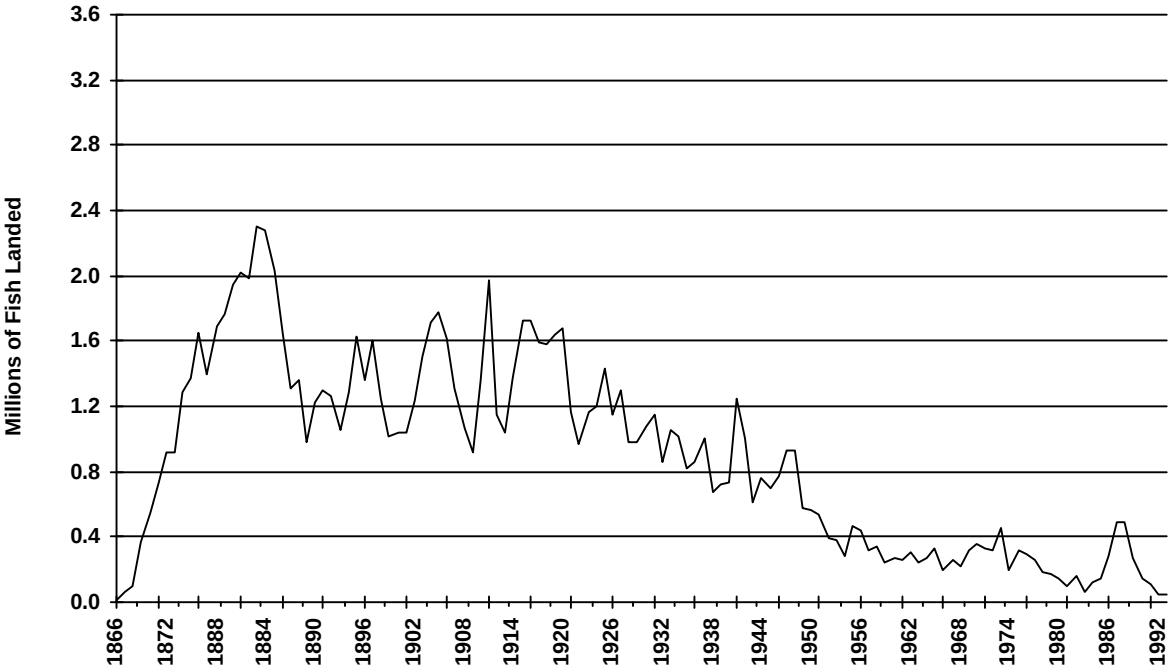


Figure 2b
Chinook



Appendix 2.C

Historical Columbia River Fish Landed

Figure 2c
Coho

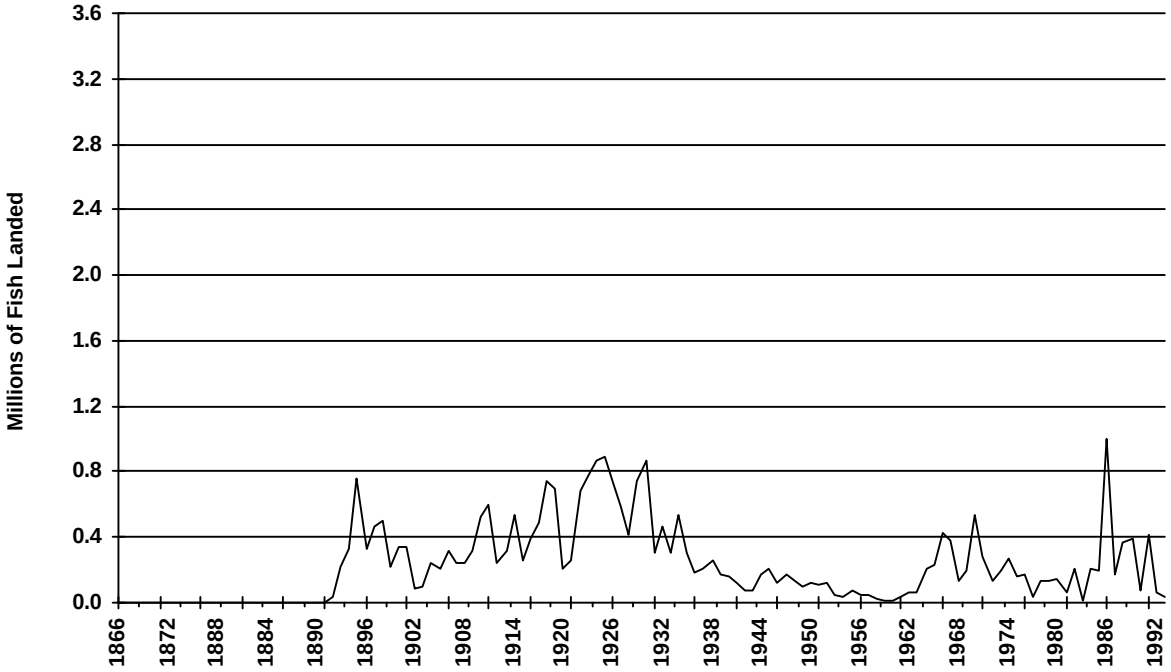
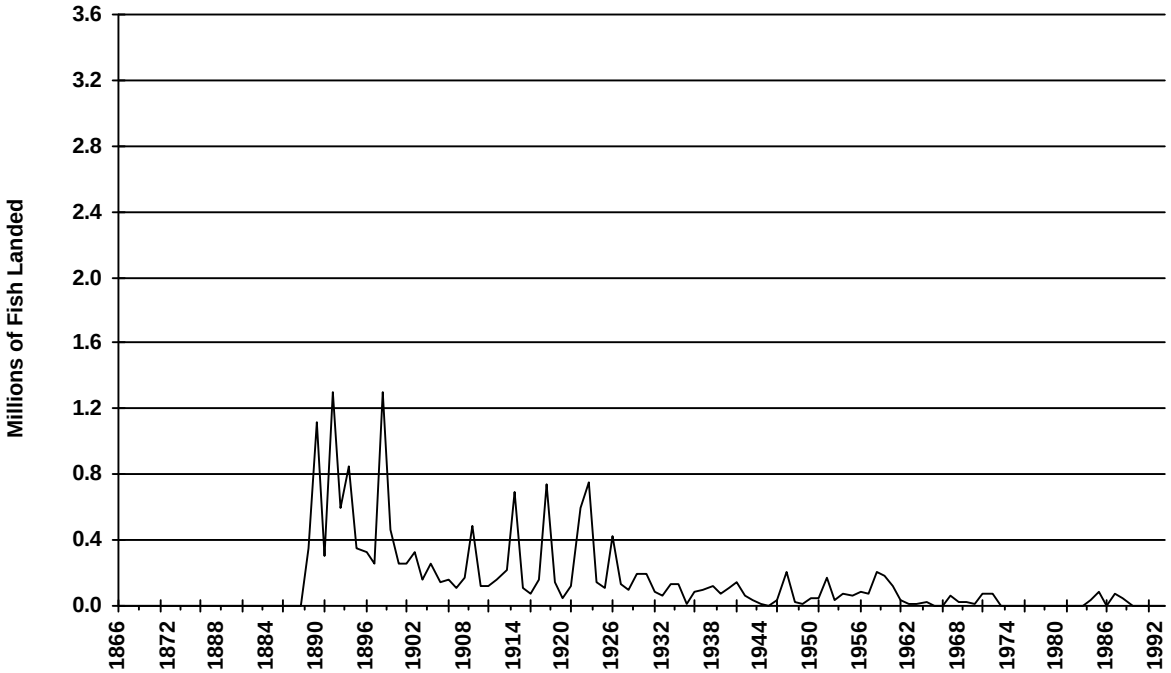


Figure 2d
Sockeye



Appendix 2.C

Historical Columbia River Fish Landed

Figure 2e
Chum

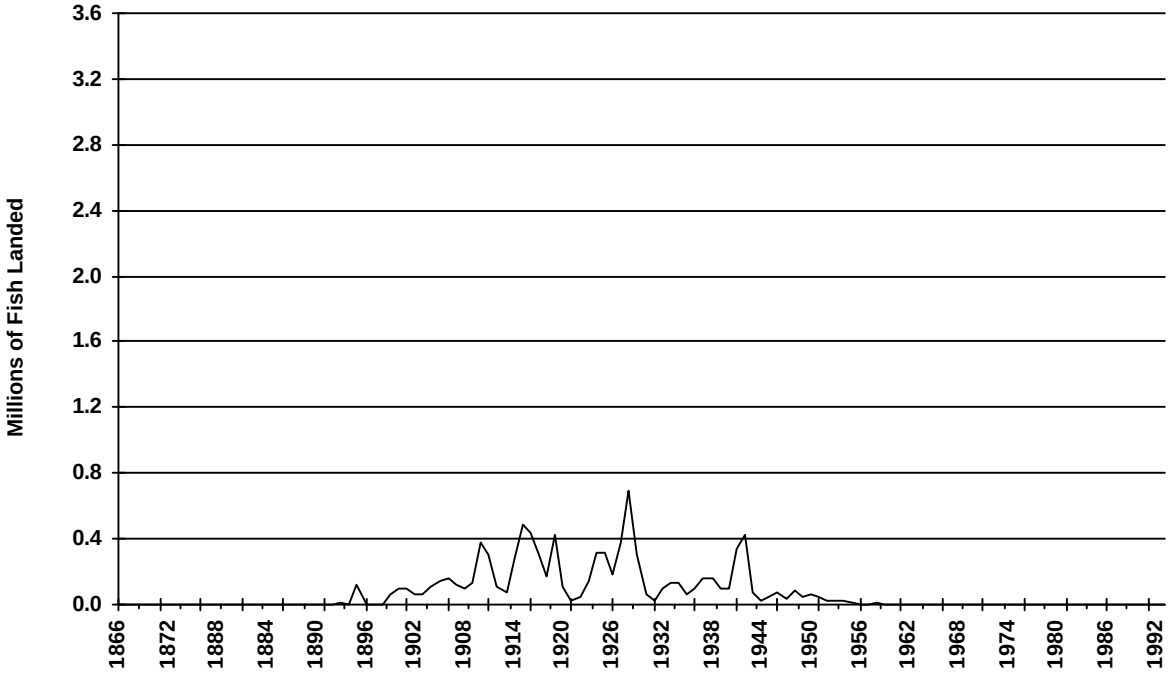
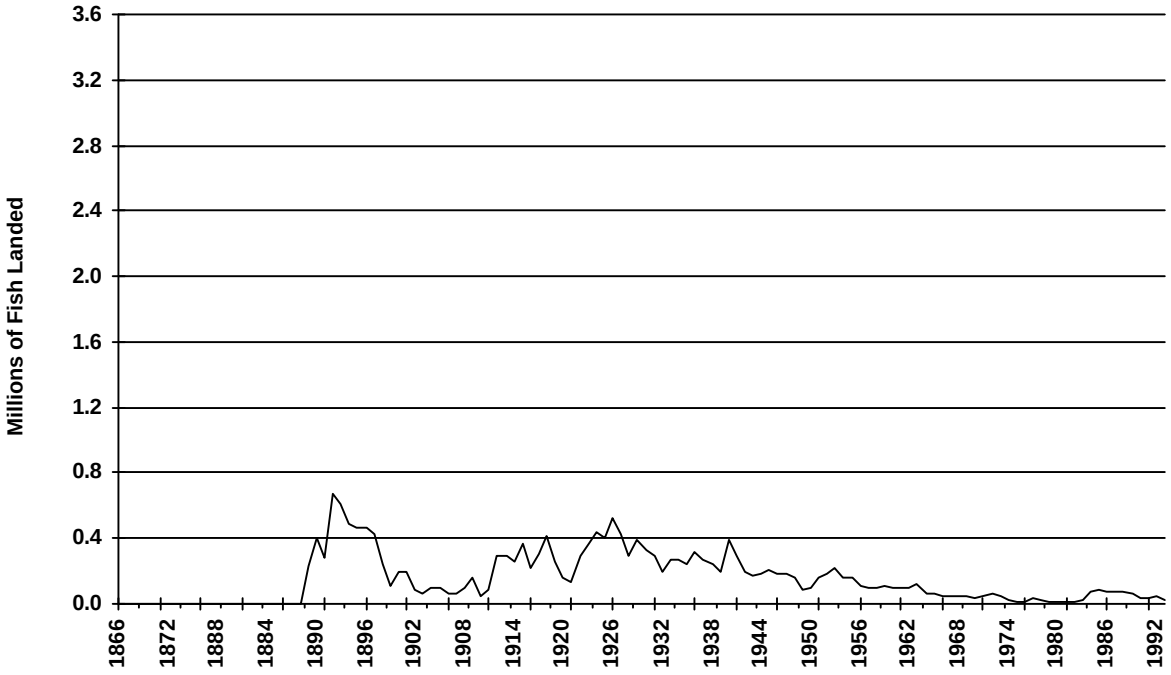


Figure 2f
Steelhead



Appendix 2.C

Estimated Historical Columbia River Pounds Landed

Figure 3a
Total Salmon and Steelhead

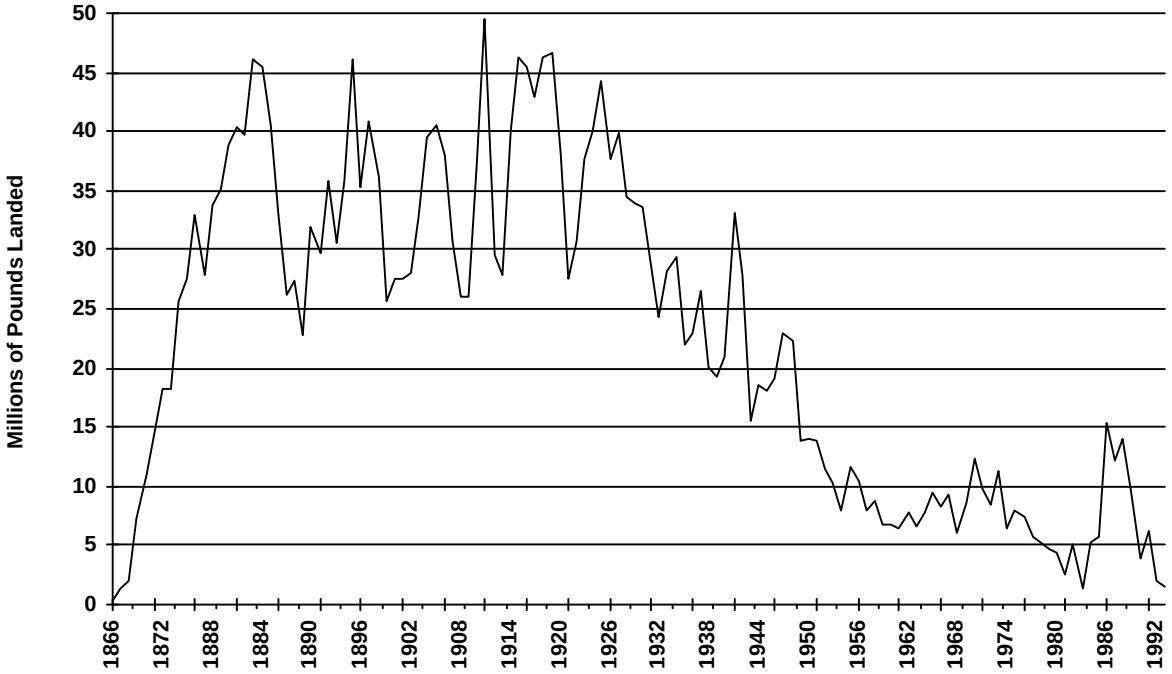
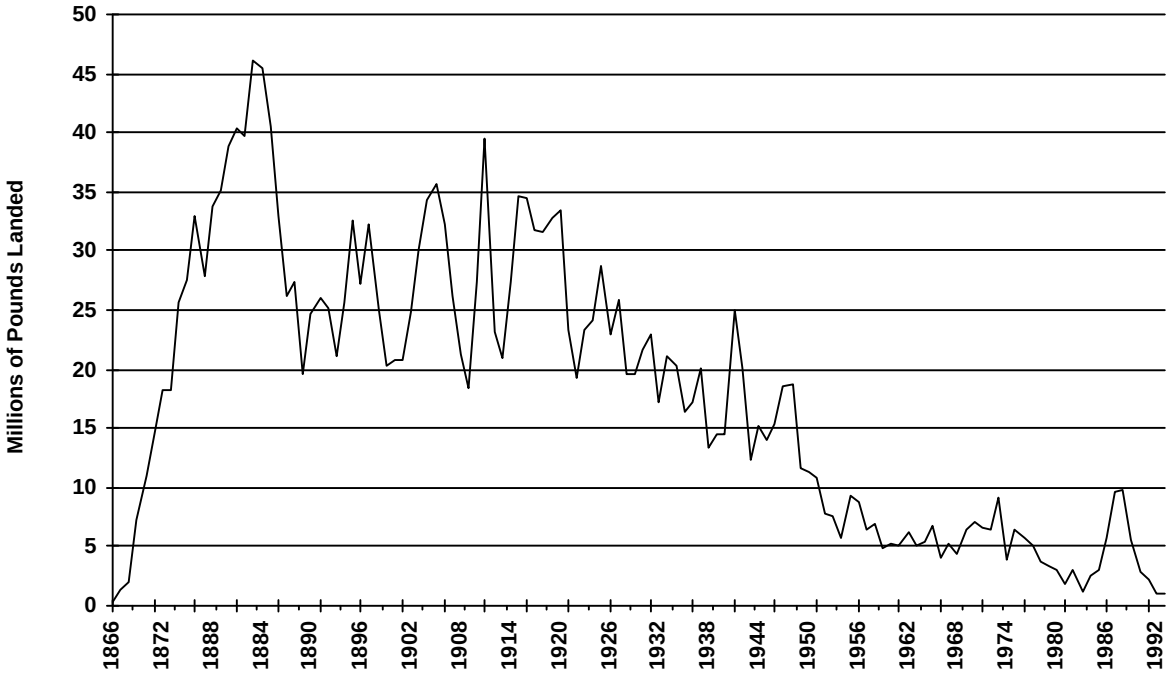


Figure 3b
Chinook



Appendix 2.C

Estimated Historical Columbia River Pounds Landed

Figure 3c
Coho

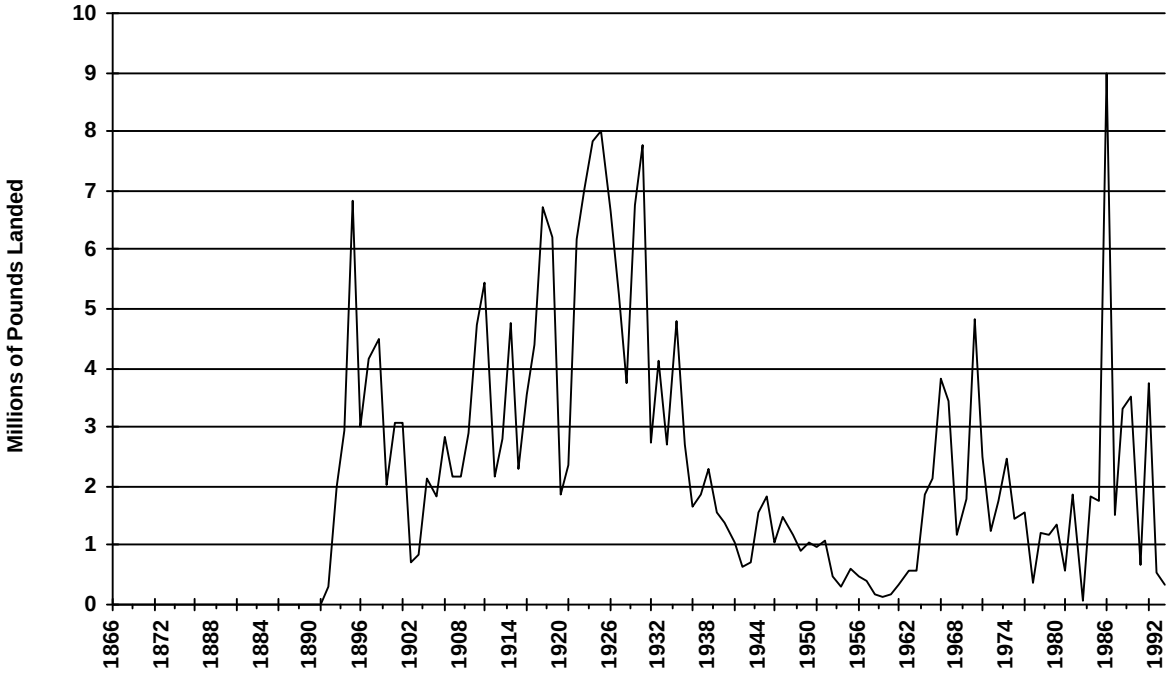
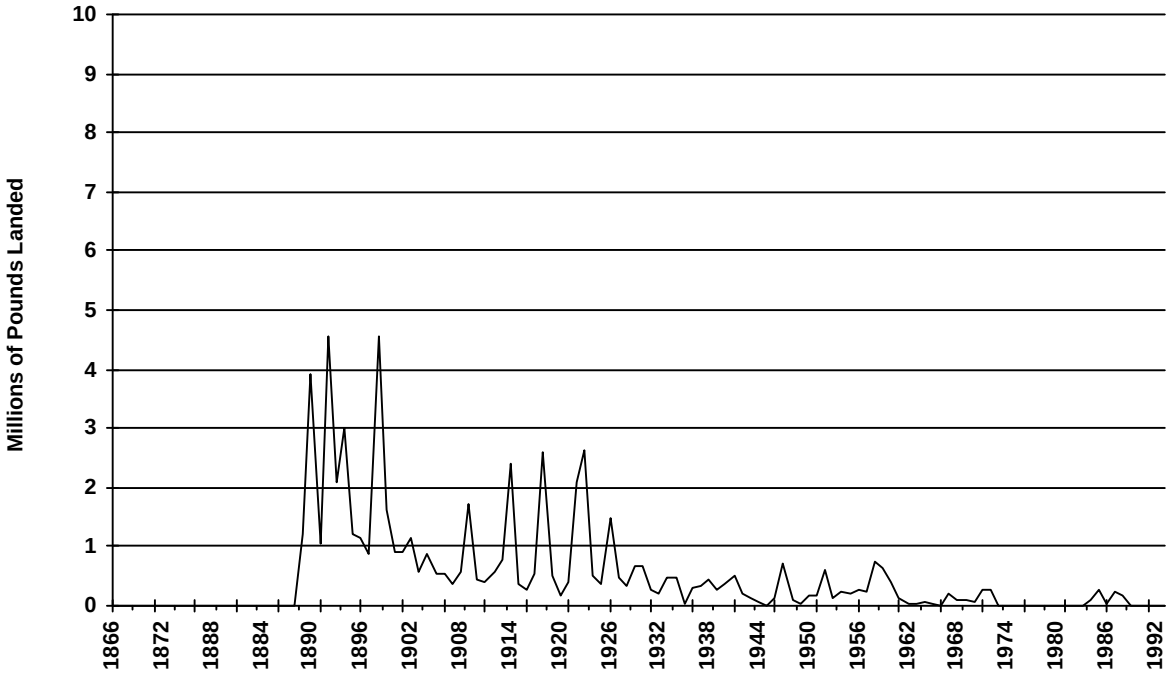


Figure 3d
Sockeye



Appendix 2.C

Estimated Historical Columbia River Pounds Landed

Figure 3e
Chum

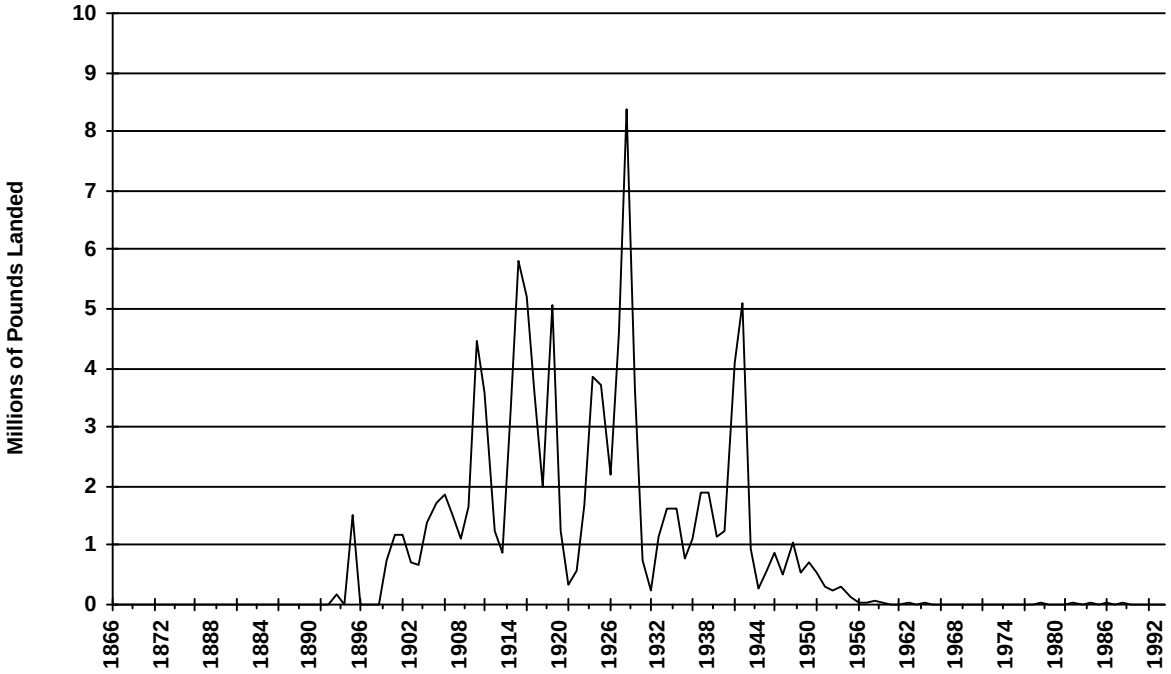
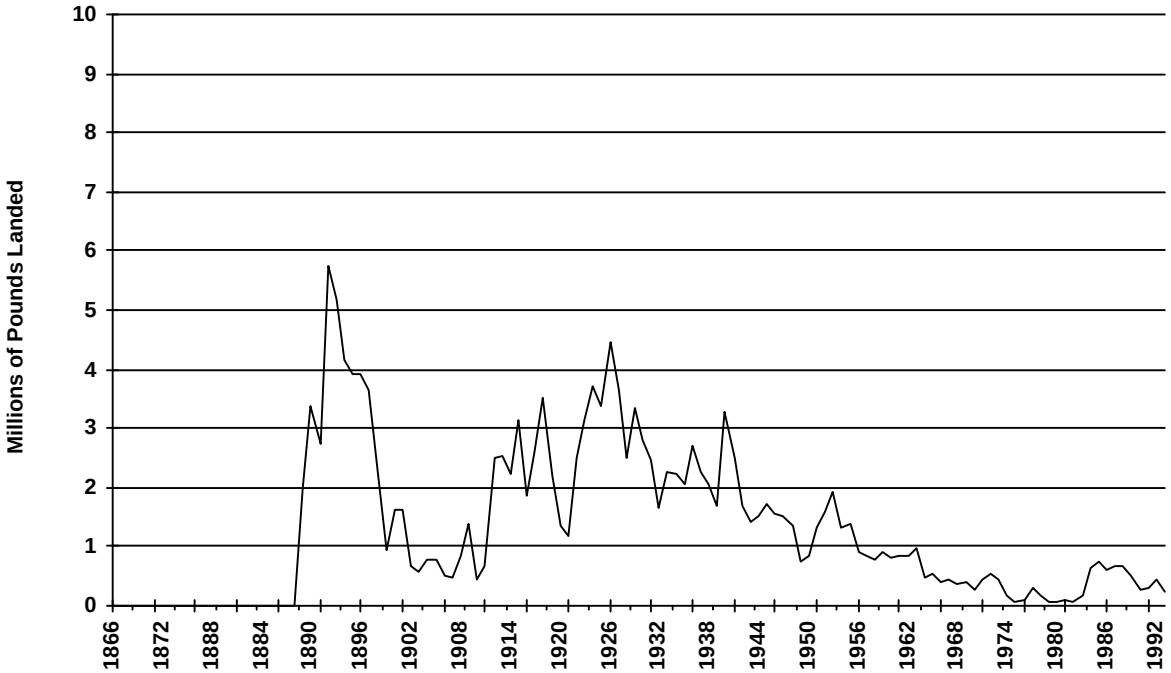


Figure 3f
Steelhead



Appendix 2.C

Estimated Historical Columbia River Landed Ex-Vessel Values

Figure 4a
Total Salmon and Steelhead

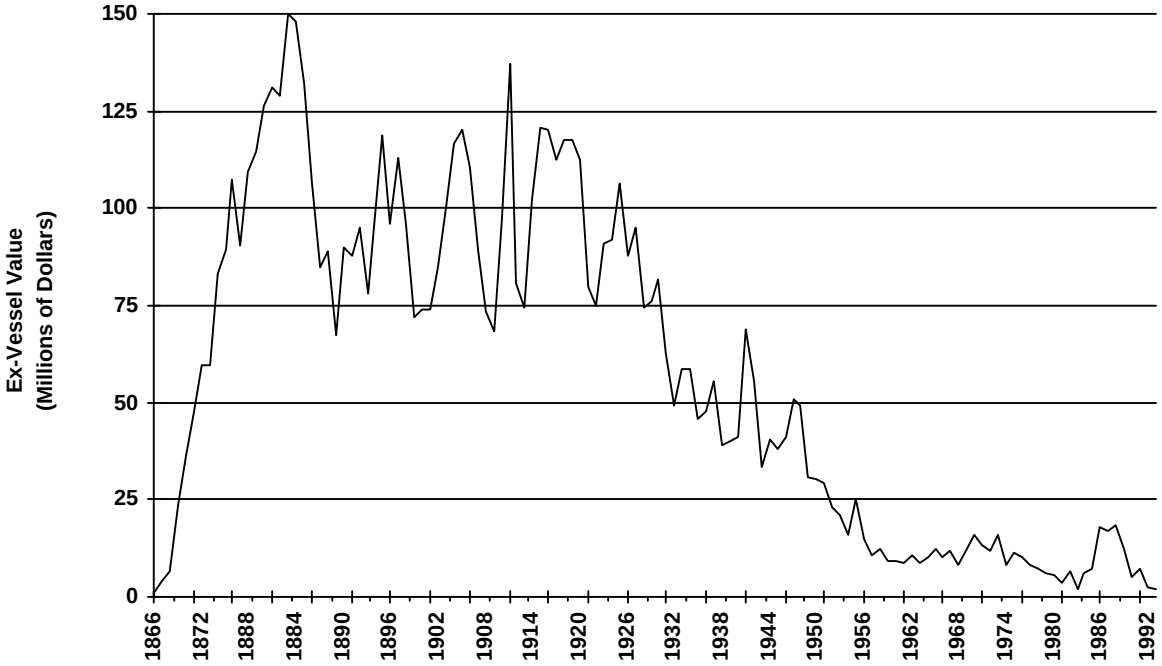
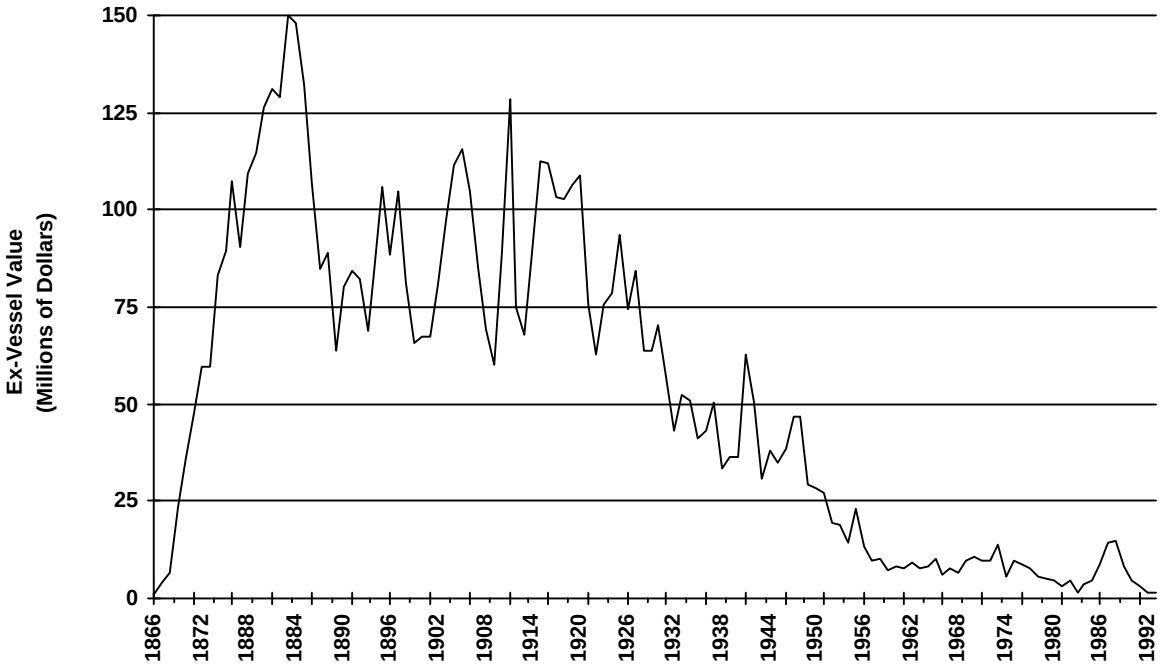


Figure 4b
Chinook



Appendix 2.C

Estimated Historical Columbia River Landed Ex-Vessel Values

Figure 4c
Coho

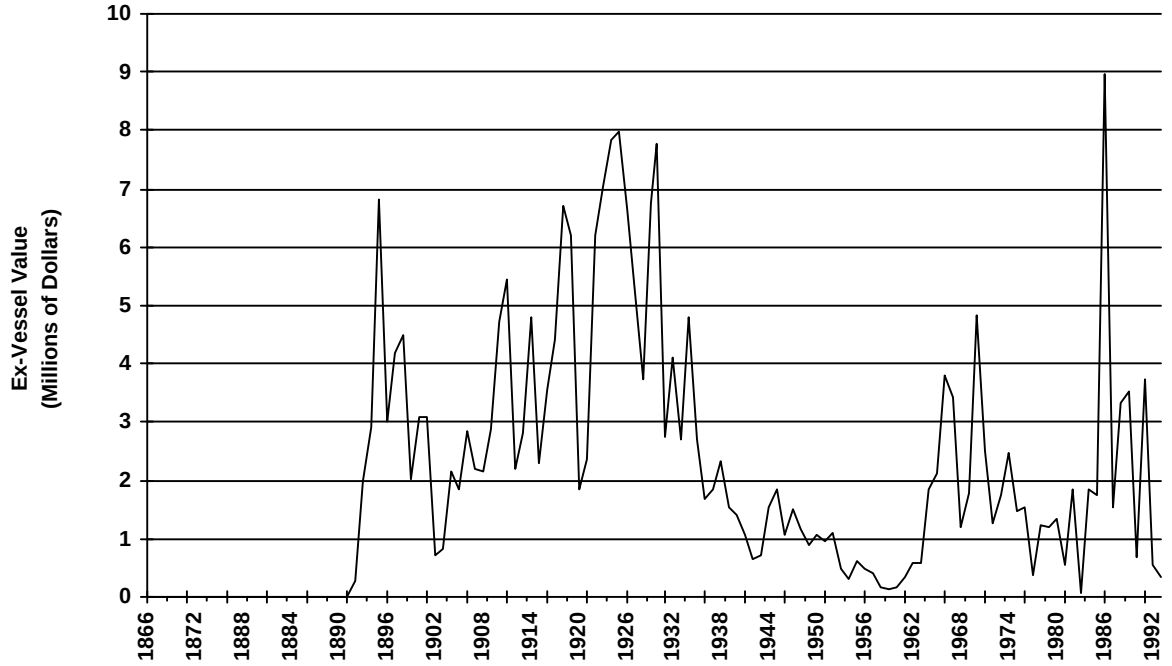
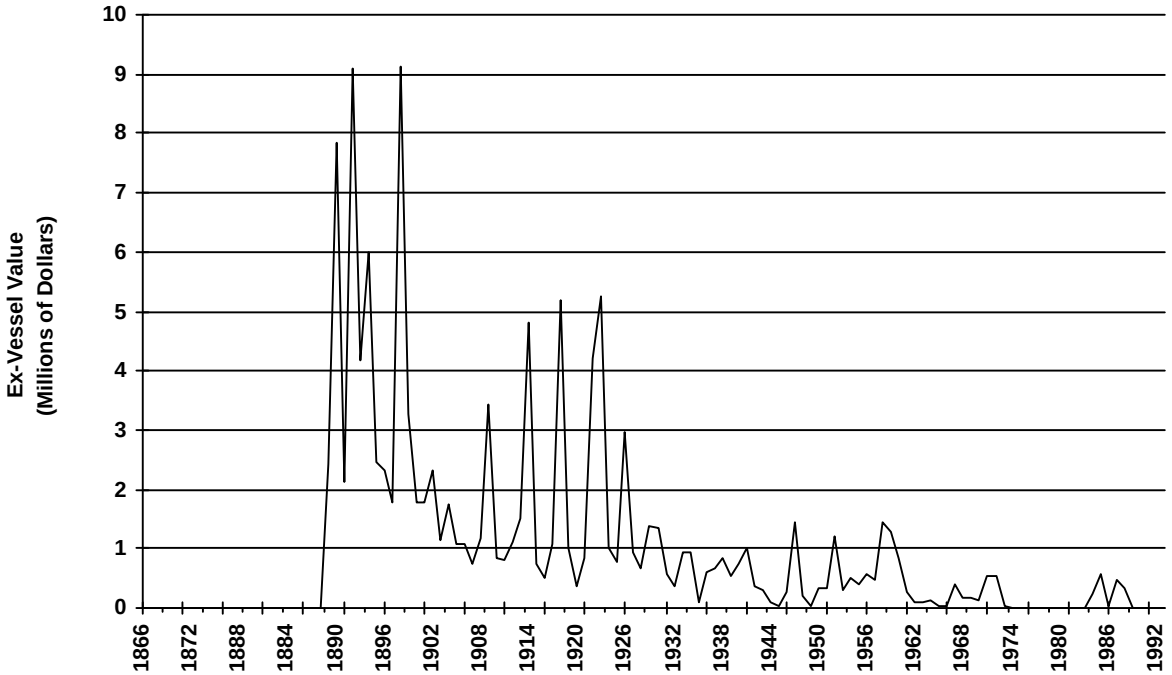


Figure 4d
Sockeye



Appendix 2.C

Estimated Historical Columbia River Landed Ex-Vessel Values

Figure 4e
Chum

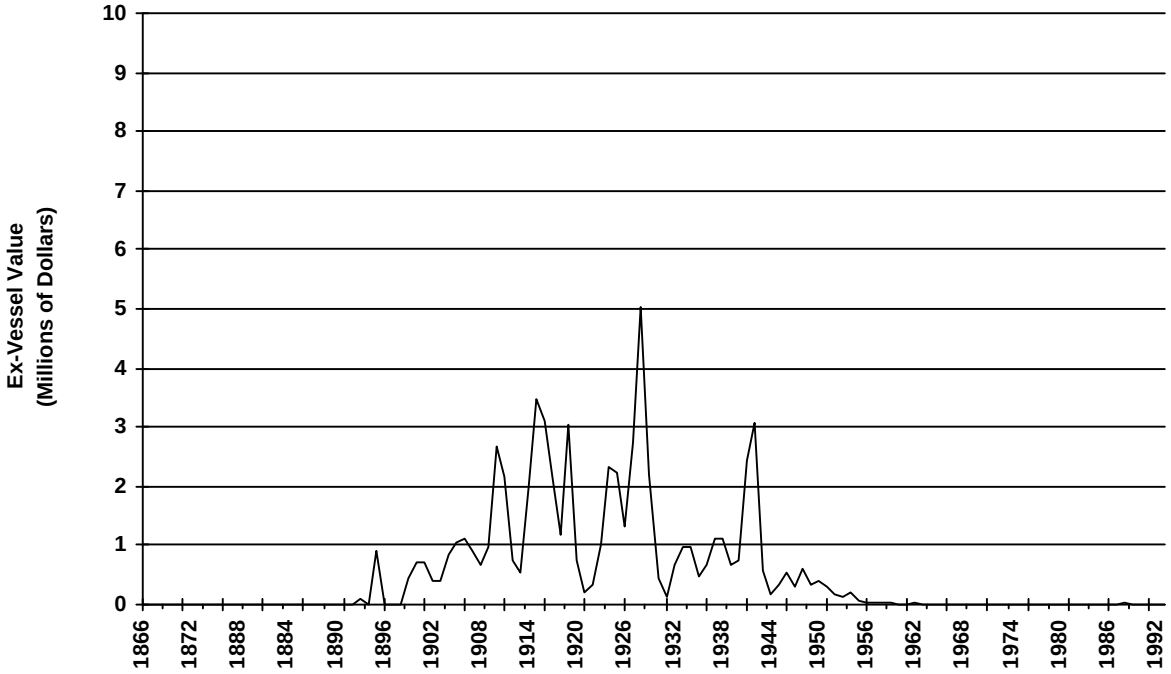
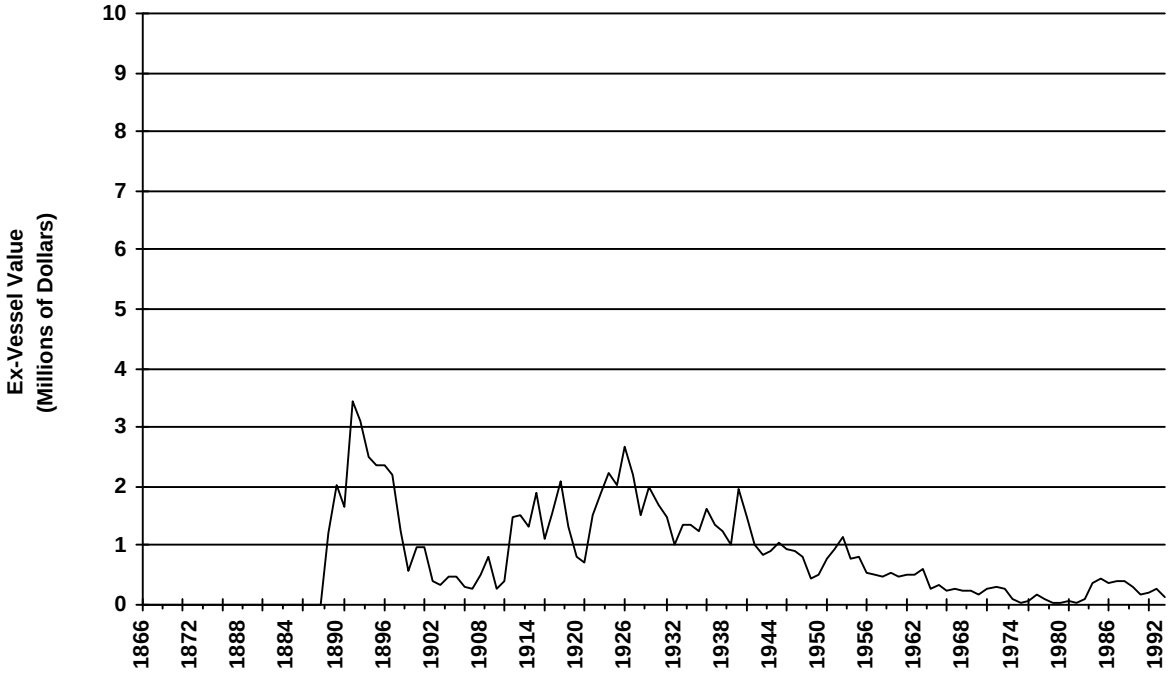


Figure 4f
Steelhead



Appendix 2.C

Figure 5a
Historical Columbia River Estimated State Income Impact

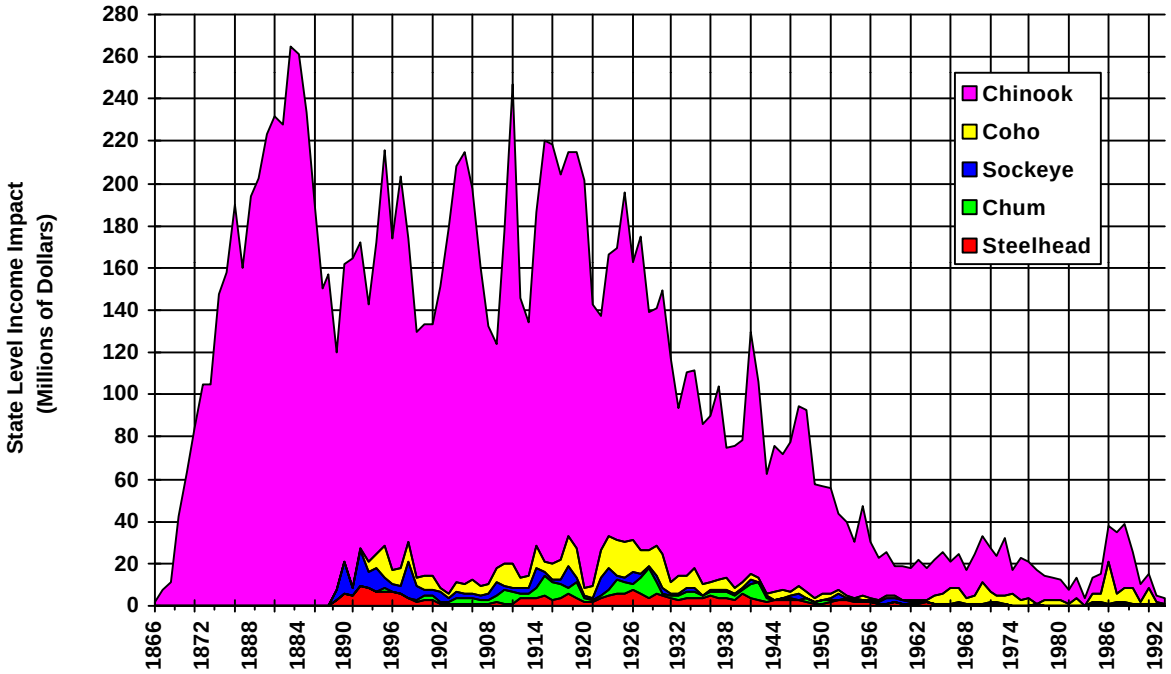
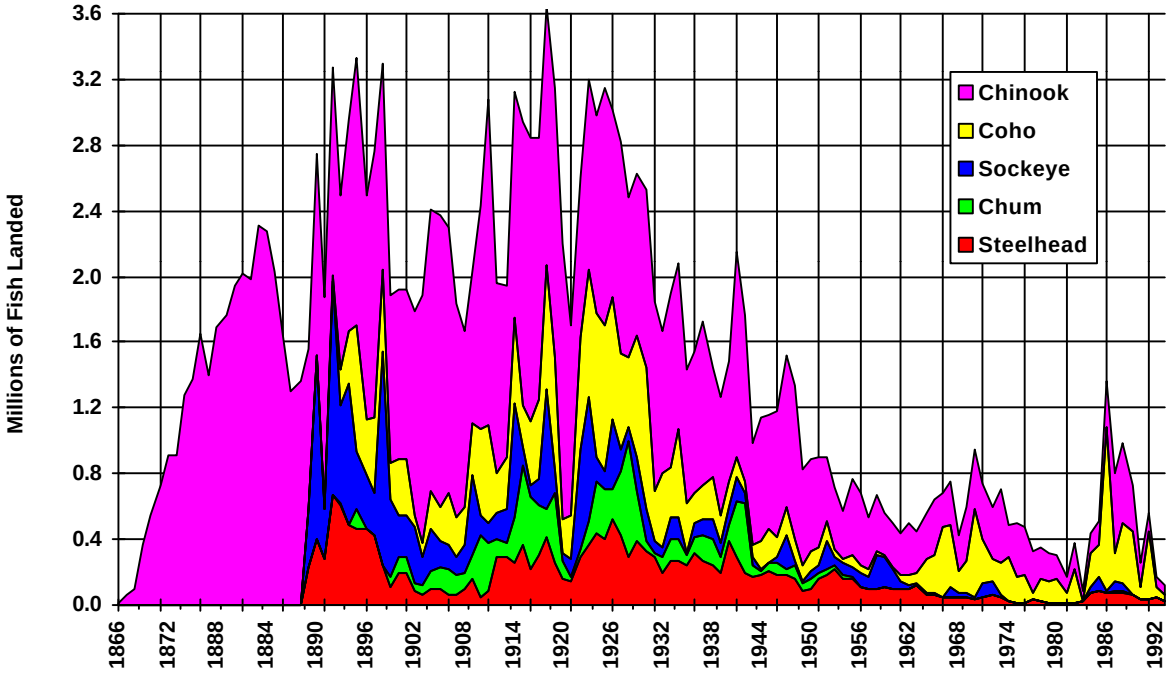


Figure 5b
Historical Columbia River Fish Landed



Appendix 2.C

Figure 5c
Estimated Historical Columbia River Pounds Landed

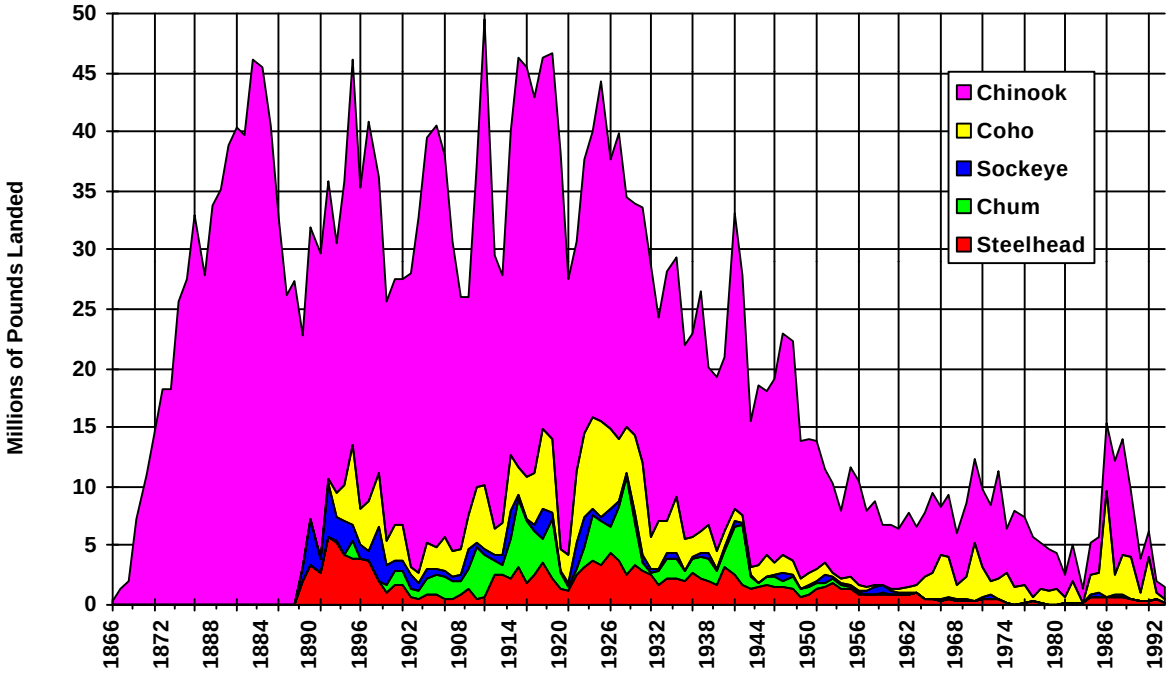
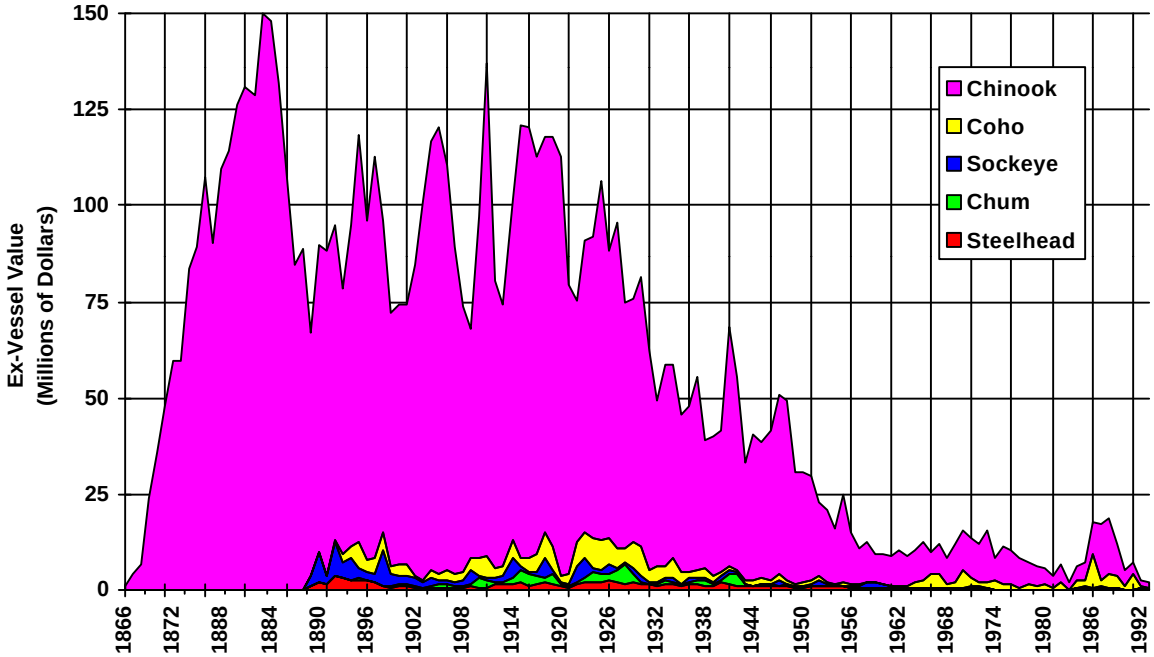


Figure 5d
Estimated Historical Columbia River Landed Ex-Vessel Values



APPENDIX 2.D

Correspondence From Donald McKernon, Director of Research, Fish Commission of Oregon

FISHERIES PROBLEMS ARISING FROM THE
CONSTRUCTION OF ICE HARBOR DAM

I have been asked by the fisheries industry and governmental agencies to present the technical difficulties involved in maintaining the large portion of the Columbia River salmon resources produced in the Snake River if Ice Harbor and the other three lower Snake River dams are constructed at the present time.

It would be repetitious and somewhat irrelevant to review in detail our studies and methods used in arriving at the basis of our objections. I am prepared to answer any questions regarding the justification for the conclusions given.

Estimates by the Fish and Wildlife Service and included in the Corps of Engineers' 308 Report, in addition to studies by our own organization, indicate that the Columbia River fisheries are producing close to 20 millions of dollars annually of new wealth to the states joining the Columbia River.

Using data collected by our research staff it has been possible to estimate that about 135,000 fall and spring chinook salmon spawn in the Snake River and its tributaries each year; 2,000 silver salmon, and 65,000 steelhead trout. From these some 200,000 adults approximately 12,000,000 pounds of fish are landed annually, valued at approximately nine millions of dollars.

The problems of maintaining the salmon runs of the Snake River in the face of the construction of Ice Harbor Dam are peculiar to the life history of the salmon runs propagating in the upper reaches of the Snake River and its tributaries.

These up-river races of salmon are in prime condition when returning to fresh water from the sea in the spring, summer, and early fall. Salmon and steelhead do not feed after entering fresh water and thus the fish destined to spawn in the Snake River and its tributaries must contain large quantities of stored energy in the way of protein and fats in order to survive the migration upstream. This year the price differential to the fishermen between upriver and lower river fish is as great as 2½ times (.08 - .20 this year).

After spawning the adult salmon die, but many of the steelhead survive and migrate back downstream to the ocean to add greater weight on return in one or two more years.

The young fish of these races stay in the streams varying lengths of time, from four months after hatching to about two years in the case of the steelhead. Migrating downstream, mainly at night in all areas and depths of the river, they are particularly susceptible to loss from major obstructions in the river. The length of life of the salmon varies from three years in the case of the silver salmon to four, five, six, and seven years in the case of the chinook.

It is obvious, then, that the problems we face in maintaining the salmon runs of the Snake River (with the construction of Ice Harbor Dam) are problems of passing the adult salmon up over the dam; the young back down; and overcoming the loss of spawning area in the Snake River.

The problem of the adult salmon is believed to be the least serious, although no adequate solution has been found yet. Delays, injuries and significant losses of adult salmon do occur at Bonneville Dam although they have not been quantitatively measured as of this date. The maximum climb which salmon can make has not been established, but it is reasonable to expect that devices can be built after study which will efficiently

collect and pass adult salmon over dams of any height contemplated on the Columbia River.

One serious problem not yet solved is the passage and handling of salmon over dams under construction and before the permanent fish facilities are constructed. Ofttimes the river conditions below the dam are temporarily worsened and are even unfit for fish life. Witness twice this year, in two different Columbia River tributaries, the Detroit Project on the North Santiam and at McNary Dam on the main Columbia, serious losses and delays to the salmon runs have occurred. Similar problems have arisen at all other major projects, including Bonneville.

The young fingerling migrating downstream pose a far more serious problem. No device has yet been perfected which helps in any way to pass the young fish down over major dams. Mechanical screens have been successful at small projects where the water flow is less than 2,000 c.f.s., but the problem has only recently been considered possible of solution and no work has been done.

Consider for a moment the immediate construction of Ice Harbor and the other three Snake River Dams. Knowing from experiments that at Bonneville the loss of fingerlings at the dam is approximately 15 percent and applying only this loss to the four Snake River Dams, McNary, and Bonneville Dam, 62 percent of the run would be lost before it ever reached salt water. But, because these dams are from 50 to 60 percent higher than Bonneville, it is not unreasonable to assume that loss would be closer to 25 percent than 15. Thus, with only these four constructed, plus McNary and Bonneville in the main river below, the loss of the run would be 80 percent. Obviously, little more need be said. Some losses of adults will occur at these dams without better facilities than we know

now how to construct. If only a five percent loss were to occur to the adults, the combined losses obviously would eradicate the run.

Consideration must further be given to the loss of spawning area, although if the other two problems are solved, it is not considered to be insurmountable. The exact magnitude of spawning in the area of the Lower Snake River Dams is not known because of the turbidity of the water. Attempts are being made to increase our knowledge of this problem at the present time.

If with present knowledge it is felt that the runs cannot be maintained past these dams, the question arises, would hatcheries suffice? A few statistics will answer this question. Between one-half and one billion salmon and steelhead eggs are deposited in the Snake River drainage each year. Our problem would be a hatchery or hatcheries capable of spawning, hatching, and rearing this colossal number of fingerling, some as much as two years before liberation. All the hatcheries on the Columbia now handle far less than 100 million eggs. The present hatchery capacity on the Columbia River being a little greater than ten percent of that needed to handle the Snake River runs. The size alone precludes any chance of success under present methods of operation. Further the races involved are among the most difficult to rear in a hatchery.

The C.B.I.A.C. Task Force Sub-Committee on an accelerated program reported on September 13, 1950 that there was a speedup schedule which would provide 1,053,000 average kilowatts of energy by June 1955 without the construction of projects upon which there was objection. Of the total possible kilowatts, 2,823,000 peaking capacity, which could be produced by speedup scheduling by June 1955, only about 250,000 kilowatts

are involved at Ice Harbor Dam. Of the some 36 projects considered, only four projects were objected to by the fisheries interests. Six projects contained objections by other interests. It is hoped that the plans for this speedup are implemented as rapidly as possible.

All data available at the present indicates that Ice Harbor and the four lower Snake River Dams must be delayed until such time that methods are known by which the anadromous fish runs inhabiting the Snake River system can be successfully maintained with a minimum of loss from such construction.

The speedup program, drawn up by a subcommittee of the C.R.I.A.C. promises to materially assist in alleviating the shortages of power without the construction of those projects over which there are major controversies.

Donald L. McKernan
Director of Research
Fish Commission of Oregon

September 24, 1951

APPENDIX 2.E

Columbia River Basin Hatchery Releases and Survival Rates

Key	Hatchery	Release site	Basin	Date	Species	Race	Stock	ESA Listing	Number	Size, fpp	Lifestage	Notes
1	Abernathy	Abernathy Cr.	Columbia Lower	3/11/96	Chinook	Fall-Tule	Tule	Non-listed	567,000	80	smolt	
2	Abernathy	Abernathy Cr.	Columbia Lower	4/15/96	Chinook	Fall-Tule	Tule	Non-listed	283,500	44	smolt	
3	Abernathy	Abernathy Cr.	Columbia Lower	5/13/96	Chinook	Fall-Tule	Tule	Non-listed	283,500	17	smolt	
4	Carson	Wind R.	Columbia Middl	4/15/96	Chinook	Spring	Carson	Non-listed	1,738,000	18	smolt	
5	Dworshak-USFWS	Clearwater R.	Snake	4/15/96	Chinook	Spring	Dworshak	Non-listed	100,000	16	smolt	
6	Dworshak-COE	Clearwater-Kamia	Snake	4/15/96	Steelhead	Summer	Dworshak-B	Non-listed	150,000	6	smolt	
7	Dworshak-COE	Clearwater-South	Snake	4/15/96	Steelhead	Summer	Dworshak-B	Non-listed	600,000	6	smolt	
8	Dworshak-COE	Clearwater-Clear C	Snake	4/15/96	Steelhead	Summer	Dworshak-B	Non-listed	350,000	7	smolt	
9	Dworshak-COE	Clearwater- R.	Snake	4/22/96	Steelhead	Summer	Dworshak-B	Non-listed	1,200,000	7	smolt	
10	Eagle Creek	Eagle Cr.	Willamette	3/14/96	Steelhead	Winter	Eagle Creek	Non-listed	175,000	5	smolt	
11	Eagle Creek	Eagle Cr.	Willamette	3/15/96	Coho		Eagle Creek	Non-listed	1,000,000	11	smolt	
12	Entiat	Entiat R.	Columbia Upper	4/1/96	Chinook	Spring	Entiat	Non-listed	340,000	14	smolt	
13	Hagerman	Salmon R.-Sawtoo	Snake	4/1/96	Steelhead	Summer	Hagerman	Non-listed	60,000	5	smolt	
14	Hagerman	L. Salmon R.	Snake	4/8/96	Steelhead	Summer	Hagerman	Non-listed	528,000	5	smolt	
15	Kooskia	Clearwater-Clear C	Snake	4/16/96	Chinook	Spring	Kooskia	Non-listed	330,000	20	smolt	
16	Leavenworth	Icicle Creek	Columbia Upper	4/18/96	Chinook	Spring	Leavenworth	Non-listed	1,690,000	16	smolt	
17	Little White Salmo	L.W. Salmon R.	Columbia Middl	4/16/96	Chinook	Spring	L.W. Salmon	Non-listed	2,800,000	15	smolt	
18	Little White Salmo	L.W. Salmon R.	Columbia Middl	6/27/96	Chinook	Fall-URB	URB	Non-listed	2,000,000	90	smolt	
19	Spring Creek	Columbia R.	Columbia Middl	3/14/96	Chinook	Fall-Tule	Tule	Non-listed	7,700,000	110	fingerling	
20	Spring Creek	Columbia R.	Columbia Middl	4/18/96	Chinook	Fall-Tule	Tule	Non-listed	4,300,000	60	smolt	
21	Spring Creek	Columbia R.	Columbia Middl	5/16/96	Chinook	Fall-Tule	Tule	Non-listed	3,600,000	35	smolt	
22	Warm Springs	Warm Springs R.	Columbia Middl	4/1/96	Chinook	Spring	Deschutes	Non-listed	490,000	19	smolt	
23	Warm Springs	Warm Springs R.	Columbia Middl	10/4/96	Coho	Spring	Deschutes	Non-listed	16,000	9	smolt	
24	Willard	L.W. Salmon R.	Columbia Middl	4/16/96	Coho		L.W. Salmon	Non-listed	544,000	15	smolt	
25	Winthrop	Methow R.	Columbia Upper	4/11/96	Chinook	Spring	Methow R.	Non-listed	156,000	12	smolt	
26	Winthrop	Methow R.	Columbia Upper	5/2/96	Steelhead	Summer	Methow R.	Non-listed	140,000	7	smolt	
27	Rapid River	Rapid R.	Snake	3/15/96	Chinook	Spring	Rapid River	Non-listed	440,000	18	smolt	
28	Rapid River	Snake R.-Hells Ca	Snake	4/15/96	Chinook	Spring	Rapid R.	Non-listed	67,000	18	smolt	raised at Clearwat
29	Niagara Springs	Pahsimeroi R.	Snake	4/1/96	Steelhead	Summer	Pahsimeroi-A	Non-listed	830,000	5	smolt	
30	Niagara Springs	Snake R.-Hells Ca	Snake	4/1/96	Steelhead	Summer	Hells Canyon	Non-listed	630,000	5	smolt	
31	Niagara Springs	Salmon R.-WarmS	Snake	4/1/96	Steelhead	Summer	Pahsimeroi-A	Non-listed	180,000	5	smolt	
32	Niagara Springs	Salmon R.-Hamme	Snake	4/1/96	Steelhead	Summer	Pahsimeroi-A	Non-listed	150,000	5	smolt	
33	Niagara Springs	Salmon R.-PineBar	Snake	4/1/96	Steelhead	Summer	Pahsimeroi-A	Non-listed	30,000	5	smolt	
34	Pahsimeroi	Pahsimeroi R.	Snake	4/1/96	Chinook	Summer	Pahsimeroi	Listed	0	15	smolt	No releases in 199
35	Cassimer Bar	Lake Osoyoos	Columbia Upper	6/1/96	Sockeye		Okanogan	Non-listed	175,000	25	smolt	
36	Hagerman	Pahsimeroi R.	Snake	3/15/96	Steelhead	Summer	Pahsimeroi	Non-listed	21,000	5	smolt	
37	Lookingglass	Lookingglass Cr.	Snake	4/15/96	Chinook	Spring	Rapid River	Non-listed	140,000	20	smolt	
38	Lookingglass	Imnaha R.	Snake	4/15/96	Chinook	Spring	Imnaha	Listed	92,000	20	smolt	
39	Lyons Ferry	Tucannon R.	Snake	4/1/96	Chinook	Spring	Tucannon	Listed	130,224	15	smolt	
40	Lyons Ferry	Snake R.-LFFH	Snake	4/1/96	Chinook	Fall	Lyons Ferry	Non-listed	418,134	14	yearling smolt	Eggbank program
41	Lyons Ferry	Snake R.-PL	Snake	4/1/96	Chinook	Fall	Lyons Ferry	Non-listed	115,000	14	yearling smolt	Pittsburg Landing
42	Clearwater	Powell R.	Snake	4/15/96	Chinook	Spring	Powell R.	Non-listed	237,000	20	smolt	
43	Clearwater	Crooked R.	Snake	4/15/96	Chinook	Spring	Crooked R.	Non-listed	37,000	20	smolt	
44	Clearwater	Red R.	Snake	4/15/96	Chinook	Spring	Red R.	Non-listed	24,000	20	smolt	
45	McCall	S.F. Salmon R.	Snake	4/15/96	Chinook	Summer	S.F. Salmon	Listed	235,000	20	smolt	
46	McCall	S.F. Salmon R.	Snake	4/15/96	Chinook	Summer	S.F. Salmon	Non-listed	345,000	20	smolt	
47	Sawtooth	Salmon R.	Snake	4/15/96	Chinook	Spring	Sawtooth	Listed	25,000	20	smolt	
48	Tucannon	Tucannon R.	Snake	4/15/96	Rainbow	Resident	Spokane	Non-listed	5,000	3	catchable	
49	Tucannon	Asotin Cr.	Snake	5/15/96	Rainbow	Resident	Spokane	Non-listed	4,000	3	catchable	
50	Lyons Ferry	Clearwater/Salmo	Snake	10/1/96	Rainbow	Resident	Spokane	Non-listed	55,000	15	fingerling	
51	Sawtooth	Salmon R.	Snake	4/15/96	Steelhead	Summer	Salmon R.	Non-listed	760,000	5	smolt	

Key	Hatchery	Release site	Basin	Date	Species	Race	Stock	ESA Listing	Number	Size, fpp	Lifestage	Notes
52	Magic Valley	L. Salmon R.	Snake	4/15/96	Steelhead	Summer	Dworshak	Non-listed	442,000	5	smolt	
53	Magic Valley	N.F. Salmon R.	Snake	4/15/96	Steelhead	Summer	Pahsimeroi	Non-listed	120,000	5	smolt	
54	Magic Valley	Lemhi R.	Snake	4/15/96	Steelhead	Summer	Pahsimeroi	Non-listed	203,000	5	smolt	
55	Magic Valley	McNabb	Snake	4/15/96	Steelhead	Summer	Pahsimeroi	Non-listed	210,000	5	smolt	
56	Magic Valley	Bruno	Snake	4/15/96	Steelhead	Summer	Pahsimeroi	Non-listed	206,000	5	smolt	
57	Magic Valley	E.F. Salmon R.	Snake	4/15/96	Steelhead	Summer	Dworshak	Non-listed	460,000	5	smolt	
58	Magic Valley	Slate Cr.	Snake	4/15/96	Steelhead	Summer	Dworshak	Non-listed	232,000	5	smolt	
59	Clearwater	Clear Cr.	Snake	4/15/96	Steelhead	Summer	Dworshak	Non-listed	300,000	6	smolt	
60	Clearwater	Clearwater R.	Snake	4/15/96	Steelhead	Summer	Dworshak	Non-listed	485,500	6	smolt	multiple sites w/in
61	Irrigon	L. Sheep Cr.	Snake	4/15/96	Steelhead	Summer	Imnaha	Non-listed	326,000	5	smolt	
62	Irrigon	Spring Cr.	Snake	4/15/96	Steelhead	Summer	Wallowa	Non-listed	516,000	5	smolt	
63	Irrigon	Deer Cr.	Snake	4/15/96	Steelhead	Summer	Wallowa	Non-listed	270,000	5	smolt	
64	Irrigon	Grande Ronde R.	Snake	4/15/96	Steelhead	Summer	Wallowa	Non-listed	262,500	5	smolt	
65	Irrigon	Deer Cr.	Snake	5/15/96	Steelhead	Summer	Wallowa	Non-listed	150,000	5	smolt	
66	Irrigon	Spring Cr.	Snake	5/15/96	Steelhead	Summer	Wallowa	Non-listed	162,500	5	smolt	
67	Lyons Ferry	Tucannon R.	Snake	4/15/96	Steelhead	Summer	Lyons Ferry	Non-listed	175,000	5	smolt	
68	Lyons Ferry	Dayton Pond	Snake	4/15/96	Steelhead	Summer	Lyons Ferry	Non-listed	120,000	5	smolt	
69	Lyons Ferry	Walla Walla R.	Snake	4/15/96	Steelhead	Summer	Lyons Ferry	Non-listed	175,000	5	smolt	
70	Lyons Ferry	Snake R.-LFFH	Snake	4/15/96	Steelhead	Summer	Lyons Ferry	Non-listed	60,000	5	smolt	
71	Lyons Ferry	Snake R.-Asotin	Snake	4/15/96	Steelhead	Summer	Lyons Ferry	Non-listed	83,000	5	smolt	
72	Lyons Ferry	Cottonwood Cr.	Snake	4/15/96	Steelhead	Summer	Wallowa	Non-listed	240,000	6	smolt	
73	Lyons Ferry	Grande Ronde R.	Snake	4/15/96	Steelhead	Summer	Wallowa	Non-listed	35,000	6	smolt	
74	Beaver Creek	Beaver Creek	Columbia Lower	4/1/96	Chinook	Fall-Tule	Tule	Non-listed	1,200,000	100	smolt	transfer from Big
75	Beaver Creek	Beaver Creek	Columbia Lower	5/1/96	Cutthroat	Sea-run	Beaver Creek	Non-listed	32,800	4	smolt	
76	Beaver Creek	Beaver Creek	Columbia Lower	5/1/96	Steelhead	Summer	Beaver Creek	Non-listed	25,900	6	smolt	
77	Beaver Creek	Beaver Creek	Columbia Lower	5/1/96	Steelhead	Winter	Beaver Creek	Non-listed	101,000	6	smolt	
78	Elokomin	Elokomin	Columbia Lower	6/1/96	Chinook	Fall-Tule	Tule	Non-listed	2,904,000	80	smolt	
79	Elokomin	Elokomin	Columbia Lower	4/1/96	Coho	Type-N	Type-N	Non-listed	1,232,000	17	smolt	
80	Elokomin	Elokomin	Columbia Lower	5/1/96	Coho	Type-S	Type-S	Non-listed	468,400	17	smolt	
81	Lower Kalama	Lower Kalama	Columbia Lower	6/1/96	Chinook	Fall-Tule	Tule	Non-listed	2,100,000	80	smolt	
82	Lower Kalama	Lower Kalama	Columbia Lower	5/1/96	Coho	Type-S	Type-S	Non-listed	549,000	17	smolt	
83	Lower Kalama	Lower Kalama	Columbia Lower	4/1/96	Chinook	Spring	Lower Kalam	Non-listed	436,000	7	smolt	
84	Grays River	Grays River	Columbia Lower	4/1/96	Chinook	Fall-Tule	Tule	Non-listed	1,200,000	75	smolt	
85	Grays River	Grays River	Columbia Lower	4/1/96	Coho	Type-S	Type-S	Non-listed	355,000	15	smolt	
86	Grays River	Grays River	Columbia Lower	5/1/96	Steelhead	Summer	Skamania	Non-listed	162,000	6	smolt	
87	Grays River	Grays River	Columbia Lower	5/1/96	Steelhead	Winter	Grays River	Non-listed	191,200	9	smolt	
88	Kalama Falls	Kalama Falls	Columbia Lower	6/1/96	Chinook	Fall-Tule	Tule	Non-listed	3,500,000	80	smolt	
89	Kalama Falls	Kalama Falls	Columbia Lower	6/1/96	Coho	Type-N	Type-N	Non-listed	880,000	17	smolt	
90	Klickitat	Klickitat	Columbia Lower	4/1/96	Chinook	Fall-Tule	Tule	Non-listed	4,200,000	80	smolt	
91	Klickitat	Klickitat	Columbia Lower	5/1/96	Coho	Type-N	Type-N	Non-listed	1,400,000	20	smolt	
92	Klickitat	Klickitat	Columbia Lower	4/1/96	Chinook	Spring	Klickitat	Non-listed	610,000	10	smolt	
93	Klickitat	Klickitat	Columbia Lowe	6/1/96	Chinook	Spring	Klickitat	Non-listed	190,000	50	smolt	
94	Lewis River-NMFS	Lewis River	Columbia Lower	5/1/96	Coho	Type-N	Type-N	Non-listed	1,000,000	16	smolt	
95	Lewis River-NMFS	Lewis River	Columbia Lower	5/1/96	Coho	Type-N	Type-N	Non-listed	1,300,000	16	smolt	
96	Toutle	Toutle	Columbia Lower	6/1/96	Chinook	Fall-Tule	Tule	Non-listed	2,500,000	80	smolt	
97	Toutle	Toutle	Columbia Lower	5/1/96	Coho	Type-S	Type-S	Non-listed	1,000,000	17	smolt	
98	Ringold	Ringold	Columbia Upper	4/1/96	Chinook	Spring	Ringold	Non-listed	1,120,000	7	smolt	
99	Ringold	Ringold	Columbia Upper	5/1/96	Steelhead	Summer	Ringold	Non-listed	185,000	6	smolt	
100	Skamania	Skamania	Columbia Lower	5/1/96	Cutthroat	Sea-Run	Skamania	Non-listed	50,163	4	smolt	
101	Skamania	Skamania	Columbia Lower	5/1/96	Steelhead	Summer	Skamania	Non-listed	274,163	6	smolt	
102	Skamania	Skamania	Columbia Lower	5/1/96	Steelhead	Winter	Skamania	Non-listed	227,842	6	smolt	

Key	Hatchery	Release site	Basin	Date	Species	Race	Stock	ESA Listing	Number	Size, fpp	Lifestage	Notes
103	Vancouver	Vancouver	Columbia Lower	5/1/96	Steelhead	Summer	Skamania	Non-listed	145,000	6	smolt	
104	Washougal	Washougal	Columbia Lower	7/1/96	Chinook	Fall-Tule	Tule	Non-listed	500,000	80	smolt	
105	Washougal	Washougal	Columbia Lower	7/1/96	Chinook	Fall-Tule	Tule	Non-listed	5,652,687	80	smolt	
106	Washougal	Washougal	Columbia Lower	4/1/96	Coho	Type-N	Type-N	Non-listed	330,186	500	fry	
107	Washougal	Washougal	Columbia Lower	5/1/96	Coho	Type-N	Type-N	Non-listed	500,000	17	smolt	
108	Washougal	Washougal	Columbia Lower	4/1/96	Coho	Type-N	Type-N	Non-listed	2,333,783	20	smolt	
109	Eagle-captive broo	Redfish Lake	Snake	7/1/96	Sockeye	Captive bro	Redfish Lake-	Listed	1,400	25	fingerling	BY95 residual-origi
110	Eagle-captive broo	Redfish Lake	Snake	7/1/96	Sockeye	Captive bro	Redfish Lake-	Listed	1,800	25	fingerling	BY95 outmigrant-
111	Bonneville-NMFS	Redfish Lake Cree	Snake	5/2/96	Sockeye	Captive bro	Redfish Lake-	Listed	2,962	8	smolt	Group 1
112	Bonneville-NMFS	Redfish Lake Cree	Snake	5/2/96	Sockeye	Captive bro	Redfish Lake-	Listed	9,152	8	smolt	Group 2
113	Bonneville-NMFS	Tanner Creek	Columbia Lower	5/2/96	Sockeye	Captive bro	Redfish Lake-	Listed	9,528	8	smolt	Group 3
114	Chelan	Wenatchee R.	Columbia Upper	5/1/96	Steelhead	Summer	Wells	Non-listed	160,000	6	smolt	
115	Chelan	Entiat R.	Columbia Upper	5/1/96	Steelhead	Summer	Wells	Non-listed	40,000	6	smolt	
116	Eastbank	Chiwawa R.	Columbia Upper	5/1/96	Chinook	Spring	Chiwawa	Non-listed	30,000	12	smolt	
117	Cowlitz	Cowlitz	Columbia Lower	5/30/96	Chinook	Fall-Tule	Tule	Non-listed	6,500,000	65	smolt	
118	Cowlitz	Cowlitz	Columbia Lower	5/30/96	Coho	Type-N	Type-N	Non-listed	4,700,000	20	smolt	
119	Cowlitz	Cowlitz	Columbia Lower	6/1/96	Chinook	Spring	Cowlitz	Non-listed	100,000	35	smolt	
120	Cowlitz	Cowlitz	Columbia Lower	4/1/96	Chinook	Spring	Cowlitz	Non-listed	1,440,000	4	smolt	
121	Cowlitz	Cowlitz	Columbia Lower	5/1/96	Cutthroat	Sea-run	Cowlitz	Non-listed	115,000	4	smolt	
122	Cowlitz	Cowlitz	Columbia Lower	5/1/96	Steelhead	Summer	Cowlitz	Non-listed	525,000	6	smolt	
123	Cowlitz	Cowlitz	Columbia Lower	5/1/96	Steelhead	Winter	Cowlitz	Non-listed	785,000	6	smolt	
124	Lewis River	Lewis River	Columbia Lower	5/1/96	Coho	Type-N	Type-N	Non-listed	815,000	16	smolt	
125	Lewis River	Lewis River	Columbia Lower	5/1/96	Coho	Type-S	Type-S	Non-listed	870,000	16	smolt	
126	Lewis River	Lewis River	Columbia Lower	3/1/96	Chinook	Spring	Lewis River	Non-listed	1,178,272	5	smolt	
127	Merwin	Lewis River	Columbia Lower	5/1/96	Cutthroat	Sea-run	Lewis River	Non-listed	25,000	4	smolt	
128	Merwin	Lewis River	Columbia Lower	5/1/96	Steelhead	Summer	Lewis River	Non-listed	125,000	6	smolt	
129	Merwin	Lewis River	Columbia Lower	5/1/96	Steelhead	Winter	Lewis River	Non-listed	125,000	6	smolt	
130	Priest Rapids	Priest Rapids	Columbia Upper	6/1/96	Chinook	Fall-URB	URB	Non-listed	6,700,000	50	smolt	
131	Turtle Rock	Turtle Rock	Columbia Upper	4/1/96	Chinook	Fall-URB	URB	Non-listed	197,000	8	yearling smolt	
132	Turtle Rock	Turtle Rock	Columbia Upper	6/1/96	Chinook	Fall-URB	URB	Non-listed	1,000,000	50	subyearling	
133	Wells	Columbia tributarie	Columbia Upper	5/1/96	Steelhead	Summer	Wells	Non-listed	475,000	6	smolt	
134	Wells	Wells	Columbia Upper	4/1/96	Chinook	Summer	Wells	Non-listed	300,000	10	smolt	
135	Wells	Wells	Columbia Upper	6/1/96	Chinook	Summer	Wells	Non-listed	490,000	20	smolt	
136	Eastbank	Carlton Pond	Columbia Upper	5/1/96	Chinook	Spring	Eastbank	Non-listed	389,000	12	smolt	
137	Eastbank	Wenatchee R.-Dry	Columbia Upper	5/1/96	Chinook	Summer	Eastbank	Non-listed	580,000	12	smolt	
138	Eastbank	Wenatchee R.	Columbia Upper	5/1/96	Steelhead	Summer	Wells	Non-listed	100,000	6	smolt	
139	Eastbank	Entiat R.	Columbia Upper	5/1/96	Steelhead	Summer	Wells	Non-listed	100,000	6	smolt	
140	Eastbank	Lake Wenatchee	Columbia Upper	7/1/96	Sockeye	Wenatchee	Wenatchee	Non-listed	70,000	150	fingerling	
141	Eastbank	Lake Wenatchee	Columbia Upper	9/1/96	Sockeye	Wenatchee	Wenatchee	Non-listed	70,000	60	sub-yearling	
142	Eastbank	Lake Wenatchee	Columbia Upper	11/1/96	Sockeye	Wenatchee	Wenatchee	Non-listed	70,000	20	sub-yearling	
143	Methow	Methow R.	Columbia Upper	5/1/96	Chinook	Spring	Methow	Non-listed	36,500	10	smolt	
144	Methow	Twisp R.	Columbia Upper	5/1/96	Chinook	Spring	Methow	Non-listed	0	10	smolt	
145	Methow	Chewuch R.	Columbia Upper	5/1/96	Chinook	Spring	Methow	Non-listed	0	10	smolt	
146	Eastbank	Similkameen R.	Columbia Upper	5/1/96	Chinook	Summer	Similkameen	Non-listed	500,000	10	yearling smolt	
147	Speelyai	Lewis River	Columbia Lower	5/1/96	Coho	Type-S	Type-S	Non-listed	18,000	16	??	
148	WDFW Coop	Coweeman R.	Columbia Lower	5/1/96	Steelhead	Winter		Non-listed	10,000	6	smolt	
149	WDFW Coop	Coweeman R.	Columbia Lower	5/1/96	Cutthroat	Sea-run		Non-listed	5,000	4	smolt	
150	WDFW Coop	F.O.C.	Columbia Lower	5/1/96	Steelhead	Winter		Non-listed	90,000	6	smolt	
151	WDFW Coop	NWesternNP	Columbia Lower	5/1/96	Steelhead	Summer		Non-listed	50,000	6	smolt	
152	Sawtooth	Salmon R. tribs	Snake	6/1/96	Steelhead	Summer	Pahsimeroi-A	Non-listed	630,200	1,000	fry	SBT hatchbox pro
153	Bonneville-NMFS	Tanner Cr.	Columbia Lower	4/1/96	Chinook	Fall-Tule	Tule-Tanner	Non-listed	1,470,000	80	smolt	

Key	Hatchery	Release site	Basin	Date	Species	Race	Stock	ESA Listing	Number	Size, fpp	Lifestage	Notes
154	Bonneville-NMFS	Tanner Cr.	Columbia Lower	3/15/96	Chinook	Fall-Tule	Tule-Tanner	Non-listed	934,000	151	fry	early release force
155	Bonneville-NMFS	Tanner Cr.	Columbia Lower	4/15/96	Chinook	Fall-Tule	Tule-Kalama	Non-listed	648,000	65	smolt	
156	Bonneville-NMFS	Tanner Cr.	Columbia Lower	4/1/96	Chinook	Fall-Tule	Tule-Skamani	Non-listed	530,000	80	smolt	
157	Bonneville-NMFS	Tanner Cr.	Columbia Lower	4/15/96	Chinook	Fall-Tule	Tule-Skamani	Non-listed	1,510,000	65	smolt	
158	Bonneville-NMFS	Tanner Cr.	Columbia Lower	4/15/96	Chinook	Fall-Tule	Tule-Spring C	Non-listed	1,842,000	65	smolt	
159	Bonneville-NMFS	Tanner Cr.	Columbia Lower	5/15/96	Chinook	Fall-Tule	Tule-Spring C	Non-listed	2,000,000	45	smolt	
160	Bonneville-COE	Ringold	Columbia Upper	3/15/96	Chinook	Fall-URB	URB-Tanner	Non-listed	2,830,000	110	smolt	
161	Bonneville-COE	Tanner Cr.	Columbia Lower	6/1/96	Chinook	Fall-URB	URB-Tanner	Non-listed	1,736,000	80	smolt	
162	Bonneville-COE	Tanner Cr.	Columbia Lower	8/1/96	Chinook	Fall-URB	URB-Tanner	Non-listed	5,205,700	40	smolt	
163	Bonneville-BPA	Umatilla R.	Columbia Middl	3/15/96	Chinook	Fall-URB	URB-Tanner	Non-listed	225,000	8	smolt	
164	Bonneville-BPA	Umatilla R.	Columbia Middl	4/15/96	Chinook	Fall-URB	URB-Tanner	Non-listed	225,000	8	smolt	
165	Bonneville-NMFS	Tanner Cr.	Columbia Lower	5/1/96	Coho	Type-S	Tanner Cr.	Non-listed	350,000	13	smolt	
166	Bonneville-NMFS	Tanner Cr.	Columbia Lower	6/1/96	Coho	Type-S	Tanner Cr.	Non-listed	825,000	13	smolt	
167	Big Creek	Big Creek	Columbia Lower	4/14/96	Chinook	Fall-Tule	Tule-Big Cree	Non-listed	1,200,000	100	fingerling	
168	Big Creek	Big Creek	Columbia Lower	3/14/96	Chinook	Fall-Tule	Tule-Big Cree	Non-listed	4,000,000	100	fingerling	
169	Big Creek	Big Creek	Columbia Lower	4/30/96	Chinook	Fall-Tule	Tule-Big Cree	Non-listed	5,700,000	80	smolt	
170	Big Creek	Big Creek	Columbia Lower	7/31/96	Chinook	Fall-Rogue	Rogue-Big Cr	Non-listed	166,000	21	smolt	
171	Big Creek	Big Creek	Columbia Lower	8/8/96	Chinook	Fall-Rogue	Rogue-Big Cr	Non-listed	167,000	18	smolt	
172	Big Creek	Big Creek	Columbia Lower	8/16/96	Chinook	Fall-Rogue	Rogue-Big Cr	Non-listed	167,000	15	smolt	
173	Big Creek	Big Creek	Columbia Lower	8/25/96	Chinook	Fall-Rogue	Rogue-Big Cr	Non-listed	500,000	13	smolt	
174	Big Creek	Big Creek	Columbia Lower	5/1/96	Coho	Type-S	Big Creek	Non-listed	180,000	12	smolt	
175	Big Creek	Big Creek	Columbia Lower	6/1/96	Coho	Type-S	Big Creek	Non-listed	355,000	12	smolt	
176	Big Creek	Big Creek	Willamette	5/15/96	Coho	Type-S	Big Creek	Non-listed	60,000	12	smolt	
177	Big Creek	Big Creek	Columbia Lower	4/15/96	Steelhead	Winter	Big Creek	Non-listed	60,000	5	smolt	
178	Cascade	Umatilla R.-RM42	Columbia Middl	4/1/96	Coho	Type-S	Tanner Cr.	Non-listed	500,000	15	smolt	
179	Cascade	Umatilla R.-RM60	Columbia Middl	4/1/96	Coho	Type-S	Tanner Cr.	Non-listed	500,000	15	smolt	
180	Cascade	Yakima R.	Columbia Upper	4/5/96	Coho	Type-S	Tanner Cr.	Non-listed	700,000	15	smolt	
181	Clackamas	Clackamas R.	Willamette	8/15/96	Chinook	Spring	Clackamas R.	Non-listed	616,669	11	smolt	
182	Clackamas	Clackamas R.	Willamette	3/15/96	Chinook	Spring	Clackamas R.	Non-listed	60,000	9	smolt	
183	Clackamas	Sandy R.	Willamette	3/15/96	Chinook	Spring	Clackamas R.	Non-listed	360,000	9	smolt	
184	Clackamas	Clackamas R.	Willamette	3/15/96	Chinook	Spring	Clackamas R.	Non-listed	275,000	9	smolt	
185	Clackamas	Cassidy Acc.	Willamette	3/15/96	Chinook	Spring	Clackamas R.	Non-listed	25,000	12	smolt	
186	Clackamas	Clackamas R.-Hubl	Willamette	3/15/96	Chinook	Spring	Clackamas R.	Non-listed	30,000	9	smolt	
187	Clackamas	Clackamas R.-Clac	Willamette	3/15/96	Chinook	Spring	Clackamas R.	Non-listed	50,000	9	smolt	
188	Clackamas	Sandy R.-Marmot	Columbia Lower	3/15/96	Chinook	Spring	Clackamas R.	Non-listed	100,000	9	smolt	
189	Clackamas	Clackamas R.	Willamette	4/1/96	Steelhead	Winter	Clackamas R.	Non-listed	30,000	6	smolt	
190	Clackamas	Sandy R.	Columbia Lower	4/1/96	Steelhead	Winter	Big Creek	Non-listed	30,000	6	smolt	
191	Gnat Creek	Clatskanine R.	Columbia Lower	4/15/96	Steelhead	Winter	Big Creek	Non-listed	10,000	6	smolt	
192	Gnat Creek	Gnat Cr.	Columbia Lower	4/15/96	Steelhead	Winter	Big Creek	Non-listed	40,000	6	smolt	
193	Gnat Creek	Clackamas R.	Willamette	4/15/96	Steelhead	Winter	Big Creek	Non-listed	105,000	6	smolt	
194	Gnat Creek	Clackamas R.-Clac	Willamette	4/15/96	Steelhead	Winter	Big Creek	Non-listed	20,000	6	smolt	
195	Gnat Creek	Gales Creek	Willamette	4/15/96	Steelhead	Winter	Big Creek	Non-listed	20,000	6	smolt	
196	Gnat Creek	Sandy R.	Columbia Lower	4/15/96	Steelhead	Winter	Big Creek	Non-listed	150,000	6	smolt	
197	Gnat Creek	Sandy R.-Marmot	Columbia Lower	4/15/96	Steelhead	Winter	Big Creek	Non-listed	50,000	6	smolt	
198	Gnat Creek	Scapoose Cr.	Columbia Lower	4/15/96	Steelhead	Winter	Big Creek	Non-listed	10,000	6	smolt	
199	Gnat Creek	Tualatin R.	Willamette	4/15/96	Steelhead	Winter	Big Creek	Non-listed	10,000	6	smolt	
200	Gnat Creek	Molalla R.	Willamette	4/15/96	Steelhead	Winter	Big Creek	Non-listed	31,250	6	smolt	
201	Gnat Creek	Clackamas R.	Willamette	4/15/96	Steelhead	Summer	S. Santiam	Non-listed	135,000	5	smolt	
202	Klaskanine	Klaskanine R.	Columbia Lower	4/5/96	Coho	Type-S	Klaskanine	Non-listed	1,125,000	12	smolt	
203	Klaskanine	Klaskanine R.	Columbia Lower	4/15/96	Steelhead	Winter	Big Creek	Non-listed	60,000	5	smolt	
204	Oxbow Springs	Umatilla R.	Columbia Middl	3/15/96	Coho	Type-S	Sandy	Non-listed	500,000	15	smolt	

Key	Hatchery	Release site	Basin	Date	Species	Race	Stock	ESA Listing	Number	Size, fpp	Lifestage	Notes
205	Sandy	Sandy R.	Columbia Lower	3/20/96	Coho	Type-S	Sandy	Non-listed	400,000	15	smolt	
206	Sandy	Sandy R.	Columbia Lower	4/20/96	Coho	Type-S	Sandy	Non-listed	100,000	15	smolt	
207	Sandy	Sandy R.	Columbia Lower	5/5/96	Coho	Type-S	Sandy	Non-listed	200,000	15	smolt	
208	CEDC	Blind Slough	Columbia Lower	8/1/96	Chinook	Fall-Rogue	Rogue	Non-listed	27,500	13	smolt	
209	CEDC	Tongue Point	Columbia Lower	8/1/96	Chinook	Fall-Rogue	Rogue	Non-listed	27,500	13	smolt	
210	CEDC	N.Fk.Klaskanine R.	Columbia Lower	8/1/96	Chinook	Fall-Rogue	Rogue	Non-listed	27,500	13	smolt	
211	CEDC	Youngs Bay	Columbia Lower	8/1/96	Chinook	Fall-Rogue	Rogue	Non-listed	1,518,000	13	smolt	
212	CEDC	Tongue Point	Columbia Lower	8/1/96	Chinook	Fall-URB	URB	Non-listed	200,000	13	smolt	
213	CEDC	Blind Slough	Columbia Lower	4/15/96	Coho	Type-S	Tanner Cr.	Non-listed	500,000	10	smolt	
214	CEDC	Tongue Point	Columbia Lower	4/1/96	Coho	Type-S	Tanner Cr.	Non-listed	500,000	10	smolt	
215	CEDC	Youngs Bay	Columbia Lower	4/15/96	Coho	Type-S	Tanner Cr.	Non-listed	500,000	10	smolt	
216	CEDC	Youngs Bay	Columbia Lower	4/26/96	Coho	Type-S	Tanner Cr.	Non-listed	825,000	10	smolt	
217	CEDC	Youngs Bay	Columbia Lower	5/28/96	Coho	Type-S	Sandy	Non-listed	300,000	10	smolt	
218	CEDC	Blind Slough	Columbia Lower	2/3/96	Chinook	Spring	S.Santiam R.	Non-listed	100,000	10	smolt	
219	CEDC	Blind Slough	Columbia Lower	2/19/96	Chinook	Spring	S.Santiam R.	Non-listed	142,000	10	smolt	
220	CEDC	Blind Slough	Columbia Lower	2/29/96	Chinook	Spring	S.Santiam R.	Non-listed	200,000	10	smolt	
221	CEDC	Youngs Bay	Columbia Lower	2/5/96	Chinook	Spring	S.Santiam R.	Non-listed	143,000	10	smolt	
222	CEDC	Youngs Bay	Columbia Lower	2/29/96	Chinook	Spring	S.Santiam R.	Non-listed	134,000	10	smolt	
223	CEDC	Youngs Bay	Columbia Lower	3/21/96	Chinook	Spring	Clackamas	Non-listed	115,000	10	smolt	
224	CEDC	Youngs Bay	Columbia Lower	5/7/96	Coho	Type-S	Clackamas	Non-listed	250,000	10	smolt	
225	CEDC	Youngs Bay	Columbia Lower	5/20/96	Coho	Type-S	Clackamas	Non-listed	350,000	10	smolt	
226	CEDC	Tongue Point	Columbia Lower	5/6/96	Coho	Type-S	Clackamas	Non-listed	190,000	10	smolt	
227	CEDC	Blind Slough	Columbia Lower	5/6/96	Coho	Type-S	Clackamas	Non-listed	210,000	10	smolt	
228	CEDC	S.Fk.Klaskanine	Columbia Lower	4/14/96	Coho	Type-S	Klaskanine R.	Non-listed	650,000	10	smolt	
229	CEDC	S.Fk.Klaskanine	Columbia Lower	3/15/96	Chinook	Spring	M. Willamette	Non-listed	50,000	8	smolt	
230	Umatilla	Umatilla R.-Imques	Columbia Middl	3/15/96	Chinook	Spring	Carson	Non-listed	390,000	8	smolt	
231	Umatilla	Umatilla R.-Imques	Columbia Middl	5/30/96	Chinook	Fall-URB	URB	Non-listed	2,100,000	60	smolt	
232	Umatilla	Umatilla R.-Thornh	Columbia Middl	5/30/96	Chinook	Fall-URB	URB	Non-listed	582,000	60	smolt	
233	Umatilla	Umatilla R.-Imques	Columbia Middl	4/15/96	Chinook	Fall-URB	URB	Non-listed	150,000	8	smolt	
234	Umatilla	Umatilla R.-Bonifer	Columbia Middl	3/15/96	Steelhead	Summer	Umatilla R.	Non-listed	50,000	5	smolt	
235	Umatilla	Umatilla R.-Mintho	Columbia Middl	4/15/96	Steelhead	Summer	Umatilla R.	Non-listed	50,000	5	smolt	
236	Umatilla	Umatilla R.-Bonifer	Columbia Middl	5/15/96	Steelhead	Summer	Umatilla R.	Non-listed	50,000	5	smolt	
237	Leaburg	McKenzie R.	Willamette	4/15/96	Steelhead	Summer	McKenzie R.	Non-listed	108,000	5	smolt	
238	Marion Forks	N.Fk.Santiam R.	Willamette	3/1/96	Chinook	Spring	N.Santiam R.	Non-listed	250,000	11	smolt	
239	Marion Forks	N.Fk.Santiam R.	Willamette	3/1/96	Chinook	Spring	N.Santiam R.	Non-listed	417,000	11	smolt	
240	Marion Forks	Detroit Res.	Willamette	6/1/96	Chinook	Spring	N.Santiam R.	Non-listed	100,000	200	fingerling	
241	Marion Forks	N.Fk.Santiam R.	Willamette	3/1/96	Steelhead	Winter	N.Santiam R.	Non-listed	50,000	5	smolt	
242	Marion Forks	N.Fk.Santiam R.	Willamette	4/1/96	Steelhead	Winter	N.Santiam R.	Non-listed	50,000	5	smolt	
243	McKenzie	McKenzie R.	Willamette	3/8/96	Chinook	Spring	McKenzie R.	Non-listed	204,000	8	smolt	
244	McKenzie	McKenzie R.	Willamette	2/29/96	Chinook	Spring	McKenzie R.	Non-listed	388,000	8	smolt	
245	McKenzie	LoneStarNetPens	Willamette	10/16/96	Chinook	Spring	McKenzie R.	Non-listed	90,000	8	smolt	
246	McKenzie	Willamette R.	Willamette	11/16/96	Chinook	Spring	McKenzie R.	Non-listed	90,000	8	smolt	
247	McKenzie	Molalla R.	Willamette	2/28/96	Chinook	Spring	S. Santiam R.	Non-listed	67,000	9	smolt	
248	McKenzie	Calapooia R.	Willamette	5/15/96	Chinook	Spring	S. Santiam R.	Non-listed	360,000	200	fingerling	
249	McKenzie	Molalla R.	Willamette	11/1/96	Chinook	Spring	S. Santiam R.	Non-listed	33,000	8	smolt	
250	Roaring River	Molalla R.	Willamette	4/1/96	Steelhead	Summer	S. Santiam R.	Non-listed	65,000	5	smolt	
251	Roaring River	Santiam R.N.Fk.	Willamette	4/1/96	Steelhead	Summer	S. Santiam R.	Non-listed	85,000	5	smolt	
252	Roaring River	Santiam R.N.Fk.	Willamette	4/1/96	Steelhead	Summer	S. Santiam R.	Non-listed	36,000	5	smolt	
253	South Santiam	Santiam R.S.Fk.	Willamette	3/12/96	Chinook	Spring	S. Santiam R.	Non-listed	418,000	8	smolt	
254	South Santiam	Santiam R.	Willamette	4/1/96	Steelhead	Summer	S. Santiam R.	Non-listed	40,500	5	smolt	
255	South Santiam	Santiam R.S.Fk.	Willamette	4/1/96	Steelhead	Summer	S. Santiam R.	Non-listed	144,000	5	smolt	

Key	Hatchery	Release site	Basin	Date	Species	Race	Stock	ESA Listing	Number	Size, fpp	Lifestage	Notes
256	Stayton Pond	Johnson Cr.	Willamette	5/16/96	Chinook	Fall-Tule	Tanner Cr.	Non-listed	0	65	smolt	release precluded
257	Stayton Pond	Mill Cr.	Willamette	5/1/96	Chinook	Fall-Tule	Tanner Cr.	Non-listed	0	55	smolt	release precluded
258	Stayton Pond	Molalla R.	Willamette	5/14/96	Chinook	Fall-Tule	Tanner Cr.	Non-listed	0	55	smolt	release precluded
259	Stayton Pond	Santiam R.N.Fk.	Willamette	5/14/96	Chinook	Fall-Tule	Tanner Cr.	Non-listed	0	55	smolt	release precluded
260	Willamette	Willamette R.M.Fk	Willamette	2/28/96	Chinook	Spring	Willamette R.	Non-listed	775,000	9	smolt	
261	Willamette	Fall Cr. Res.	Willamette	5/14/96	Chinook	Spring	Willamette R.	Non-listed	1,000,000	200	smolt	
262	Willamette	Lookout Pt. Res.	Willamette	5/14/96	Chinook	Spring	Willamette R.	Non-listed	250,000	100	smolt	
263	Willamette	Hills Cr. Res.	Willamette	1/25/96	Chinook	Spring	Willamette R.	Non-listed	200,000	900	smolt	
264	Willamette	Willamette R.M.Fk	Willamette	1/25/96	Chinook	Spring	Willamette R.	Non-listed	104,000	900	smolt	
265	Dexter Ponds	Willamette R.M.Fk	Willamette	3/15/96	Chinook	Spring	Willamette R.	Non-listed	378,000	9	smolt	
266	Dexter Ponds	Willamette R.	Willamette	11/1/96	Chinook	Spring	Willamette R.	Non-listed	80,000	8	smolt	
267	Dexter Ponds	Santiam R.S.Fk.	Willamette	3/1/96	Chinook	Spring	S. Santiam	Non-listed	234,000	8	smolt	
268	Dexter Ponds	Santiam R.S.Fk.	Willamette	11/1/96	Chinook	Spring	S. Santiam	Non-listed	234,000	8	smolt	
269	Dexter Ponds	Willamette R.M.Fk	Willamette	4/15/96	Steelhead	Summer	McKenzie R.	Non-listed	115,000	5	smolt	
270	Bonneville-NMFS	Tanner Cr.	Columbia Lower	2/5/96	Chinook	Fall-Tule	Tule-Tanner	Non-listed	7,000,000	433	fry	early release force
271	Oak Springs	Clackamas R.	Willamette	4/1/96	Steelhead	Winter	Clackamas W	Non-listed	40,000	5	smolt	
272	Oak Springs	Hood R.M.Fk.	Columbia Middl	4/7/96	Steelhead	Winter	Hood River	Non-listed	12,500	5	smolt	
273	Oak Springs	Hood R.E.Fk.	Columbia Middl	4/7/96	Steelhead	Winter	Hood River	Non-listed	37,500	5	smolt	
274	Oak Springs	Zigzag R.	Columbia Lower	4/15/96	Steelhead	Summer	S. Santiam	Non-listed	10,000	5	smolt	
275	Oak Springs	Still Cr.	Columbia Lower	4/15/96	Steelhead	Summer	S. Santiam	Non-listed	10,000	5	smolt	
276	Oak Springs	Salmon R.	Columbia Lower	4/15/96	Steelhead	Summer	S. Santiam	Non-listed	55,000	5	smolt	
277	Oak Springs	Hood R.	Columbia Middl	4/1/96	Steelhead	Summer	S. Santiam	Non-listed	60,460	5	smolt	
278	Oak Springs	Hood R.E.Fk.	Columbia Middl	4/15/96	Steelhead	Winter	Hood R. Wild	Non-listed	50,000	5	smolt	
279	Pelton Ladder	Deschutes R.	Columbia Middl	4/22/96	Chinook	Spring	Deschutes	Non-listed	93,324	12	smolt	
280	Pelton Ladder	Deschutes R.	Columbia Middl	4/22/96	Chinook	Spring	Deschutes	Non-listed	186,648	8	smolt	
281	Pelton Ladder	Hood R.W.Fk.	Columbia Middl	4/28/96	Chinook	Spring	Deschutes	Non-listed	124,432	8	smolt	
282	Round Butte	Deschutes R.	Columbia Middl	4/22/96	Chinook	Spring	Deschutes	Non-listed	30,000	12	smolt	
283	Round Butte	Deschutes R.	Columbia Middl	4/22/96	Chinook	Spring	Deschutes	Non-listed	20,000	8	smolt	
284	Round Butte	Deschutes R.	Columbia Middl	4/7/96	Steelhead	Summer	Deschutes	Non-listed	162,000	4	smolt	

Table 1
Weighted Average Percent Survival of Selected Columbia River Chinook Salmon Stocks /1

Stock Group	Brood Years	Overall Average Percent Survival	Percent Survival Range	1990 Brood Year Percent Survival	1984-1990 Brood Years Average	
					Ocean	Total
FALL CHINOOK SALMON						
CEDC (Rogue Stock)	1984-87,1989	2.63	0.36 (1986) to 7.56 (1984)			2.63 /2
CEDC (Tule Stock)	1980-1987	0.29	0.04 (1987) to 1.68 (1984)			0.48 /2
Klaskanine (Tule)	1977-81, 1986-88	0.14	0.01 (1987) to 0.41 (1977)			0.08 /2
Big Cr. (Rogue)	1982-1990	2.28	0.71 (1990) to 4.84 (1982)	0.71		1.89
Big Cr. (Tule)	1976-81, 1986-90	0.28	0.05 (1987) to 1.02 (1979)	0.07		0.12 /2
Bonneville (Tule)	1976-84, 1986-90	0.41	0.02 (1987) to 2.76 (1984)	0.10		0.57 /2
Bonneville (URB)	1977-1990	1.31	0.13 (1988) to 3.53 (1984)	0.15		1.17
Stayton Pond (Tule)	1976-1990	0.57	0.09 (1986) to 3.41 (1984)	0.15		0.69
Source: Lewis (1997)						
Abernathy (Tule)	1980-1990	0.20	0.08 (1990) to 1.8 (1980)			
Big Creek (Tule)	1985-1991	0.12	0.05 (1987) to 0.17 (1991)			
Big Creek (Rogue)	1985-1991	1.13	0.50 (1991) to 2.25 (1987)			
Stayton Pond (Tule)	1987-1991	0.23	0.01 (1991) to 0.68 (1989)			
Elokomin (Tule)	1974-1988	0.40	0.06 (1988) to 0.85 (1977)			
Grays River (Tule)	1974-1990	1.32	0.05 (1981) to 8.9 (1974)			
Kalama Falls (Tule)	1971-1988	0.51	0.10 (1978) to 1.35 (1971)			
Klickitat (Tule)	1975-1989	0.30	0.02 (1980) to 1.0 (1996)			
Toutle (Tule)	1971-1989	0.43	0.04 (1987) to 0.90 (1977)			
Washougal (Tule)	1973-1989	0.54	0.12 (1987) to 1.50 (1976)			
Cowlitz (Tule)	1977-1989	0.55	0.05 (1987) to 1.7 (1984)			
CEDC - Rogue	1987-1991	1.51	0.15 (1991) to 3.03 (1987)			
CEDC - URB	1987	0.04	--			
Lewis River - Wild	1976-1989	0.87	0.2 (1978) to 1.8 (1984)			
Bonneville-Tanner Tule	1987-1991	0.11	0.03 (1991) to 022 (1988)			
Bonneville - URB	1987-1991	0.20	0.15 (1988) to 0.29 (1990)			
Little White Salmon URB	1980-1990	0.40	0.3 (1989) to 1.95 (1984)			
Spring Creek Tule	1980-1990	0.35	0.005 (1984) to 0.95 (1982)			
Bonneville URB Mid Col	1988-1990	0.22	0.16 (1988) to 0.33 (1989)			
Umatilla URB	1987-1991	0.18	0.02 (1990) to 0.49 (1987)			
Umatilla URB	1987-1990	0.14	0.07 (1980) to 0.20 (1990)			
Priest Rapids URB	1974-1989	0.77	0.10 (1987) to 2.00 (1975)			
Turtle Rock URB	1982-1989	0.86	0.5 (1986) to 3.6 (1983)			
Priest Rapids Wild	1987-1989	0.32	0.2 (1987) to 0.40 (1989)			
Lyons Ferry Sub Yearling						
Barged	1984-1986	0.20	0.02 (1988) to 0.55 (1986)			
Not barged	1984-1989	0.25	0.035 (1988) to 0.60 (1984)			
Lyons Ferry Yearling						
Barged	1985-1988	1.38	1.1 (1987) to 1.8 (1985)			
Not barged	1983-1988	2.15	0.3 (1987) to 7.5 (1983)			

Sources: Fuss et al. (1994), Fuss (1995), Garrison et al. (1995), and Pastor (1995).

Table 1 (continued)

Stock Group	Brood Years	Overall Average Percent Survival	Percent Survival Range	1990 Brood Year Percent Survival	1984-1990 Brood Years Average Ocean	1984-1990 Brood Years Average Total	
SPRING CHINOOK SALMON							
Round Butte	1975-1990	0.84	0.04 (1976) to 1.93 (1986)	0.27		1.28	
West Fork Hood River	1986-1990	0.13	0.01 (1990) to 0.33 (1986)	0.01		0.13	/2
Willamette	1974-75, 77-80, 84-90	1.15	0.24 (1975) to 2.36 (1978)	0.31		0.98	
McKenzie	1978-81, 1984-90	0.81	0.05 (1990) to 1.61 (1981)	0.05		0.81	
South Santiam	1975-78, 84-85, 87-90	0.62	0.20 (1990) to 1.38 (1985)	0.20		0.77	/2
Marion Forks	1974-77, 79-80, 82-90	0.76	0.01 (1974) to 1.82 (1986)	0.08		1.06	
Clackamas	1984-1990	0.50	0.07 (1985) to 1.17 (1988)	0.25		0.50	
CEDC (SF Klaskanine)	1988-1990	0.01	0.00 (1990) to 0.04 (1989)	0.00		0.01	/2
CEDC (Youngs Bay)	1988-1990	0.20	0.05 (1990) to 0.44 (1988)	0.05		0.20	/2

Note: Percent survival includes both freshwater and ocean recoveries.
Source: Lewis (1997).

Clackamas	1987-1991	0.61	0.22 (1991) to 1.16 (1988)
Marion Forks-Santiam	1987-1991	0.75	0.16 (1990) to 1.48 (1987)
Marion Forks-Detroit	1987	1.56	1.56 in 1987
McKenzie	1987-1991	0.45	0.14 (1991) to 1.13 (1987)
Willamette	1987-1991	0.62	0.41 (1991) to 1.05 (1988)
Dexter Ponds	1987-1991	0.59	0.20 (1988) to 1.28 (1987)
Klickitat	1989	0.22	0.22 in 1989
Cowlitz	1971-1989	3.08	0.3 (1980) to 10.1 (1976)
Lewis	1988-1989	0.80	0.3 (1989) to 1.3 (1988)
Clackamas - Sandy	1991	0.07	0.07 in 1991
CEDC - Youngs Bay	1988-1991	0.17	0.00 (1991) to 0.44 (1988)
CEDC - Klask.	1988-1991	0.02	0.00 (1988) to 0.04 (1980)
Carson	1982-1990	0.21	0.01 (1991) to 0.41 (1983)
Little White Salmon	1982-1990	0.35	0.01 (1984) to 1.05 (1988)
Warm Springs	1987-1990	0.09	0.0075 (1990) to 0.18 (1988)
Umatilla	1987-1991	0.13	0.01 (1991) to 0.31 (1988)
Round Butte	1987-1991	0.90	0.29 (1990) to 1.71 (1988)
Entiat	1989-1990	0.03	0.004 (1990) to 0.05 (1989)
Leavenworth	1986-1990	0.16	0.003 (1987) to 0.48 (1988)
Winthrop	1987-1990	0.01	0.001 (1990) to 0.021 (1989)
Ringold	1977-1989	1.25	0.001 (1972) to 2.65 (1977)
Eastbank - Chiwawa	1989	0.32	0.32 in 1989
Wells	1979-1988	0.30	0.001 (1986) to 0.95 (1976)
Eastbank - Carlton	1989	0.30	0.30 in 1989
Eastbank - Similk	1989	0.90	0.90 in 1989
Dworshak	1987-1990	0.30	0.007 (1990) to 0.07 (1988)
Kooskia	1988-1990	0.14	0.01 (1990) to 0.27 (1988)
Rapid River	1987-1991	0.11	0.03 (1991) to 0.35 (1988)
Lookingglass	1987-1991	0.13	0.00 (1991) to 0.36 (1988)
Lyons Ferry	1985-1989	0.25	0.17 (1987) to 0.32 (1988)

Sources: Fuss et al. (1994), Fuss (1995), Garrison et al. (1995), and Pastor (1995).

Table 2
Weighted Average Percent Survival of Coho Salmon Stocks Tagged for Stock Assessment /1

Stock Group	Brood Years	Overall Average Percent Survival	Percent Survival Range	1991 Brood Year Percent Survival	1982-1991 Brood Years Average Ocean	1982-1991 Brood Years Average Total
COLUMBIA RIVER COHO SALMON						
Sandy River	1977-1991	3.57	0.09 (1990) to 8.98 (1985)	0.88	1.77	4.23
Big Creek	1980-1991	3.17	0.21 (1990) to 8.14 (1986)	0.93	1.53	3.46
Klaskanine River	1981-1991	3.41	0.32 (1991) to 7.81 (1985)	0.32	1.47	3.41
Bonneville Hatchery	1980-1991	2.79	0.88 (1990) to 6.93 (1986)	2.25	1.09	2.97
Umatilla River	1985-1991	1.63	0.17 (1989) to 4.48 (1986)	0.21	0.81 /2	1.63 /2
Wahkeena Pond	1982-1991	1.60	0.00 (1985-87) to 7.18 (1983)	0.36	0.42	1.60
Yakima River	1986-1991	0.80	0.05 (1991) to 2.00 (1988)	0.05	0.48 /2	0.80 /2
COASTAL RIVERS COHO SALMON						
Coos River	1984-1991	2.85	0.52 (1984) to 7.89 (1985)	0.53	1.50 /2	2.85 /2
Rogue River	1977-1991	2.86	0.38 (1990) to 9.01 (1978)	3.34	0.68	2.15
Nehalem River	1977-1991	1.77	0.44 (1978) to 6.21 (1985)	0.56	1.23	2.14
North Umpqua River	1980-1991	2.11	0.62 (1991) to 4.45 (1984)	0.62	1.47	1.96
Trask River	1977-1991	1.56	0.46 (1991) to 3.57 (1986)	0.46	1.05	1.75
Smith River	1976-1986	1.29	0.15 (1978) to 2.93 (1984)		1.55 /2	1.61 /2
Alsea River	1975-1991	2.14	0.30 (1991) to 5.91 (1978)	0.30	0.86	1.37
Eel Lake	1980-1991	1.68	0.04 (1991) to 4.22 (1980)	0.04	0.69	1.37
South Umpqua R.	1982-1991	1.36	0.08 (1991) to 4.10 (1985)	0.08	1.30	1.36
Coquille River	1980-1991	1.43	0.13 (1991) to 3.60 (1986)	0.13	0.65	1.33
East Fork Trask R.	1983-1991	1.18	0.33 (1984) to 2.31 (1986)	0.38	0.86 /2	1.18 /2
Salmon River	1976-1991	1.16	0.26 (1984) to 2.64 (1976)	0.30	0.28	0.62
Siletz River	1977-1991	1.10	0.11 (1991) to 2.72 (1980)	0.11	0.39	0.61
Siuslaw River	1986,1990-91	0.30	0.06 (1991) to 0.43 (1986)	0.06	0.24 /2	0.30 /2
Type S Coho - Grays River Hatch.	1975-1991	1.33	0.01 (1990) to 3.4 (1988			
Type N Elochoman Hatch.	1971-1990	2.30	0.01 (1991) to 8.1 (1988)			
Type S Elochoman Hatch.	1971-1991	0.92	0.03 (1991) to 3.5 (1988)			
- Cowlitz Hatchery	1971-1991	2.39	0.60 (1991) to 6.94 (1983)			
Type S North Toutle Hatch.	1971-1991	2.94	0.60 (1991) to 5.9 (1972)			
- Fallout Creek Hatchery	1988-1991	1.78	0.15 (1989) to 5.9 (1988)			
Type N Kalama Falls Hatch.	1983-1991	3.39	0.10 (1991) to 8.9 (1988)			
Type N Lewis River Hatchery	1986-1991	3.58	0.50 (1991) to 8.2 (1986)			
Type S Lewis River Hatchery	1980-1991	2.52	0.15 (1981) to 7.0 (1982)			
Type N Washougal Hatch., OR side	1977-1991	2.34	0.10 (1991) to 5.2 (1978)			
Type N Washougal (Klickitat)	1988-1991	0.47	0.10 (1991) to 1.59 (1988)			
Type N Klickitat Hatchery	1971-1991	1.45	0.10 (1991) to 4.5 (1972)			
Type S Turtle Rock Hatchery	1976-1991	0.35	0.005 (1991) to 0.9 (1976)			
Eagle Creek	1980-1992	1.20	0.07 (1980) to 4.18 (1988)			
L. White Salmon Wild	1980-1992	0.45	0.07 (1991) to 1.70 (1988)			
CEDC Klaskanine	1989-1993	1.15	0.54 (1989) to 3.09 (1990)			
CEDC Clack./Youngs R.	1989-1993	0.70	0.26 (1993) to 1.24 (1989)			
CEDC Big Creek/Youngs R.	1990	1.10	--			
CEDC Kalama/Youngs R.	1990	0.13	--			
CEDC Klask./Youngs R.	1990-1991	2.10	0.75 (1991) to 3.45 (1990)			
CEDC Sandy R./Youngs R.	1990	0.03	--			
CEDC Tanner Cr./Youngs R.	1991-1993	1.63	0.68 (1993) to 2.89 (1991)			
CEDC Tanner Cr./Blind S.	1993	1.92	--			
CEDC Tanner Cr./Tongue Pt.	1993	3.02	--			
Trojan Pond Sandy/Col.	1989-1991	0.22	0.20 (1989) to 0.23 (1991)			
Wahkeena Pond Tanner Cr.	1989-1992	0.19	0.03 (1992) to 0.36 (1991)			

Note: Percent survival includes both freshwater and ocean recoveries. Freshwater fisheries are only sampled in the Columbia River.

Source: Lewis (1997).

Sources: Fuss et al. (1994), Fuss (1995), Garrison et al. (1995), Pastor (1995).

APPENDIX 2.F.

Recent Trends in Adult Returns of Snake River Originating Anadromous Fish

Project: Lower Snake River Juvenile Salmon Migration Feasibility Study Project
Statement: Estimated number of wild snake river spring/summer chinook
Date: October 8, 1999

	Wild Snake River Chinook				
Species / Year	At River Mouth	Ocean Harvest	Mainstem Harvest	Lower Granite Escapement	Total Harvest and Escapement
Spring Chinook					
1979-1996	10,096	--	825	4,909	5,734
1991-1995	6,765	--	529	4,332	4,861
1979	7,960	--	359	2,573	2,932
1980	13,151	--	484	3,478	3,962
1981	14,926	--	1,015	7,941	8,956
1982	19,113	--	1,757	7,117	8,874
1983	14,505	--	1,369	6,181	7,550
1984	7,148	--	774	3,199	3,973
1985	8,263	--	614	5,245	5,859
1986	12,319	--	1,015	6,895	7,910
1987	12,256	--	1,008	7,883	8,891
1988	14,381	--	2,025	8,581	10,606
1989	7,055	--	748	3,029	3,777
1990	6,730	--	827	3,216	4,043
1991	5,495	--	594	2,206	2,800
1992	16,124	--	1,027	11,285	12,312
1993	8,202	--	645	6,008	6,653
1994	2,152	--	265	1,416	1,681
1995	1,852	--	112	745	857
1996	--	--	219	1,358	1,577
Summer Chinook					
1979-1995	3,523	--	139	2,801	2,940
1991-1995	1,913	--	32	1,719	1,751
1979	2,164	--	99	2,712	2,811
1980	3,426	--	154	2,688	2,842
1981	5,235	--	323	3,326	3,649
1982	5,518	--	414	3,529	3,943
1983	5,113	--	135	3,233	3,368
1984	4,583	--	102	4,200	4,302
1985	3,124	--	191	3,196	3,387
1986	5,100	--	259	3,934	4,193
1987	4,350	--	259	4,214	4,473
1988	4,116	--	219	2,263	2,482
1989	3,196	--	17	2,350	2,367
1990	4,407	--	28	3,378	3,406
1991	3,369	--	37	2,814	2,851
1992	1,840	--	16	1,148	1,164
1993	3,410	--	84	3,959	4,043
1994	411	--	6	305	311
1995	534	--	16	371	387
1996	--	--	--	--	--

Notes:
1. Ocean harvests for each species is assumed to be zero.
2. Mainstem harvest includes Zones 1 through 6 and Treaty Indian harvests.
3. The difference between 'Total' and 'At River Mouth' is equal to passage loss.
4. PATH index stocks year 0 all actions are equal to year 5 action A1
5. Total wild stocks is equal to PATH index stocks plus other wild stocks.
6. Total wild ocean escapement is equal to the "At River Mouth" 1991-1995 average. Other wild stocks ocean escapement equal to difference between Total and PATH stocks.
7. Other wild stocks mainstem harvest, tributary harvest, pre-spawning mortality, LWG escapement, and spawners use ocean escapement and proportion of PATH results to PATH ocean escapement.
8. Hatchery production is from personal communication with Steve Smith, NMFS (1998).
9. Hatchery SAR for year 0 is the 1980's historical SAR from CWT Missing Productions Groups Annual Reports (NMFS, IDFW).
10. Hatchery total adults is production multiplied by Hatchery SAR.
11. Hatchery year 0 columns calculated using year 0 total adults and proportion of PATH results.

Source: "1996 All Species Review: Columbia River Fish Management Plan," August 4, 1997.
Spring Chinook comes from Tab 1 Table 2.
Summer Chinook comes from Tab 2 Table 2.

Project: Lower Snake River Juvenile Salmon Migration Feasibility Study Project
Statement: Estimated number of wild snake river fall chinook
Date: October 8, 1999

Species / Year	Wild Snake River Chinook At River Mouth	Ocean Harvest	Mainstem Harvest	Lower Granite Escapement	Total Harvest and Escapement
Fall Chinook					
1986-1995	1,813	--	699	381	1,080
1991-1995	1,391	--	286	473	759
1979	--	--	--	--	--
1980	--	--	--	--	--
1981	--	--	--	--	--
1982	--	--	--	--	--
1983	--	--	--	--	--
1984	--	--	--	--	--
1985	--	--	--	--	--
1986	2798	--	1310	449	1759
1987	2235	--	1249	253	1502
1988	3664	--	1918	368	2286
1989	1910	--	827	295	1122
1990	570	--	258	78	336
1991	1,878	--	525	318	843
1992	1,368	--	223	549	772
1993	1,568	--	398	742	1140
1994	1,020	--	157	406	563
1995	1,120	--	128	350	478
1996	--	--	--	--	--

Notes:
1. Ocean escapement and mainstem harvest for year 0 is equal to 'At River Mouth' 1991-1995 average.
2. Ocean harvests for fall chinook is not provided in source document listed below. Year 0 ocean harvest is calculated using year 0 ocean escapement and the proportion of year 5 ocean escapement and ocean harvest.
3. Mainstem harvest includes Zones 1 through 6. They also include Treaty Indian harvest.
4. The difference between 'Total' and 'At River Mouth' is equal to passage loss.
5. There is no tributary harvest for fall chinook in Idaho. The Idaho Department of Fish and Game hold only a small number of days for sport fishing.
6. Spawners in year 0 is equal to the 'Lower Granite Escapement' 1991-1995 average.
7. Hatchery production is from personal communication with Steve Smith, NMFS (1998).
8. Hatchery SAR for year 0 is the 1980's historical SAR from CWT Missing Productions Groups Annual Reports (NMFS, IDFW).
9. Hatchery total adults is production multiplied by Hatchery SAR.
10. Hatchery year 0 columns calculated using year 0 total adults and proportion of PATH results.

Source: "1996 All Species Review: Columbia River Fish Management Plan," August 4, 1997. Fall Chinook comes from Tab 3 Table 9.

Project: Lower Snake River Juvenile Salmon Migration Feasibility Study Project
Statement: Estimated mainstem harvest of wild group A and B summer steelhead
Filter: Length Method
Date: October 8, 1999

	Wild Snake River Summer Steelhead			
Run / Year	Minimum Run Size	Mainstem Harvest	Harvest Rate	Lower Granite Escapement
Group A				
1986-1995	49,838	8,676	17.4%	12,369
1986	58,829	8,741	14.9%	17,621
1987	110,586	21,438	19.4%	21,847
1988	64,932	14,857	22.9%	17,429
1989	56,601	9,880	17.5%	15,928
1990	27,105	4,657	17.2%	2,922
1991	60,750	9,593	15.8%	15,812
1992	42,710	7,159	16.8%	13,219
1993	28,961	4,989	17.2%	6,532
1994	20,866	2,294	11.0%	4,732
1995	27,036	3,155	11.7%	7,648
Group B				
1986-1995	12,744	4,642	36.4%	3,856
1986	13754	4539	33.0%	4369
1987	18949	8946	47.2%	3623
1988	22322	8163	36.6%	3604
1989	17679	8062	45.6%	9040
1990	13080	3668	28.0%	6339
1991	7847	3070	39.1%	1510
1992	18310	6010	32.8%	6127
1993	5945	1507	25.3%	821
1994	7256	1800	24.8%	2783
1995	2302	650	28.2%	342

Notes: 1. Wild ocean escapement is calculated using run size equals LWG escapement divided by a calculated share of 1 minus 0.219. Ratio is calculated using group share of total run size and share of harvest by group.
2. Harvest rate is for mainstem only. The harvest rate is calculated using the sum of group A and B mainstem harvest divided by the sum of group A and B minimum run size.

Source: "1996 All Species Review: Columbia River Fish Management Plan," August 4, 1997. Summer steelhead comes from Tab 8 Tables 12 and 13.

Project: Lower Snake River Juvenile Salmon Migration Feasibility Study Project
Statement: Lower Granite dam wild/natural and hatchery steelhead runs
Filter: Length Method, A and B runs
Date: October 8, 1999

Species / Year	LWG Escapement Wild	Hatchery	Total
Summer Steelhead			
1986-1995	16,225	72,795	89,020
1986	21,990	107,993	129,983
1987	25,470	45,810	71,280
1988	21,033	66,104	87,137
1989	24,968	106,452	131,420
1990	9,261	47,604	56,865
1991	17,322	81,730	99,052
1992	19,346	108,919	128,265
1993	7,353	52,415	59,768
1994	7,515	39,787	47,302
1995	7,990	71,137	79,127

Notes: 1. LWG escapement for A plus B runs.
Source: "1996 All Species Review: Columbia River Fish Management Plan," August 4, 1997. Summer steelhead comes from Tab 8 Table 2.

Project: Lower Snake River Juvenile Salmon Migration Feasibility Study Project
Statement: Upriver summer steelhead harvest estimates, by run-year, for tributaries, 1986-1994
Filter: Length Method, A and B runs
Date: May 24, 1999

Species / Year	Idaho Tributary Harvest
Summer Steelhead	
1986-1994	30,911
1986	47,900
1987	17,987
1988	23,521
1989	48,885
1990	19,191
1991	28,573
1992	44,663
1993	27,858
1994	19,618
1995	NA

Notes: 1. Wild tributary harvest is based on proportion of LWG escapement. Proportion is estimated by dividing total Idaho tributary harvest by total LWG escapement.
Source: "1996 All Species Review: Columbia River Fish Management Plan," August 4, 1997. Summer steelhead comes from Tab 8 Table 4.

Project: Lower Snake River Juvenile Salmon Migration Feasibility Study Project
Statement: Non-Indian harvest of upriver summer steelhead, 1986-1996
Filter: Length Method, A and B runs
Data Source: All Species Review
Date: October 8, 1999

	Non-Indian Upriver Summer Steelhead Harvest									
	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1990-1994 Average
Lower Granite Dam										
Snake R. above LWG Dam										
Washington	4451	1947	4060	7085	1,801	6,116	4,291	2,000	921	3,026
WA above Clakston	--	--	--	--	--	--	3,473	1,405	1,270	1,230
Oregon	1072	734	1041	1539	453	1,714	2,444	1,166	743	1,304
Idaho	4527	2238	2776	5085	1,674	5,527	5,585	4,918	1,979	3,937
Aston Creek	0	4	11	0	2	0	0	0	0	0
Grande Ronde River										
WA Grande Ronde	200	293	515	823	653	2,070	1,507	1,351	939	1,304
OR Grande Ronde	161	152	521	2191	608	5,173	2,093	554	103	1,706
Wenaha	NA	4	4	0	6	0	4	3	0	3
Wallowa	1160	394	1094	2138	19	4,030	2,631	880	0	1,512
Minam	NA	3	0	0	0	0	0	0	0	0
Imnaha	NA	57	60	321	212	592	750	153	53	352
Clearwater	15808	8767	11571	27954	12,973	10,416	19,351	11,205	5,953	11,980
Salmon	27057	6983	8947	15110	4,388	12,515	18,831	11,215	11,435	11,677
Above Hells Canyon Dam										
Oxbow	--	--	--	--	--	79	811	10	251	230
Boise	508	--	227	736	--	36	41	215	0	58
Payette	--	--	--	--	--	0	44	264	0	62
Total	54,944	21,576	30,827	62,982	22,789	48,268	61,856	35,339	23,647	38,380

Note: 1. Table is used to determine Idaho's share of total tributary harvests.
2. Idaho tributaries include Snake River above LWG Dam - Idaho, Aston Creek, Clearwater, Salmon, and Above Hells Canyon Dam.

Source: "1996 All Species Review: Columbia River Fish Management Plan," August 4, 1997. Table A1a, A1b, A1c, and A1d.

Project: Lower Snake River Juvenile Salmon Migration Feasibility Study Project
Statement: Snake River Anadromous Fish In-river Harvests and Harvest Rates for 5-year Average, 1991-1995
Date: October 8, 1999

Existing In-river Harvest and Harvest Rates for 1991-1995

		Mainstem								Tributary	
	Ocean	Commercial Non-Treaty		Recreational		Treaty Indian		LWG Escapement		Recreational	
Species/Stock	Escapement	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Snake River											
Fall Chinook											
Wild	1,391	70	5.0%	0	0.0%	216	15.5%	473	34.0%	0	0.0%
Hatchery	3,421	168	4.9%	61	1.8%	520	15.2%	1,327	38.8%	--	--
Total	4,811	238	5.0%	61	1.3%	736	15.3%	1,800	37.4%	--	--
Spring Chinook											
Wild	6,765	--	--	0	0.0%	393	5.8%	4,332	64.0%	0	0.0%
Hatchery	9,631	--	--	200	2.1%	652	6.8%	6,323	65.7%	--	--
Total	16,396	94	0.6%	200	1.2%	1,044	6.4%	10,655	65.0%	--	--
Summer Chinook											
Wild	1,913	0	0.0%	0	0.0%	23	1.2%	1,719	89.9%	0	0.0%
Hatchery	1,800	0	0.0%	2	0.1%	20	1.1%	1,521	84.5%	--	--
Total	3,713	0	0.0%	2	0.1%	43	1.2%	3,240	87.2%	--	--
Summer Steelhead											
Wild	14,681	0	0.0%	0	0.0%	1,985	13.5%	11,905	81.1%	0	0.0%
Hatchery	98,051	0	0.0%	10,835	11.0%	17,666	18.0%	70,798	72.2%	38,380	39.1%
Total	112,732	0	0.0%	10,127	9.0%	19,363	17.2%	82,703	73.4%	38,380	34.0%
Upper Columbia and Snake River											
Summer Steelhead											
Wild	44,397	0	0.0%	0	0.0%	6,003	13.5%	*36,351* *	81.9%	0	0.0%
Hatchery	192,988	0	0.0%	21,325	11.0%	34,771	18.0%	*142,266* *	73.7%	53,661	27.8%
Total	237,385	0	0.0%	21,325	9.0%	40,774	17.2%	*178,617* *	75.2%	53,661	22.6%

Notes:
1. Averages are based on 1991 through 1995 period.
2. Harvest rates based on ocean escapement.
3. Upriver refers to mainstem escapement from the lower Columbia River into either the Upper Columbia River or the Snake River.
4. All references to specific tables and tabs are found in the TAC 1997.
5. Recreational mainstem and tributary harvest are assumed to be illegal and zero for wild fall chinook, spring chinook, and summer chinook after 1990 and for summer steelhead after 1984.
6. Fall chinook
   a. Total fall chinook harvest from commercial, recreational, and treaty user groups is from Table 8 Tab 3. The assumption is made that catch in zone 6 is treaty.
   b. Commercial wild harvest is from Table 9 Tab 3. See note 5.
   c. Commercial and recreational hatchery fall chinook is the residual between total and wild harvest.
   d. Ocean and LWG escapement is from Tables 8 and 9 Tab 3.
   e. Treaty harvest of wild fall chinook is from Table 9 Tab 3. Hatchery is the residual of total and wild.
7. Spring chinook
   a. Total ocean escapement is the total upriver run size times the proportion of Snake River spring chinook from Tables 1 and 2 Tab 1.
   b. Wild ocean escapement and LWG escapement are from Tables 2 and 3 Tab 1.
   c. Hatchery ocean escapement is the residual between total and wild.
   d. Hatchery LWG escapement is from Table 3 Tab 1.
   e. Total commercial and total recreational Snake River harvests are estimated using upriver spring chinook mainstem harvest by user group and applying the proportion of mainstem escapement to Snake River.
   f. Treaty harvest of wild mainstem Snake River spring chinook is from Table 2 Tab 1. It is assumed that harvest in zone 6 are treaty harvest only. Total harvest is estimated using harvest of upriver spring chinook and proportion to Snake River spring chinook. Treaty harvest of hatchery spring chinook is the residual of total and wild.
8. Summer chinook
   a. Wild ocean escapement and LWG escapement is from Table 2 Tab 2.
   b. Hatchery ocean escapement and LWG escapement is from Table 3 Tab 2.
   c. Total recreational mainstem harvest of summer chinook is estimated from harvest of upriver summer chinook and proportion Snake River summer chinook.
   d. Non-treaty commercial harvest in zones 1-5 for wild and hatchery summer chinook is zero. Table 1 Tab 2. Incidental non-retention excluded.
   e. Treaty harvest of wild summer chinook is from Table 2 Tab 2. This assumes zone 6 harvest is treaty only.
   f. Treaty harvest of hatchery summer chinook is from Table 3 Tab 2. This assumes zone 6 harvest is treaty only.
9. Summer steelhead
   a. Non-treaty commercial harvest is assumed to be zero.
   b. LWG escapement is from Tables 12 through 15 Tab 8. Lower Granite counts of group A and B were summed (based on the length method).
   c. Total tributary harvest is from Tables A1c and A1d.
   d. Wild and hatchery ocean escapement is from Tables 12 through 15 Tab 8. Lower Granite with no mainstem fishery counts of group A and B were summed (based on the length method). This provides a minimum run size.
   e. Mainstem harvest rates are assumed to equal mainstem harvest rates for total upriver summer steelhead stocks. Tab 8 Table 4.

Source: TAC 1997.