1993 HATCHERY ESCAPEMENT

Washington Department of Fish & Wildlife

Hatchery Program
FINAL -- September 1994

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Assessment and Development Division

ESCAPEMENT TOTALS BY SPECIES

Species	Total Escapement			Upstream		Escapement Less Upstream	
	Adults	Jacks	Eggtake	Adults	Jacks	Adults	Jacks
Spring Chinook	21,500	2,094	16,968,500	7,624	318	13,876	1,776
Summer Chinook	3,299	449	4,181,200	13	76	3,286	373
Fall Chinook	75,649	13,903	105,572,700	5,011	514	70,638	13,389
Coho	209,041	18,215	96,258,350	45,010	3,522	164,031	14,693
Chum	128,683	0	58,493,300	22,333	0	106,350	0
Sockeye	11,924	2	9,264,400	5,915	2	6,009	0
Pink	23,957	0	5,469,000	12,302	0	11,655	0
TOTAL ESCAPEMENT	***474,053***	***34,663***	***296,207,450***	***98,208***	***4,432***	***375,845***	***30,231***

SPRING CHINOOK

Hatchery	Stock		Total Escapement Adults	Total Escapement Jacks	Total Escapement Eggtake	Upstream Adults	Upstream Jacks	Escapement Less Upstream Adults	Escapement Less Upstream Jacks
PUGET SOUND REGION									
Nooksack	Nooksack		1,364	58	2,037,600	0	0	1,364	58
Skagit	Clark Creek		1,574	140	1,549,000	0	0	1,574	140
Hood Canal	Hood Canal		47	0	100,000	0	0	47	0
Hupp Springs	Minter		410	27	535,000	0	0	410	27
	SSNP		742	0	1,130,000	0	0	742	0
SUBTOTAL			***4,137***	***225***	***5,351,600***	***0***	***0***	***4,137***	***225***
COASTAL REGION									
Soleduck	Soleduck		851	8	701,000	0	0	851	8
COLUMBIA RIVER REGION									
Cowlitz	Cowlitz	1	6,194	731	3,406,000	2,126	177	4,068	554
Kalama Falls	Kalama River		1,278	66	1,182,400	492	60	786	6
Lewis River	Lewis River	2	678	5	0	0	0	678	5
Speelyai	Lewis River	2	0	0	1,421,000	0	0	0	0
Klickitat	Klickitat		1,782	938	2,400,000	505	0	1,277	938
Lyon's Ferry	Tucannon		429	19	139,000	335	16	94	3
	Ringold	3	0	0	1,645,000	0	0	0	0
Ringold	Ringold	3	1,583	37	0	0	0	1,583	37
Priest Rapids	Priest Rapids	4	3,880	64	0	3,847	64	33	0
Eastbank	Chiwawa	5	0	0	202,500	0	0	0	0
Chiwawa	Chiwawa	5	319	1	0	210	1	109	0
Methow	Methow		98	0	196,000	0	0	98	0
	Chewuch		201	0	232,000	75	0	126	0
	Twisp		70	0	92,000	34	0	36	0
SUBTOTAL			***16,512***	***1,861***	***10,915,900***	***7,624***	***318***	***8,888***	***1,543***
TOTAL ESCAPEMENT			***21,500***	***2,094***	***16,968,500***	***7,624***	***318***	***13,876***	***1,776***

1 Total escapement includes 8 A recycled downstream that did not return to hatchery.

2 Total Lewis River escapement was shipped to Speelyai to be spawned. Eggtake is listed under Speelyai.

3 Total Ringold escapement includes 805 A shipped to Lyon's Ferry to be spawned. Eggtake is listed under Lyon's Ferry.

4 Total escapement includes 21 radio-tagged A recycled downstream that did not return to hatchery.

5 Total Chiwawa Ponds escapement includes 106 A shipped to Eastbank to be spawned. Eggtake is listed under Eastbank.

SUMMER CHINOOK

		Total Escapement			Upstream		Escapement Less Upstream	
Hatchery	Stock	Adults	Jacks	Eggtake	Adults	Jacks	Adults	Jacks
PUGET SOUND REGION								
Skagit	Clark Creek	884	189	0	0	0	884	189
Skykomish	Skykomish	566	45	1,196,000	0	0	566	45
Sunset Falls	Sunset Falls	219	76	0	219	76	0	0
SUBTOTAL		***1,669***	***310***	***1,196,000***	***0***	***76***	***1,669***	***234***
COLUMBIA RIVER REGION								
Dryden Dam	Wenatchee Riv. 1	491	1	0	13	0	478	1
Eastbank	Wenatchee Riv. 1	0	0	1,022,000				
Wells Dam	Wells	1,139	138	1,963,200	0	0	1,139	138
SUBTOTAL		***1,630***	***139***	***2,985,200***	***13***	***0***	***1,617***	***139***
TOTAL ESCAPEMENT		***3,299***	***449***	***4,181,200***	***13***	***76***	***3,286***	***373***

1 Total Drydan Dam escapement includes 476 A and 1 J shipped to Eastbank to be spawned. Eggtake is listed under Eastbank.

FALL CHINOOK

Hatchery	Stock	Total Escapement			Upstream		Escapement Less Upstream	
		Adults	Jacks	Eggtake	Adults	Jacks	Adults	Jacks
PUGET SOUND REGION								
Nooksack	Nooksack	464	39	692,900	0	0	464	39
Glenwood Springs	Glenwood Spr.	3,766	76	6,330,000	0	0	3,766	76
Whatcom Creek	Whatcom [1]	456	57	398,000	200	55	256	2
Samish	Samish	11,319	444	15,815,000	448	22	10,871	422
Skagit	Clark Creek	300	9	390,000	0	0	300	9
Baker River Trap	Baker River	331	0	0	329	0	2	0
Skykomish	Skykomish	1,363	406	880,000	0	0	1,363	406
Sunset Falls	Sunset Falls	258	76	0	258	76	0	0
Issaquah	Issaquah	3,159	41	1,807,000	0	0	3,159	41
Green River	Soos Creek	3,656	457	5,279,600	3	150	3,653	307
Minter Creek	Minter Creek	2,013	11	1,363,000	10	0	2,003	11
Coulter Creek	Coulter Creek [2]	1,465	0	0	1,465	0	0	0
Garrison Springs	Chambers Creek	514	6,915	984,000	0	125	514	6,790
Puyallup	Voights Creek	1,550	124	2,254,000	4	0	1,546	124
McAllister	McAllister	719	1,281	789,000	0	0	719	1,281
Deschutes Falls Park	Deschutes River	5,176	397	5,752,000	93	0	5,083	397
George Adams	George Adams	612	517	1,174,000	0	0	612	517
Hood Canal	Hood Canal	2,005	1,231	3,468,000	0	0	2,005	1,231
Elwha Channel	Elwha	923	1	2,319,000	0	0	923	1
SUBTOTAL		***40,049***	***12,082***	***49,695,500***	***2,810***	***428***	***37,239***	***11,654***

1 Formerly Bellingham Maritime Heritage Technical College.

2 From PRHM stream survey.

FALL CHINOOK Cont . . .

Hatchery	Stock	Total Escapement Adults	Total Escapement Jacks	Total Escapement Eggtake	Upstream Adults	Upstream Jacks	Escapement Less Upstream Adults	Escapement Less Upstream Jacks
COASTAL REGION								
Soleduck	Soleduck	28	1	45,000	0	0	28	1
Shale Creek	Queets-Clrwtr	146	0	285,000	0	0	146	0
Humptulips	Humptulips	216	2	392,000	0	0	216	2
Simpson	Chehalis	67	0	120,100	0	0	67	0
	Satsop Springs	116	6	79,200	0	0	116	6
Satsop Springs	Satsop Springs	130	11	265,000	10	0	120	11
Willapa	Willapa	6,624	30	7,253,000	1,537	0	5,087	30
Nemah	Nemah	1,024	8	1,445,000	3	0	1,021	8
Naselle	Naselle	5,308	202	7,347,000	437	31	4,871	171
SUBTOTAL		***13,659***	***260***	***17,231,300***	***1,987***	***31***	***11,672***	***229***
COLUMBIA RIVER REGION								
Grays River	Grays River	55	4	51,500	5	0	50	4
Sea Resources	Sea Resources	357	38	797,000	8	9	349	29
Elokomin	Elokomin	662	25	1,203,800	0	0	662	25
	Rogue River 1	47	4	0	0	0	47	4
Cowlitz	Cowlitz 2	2,907	709	5,482,000	0	0	2,907	709
Toutle	Toutle	396	40	374,000	0	0	396	40
Kalama Falls	Kalama River	2,181	51	5,925,300	164	39	2,017	12
Lower Kalama	Kalama River	1,693	100	3,541,700	18	4	1,675	96
Lewis River	Lewis River	20	3	0	19	3	1	0
Washougal	Washougal	3,174	128	3,666,000	0	0	3,174	128
Lyon's Ferry	Lyon's Ferry	996	162	2,136,000	0	0	996	162
Priest Rapids	Priest Rapids	8,963	277	14,643,000	0	0	8,963	277
Wells Dam	Wells	490	20	825,600	0	0	490	20
SUBTOTAL		***21,941***	***1,561***	***38,645,900***	***214***	***55***	***21,727***	***1,506***
TOTAL ESCAPEMENT		***75,649***	***13,903***	***105,572,700***	***5,011***	***514***	***70,638***	***13,389***

1 Includes 6 M, 14 F, 1 J that were shipped to Big creek Hatchery in Oregon.

2 Includes 1 A, 381 J recycled downstream that did not return.

COHO

Hatchery	Stock	Total Escapement Adults	Total Escapement Jacks	Total Escapement Eggtake	Upstream Adults	Upstream Jacks	Escapement Less Upstream Adults	Escapement Less Upstream Jacks
PUGET SOUND REGION								
Nooksack	Nooksack	9,217	10,151	4,753,200	0	0	9,217	10,151
Whatcom Creek	Whatcom [1]	297	10	38,500	70	2	227	8
Samish	Samish	9,061	607	52,500	8,998	607	63	0
Skagit	Clark Creek	5,366	419	1,365,300	0	0	5,366	419
	Baker River	823	0	180,400	0	0	823	0
Baker River Trap	Baker River	4,362	0	0	4,216	0	146	0
Skykomish	Skykomish	12,316	947	8,090,500	600	0	11,716	947
Sunset Falls	Sunset Falls	8,900	1,119	0	8,900	1,119	0	0
Issaquah	Issaquah	12,758	289	4,452,450	2,000	0	10,758	289
Green River	Soos Creek	19,359	8	9,532,000	4,200	0	15,159	8
Minter Creek	Minter Creek	16,100	33	6,231,000	4,746	0	11,354	33
Garrison Springs	Chambers Creek	1,593	306	0	1,497	306	96	0
Deschutes Falls Park	Wild	659	168	0	604	155	55	13
Puyallup	Voights Creek	38,095	616	13,234,100	500	0	37,595	616
George Adams	George Adams	2,788	51	722,000	0	0	2,788	51
	Baker	60	147	0	0	0	60	147
Hood Canal	Baker	1,607	211	29,000	10	0	1,597	211
Dungeness	Dungeness	2,731	11	1,179,000	0	0	2,731	11
SUBTOTAL		***146,092***	***15,093***	***49,859,950***	***36,341***	***2,189***	***109,751***	***12,904***

1 Formerly Bellingham Maritime Heritage Technical College.

COHO Cont . . .

Hatchery	Stock	Total Escapement			Upstream		Escapement Less Upstream	
		Adults	Jacks	Eggtake	Adults	Jacks	Adults	Jacks
COASTAL REGION								
Soleduck	Summer	1,654	247	410,000	0	0	1,654	247
	Fall	3,746	160	1,159,000	0	0	3,746	160
Shale Creek	Shale Creek	1,263	46	0	1,236	44	27	2
	Clearwater	78	0	138,000	0	0	78	0
	Upper Clearwater	14	0	12,000				
	Queets 1	48	0	57,000	0	0	48	0
	Miller Creek	19	0	5,000	0	0	19	0
	Deception Creek	11	0	5,000	0	0	11	0
	Matheny Creek	25	0	19,500	0	0	25	0
Humptulips	Humptulips	6,468	222	7,968,000	0	0	6,468	222
Satsop Springs	Satsop	2,208	28	3,274,000	40	7	2,168	21
Simpson	Satsop	6,271	20	768,700	1,278	1	4,993	19
	Bingham Late	76	0	74,400	0	0	76	0
Bingham Creek	Bingham	907	16	0	822	13	85	3
Willapa	Willapa	2,552	0	800,000	400	0	2,152	0
Nemah	Nemah	1,877	62	1,269,000	28	30	1,849	32
Naselle	Naselle	7,955	348	4,587,000	12	0	7,943	348
SUBTOTAL		***35,172***	***1,149***	***20,546,600***	***3,816***	***95***	***31,356***	***1,054***

1 Total escapement includes 11 A trapped in the Upper Queets, and 31 A trapped in the Mid-Queets.

COHO Cont . . .

Hatchery	Stock		Total Escapement Adults	Total Escapement Jacks	Total Escapement Eggtake	Upstream Adults	Upstream Jacks	Escapement Less Upstream Adults	Escapement Less Upstream Jacks
COLUMBIA RIVER REGION									
Grays River	Type S		102	1	57,000	20	0	82	1
Sea Resources	Chinook River		36	1	27,000	0	0	36	1
Elokomin	Type S		1,102	59	1,027,000	0	0	1,102	59
	Type N		1,100	22	1,181,000	34	0	1,066	22
Cowlitz	Type N		5,641	1,336	6,447,000	829	1,165	4,812	171
Toutle	Type S		7,075	67	3,356,000	3,412	50	3,663	17
N.F. Toutle FCF	Type S		88	19	0	84	16	4	3
Kalama Falls	Type N		72	2	60,800	1	1	71	1
Lower Kalama	Type S		1,513	9	1,548,000	5	0	1,508	9
Lewis River	Type S	1	1,713	27	0	300	1	1,413	26
	Type N		8,719	417	10,367,000	87	0	8,632	417
Speelyai	Lewis River (S)	1	0	0	1,295,000	0	0	0	0
Washougal	Type N		616	13	486,000	81	5	535	8
SUBTOTAL			***27,777***	***1,973***	***25,851,800***	***4,853***	***1,238***	***22,924***	***735***
TOTAL ESCAPEMENT			***209,041***	***18,215***	***96,258,350***	***45,010***	***3,522***	***164,031***	***14,693***

1 Total Lewis River escapement includes 1322 A & 12 J shipped to Speelyai to be spawned. Eggtake is listed under Speelyai.

CHUM

Hatchery	Stock	Total Escapement			Upstream		Escapement Less Upstream	
		Adults	Jacks	Eggtake	Adults	Jacks	Adults	Jacks
PUGET SOUND REGION								
Nooksack	Nooksack	728	0	609,200	0	0	728	0
Whatcom Creek	Whatcom	3,279	0	3,438,400	100	0	3,179	0
Samish	Samish	2,656	0	684,000	1,596	0	1,060	0
Baker River Trap	Baker River	9	0	0	9	0	0	0
Sunset Falls	Sunset Falls	10	0	0	10	0	0	0
Minter Creek	Minter Creek	14,200	0	6,013,000	8,266	0	5,934	0
	Early	280	0	0	24	0	256	0
Coulter Creek	Early [1]	1,840	0	0	1,840	0	0	0
	Late [1]	3,931	0	0	3,931	0	0	0
Garrison Springs	Garrison	5,802	0	597,700	5,349	0	453	0
Deschutes Falls Park	Percival	4	0	0	4	0	0	0
	Wild	27	0	0	24	0	3	0
George Adams	George Adams	10,601	0	7,156,000	0	0	10,601	0
McKernan	McKernan	9,350	0	3,655,000	0	0	9,350	0
Hood Canal	Hood Canal	71,648	0	35,626,000	400	0	71,248	0
SUBTOTAL		***124,365***	***0***	***57,779,300***	***21,553***	***0***	***102,812***	***0***
COASTAL REGION								
Nemah	Nemah	1,205	0	410,000	276	0	929	0
Naselle	Naselle	112	0	0	109	0	3	0
SUBTOTAL		***1,317***	***0***	***410,000***	***385***	***0***	***932***	***0***
COLUMBIA RIVER REGION								
Grays River	Grays River	16	0	0	16	0	0	0
Sea Resources	Sea Resources	2,985	0	304,000	644	0	2,341	0
SUBTOTAL		***3,001***	***0***	***304,000***	***660***	***0***	***2,341***	***0***
TOTAL ESCAPEMENT		***128,683***	***0***	***58,493,300***	***22,598***	***0***	***106,085***	***0***

1 PRHM Stream Survey

SOCKEYE

Hatchery	Stock	Total Escapement Adults	Total Escapement Jacks	Total Escapement Eggtake	Upstream Adults	Upstream Jacks	Escapement Less Upstream Adults	Escapement Less Upstream Jacks
PUGET SOUND REGION								
Baker River Trap	Baker River	3,818	0	0	3,817	0	1	0
Sunset Falls	Sunset Falls	5	0	0	5	0	0	0
Cedar River	Cedar River [1]	5,702	0	9,036,000	0	0	5,702	0
Garrison Springs	Chambers Creek	42	2	0	42	2	0	0
Deschutes Falls Park	Wild	3	0	0	3	0	0	0
SUBTOTAL		***9,570***	***2***	***9,036,000***	***3,867***	***2***	***5,703***	***0***
COLUMBIA RIVER REGION								
Toutle	Toutle	1	0	0	1	0	0	0
Lake Wenatchee	Lake Wenatchee	2,353	0	228,400	2,047	0	306	0
SUBTOTAL		***2,354***	***0***	***228,400***	***2,048***	***0***	***306***	***0***
TOTAL ESCAPEMENT		***11,924***	***2***	***9,264,400***	***5,915***	***2***	***6,009***	***0***

1 Numbers include males live spawned and returned to stream

PINK

Hatchery	Stock	Total Escapement			Upstream		Escapement Less Upstream	
		Adults	Jacks	Eggtake	Adults	Jacks	Adults	Jacks
PUGET SOUND REGION								
Baker River Trap	Baker River	6,123	0	0	6,117	0	6	0
Skykomish	Skykomish	135	0	83,000	0	0	135	0
Sunset Falls	Sunset Falls	6,180	0	0	6,180	0	0	0
Puyallup	Voight Creek	5	0	0	0	0	5	0
Garrison Springs	Garrison	1	0	0	0	0	1	0
Minter Creek	Minter Creek	16	0	2,000	5	0	11	0
Hood Canal	Hood Canal	11,497	0	5,384,000	0	0	11,497	0
TOTAL ESCAPEMENT		***23,957***	***0***	***5,469,000***	***12,302***	***0***	***11,655***	***0***