	A	B	C	D	E	F	G
1	2004 WDFW DRAFT Ocean Age 3 Washington coho forecast summary					03/02/04	
2		**Ocean Age 3 abundance**			Prop. of	Escapement	
3	**Production Region** / FRAM unit	Ad marked	Unmarked	Total	unit	Goal	
4	**Nooksack-Samish**						
5	Misc 7&7A Natural	-	3,400	3,400	0.03	1000 (Scndry)	
6	7/7A Ind. Hatch (San Juans CoOps)	1,140	0	1,140	0.01	-	
7	Nooksack R Natural	-	12,800	12,800	0.12	9,000 (Scndry)	
8	Kendall Cr. Hatchery	9,469	1,950	11,419	0.11	706	
9	Skookum Cr. Hatchery	39,983	1,817	41,800	0.40	2,000	
10	Lummi Bay Hatchery	18,192	516	18,709	0.18	2,360	
11	Misc Bell. Bay 7B Hatch	183	0	183	0.00	-	
12	Samish River Natural	-	11,300	11,300	0.11	8,900 (Scndry)	
13	Indian Slough Hatchery	3,360	0	3,360	0.03	-	
14	**Mgt unit hatchery total**	**72,327**	**4,283**	**76,610**	-	-	
15	**Mgt unit wild total**	-	**27,500**	**27,500**	-	-	
16	**Nook/Sam Prod Reg total**	**72,327**	**31,783**	**104,110**	**1.00**	-	
17	**Skagit**						
18	**Skagit River Natural**	-	**155,814**	**155,814**	0.87	40 % (Norm)	
19	Skagit natural (no Baker)	-	152,635	152,635	-	-	
20	Baker natural	-	3,179	3,179	-	-	
21	**Skagit Region Hatchery**	**18,734**	**4,055**	**22,788**	0.13	700	
22	Skagit Hatch (no Baker)	14,828	2,170	16,997	-	500	
23	Baker Hatch	3,906	0	3,906	-	200	
24	Oak Harbor Net Pens	0	1,885	1,885	-	-	
25	**Mgt unit hatchery total**	**18,734**	**4,055**	**22,788**	-	-	
26	**Mgt unit wild total**	-	**155,814**	**155,814**	-	-	
27	**Skagit Production Region total**	**18,734**	**159,869**	**178,602**	**1.00**	-	
28	**Stillaguamish- Snohomish**						
29	Stillaguamish Natural	-	38,000	38,000	0.14	50 % (Norm)	
30	Stillaguamish Hatchery	0	500	500	0.00	-	
31	Snohomish Natural	-	192,100	192,100	0.69	40 % (Norm)	
32	Snohomish Hatchery	3,300	8,400	11,700	0.04	3,200	
33	Tulalip Hatchery	13,800	17,500	31,300	0.11	-	
34	Misc 8A Hatch	5,300	0	5,300	0.02	-	
35	**Mgt unit hatchery total**	**22,400**	**26,400**	**48,800**	-	-	
36	**Mgt unit wild total**	-	**230,100**	**230,100**	-	-	
37	**Stil/Sno Production Region total**	**22,400**	**256,500**	**278,900**	**1.00**	-	
38	**South Sound**						
39	Lake Washington Natural	-	14,600	14,600	0.04	15,000 (Scndry)	
40	Lake Washington Hatchery	35,905	0	35,905	0.10	1K-2K	
41	Green River Natural	-	11,500	11,500	0.03	8,000 (Scndry)	
42	Green River Hatchery	20,493	22,816	43,309	0.12	2,300	
43	Elliot Bay Net Pens	0	34,515	34,515	0.10	-	
44	Seattle Aquarium	1,856	0	1,856	0.01	-	
45	Area 10 misc net pens	1,792	0	1,792	0.01	-	
46	West Area 10, 11, and 10E Natural	-	13,000	13,000	0.04	~3,100 (Scndry)	
47	Area 10E Hatchery	0	0	0	0.00	-	
48	Puyallup River Natural	-	13,900	13,900	0.04	11,000 (Scndry)	
49	Puyallup River Hatchery	51,886	3,046	54,932	0.16	1,100	
50	Area 13 (Fox Island NP)	-	-	0	0.00	-	
51	Nisqually River Natural	-	1,000	1,000	0.00	4,000 (Scndry)	
52	Nisqually River Hatchery	404	4,243	4,647	0.01	2,000	
53	Area 13A Hatchery (Normal)	49,031	583	49,614	0.14	4,500	
54	Area 13A Hatchery (Delayed)	14,828	240	15,067	0.04	-	
55	Misc. 13A-K Natural	-	7,200	7,200	0.02	13,500 (Scndry)	
56	Deschutes River Natural	-	100	100	0.00	8,100 (Scndry)	
57	SS Pens/Squaxin Island (Normal)	41,888	2,875	44,763	0.13	-	
58	SS Pens/Squaxin Island (Delayed)	1,753	214	1,968	0.01	-	
59	**Mgt unit hatchery normal total**	**203,256**	**68,078**	**271,334**	-	-	
60	**Mgt unit hatchery delayed total**	**16,581**	**454**	**17,035**	-	-	
61	**Mgt unit N+D hatchery total**	**219,836**	**68,532**	**288,369**	-	-	
62	**Mgt unit wild total**	-	**61,300**	**61,300**	-	-	
63	**SS Production Region total**	**219,836**	**129,832**	**349,669**	**1.00**	-	
64	**Hood Canal**[1]						
65	Area 9A Natural	-	209	209	0.00	Scndry, no goal	
66	Area 9A Net Pens	3,321	414	3,735	0.03	-	
67	Area 12/12B Natural	-	36,736	36,736	0.26	Comp Coho	
68	Quilcene Hatchery	16,206	2,609	18,815	0.13	1,300	
69	Area 12A Natural	-	200	200	0.00	Scndry, no goal	
70	Area 12A Net Pens	771	2,247	3,018	0.02	-	
71	Area 12C/12D Natural	-	40,467	40,467	0.29	Comp Coho	
72	Skokomish Natural	-	21,540	21,540	0.15	Comp Coho	
73	Skokomish Hatchery	14,610	2,555	17,165	0.12	550	
74	**PFMC hatchery total**	-	-	**43,142**	-	1,850	
75	**PFMC wild total (Primary only)**	-	-	**98,743**	-	35 % (Norm)	
76	**HC Production Region total**	-	-	**141,885**	**1.00**	-	
77	**Strait Juan de Fuca**[1]						
78	Dungeness Hatchery	15,079	0	15,079	0.23	650	
79	Elwha Hatchery	1,830	5,925	7,756	0.12	1,150	
80	**Eastern Straits Tribs Natural**	-	**12,006**	**12,006**	0.19	Comp Coho	
81	Primary east SJF Nat	-	6,124	6,124	-	-	
82	Dungeness wild	-	5,031	5,031	-	Scndry, no goal	
83	Elwha wild	-	851	851	-	Scndry, no goal	
84	**Western Straits Tribs Natural**	-	**29,598**	**29,598**	0.46	Comp Coho	
85	**PFMC hatchery total**	-	-	**28,716**	-	-	
86	**PFMC wild total (Primary only)**	-	-	**35,722**	-	40 % (Norm)	
87	**SJF Production Region total**	-	-	**64,438**	**1.00**	-	
88	Willapa Bay Natural	-	36,677	36,677	0.40	13,100	
89	Willapa Bay Hatchery	53,469	1,570	55,039	0.60	6,100	
90	**Willapa Production Region total**	**53,469**	**38,247**	**91,716**	**1.00**	-	
91	**Grays Harbor Natural**	-	**117,932**	**117,932**	0.63	35,400	
92	Humptulips Natural	-	19,124	19,124	-	-	
93	Chehalis Natural	-	98,808	98,808	-	-	
94	**Grays Harbor Hatchery**	**66,192**	**1,623**	**67,815**	0.37	5,000	
95	Humptulips Hatch	34,196	153	34,349	-	-	
96	Chehalis Hatch	21,968	1,415	23,383	-	-	
97	GH Net Pens	10,028	55	10,083	-	-	
98	**GH Production Region total**	**66,192**	**119,555**	**185,747**	**1.00**	-	
99	Quinault Natural[2]	-	50,000	50,000	0.73	-	
100	Quinault Hatchery	14,058	4,128	18,186	0.27	3,200	
101	**Quinault Prod Region total**	**14,058**	**54,128**	**68,186**	**1.00**		
102	Queets Natural		18,467	18,467	0.49	5,800-14,500	
103	Queets Supplemental	2,535	0	2,535	0.07	-	
104	Queets Hatchery	2,883	14,179	17,062	0.45	-	
105	**Queets Production region total**	**5,418**	**32,646**	**38,064**	**1.00**	-	
106	North Coast Indept. tribs Natural	-	12,720	12,720	0.75	-	
107	North Coast Indept. Hatch (Makah)	3,587	734	4,322	0.25	-	
108	**NC Production Region total**	**3,587**	**13,454**	**17,042**	**1.00**	-	
109	Hoh Natural	-	8,100	8,100	1.00	2,000-5,000	
110	Hoh Hatchery	-	-	0	0.00	0	
111	**Hoh Production Region total**	**0**	**8,100**	**8,100**	**1.00**	-	
112	Quillayute summer Natural	-	1,080	1,080	0.02	300	
113	Quillayute summer Hatchery	6,062	74	6,136	0.12	200	
114	Quillayute fall Natural	-	21,212	21,212	0.43	6,300-15,800	
115	Quillayute fall Hatchery	18,097	2,824	20,921	0.42	400	
116	**Quill Production Region total**	**24,159**	**25,190**	**49,349**	**1.00**	-	
117	Columbia Early Above Bonn				0.00	-	
118	Columbia Early Below Bonn			313,600	0.53	-	
119	Columbia Late Above Bonn				0.00	-	
120	Columbia Late Below Bonn			274,700	0.47	-	
121	Lower Columbia natural [1]	-			-	-	
122	**Col. PR Total** excl LC natural	**0**	**0**	**588,300**	**1.00**	-	
123	**Grand Total**	**500,181**	**869,304**	**2,164,108**			

124 Notes

125 1) Hood Canal and SJF final forecast values only published with DA2 and JA3 values. The OA3 Hatch
126 forecats values for these regions for this table were derived by dividing the JA3 values by the
127 JA3>OA3 conversion value of 1.232.
128 2) "Official" Columbia natural estimate is folded into the total Columbia early and late forecasts, as
129 Columbia fcst is based on historical relationship of hatchery jack returns to subsequent total H+W
130 adult OPI runsizes (although natural production in Columbia basin has not yet been systematically
131 quanitified, it is assumed to be a small fraction (<10 %) of total annual return).
132 3) Quinault wild fcst value is a preliminary estimate

133	2,164,108	Grand H+W Total (Table 1)
134	2,164,108	Grand H+W Total (Table 2A)
135	2,164,108	Grand H+W Total (Table 2B)
136	1,575,808	Total H+W w/out Columbia (Table 1)
137	1,575,808	Total H+W w/out Columbia (Table 2A)
138	1,575,808	Total H+W w/out Columbia (Table 2B)
139	1,117,604	Puget Sound/SJF H+W Total (Table 1)
140	1,117,604	Puget Sound/SJF H+W Total (Table 2A)
141	1,117,604	Puget Sound/SJF H+W Total (Table 2B)

145 1) Catch + escapement = Ocean age 3
146 2) Ocean age 3 * 1.333 = DA2
147 3) Jan age 3 = DA2 * 0.924
148 4) Jan age 3 = Ocean age 3 * 1.333 * (1-0.076) or
149 Jan age 3 = Ocean age 3 * 1.333 * 0.924 or
150 Jan age 3 = Ocean age 3 * 1.232
151 *Note: O.076 is Dec age 2 monthly mortality rate.*