

Appendix A: Salmon time series used in the analyses

The 30+ year time series used in the analyses. The Evolutionarily Significant Units (ESUs) are described in Busby et al. 1996 and Myers et al. 1998. The majority of the data are catalogued on the StreamNet online database (www.streamnet.org) maintained by the Pacific States Marine Fisheries Commission; the rest are on National Marine Fisheries Service (NMFS) databases or in the cited references. Count types are redds (redds), redds per mile (rpm), total live spawner estimate (tlc), peak spawner or carcass count (peak), dam count (dc), and unknown (unk).

ESU	Count types	References: Numbers are StreamNet reference numbers
CHINOOK		
California	13 tlc	61115-8 61121-3, 61129, 61131, 61136-8, 90010
Lower Columbia	11 tlc 4 peak	50005, 50007, 50010, 50276, 50312, 50982, 103050, 105030, 110050, 113030, 113040, 116050, 121002, 128050, 131030
Middle Columbia	10 rpm	50148, 50158, 50167, 50175, 50177-8, 52053-5, 61466
Upper Columbia Spr	2 redds 6 rpm 4 tlc 3 peak	60044, 60046, 60048, 60057-9, 60061, 60063, 60825-7, 143031, T. Cooney, NMFS (pers. comm.)
Upper Columbia Sum/Fall	4 rpm 1 tlc	60040-2, 60055, Beamesderfer et al. 1998
Snake R Spr/Sum	1 redds 38 rpm 7 tlc	41001-2, 41005-6, 41008-9, 41012, 41015-6, 41023, 41026, 41028, 41030-1, 41033, 41035-6, 41038, 41044, 41048, 41056, 41058-60, 41062, 41076, 50074, 50097, 50119-21, 50124, 54594, 57510-4, Beamesderfer et al. 1998, 1 NMFS
Snake R Basin Fall	1 tlc	Beamesderfer et al. 1998
Oregon Coast	1 tlc 20 peak	50414, 50445, 50498, 50541, 50549, 50568-70, 50572, 52074, 52076, 52078, 52080, 52082, 53492, 53494, 53498, 53505, 66899
Puget Sound	10 tlc 1 dc 7 unk	60586, 60606, 60611, 60638, 60645, 60665, 60674, 60677+61583, 60689, 61471, 61992, 7 NMFS
STEELHEAD		
Lower Columbia	1 dc	50320
Middle Columbia	13 rpm 1 dc	50104, 50106, 50109, 50111, 50114, 50515+57508, 54587, 54597-99, 57526, 57530-1, 57533
Upper Columbia	1 tlc	180072
Snake River	13 rpm	50022-6, 54564-5, 54567, 54569, 54572-3, 54575, 54589
Upper Willamette	3 tlc	50305, 50945, 51004
Klamath Mtns Prov.	2 dc	51222-3
Oregon Coast	2 dc	50512-3
Puget Sound	2 dc	60896, 60900
Northern California	3 dc	61134, 61140, 90107

Appendix A: References:

Beamesderfer, R. C. P., H.A. Schaller, M.P. Zimmerman, C.P. Petrosky, O.P. Langness, and L. LaVoy. 1998. Spawner-recruit data for spring and summer chinook salmon populations in Idaho, Oregon, and Washington. In Marmorek, ed. Plan for Analyzing and Testing Hypotheses (PATH): Retrospective and Prospective Analyses of Spring/Summer Chinook. ESSA Technologies Ltd., Vancouver, B.C.

Busby, P. J., T. C. Wainwright, G. J. Bryant, L. Lierheimer, R. S. Waples, F. W. Waknitz, and I. V. Lagomarsino. 1996. Status review of west coast steelhead from Washington, Idaho, Oregon, and California. U. S. Department of Commerce, NOAA Technical Memo. NMFS-NWFSC-27, 261 pp.

Myers, J. M., R. G. Kope, G. J. Bryant, D. Teel, L. J. Lierheimer, T. C. Wainwright, W. S. Grant, F. W. Waknitz, K. Neely, S. T. Lindley, and R. S. Waples. 1998. Status review of chinook salmon from Washington, Idaho, Oregon, and California. U. S. Department of Commerce, NOAA Technical Memo. NMFS-NWFSC-35, 443p.