

CHAPTER I - ABUNDANCE PROJECTIONS

Abundance expectations in 2008 are summarized for key Chinook and coho salmon stocks in Tables I-1 and I-2, respectively. A cursory comparison of preseason forecast and postseason abundance estimates for selected stocks is presented in Figures I-1 and I-2. More detailed analyses of this subject are covered in Chapter II (Chinook) and III (coho). Information on pink salmon abundance, which is only significant in odd-numbered years, is contained in Chapter IV. Council Salmon Fishery Management Plan (FMP) management goals are presented in Table I-3 and Appendix A, Table A-1.

In addition to the key stocks with abundance projections listed in Tables I-1 and I-2, Council management decisions for the 2008 ocean salmon fishing seasons may be constrained by other stocks, such as those listed under the ESA or subject to the PSC agreement, which may not have abundance projections made, or do not have abundance projections available in time for inclusion in this report. These include the following ESU's: Sacramento River Winter, Central Valley Spring, California Coastal, Lower Columbia River, and Snake River Fall Chinook; and Central California and Southern Oregon/Northern California coho, as well as Interior Fraser (including Thompson River) coho.

TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 1 of 3)

Production Source and Stock or Stock Group	2000	2001	2002	2003	2004	2005	2006	2007	2008	Methodology for 2008 Prediction and Source
California Central Valley (Index)										
Sacramento and San Joaquin Basins, Fall, Late Fall, Spring, and Winter Run	790.4	649.4	825.4	1,108.1	831.8	1,678.3	632.5	499.9	157.1	Linear regression analysis of river age-2 jacks on CVI of the following year. Data point 2005 excluded for 2008 CVI forecast. ODFG staff.
Klamath River (Ocean Abundance)										
Fall Run	389.9	435.5	362.5	310.2	216.3	239.8	110.0	546.2	190.7	Linear regression analysis of age-specific ocean abundance estimates on river runs of same cohort. KRTAT.
Oregon Coast										
North and South/Local Migrating Estimates Not Made										None.
Columbia River (Ocean Escapement)										
Upriver Spring	134.0	364.6	333.7	145.4	360.7	254.1 ^{a/}	88.4	78.5	269.3	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Willamette Spring	59.9	61.0	73.8	109.8	109.4	116.9	46.5	52.0	34.0	Age-specific linear regressions of cohort returns in previous run years. ODFW staff.
Sandy Spring	3.8	4.0	4.3	4.8	5.2	7.4	8.2	7.9	6.8	Recent year average. ODFW staff.
Cowlitz Spring	2.0	1.0	3.1	4.9	15.9	12.7	3.0	6.4	5.2	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Kalama Spring	1.4	1.0	1.6	3.6	6.0	4.5	1.5	4.0	3.7	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Lewis Spring	2.6	2.8	2.0	3.1	5.4	7.6	1.8	5.9	3.5	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Upriver Summer	33.3	24.5	77.7	87.6	102.8	62.4 ^{a/}	49.0	45.6	52.0	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
URB Fall	171.1	127.2	281.0	280.4	292.2	352.2	253.9	182.4	162.5	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
SCH Fall	21.9	56.6	144.4	96.9	138.0	114.1	50.0	21.8	87.2	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
LRW Fall	3.5	16.7	18.7	24.6	24.1	20.2	16.6	10.1	3.8	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
LRH Fall	23.7	32.2	137.6	115.9	77.1	74.1	55.8	54.9	59.0	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.
MCB Fall	50.6	43.5	96.2	104.8	90.4	89.4	88.3	68.0	54.0	Age-specific average cohort ratios/cohort regressions. Columbia River TAC.

TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 2 of 3)

Production Source	2000	2001	2002	2003	2004	2005	2006	2007	2008	Methodology for 2008 Prediction and Source
Washington Coast (Ocean Escapement)										
Willapa Bay	4.2	4.3	3.7	2.4	4.1	3.2	2.0	2.0	2.5	Mean return per release by age class adjusted for brood performance through 2007 return year. WDFW staff.
										Mean return per release by age class adjusted for brood performance through 2007 return year. WDFW staff.
Quinalt Spring/Summer	Natural	18.9	17.8	18.8	14.2	14.7	17.4	29.8	27.0	
Quinalt Fall	Hatchery	NA	NA	NA	NA	NA	NA	NA	NA	
Queets Spring/Summer	Natural	NA	NA	NA	NA	NA	NA	NA	NA	
Queets Fall	Natural	NA	NA	NA	NA	NA	NA	NA	NA	
Hoh Spring/Summer	Natural	NA	NA	NA	NA	NA	NA	NA	0.9	Age specific mean cohort ratios and linear regression analysis using recent 5 year mean.
Hoh Fall	Natural	NA	NA	NA	NA	NA	NA	NA	2.9	Age specific mean cohort ratios and linear regression analysis, means of all years subtracting out the high and low years.
Quillayute Spring	Hatchery	NA	NA	NA	NA	NA	NA	NA	1.7	Mean return per release, adjusted means for 5-6 year olds.
Quillayute Summer/Fall	Natural	NA	NA	NA	NA	NA	NA	NA	6.3	Summer: Recent 5 year mean return per spawner. Fall: Recent year mean return rates from cohort analysis.
North Coast Totals										
Spring/Summer	Natural	NA	NA	NA	NA	NA	NA	NA	NA	
Fall	Natural	NA	NA	NA	NA	NA	NA	NA	NA	
Spring/Summer	Hatchery	NA	NA	NA	NA	NA	NA	NA	NA	
Fall	Hatchery	NA	NA	NA	NA	NA	NA	NA	NA	
Puget Sound^{b/}										
Nooksack/Samish	Hatchery	19.0	34.9	52.8	45.8	34.2	19.5	16.9	18.8	35.3
East Sound Bay	Hatchery	5.0	1.6	1.6	1.6	0.8	0.4	0.4	0.4	0.8
Skagit	Natural	7.3	9.1	13.8	13.7 ^{c/}	20.4 ^{c/}	23.4 ^{c/}	24.1 ^{c/}	15.0 ^{c/}	23.8 ^{c/}
	Hatchery	0.0	0.0	0.0	0.0 ^{c/}	0.5 ^{c/}	0.7 ^{c/}	0.6 ^{c/}	1.1 ^{c/}	0.7 ^{c/}
Stillaguamish	Natural	2.0 ^{d/}	1.7 ^{d/}	2.0 ^{d/}	2.0 ^{d/}	3.3 ^{d/}	2.0 ^{d/}	1.6 ^{d/}	1.9 ^{d/}	1.1 ^{d/}
Snohomish	Natural	6.0	5.8 ^{d/}	6.7 ^{d/}	5.5 ^{d/}	15.7 ^{d/}	14.2 ^{d/}	8.7 ^{d/}	12.3 ^{d/}	6.5 ^{d/}
	Hatchery	6.2	4.1	6.8 ^{d/}	9.4 ^{d/}	10.1 ^{d/}	9.9 ^{d/}	9.6 ^{d/}	8.7 ^{d/}	8.8 ^{d/}
Tulalip	Hatchery	5.0	5.5	5.8 ^{d/}	6.0 ^{d/}	7.6 ^{d/}	9.2 ^{d/}	10.0 ^{d/}	8.1 ^{d/}	4.1 ^{d/}

TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 3 of 3)

Production Source and Stock or Stock Group	Methodology for 2008 Prediction and Source									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008
South Puget Sound Natural	17.5	16.2	16.9	19.6	17.5	17.7	21.3	17.0	21.1	Puyallup-based predicted return at age calculated for return years 1993-2005, multiplied by average difference between forecasts and run sizes from 1999 to 2006. For Nisqually, recent 5-year average (2002-2006).
Hatchery	77.5	73.7	90.8	86.6	86.5	83.1	85.8	92.1	101.3	Average return at age multiplied by cohort release for Green and 10E. Average of two different methods for Carr Inlet, (1) 1980-2005 mean return/smolt released multiplied by 2002 brood smolts released, and (2) 1980-2006 mean return/pound released multiplied by 2004 brood pounds released.
Hood Canal Natural	19.2	2.7	2.9 ^{c/}	3.6 ^{c/}	2.4 ^{c/}	3.1 ^{c/}	2.5 ^{c/}	3.8 ^{c/}	2.6 ^{c/}	Natural fish based on the Hood Canal terminal run reconstruction-based relative contribution of the individual Hood Canal management units in the 2004-2007 return years.
Hatchery		22.6	21.1 ^{c/}	30.2 ^{c/}	27.2 ^{c/}	27.5 ^{c/}	27.7 ^{c/}	43.6 ^{c/}	34.2 ^{c/}	Brood 2004 fingerling lbs released from WDFW facilities in 2005, multiplied by the average of postseason estimated terminal area return rates (total terminal run / hatchery fingerling lbs released three years previous) for the last eight return years (2000-2007), excluding return year 2005 in which the return rate was a statistical outlier.
Hoko Natural				Included in Juan de Fuca Forecast					1.1 ^{d/}	Sibling regressions;
Strait of Juan de Fuca Natural	1.1	3.5	3.6 ^{c/}	3.4 ^{c/}	3.6 ^{c/}	4.2 ^{c/}	4.2 ^{c/}	4.4 ^{c/}	3.2	Four-year average 2003-2006 of terminal run size. Elwha
Hatchery	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	estimate is a combination of hatchery and wild fish.

a/ Beginning in 2005, the upriver spring/summer designation was changed, with stream type Snake Basin summer fish being combined with the spring stock.

b/ Forecast is Puget Sound run size available to U.S. net fisheries. Does not include fish caught in troll and recreational fisheries.

c/ Terminal run forecast.

d/ Expected spawning escapement without fishing.

TABLE I-2. Preseason adult coho salmon stock forecasts in thousands of fish. (Page 1 of 2)

Production Source and Stock or Stock Group	2000	2001	2002	2003	2004	2005	2006	2007	2008	Methodology for 2008 Prediction and Source
OPI Area (Total Abundance)	727.9	1,758.7	434.1	984.6	777.9	542.9	460.2	870.7	289.5	Sum of stock component estimates.
Columbia River										
OPI Public Hatchery	671.4	1,707.6	361.7	863.1	623.9	389.9	398.8	593.6	216.1	A new method was developed to estimate coho abundances for the hatchery components of the Columbia River and the Oregon Coast. The new method is based on the 86-92 base period and "backwards" FRAM runs for recent years. See text in Chapter III for details.
Columbia River Early	326.3	1,036.5	161.6	440.0	313.6	284.6	245.8	424.9	110.3	
Columbia River Late	278.0	491.8	143.5	377.9	274.7	78.0	113.8	139.5	86.4	
Coastal N. of Cape Blanco	48.5	127.3	36.6	29.3	16.6	11.5	8.6	7.0	1.7	
Coastal S. of Cape Blanco	18.6	52.0	20.0	15.9	19.0	15.8	30.6	22.2	17.7	
Lower Columbia River										
Natural	NA	NA	NA	NA	NA	NA	NA	21.5	13.4	A new method was developed to estimate LCR wild coho. The method relies on the 86-92 base period and "backward" FRAM runs for recent years. See text in Chapter III for details.
Oregon Coast (OCN)										
Natural	55.9	50.1	71.8	117.9	150.9	152.0	60.8	255.4	60.0	Prediction for 2008 is equal to 2007 observed return.
STEP Hatchery	0.6	1.0	0.6	3.6	3.1	1.0	0.6	0.2	0.0	No forecast for 2008; releases discontinued.
Washington Coast										
Willapa										
Natural	9.9	21.6	21.6	31.8	36.7	35.9	30.3	24.4	35.1	A variety of methods were used for 2008, primarily based on smolt production and survival. See text in Chapter III for details.
Hatchery	19.6	36.1	40.4	57.5	55.0	56.4	37.7	37.2	25.5	
Grays Harbor										
Natural	47.8	51.3	55.4	58.0	117.9	91.1	67.3	59.4	42.7	
Hatchery	75.8	67.1	56.8	64.0	67.8	54.4	52.4	74.0	53.1	
Quinalt										
Natural	4.4	8.7	29.4	47.7	50.5	44.9	28.8	18.6	17.4	
Hatchery	7.4	10.8	12.3	20.6	18.2	33.6	34.5	22.7	24.5	
Queets										
Natural	2.7	12.0	12.5	24.0	18.5	17.1	8.3	13.6	10.2	
Hatchery	11.8	10.0	16.0	24.9	17.1	17.4	11.9	19.1	10.3	
Supplemental ^{a/}	0.8	NA	2.0	1.3	2.5	2.4	-	-	-	
(Flood)										
Hoh										
Natural	3.5	8.5	8.5	12.5	8.1	7.6	6.4	5.4	4.3	
Quillayute Fall										
Natural	8.7	23.0	22.3	24.9	21.2	18.6	14.6	10.8	10.5	
Hatchery	13.9	15.3	15.0	15.2	20.9	22.1	10.4	18.1	13.0	

TABLE I-2. Preseason adult coho salmon stock forecasts in thousands of fish. (Page 2 of 2)

Production Source and Stock or Stock Group	Methodology for 2008 Prediction and Source									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008
Quillayute Summer	Natural	1.6	0.6	1.2	1.8	1.1	0.8	1.1	1.0	1.1
	Hatchery	5.4	5.3	4.9	5.4	6.1	6.1	4.0	6.4	4.2
North Coast Independent Tributaries	Natural	5.1	8.1	6.4	14.8	12.7	8.5	8.1	3.2	3.2
	Hatchery	11.7	8.1	8.1	11.0	4.3	5.6	3.2	4.1	5.0
WA Coast Total	Natural	83.7	133.8	157.3	215.5	266.7	224.5	164.9	136.4	124.5
	Hatchery	146.4	152.7	155.5	199.9	191.9	198.0	154.1	181.6	135.7
Puget Sound Strait of Juan de Fuca	Natural	13.5	21.4	21.2	20.1	35.7	20.7	26.1	29.9	24.1
	Hatchery	13.6	14.4	14.0 ^{a/}	24.0 ^{a/}	28.7 ^{a/}	26.5 ^{a/}	20.5	18.4	9.5
Nooksack-Samish	Natural	14.9	12.4	22.0	16.4	27.5	17.0	18.3	5.2	14.8
	Hatchery	65.5	44.4	105.4	66.2	75.5	89.5	81.1	53.1	47.1
Skagit	Natural	30.2	87.2	98.5	116.6	155.8	61.8	106.6	26.8	61.4
	Hatchery	10.3	10.1	14.1	10.4	22.8	9.1	22.5	8.9	18.3
Stillaguamish	Natural	17.7	24.4	19.7	37.8	38.0	56.7	45.0	69.2	31.0
	Hatchery	-	-	-	1.3	0.5	0.2	1.2	0.0	0.1
Snohomish	Natural	53.0	129.6	123.1	203.0	192.1	241.6	139.5	98.9	92.0
	Hatchery	62.1	60.9	60.3	35.4	48.3	59.1	96.4	25.7	53.5
South Sound	Natural	11.7	29.5	40.4	103.6	61.3	45.7	45.3	18.2	27.3
	Hatchery	121.8	172.6	222.5	315.6	288.4	222.2	256.1	181.7	170.0
Hood Canal	Natural	61.0	62.0	34.9	32.4	98.7	98.4	59.4	42.4	30.4
	Hatchery	38.5	33.5	31.3 ^{a/}	48.0 ^{a/}	43.1 ^{a/}	60.6 ^{a/}	57.9	54.8	35.0
Puget Sound Total	Natural	202.0	366.5	359.8	529.9	609.2	541.9	440.2	290.6	281.0
	Hatchery	311.8	335.9	447.6	501.0	507.3	465.2	535.7	342.6	333.5

a/ Strait of Juan de Fuca and Hood Canal Hatchery numbers in 2002-2005 include natural coho from secondary (hatchery) management zones.

b/ Program ended in 2005.

TABLE I-3. Achievement of conservation objectives for natural stocks listed in Table 3-1 of the Pacific Coast Salmon Plan. Bolded numbers indicate a failure to meet the conservation objective. Stocks listed under the Endangered Species Act are not included. (Page 1 of 2)

Stock and Conservation Objective (thousands of spawners; spawners per mile; impact or replacement rate)	Observed or Projected Conservation Achievement (postseason estimates of thousands of spawners or spawners per mile; preseason or postseason impact or replacement rate)										Overfishing Criteria	
	2000	2001	2002	2003	2004	2005	2006	2007 ^{a)}	2008 ^{b)}	Alert ^{c)}	Concern ^{d)}	Exception ^{e)}
CHINOOK												
Sacramento River Fall 122.0 - 180.0 adult spawners	416.8	546.1	775.5	521.6	283.6	394.0	267.9	88.0	68.4	No	No	No
Klamath River Fall - < 66%-67% avg. spawner reduction rate but no less than 35.0 adult natural spawners annually	82.7	77.8	65.6	87.6	24.1	26.8	30.2	59.7	26.9	No	Yes	No
Southern, Central and Northern Oregon Coast Spring and Fall No less than 60 adult spawners/mile ^{f)}	85.0	203.0	268.0	297.0	211.0	118.0	106.0	42.0	NA	No	No	No
Upper Columbia River Bright Fall 43.5 adults over McNary Dam Council area base period impacts <4%	66.4	110.5	141.7	180.0	170.6	134.8	91.0	58.7	>43.5	No	No	Exp. Rate
Columbia River Summer Chinook 80.0 to 90.0 adults over Bonneville Dam Council area base period impacts <2% In 2004 state and tribal co-managers changed the stock definition from Chinook passing Bonneville Dam after May 31 to Chinook passing Bonneville Dam after June 14, and the goal changed to 29,000 at the river mouth	30.6	76.2	127.4	114.8	NA	NA	NA	NA	NA	NA	NA	NA
Grays Harbor Fall - 14.6 adult spawners (MSP)	23.2	54.9	92.8	83.1	65.4	60.1	76.2	37.2	>29.0	No	No	Exp. Rate
Grays Harbor Spring - 1.4 adult spawners	9.3	9.5	11.3	19.4	31.8	19.5	17.1	NA	NA ^{g)}	No	No	Exp. Rate
Queets Fall - no less than 2.5 adult spawners (MSY)	3.1	2.9	2.6	1.9	5.0	2.1	2.5	NA	NA ^{g)}	No	No	Exp. Rate
Queets Spring/Summer - no less than 0.7 adult spawners	3.6	2.3	2.1	4.1	3.6	3.1	2.3	1.9	NA ^{g)}	No	No	Exp. Rate
Hoh Fall - no less than 1.2 adult spawners (MSY)	0.2	0.5	0.7	0.2	0.6	0.3	0.3	NA ^{g)}	Limited ^{g)}	No	No	Exp. Rate
Hoh Spring/Summer - no less than 0.9 adult spawners	1.7	2.6	4.4	1.6	3.2	4.2	1.5	1.7	2.9	No	No	Exp. Rate
Quillayute Fall - no less than 3.0 adult spawners (MSY)	0.5	1.2	2.5	1.2	1.8	1.2	0.9	0.8	0.9	No	No	Exp. Rate
Quillayute Spring/Summer - 1.2 adult spawners (MSY)	3.7	5.1	6.1	7.4	3.8	6.4	5.6	2.9	5.5	No	No	Exp. Rate
	1.0	1.2	1.0	1.2	1.1	0.9	0.6	NA	2.5	Limited ^{g)}	No	Exp. Rate

TABLE I-3. Achievement of conservation objectives for natural stocks listed in Table 3-1 of the Pacific Coast Salmon Plan. Bolded numbers indicate a failure to meet the conservation objective. Stocks listed under the Endangered Species Act are not included. (Page 2 of 2)

Stock and Conservation Objective (thousands of spawners; spawners per mile; impact or replacement rate)	Observed or Projected Conservation Achievement (postseason estimates of thousands of spawners or spawners per mile; pre-season or post-season impact or replacement rate)										Overfishing Criteria	
	2000	2001	2002	2003	2004	2005	2006	2007 ^{a/}	2008 ^{b/}	Alert ^{c/}	Concern ^{d/}	Exception ^{e/}
COHO												
Grays Harbor - 35.4 adult spawners (MSP)	38.1	79.1	108.7	83.9	60.7	44.1	14.4	23.7	>35.4	No	No	No
Queets - 5.8 to 14.5 adult spawners (MSY range) Includes supplemental adults prior to 2006.	8.6	24.9	13.8	10.6	8.7	6.5	5.4	5.3	>5.8	No	No	No
Hoh - 2.0 to 5.0 adult spawners (MSY range)	6.8	10.8	9.0	6.3	4.7	4.7	1.3	3.1	>2.0	No	No	No
Quillayute Fall - 6.3 to 15.8 adult spawners (MSY range)	13.3	18.9	23.0	14.8	13.4	11.5	5.6	5.6	>6.3	No	No	No
Western Strait of Juan de Fuca - 11.9 adult spawners	16.9	34.3	20.6	12.4	12.0	6.8	>11.9	>11.9	>11.9	No	No	No
Eastern Strait of Juan de Fuca - 0.95 adult spawners	2.1	2.6	2.5	2.9	8.5	3.4	>0.95	>0.95	>0.95	No	No	No
Hood Canal - 21.5 adult spawners (MSP)	27.2	94.8	69.3	170.3	146.9	38.1	13.8	>21.5	15.0	No	No	No
Skagit - 30.0 adult spawners (MSP)	62.9	87.0	56.0	69.2	138.8	34.7	14.5	>30.0	41.5	No	No	No
Stillaguamish - 17.0 adult spawners (MSP)	28.3	73.6	27.3	45.7	59.2	25.8	8.5	38.7	20.4	No	No	No
Snohomish - 70.0 adult spawners (MSP)	94.2	261.8	161.6	182.7	252.8	109.0	75.8	117.9	61.9	No	No	No

a/ Preliminary data.

b/ Preliminary approximations based on pre-season abundance projections and last year's regulations or season structures.

c/ Conservation Alert - triggered during the annual pre-season process if a natural stock or stock complex, listed in Table 3-1 of the salmon FMP, is projected to fall short of its conservation objective (MSY, MSY proxy, MSP, or floor in the case of some harvest rate objectives [e.g., 35,000 natural Klamath River fall Chinook spawners]).

Actions for Stocks that are not Exceptions - The Council will close salmon fisheries within its jurisdiction which impact the stocks, except in the case of Washington coastal and Puget Sound salmon stocks and fisheries managed under U.S. District Court orders. In these cases, the Council may allow fisheries which meet annual spawner targets developed through relevant U.S. v. Washington, Hoh v. Baldrige, and subsequent U.S. District Court ordered processes and plans, that may vary from the MSY or MSP conservation objectives. For all natural stocks that meet the conservation alert criteria, the Council will notify pertinent fishery and habitat managers, advising that the stock may be temporarily depressed or approaching an overfishing concern (depending on its recent conservation status), and request state and tribal fishery managers identify the probable causes, if known. If the stock has not met its conservation objective in the previous two years, the Council will request state and tribal managers to do a formal assessment of the primary factors leading to the shortfalls and report to the Council no later than the March meeting prior to the next salmon season.

d/ Overfishing concern - triggered if, in three consecutive years, the post-season estimates indicate a natural stock, listed in Table 3-1 of the salmon FMP, has fallen short of its conservation objective (MSY, MSP, or spawner floor as noted for some harvest rate objectives).

Actions required for Stocks that are not Exceptions - Within one year, the STT to recommend and the Council to adopt management measures to end the overfishing concern and recover the stock in as short a time as possible, preferably within ten years or less. The HC to provide recommendations for habitat restoration and enhancement measures within a suitable time frame.

e/ Exception - application of the conservation alert and overfishing criteria and subsequent Council actions do not apply for (1) hatchery stocks, (2) natural stocks with a cumulative adult equivalent exploitation rate of less than 5% in ocean fisheries under Council jurisdiction during the FRAM base periods, and (3) stocks listed under the ESA.

Conservation Alert and Overfishing Concern Actions for Natural Stocks that are Exceptions (those with exploitation rates limited to less than 5% in base period Council-area ocean fisheries) - Use the expertise of STT and HC to confirm negligible impacts of proposed Council fisheries, identify factors which have led to the decline or low abundance (e.g., fishery impacts outside Council jurisdiction, or degradation or loss of essential fish habitat) and monitor abundance trends and total harvest impact levels. Council action will focus on advocating measures to improve stock productivity, such as reduced interceptions in non-Council managed fisheries, and improvements in spawning and rearing habitat, fish passage, flows, and other factors affecting overall stock survival.

f/ Based on the sum of south/local and north migrating spawners per mile weighted by the total number of miles surveyed for each of the two components (2.2 miles for south/local and 7.5 miles for northern stocks).

g/ Pre-season forecasts are not available for Washington coastal Chinook stocks.

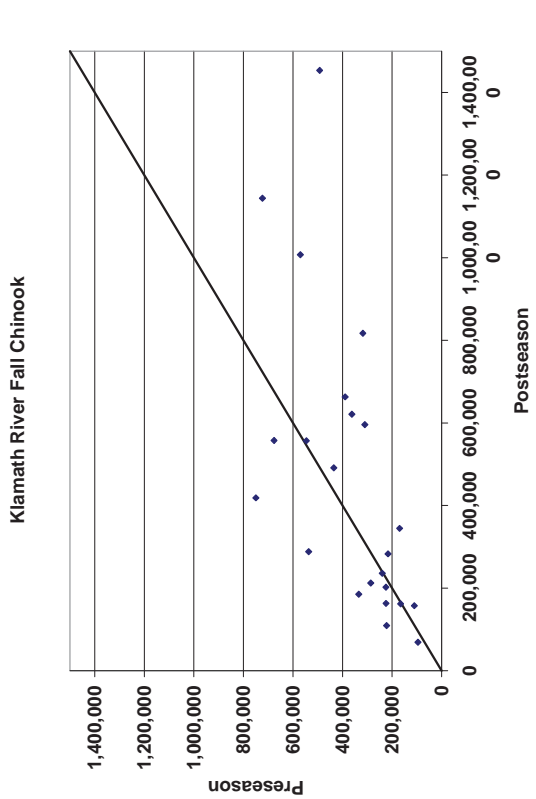
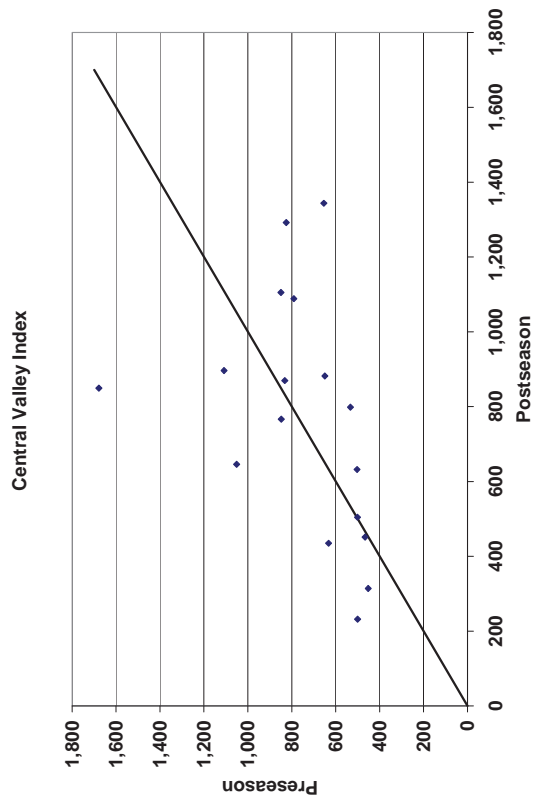
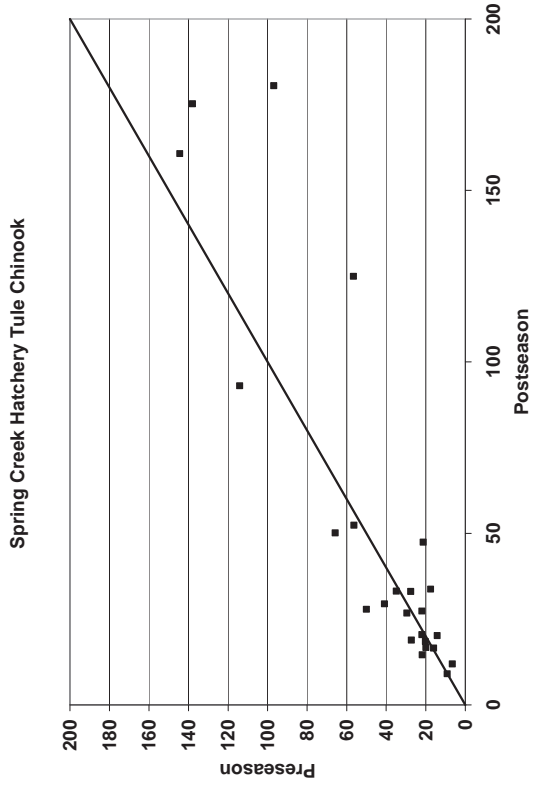
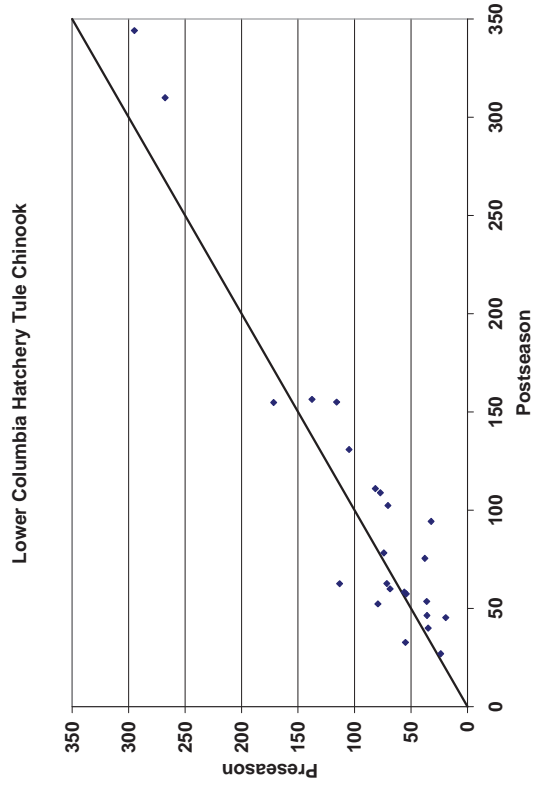


FIGURE I-1. Selected preseason vs. postseason forecasts for Chinook stocks with significant contribution to Council area fisheries.

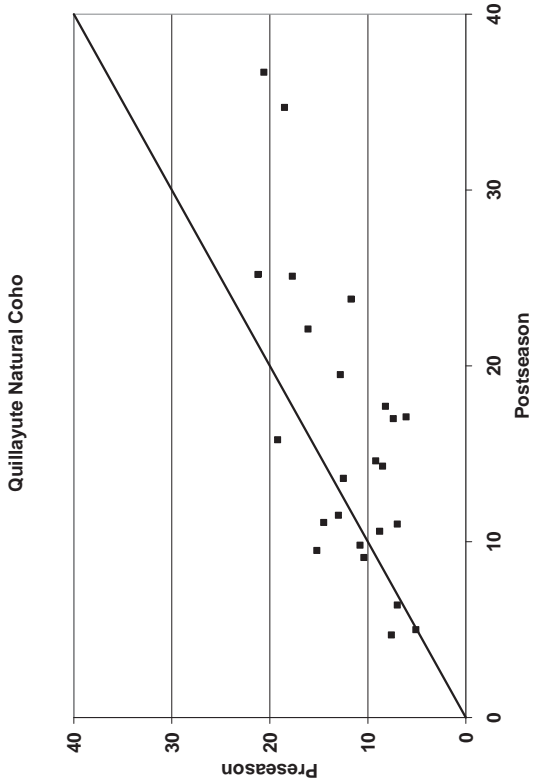
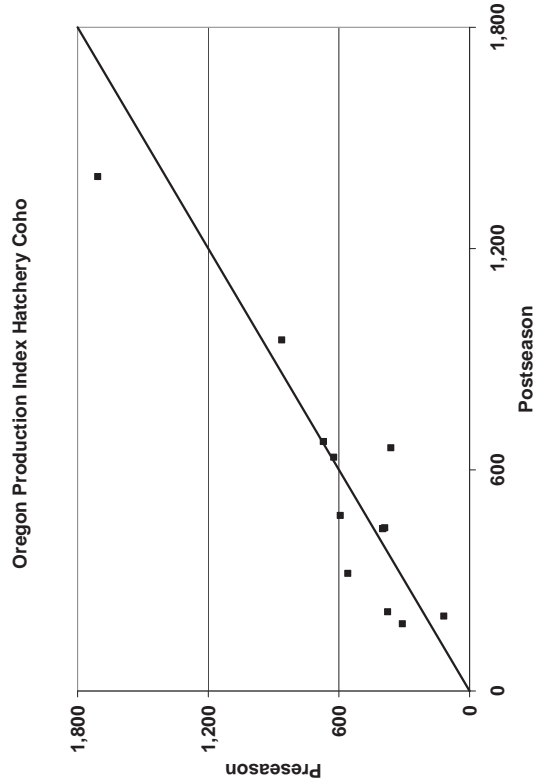
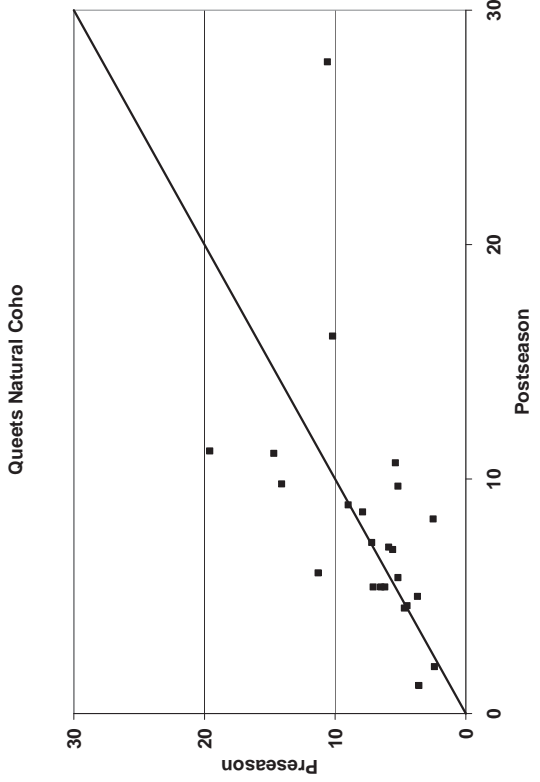
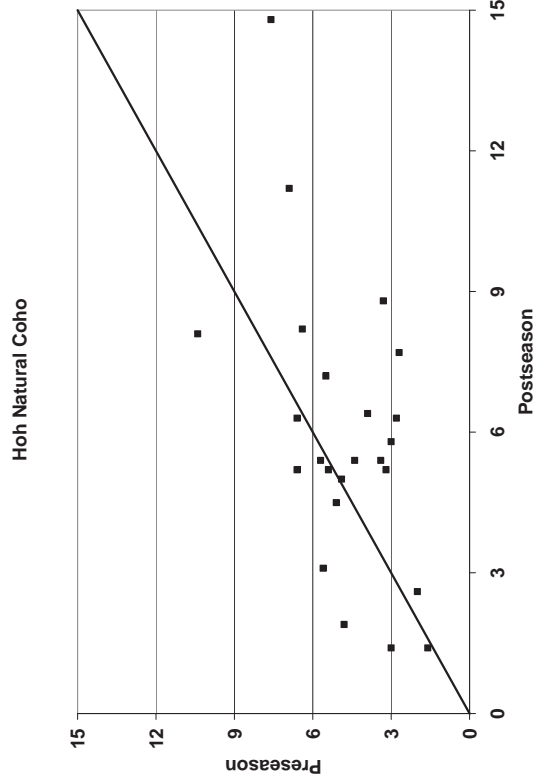


FIGURE I-2a. Selected preseason vs. postseason forecasts for coho stocks with significant contribution to Council area fisheries.

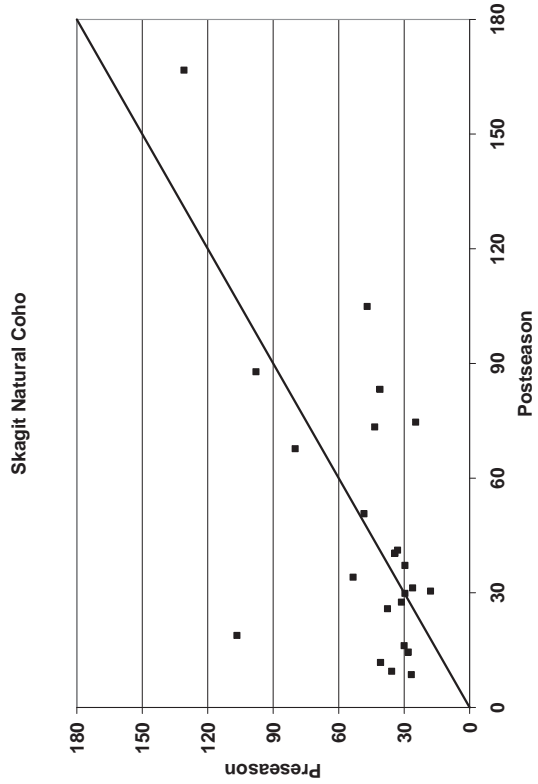
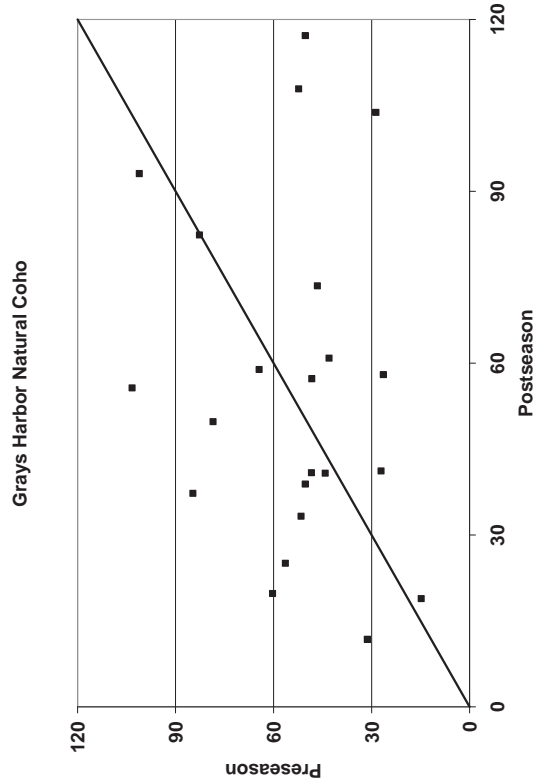
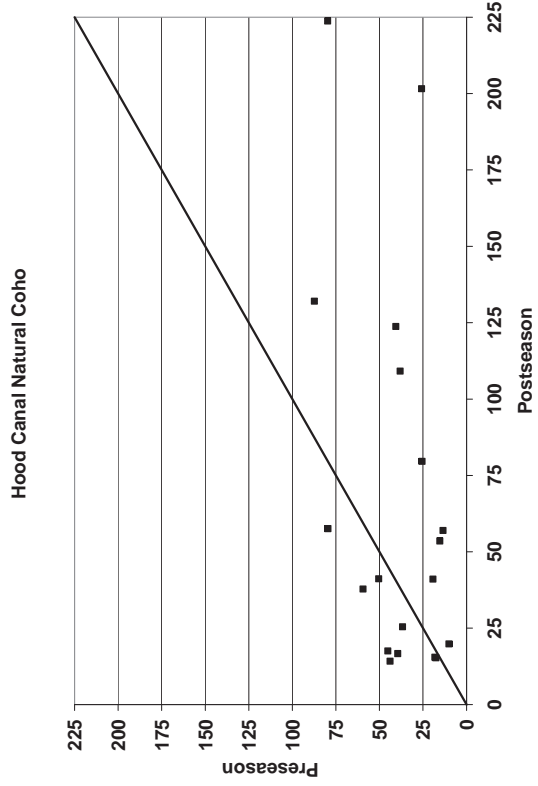
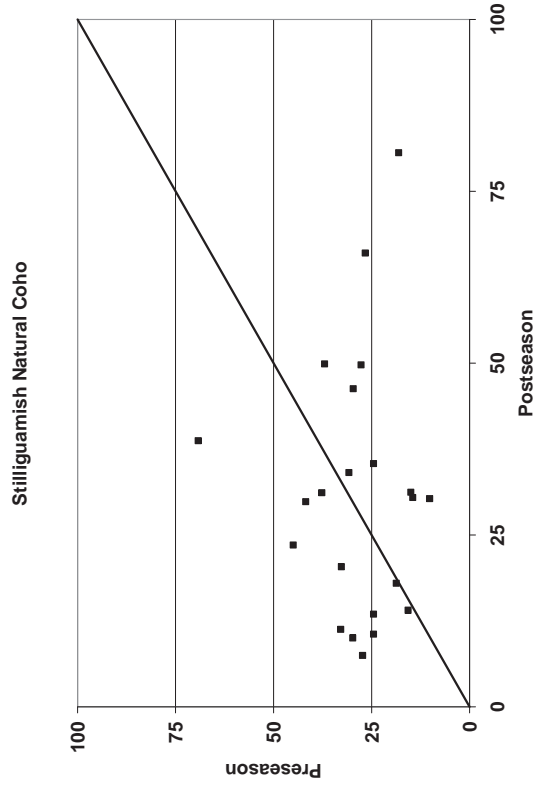


FIGURE I-2b. Selected preseason vs. postseason forecasts for coho stocks with significant contribution to Council area fisheries.

