

2010 Puget Sound Summer/Fall Chinook Preseason Forecasts

03/02/2010

								Comp Chinook Management Criteria			
Region	Watershed	Notes	Forecast Type	Hatchery	Supplmt	Wild	Total	RER/8	Low Abundance Thresholds/9		
Strait	Hoko	1	Esc w/o fishing				1,776	1,776	<10% So. U.S.	500 spawners	
	Dungeness	1	Terminal				556	556	<10% So. U.S.	500 spawners	
	Elwha	2	Terminal				1,298	1,298	<10% So. U.S.	1,000 spawners	
	Region total				0			3,630	3,630		
North Sound	Glenwood Springs		4B	2,335			2,335				
	Nooksack/Samish	3	4B	30,292			30,292				
	Skagit		Terminal	794			794	12,997	50% total	4,800 spawners	
	Stillaguamish		Esc w/o fishing			551	817	1,368	25% total	650	
	Snohomish		Esc w/o fishing	5,645			5,645	9,858	21% total	2,800 spawners	
	Tulalip		Esc w/o fishing	3,416			3,416				
	Region total				42,482	551	23,672	66,705			
16-Feb											
Upper South Sound	Lake Washington										
	Issaquah	5	4B	9,584			9,584				
	Univ. of Wa		4B	2,339			2,339				
	Cedar		4B				1,573	1,573	15% preterm So. U.S., 1,200 esc goal	200 spawners	
	North Tributaries		4B				1,454	1,454			
	Subregion total				11,923			3,027	14,950		
	Green River										
	Soos Creek Hatchery		4B	14,411			14,411				
	Icy Creek		4B	758			758				
	Mainstem/Newaukum	1	4B				3,646	3,646	15% preterm So. U.S., 5,800 esc goal	1,800 spawners	
	Subregion total				15,169			3,646	18,815		
	Grovers		4B	2,538			2,538				
	East Kitsap(Gorst, Dogfish, CI	4	4B	5,923			5,923				
	Subregion total				8,461			8,461			
Puyallup River	1	4B	8,970			1,877	10,847	50% total	500 spawners/12		
Upper South Sound Total				44,523		8,550	53,073				

2010 Puget Sound Summer/Fall Chinook Preseason Forecasts (continued)

Region	Watershed	Notes	Hatchery	Supplmt	Wild	Total	Comp Chinook Management Criteria	
							RER/8	Low Abundance Thresholds/9
Lower South Sound	Carr Inlet	5 4B	11,638			11,638		
	Deschutes	5 4B	14,198			14,198		
	Nisqually	1 4B	18,918		5,177	24,095	1,200 escapement goal	
	Chambers	5 4B	8,170			8,170		
	McAllister	6 4B				0	Program is terminated	
	Coulter	7 4B				0	Program is terminated	
	<i>Lower South Sound Total</i>			52,924		5,177	58,101	
	South Sound total		97,447	0	13,727	111,174		
Hood Canal	Skokomish w/George Adams	10 Terminal	29,793		2,160	31,953	15% preterm So. U.S. total 3,650 esc g	1,300 spawners/13
	12B naturals	Terminal			136	136	15% preterm So. U.S. 750 esc goal	400 spawners
	12C/12H	Terminal	12,834		89	12,923		
	12D	Terminal			29	29		
	Hood Canal total		42,627	0	2,414	45,041		
	Puget Sound Grand total		182,556	551	43,443	226,550		
Footnotes	<ol style="list-style-type: none"> 1. Wild forecast Includes hatchery origin and natural origin fish 2. Hatchery and natural broken out by 2008 otolith results 3. This includes returns to Samish, Whatcom, Nooksack and Lummi Bay and neighboring streams. 4. Forecast resulting from rearing pond production spawning in river of origin or in neighboring streams 5. Combined natural and hatchery spawner forecast (all fish of hatchery origin) 6. Last releases from BY 2001, no fall chinook are expected. 7. Hatchery chinook releases terminated with BY 2000. 2007 forecast is wild production of naturally spawning hatchery fish. 8. RER= Recovery Exploitation Rate (interim management ceiling during recovery phase). 9. Level of spawning abundance that triggers additional management action. 10. The low abundance threshold includes 800 natural and/or 500 hatchery spawners 11. Threshold expressed as natural origin spawners 12. Goal for South Prairie Cr Index 13. Aggregate for combined hatchery and wild spawners 							

NOAA PFMC Guidance Letter for 2008 fisheries

In March, 2005, NOAA Fisheries Service approved fishing activities conducted in accordance with the harvest component of the Comprehensive Management Plan for Puget Sound Chinook, a Resource Management Plan (RMP) submitted by the Washington Department of Fish and Wildlife and the Puget Sound Treaty tribes under Limit 6 of the ESA 4(d) rule. The terms of the RMP have also been incorporated into the Puget Sound Salmon Recovery Plan adopted by NOAA Fisheries on January 19, 2007. The take limit for fisheries implemented under the terms of the RMP apply to the 2005-2009 fishing years (May 1, 2005 through April 30, 2010). The RMP management approach consists of a two tiered harvest regime (normal and minimum), depending on stock status. The harvest objectives in the RMP are a mixture of total and southern U.S. exploitation rates (termed in the RMP - Rebuilding Exploitation Rates or RERs - These are not to be confused with the Rebuilding Exploitation Rates used by NOAA Fisheries Service to assess proposed harvest actions under the ESA since they are derived by different methodologies and used for different purposes. The RERs in Table 1 are those developed by the co-managers in the RMP approved by NOAA Fisheries Service and therefore fisheries conducted consistent with these RERs are not subject to an ESA prohibition on take of listed Puget Sound Chinook) and escapement goals. Under conditions of normal abundance, the RERs and escapement goals, listed on the left of Table 1, apply. However, when a particular management unit is 1) not expected to meet its low abundance threshold, or, 2) if the total exploitation rate is projected to exceed its RER under a proposed set of fisheries, the co-managers will constrain their fisheries such that either the RER is not exceeded, or the Critical Exploitation Rate Ceiling (CERC - The ceiling rate used by the co-managers may be below the CERC shown on the right side of Table 1 if the 2003 fisheries modeled with 2005 abundances results in rates less than the CERC) listed on the right of Table 1, is not exceeded.

Puget Sound Spring Chinook 2010 Preseason Forecasts

	Notes	Forecast				Total RER	Low Abundance Thresholds
		Type	Hatchery	Supplmt	Wild		
Nooksack River							
North Fork	1	Terminal	873	1,342	314	2,529 Under Development	1000 spawners/11
South Fork	2	Terminal			76	76 Under Development	1000 spawners/11
Skagit River		Terminal	1,491		768	2,259 38% total	576 spawners
White River							
Minter Creek	4	Terminal	1,932			1,932	
White River Hatchery	3,4	Terminal	1,000			1,000	
Buckley Trap	5	Terminal		887		887 20% total	200 spawners
Total White River Springs						3,819	
Total Puget Sound			5,296	2,229	1,158	8,683	

1. Supplementation number is hatchery-origin acclimated fish expected to spawn in the wild.
2. Forecast of SF Nooksack stock origin chinook. Forecast that includes non-native origin fish is 138.
3. Forecast of returns to the hatchery rack only.
4. For FRAM modeling purposes, x are estimated to originate from fingerling production and x from yearling production
5. Includes naturally produced spring and fall chinook returns and acclimation pond production

Washington Coast 2010 Chinook Preseason Forecasts

	Hatchery	Wild	Totals	Natural Escapement Goal
North Coast				
Quillayute River				
Spring	1,477		1,477	200
Summer		1,184	1,184	1,200
Fall		6,285	6,285	> of 3,000 or 60% of run
Hoh				
Spring/Summer		814	814	>of 900 or 69% of RS
Fall		3,250	3,250	>of 1,200 or 60% of RS
Queets				
Spring/Summer			0	>of 700 or 70% of RS
Fall			0	>of 2,500 or 60% of RS
Quinault				
Fall	0	0	0	
North Coast totals	Summer/Falls:	0	10,719	10,719
	Spring/Summers:	1,477	814	2,291
Grays Harbor				
Chehalis springs		909	909	1,400
Chehalis falls	0	0	0	12,364
Humtulpis falls	0	0	0	2,236
Subregion Falls Total	0	0	0	
Willapa Bay	31,135	2,023	33,158	
Coast total	32,612	14,465	47,077	

COLUMBIA RIVER FALL CHINOOK 2010 PRESEASON FORECASTS

Stock Group	2010 February Forecasts	2009 Actual Returns	2009 February Forecasts
Lower River Hatchery - LRH	90,600	76,700	88,800
Lower River Wild - LRW	9,700	7,500	8,500
Bonneville Pool Hatchery - BPH	169,000	49,000	59,300
Upriver Bright - URB	310,800	212,000	259,900
Bonneville Upriver Bright - BUB	30,300	39,000	50,000
Pool Upriver Bright - PUB	42,300	34,100	44,400
Columbia River Total	652,700	418,300	510,900

2010 Forecasts

- ❖ LRH - Best return since 2004 and slightly greater than the 10-year average.
- ❖ LRW - Slightly improved over last three years, but below 10-year average.
- ❖ BPH - Best return since 2004 and much greater than the 10-year average. 2009 return of jacks was a record high. Age-3 fish are 91% of total forecast.
- ❖ URB - Best return since 2004. Strong return and greater than 10-year average. 2009 return of jacks was the highest in 23 years. Age-3 fish are 42% of total forecast.
- ❖ BUB - Slightly less than 2009 actual return and 69% of 10-year average.
- ❖ PUB - Similar to 10-year average.
- ❖ Total forecast of 652,700 Columbia River fall Chinook is greater than the 10-year average, and much greater than the 2009 actual return.

February 19, 2010
Washington Department of Fish and Wildlife
U.S. v Oregon Technical Advisory Committee Sub-group