

**2004-05 Winter and Summer Steelhead Management Recommendations
for Tributaries to Hood Canal**

Joint Report Prepared by:

**Washington Department of Fish and Wildlife
Point No Point Treaty Council
Skokomish Tribe**

December 2004

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1.1 Management Periods

The management periods indicated in this report define the time interval during which regulatory actions are directed to meeting conservation and allocation needs of steelhead stocks while taking into account catches (actual or expected) of steelhead made outside of the management periods. Since many runs extend over lengthy periods of time and only a small portion of the population of each run is available at the extremes of its run timing, it is impractical to exercise directed management for non selective fisheries on these portions of runs while continuing harvests of other species or stocks. Effort should be spread throughout the management periods to achieve escapement and catch from all segments of the run.

Winter Steelhead

<u>Area</u>	<u>Management Period</u>
Area 9A	December 7 through March 31
Hood Canal Rivers	December 7 through April 15

Management periods for winter steelhead were established by reviewing historical information on the timing of recreational catches. The end of the management period was adjusted to match the beginning of the spring chinook management period.

Summer Steelhead

<u>Area</u>	<u>Management Period</u>
Dosewallips River	May 30 through September 18
Duckabush River	May 30 through September 18
Skokomish River	May 30 through August 21

Summer-run steelhead management periods for the Dosewallips River, Duckabush River, and the Skokomish River were established on the basis of historical harvest patterns by recreational fisheries to include approximately the central 80 percent of the run distribution. Catch accounting periods for all fisheries in Hood Canal rivers and streams are November 1 - April 30 for winter run steelhead and May 1 - October 31 for summer run steelhead.

1.2 Harvest and Escapement

Treaty net fisheries have generally been targeted at earlier returning, often hatchery reared, winter run steelhead recruits which are expected to return primarily from December through February. In accordance with prior agreements, the mixed stock harvest to be taken by treaty fishermen in Area 9A shall be limited to the period from December 1 through January 31.

Recreational fisheries occur for summer and winter run steelhead in Hood Canal streams. The summer steelhead season is open from June 1 through October 31 each year. The winter steelhead season is open from November 1 through the last day of February each year.

For winter steelhead, recreational and tribal harvest estimates, as well as hatchery smolt releases for the 1978-79 through 2003-04 seasons are shown in Tables 1a-1h. Table 2 shows the estimated recreational and tribal harvest of summer steelhead for the 2000 through 2004 seasons.

No escapement goals have been agreed to between WDFW and the Tribes for any natural stocks of winter or summer steelhead in the Hood Canal area. Wild steelhead spawner escapement has been monitored in some Hood Canal streams (Tables 1a-1h).

1.3 Management Recommendations

Given the lack of accurate information regarding the abundance of steelhead runs, it is generally recommended that all parties maintain the recent years' fisheries regime, with no major modifications. Prior to implementing any significant changes, the parties should reach agreement on its potential effect to the resource and their fisheries.

Tribes of the Point No Point Treaty Area intend to exercise their opportunity to harvest the majority of their share of summer steelhead during the winter steelhead management period, therefore, no treaty fisheries directed at summer steelhead should occur.

For winter steelhead, there is uncertainty regarding the status of some wild stocks and run timing of naturally reared stocks returning to tributaries of Hood Canal. Due to this uncertainty, fisheries should be targeted at hatchery-reared stocks, which are expected to return primarily during December and January. In order to minimize recreational fishery impacts to wild winter steelhead, recreational fisheries for winter steelhead close on the last day of February and wild steelhead release regulations have been in effect in the Skokomish and Tahuya rivers since 1987 and in all other Hood Canal tributaries open during the winter steelhead season since the 1994-95 season. In addition, these regulations have been in effect since 1993 in all marine areas to protect wild winter steelhead.

For summer steelhead, the management period overlaps the spring chinook salmon management period (May 1 - Aug. 1) in the Skokomish River. In order to avoid the incidental capture of spring chinook, which are expected to return at levels below escapement needs, non-selective fisheries should remain closed through the end of the spring chinook management period in the

Skokomish River. Wild steelhead release regulations have been in effect for recreational fisheries in all freshwater areas since 1992 and in all marine areas since 1993 to protect wild summer steelhead.

1.5 Spawner Surveys

Steelhead spawner escapement should be monitored in Hood Canal streams. Wild steelhead spawner surveys and escapement estimates have been made by the Washington Department of Fish and Wildlife on the Dewatto, Tahuya, Union, Skokomish, Hamma Hamma, Duckabush, Dosewallips and Little Quilcene rivers (Tables 1a-1h). These surveys should be continued. It is noted that past spawner surveys have been limited to periods after March 1 in most seasons.

Table 1a.

Quilcene River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest	Escapement	Smolt release		Comments
	Hatchery	Wild	H&W Total	H&W Total	Wild	Year	Number	
1978/79			40			1977	15,100	No escapement goal established
1979/80			95	0		1978	15,300	SaSI stock #6287
1980/81			118	0		1979	9,600	Includes Little Quilcene R, Big Quilcene R and Tarboo Cr.
1981/82			55	0		1980	9,585	
1982/83			22	0		1981	15,043	Harvest data for Big Quilcene R. and Little Quilcene R.
1983/84			53	0		1982	13,060	Prior to 2000: 1 May to 30 April CRC year
1984/85			53	16		1983	11,900	Year 2000: 1 May to 31 Mar CRC year
1985/86			22	7		1984	10,300	2001+: 1 April to 31 March CRC year
1986/87	19	13	32	8		1985	10,200	Begin ad-clip in 1985
1987/88	21	2	23	0		1986	10,200	Smolt releases into Big Quilcene
1988/89	6	4	10	0		1987	5,300	Smolts expected to return as adults 2 and 3 years after release
1989/90	18	14	32	0		1988	5,100	
1990/91	2	2	4	0		1989	10,160	
1991/92	0	0	0	0		1990	10,100	
1992/93	2	2	4	0		1991	0	1992 SASSI stock status: Unknown
1993/94	0	0	0	0		1992	0	
1994/95	9	9	18	0		1993	0	
1995/96	4	0	4	0		1994	0	
1996/97	0	0	0	0		1995	0	
1997/98	3	0	3	0		1996	0	
1998/99	9	9	18	0	29	1997	0	Escapement data for Little Quilcene
1999/00	0	0	0	0	15	1998	0	Beginning with 1999-00, sport totals are Nov. thru Mar. + Apr. of next year
2000/01	43	4	47	0	8	1999	0	
2001/02	21	33	54	0	30	2000	0	2002 SaSI stock status: Unknown
2002/03	14	0	14	0	16	2001	0	
2003/04	0	0	0	0	36	2002	0	
2004/05						2003	0	
2005/06						2004	0	

Table 1b.

Dosewallips River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest	Escapement	Smolt releases		Comments
	Hatchery	Wild	H&W Total	H&W Total	Wild	Year	Number	
1978/79			234	0		1977	20,000	WDFW escapement goal = 318 in index
1979/80			476	0		1978	30,000	SaSI stock #6280
1980/81			369	2		1979	25,200	Esc. index = RM 0.2-3.0, 3.6-5.4, 7.0-11.0, 11.5-12.0
1981/82			218	136		1980	23,200	
1982/83			173	134		1981	23,700	
1983/84			262	143		1982	18,200	Prior to 2000: 1 May to 30 April CRC year
1984/85			283	119		1983	20,000	Year 2000: 1 May to 31 Mar CRC year
1985/86			167	91		1984	25,100	2001+: 1 April to 31 March CRC year
1986/87	69	85	154	0		1985	20,800	Begin ad-clip in 1985
1987/88	72	41	113	9		1986	19,600	
1988/89	24	10	34	0		1987	15,000	Smolts expected to return as adults 2 and 3 years after release
1989/90	35	14	49	0		1988	25,400	
1990/91	24	8	32	0		1989	25,000	
1991/92	4	2	6	0		1990	15,100	
1992/93	0	7	7	0		1991	5,600	1992 SASSI stock status: Depressed
1993/94	12	11	23	0		1992	15,000	
1994/95	6	0	6	0	79	1993	20,100	
1995/96	12	0	12	0	55	1994	14,742	
1996/97	3	0	3	0	60	1995	5,000	
1997/98	11	0	11	0	49 (min)	1996	12,648	poor visibility during survey season
1998/99	0	0	0	0	99 (min)	1997	0	
1999/00	0	0	0	0	78	1998	12,500	Sport totals are Nov. thru Mar. + Apr. of next year
2000/01	0	0	0	0	89	1999	12,300	
2001/02	32	0	32	0	52	2000	12,500	2002 SaSI stock status: Depressed
2002/03	0	0	0	0	96	2001	12,600	
2003/04	0	4	4	0	-	2002	12,500	Incomplete esc. surveys due to poor visibility + high flows
2004/05						2003	12,533	
2005/06						2004	0	

Table 1c.

Duckabush River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest		Escapement		Smolt releases		Comments
	Hatchery	Wild	H&W Total	H&W Total	Wild	Year	Number			
1978/79			404	0		1977	20,000		WDFW escapement goal = 44 in index	
1979/80			575	0		1978	26,400		SaSI stock #6266	
1980/81			288	16		1979	15,100		Esc. index = RM 0.0 to 2.3	
1981/82			253	75		1980	15,000			
1982/83			148	59		1981	17,800			
1983/84			230	117		1982	18,100		Prior to 2000: 1 May to 30 April CRC year	
1984/85			231	47		1983	20,000		Year 2000: 1 May to 31 Mar CRC year	
1985/86			201	52		1984	20,000		2001+: 1 April to 31 March CRC year	
1986/87	89	57	146	12		1985	20,100		Begin ad-clip in 1985	
1987/88	69	42	111	0		1986	22,300			
1988/89	45	30	75	0		1987	5,000		Smolts expected to return as adults 2 and 3 years after release	
1989/90	31	30	61	0		1988	20,000			
1990/91	10	10	20	0		1989	20,000			
1991/92	26	22	48	0		1990	15,000			
1992/93	10	7	17	0		1991	0		1992 SASSI status: Depressed	
1993/94	13	0	13	0		1992	15,100			
1994/95	14	0	14	0		1993	17,000			
1995/96	20	0	20	0		1994	15,142			
1996/97	9	0	9	0	19 (min)	1995	5,000			
1997/98	9	0	9	0	6 (min)	1996	10,080		poor visibility during survey season	
1998/99	3	0	3	0	29 (min)	1997	0			
1999/00	0	0	0	0	36	1998	10,032		Sport totals are Nov. thru Mar. + Apr. of next year	
2000/01	0	0	0	0	13	1999	10,638			
2001/02	28	0	28	0	16	2000	10,200		2002 SaSI status: Depressed	
2002/03	0	0	0	0	8	2001	10,000			
2003/04	0	4	4	0	29	2002	10,000			
2004/05						2003	10,032			
2005/06						2004	0			

Table 1d.

Hamma Hamma River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest	Escapement	Smolt releases		Comments	
	Hatchery	Wild	H&W Total	H&W Total	Wild	Year	Number		
1978/79			32				0	WDFW escapement goal =119 in index	
1979/80			78	0			0	SaSI stock #6252	
1980/81			43	0			0	Esc. index area = river mile 0.3 to 2.2, plus John Cr.	
1981/82			90	20			0		
1982/83			38	0			0		
1983/84			150	0			0	Prior to 2000: 1 May to 30 April CRC year	
1984/85			150	0			0	Year 2000: 1 May to 31 Mar CRC year	
1985/86			38	0			0	2001+: 1 April to 31 March CRC year	
1986/87	3	44	47	0			0		
1987/88	13	11	24	0			0		
1988/89	2	8	10	0			0		
1989/90	2	4	6	0			0		
1990/91	0	0	0	0			0		
1991/92	4	0	4	0			0		
1992/93	2	0	2	0			0	1992 SASSI status: Unknown	
1993/94	0	0	0	0			0		
1994/95	0	0	0	0	13	(index)	0	Begin WSR	
1995/96	0	0	0	0	8	(index)	0		
1996/97	0	0	0	0	35	(index)	0		
1997/98	0	0	0	0	18	(index)	0	Begin supplementation program using native broodstock	
1998/99	0	0	0	0	21	(index)	0		
1999/00	0	0	0	0	19		0	Sport totals are Nov. thru Mar. + Apr. of next year	
2000/01	0	4	4	0	--			2002 SaSI status: Depressed	
2001/02	0	0	0	0	260		2000	1,524	Esc. includes 197 (81 F + 116 M) captive-reared adults released
2002/03	0	0	0	0	133		2001	1,336	Esc. includes 4 (2 F + 2 M) captive-reared adults released
2003/04	0	0	0	0	214		2002	489	Esc. includes 76 (35 F + 41 M) captive-reared adults released
2004/05							2003	1,454	
2005/06							2004	0	

Table 1e.

Skokomish River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest		Escapement		Smolt releases		Comments
	Hatchery	Wild	H&W Total	H&W Total	Wild	Year	Number			
1978/79			277	302		1977	35,800	WDFW escapement goal =1,400		
1979/80			302	113		1978	18,700	SaSI stock #6238		
1980/81			161	286		1979	10,500			
1981/82			145	344	822	1980	17,000			
1982/83			202	247	659	1981	27,200			
1983/84			202	161	777	1982	14,800	Prior to 2000: 1 May to 30 April CRC year		
1984/85			327	306	968	1983	27,082	Year 2000: 1 May to 31 Mar CRC year		
1985/86			332	400	866	1984	29,600	2001+: 1 April to 31 March CRC year		
1986/87	120	38	158	274	546	1985	23,100	Begin ad-clip in 1985		
1987/88	72	15	87	231	742	1986	20,900	Smolts expected to return as adults 2 and 3 years after release		
1988/89	46	13	59	51	1,444	1987	20,000			
1989/90	66	2	68	57	370	1988	44,800			
1990/91	14	2	16	23	729	1989	39,975	1992 SaSSI status: Depressed		
1991/92	19	2	21	3	172	(min) 1990	39,000	Incomplete surveys due to high flows		
1992/93	0	2	2	13		1991	19,900	Incomplete surveys due to high flows		
1993/94	8	6	14	20	473	1992	28,500			
1994/95	6	3	9	0	398	1993	20,000			
1995/96	24	0	24	0		1994	39,130	Incomplete surveys due to high flows		
1996/97	23	2	25	0		1995	39,296	Incomplete surveys due to high flows		
1997/98	10	0	10	0	373	1996	53,684			
1998/99	9	3	12	0	311	1997	14,688			
1999/00	26	2	28	0	261	1998	53,495	Sport totals are Nov. thru Mar. + Apr. of next year		
2000/01	26	0	26	0	286	1999	46,700	2002 SaSI status: Depressed		
2001/02	100	0	100	0	156	(min) 2000	62,300	Incomplete surveys due to high flows		
2002/03	14	5	19	0	132	(min) 2001	63,000	Incomplete surveys due to high flows		
2003/04	52	4	56	0	233	2002	68,400	Good esc. survey conditions		
2004/05						2003	55,803			
2005/06						2004	49,946			

Table 1f.
Union River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest	Escapement	Smolt releases		Comments
	Hatchery	Wild	H&W Total	H&W Total	Wild	Year	Number	
1978/79			312	0		1977	10,100	Escapement goal not identified
1979/80			81	0		1978	10,000	SaSI # 6231
1980/81			67	0		1979	10,100	Run: E. Dec. to E. Jun; Spawn: M. Feb. to E. Jun.
1981/82			41	0		1980	10,300	
1982/83			40	0		1981	9,900	1983-1985: Catch limit is one
1983/84			43	0		1982	10,010	
1984/85			83	0		1983	10,000	
1985/86			143	0		1984	10,000	Smolts expected to return as adults 2 and 3 years after release
1986/87	9	11	20	0		1985	9,400	Begin ad-clip in 1985; WSR in 1987
1987/88	10	2	12	0		1986	10,000	Prior to 2000: 1 May to 30 April CRC year
1988/89	32	6	38	0		1987	10,000	Year 2000: 1 May to 31 Mar CRC year
1989/90	10	2	12	0		1988	15,000	2001+: 1 April to 31 March CRC year
1990/91	8	6	14	0		1989	14,850	
1991/92	2	2	4	0		1990	10,035	1992 SaSSI status: Unknown
1992/93	11	2	13	0		1991	5,000	
1993/94	0	0	0	0		1992	10,000	
1994/95	3	0	3	0		1993	11,500	
1995/96	4	0	4	0		1994	15,028	
1996/97	0	0	0	0		1995	0	
1997/98	0	0	0	0	45	1996	0	
1998/99	0	0	0	0	65	1997	0	
1999/00	9	0	9	0	50	1998	0	Sport totals are Nov. thru Mar. + Apr. of next year
2000/01	8	0	8	0	73	1999	0	Hat. returns assumed 73.5% age 3; 26.5% age 4
2001/02	0	0	0	0	49	2000	0	2002 SaSI status: Unknown
2002/03	0	0	0	0	50	2001	0	
2003/04	0	0	0	0	58	2002	0	
2004/05						2003	0	
2005/06						2004	0	

Table 1g.

Tahuya River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest	Escapement			Smolt releases		Comments
	Hatchery	Wild	H&W Total	H&W Total	Hatchery	Wild	H&W Total	Year	Number	
1978/79			44	0				1977	10,000	WDFW escapement goal =236
1979/80			109	0				1978	9,900	SaSI # 6224
1980/81			74	0		94		1979	10,100	Run: E. Dec. to E. Jun; Spawn: M. Feb. To E. Jun.
1981/82			37	0		86		1980	10,500	
1982/83			46	0		44		1981	10,700	
1983/84			71	11	241	172	413	1982	8,400	Prior to 2000: 1 May to 30 April CRC year
1984/85			115	0	162	185	347	1983	15,100	Year 2000: 1 May to 31 Mar CRC year
1985/86			86	0	71	142	213	1984	10,300	2001+: 1 April to 31 March CRC year
1986/87	14	9	23	3		119		1985	10,000	Begin ad-clip in 1985; WSR in 1987
1987/88	7	17	24	0	121	102	223	1986	10,000	Smolts expected to return as adults 2 and 3 years after release
1988/89	4	4	8	0	148	142	290	1987	10,000	
1989/90	5	3	8	0		164		1988	10,000	
1990/91	7	7	14	0		122		1989	15,000	
1991/92	0	2	2	0		73		1990	0	1992 SaSSI status: Depressed
1992/93	0	7	7	0		75		1991	0	
1993/94	3	0	3	0		77		1992	0	
1994/95	3	0	3	0		89		1993	9,800	
1995/96	8	4	12	0		92		1994	14,976	
1996/97	0	0	0	0		144		1995	0	
1997/98	0	0	0	0		126		1996	0	
1998/99	6	6	12	0		340		1997	0	
1999/00	2	0	2	0		191		1998	0	Sport totals are Nov. thru Mar. + Apr. of next year
2000/01	0	0	0	0		133		1999	0	
2001/02	0	0	0	0		97		2000	0	2002 SaSI status: Depressed
2002/03	0	0	0	0		53		2001	0	
2003/04	0	0	0	0		168		2002	0	
2004/05								2003	0	
2005/06								2004		

Table 1h.

Dewatto River winter steelhead sport harvest, tribal harvest, escapement and hatchery steelhead smolt releases, 1978-79 through 2003-04 return years.

Return Year	Sport Harvest			Tribal Harvest	Escapement	Smolt releases		Comments
	Hatchery	Wild	H&W Total	H&W Total	Wild	Year	Number	
1978/79			92	0		1977	10,400	WDFW escapement goal =138
1979/80			74	0		1978	10,006	SaSI # 6217
1980/81			23	0	12	1979	10,010	Run: E. Dec. to E. Jun; Spawn: M. Feb. To E. Jun.
1981/82			44	0	34	1980	10,254	
1982/83			38	0	22	1981	12,400	
1983/84			36	0	86	1982	9,996	Prior to 2000: 1 May to 30 April CRC year
1984/85			73	0	102	1983	12,000	Year 2000: 1 May to 31 Mar CRC year
1985/86			102	91	32	1984	12,000	2001+: 1 April to 31 March CRC year
1986/87	8	11	19	81		1985	11,000	Begin ad-clip in 1985; WSR in 1987
1987/88	13	0	13	61	23	1986	9,900	Smolts expected to return as adults 2 and 3 years after release
1988/89	2	2	4	0	22	1987	3,000	
1989/90	2	0	2	0		1988	10,100	
1990/91	2	2	4	0		1989	14,800	
1991/92	0	0	0	0		1990	10,000	
1992/93	0	0	0	0	40	1991	0	1992 SaSSI status: Depressed
1993/94	3	0	3	0	18	1992	0	
1994/95	0	0	0	0	22	1993	0	
1995/96	0	0	0	0	39	1994	0	
1996/97	0	0	0	0	11	1995	0	
1997/98	0	0	0	0	28	1996	0	
1998/99	0	0	0	0	15	1997	0	
1999/00	0	0	0	0	23	1998	0	Sport totals are Nov. thru Mar. + Apr. of next year
2000/01	0	0	0	0	19	1999	0	
2001/02	0	0	0	0	30	2000	0	2002 SaSI status: Depressed
2002/03	0	0	0	0	18	2001	0	
2003/04	0	0	0	0	39	2002	0	
2004/05						2003	0	
2005/06						2004	0	

Table 2.

Sport and tribal harvest of summer run steelhead in Hood Canal rivers, 2000 through 2004 seasons. No hatchery summer run steelhead smolts are released in Hood Canal rivers.

River system		Summer run steelhead				
		Return year				
		2000	2001	2002	2003	2004
Quilcene R.	Harvest					
	Sport	0	20	4	0	0
	Tribal	0	0	0	0	0
	Total	0	20	4	0	0
Dosewallips R.	Harvest					
	Sport	0	0	0	3	6
	Tribal	0	0	0	0	0
	Total	0	0	0	3	6
Duckabush R.	Harvest					
	Sport	0	0	0	0	0
	Tribal	0	0	0	0	0
	Total	0	0	0	0	0
Hamma Hamma R.	Harvest					
	Sport	0	0	0	0	0
	Tribal	0	0	0	0	0
	Total	0	0	0	0	0
Skokomish R.	Harvest					
	Sport	0	5	18	50	19
	Tribal	0	0	0	0	0
	Total	0	5	18	50	19
Union R.	Harvest					
	Sport	8	5	0	0	0
	Tribal	0	0	0	0	0
	Total	8	5	0	0	0
Tahuya R.	Harvest					
	Sport	0	0	0	0	0
	Tribal	0	0	0	0	0
	Total	0	0	0	0	0
Dewatto R.	Harvest					
	Sport	0	0	0	0	0
	Tribal	0	0	0	0	0
	Total	0	0	0	0	0