

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Cispus River Winter-run (late) Steelhead

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

WRIA 26.0668

Lewis County

Example: Hatchery smolt releases during the spring of 1977 will produce the majority of adults returning for the 1978-79 winter and 1979 summer harvest seasons

1May-30Apr

Smolt

Revised: 06-01-05

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			Smolt Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978/79														No EG No SaSI stock
1979/80														
1980/81														
1981/82														
1982/83														
1983/84														
1984/85														
1985/86														
1986/87														
1987/88														
1988/89														Cispus harvest not broken out until 1999-2000 season
1989/90														
1990/91														
1991/92														
1992/93														
1993/94														
1994/95														
1995/96														
1996/97														Integrated Recovery hatchery program Late winter smolt plants
1997/98														
1998/99														
1999/00	12	0	12										15,200	Smolt program start
2000/01	0	9	9										1,500	
2001/02	3	0	3										24,400	
2002/03	0	0	0										18,500	
2003/04	0+	0+	0+										15,238	yearling (10-20/pound) plant
2004/05														
2005/06														
2006/07														
2007/08														
2008/09														

Catch Record Card (CRC) reporting season change:  
 Prior to 2000: 1 May to 30 April CRC year  
 Year 2000: 1 May to 31 Mar CRC year  
 2001 and on: 1 April to 31 March CRC year

## Historical Database

**Coweeman River - SSH**

**WRIA 26.0003**

**Cowlitz County**

Revised: 09-06-05

Return Year	Sport Harvest			Tribal Harvest			Escapement			Total Runsize		
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total
1981-82												
1982												
1983												
1984												
1985												
1986	3	1	4									
1987	9	0	9									
1988	18	0	18									
1989	10	4	14									
1990	16	0	16									
1991	34	0	34									
1992	13	0	13									
1993	29	0	29									
1994	11	0	11									
1995	21	0	21									
1996	9	0	9									
1997	18	0	18									
1998	0	0	0									
1999	4	0	4									
2000	0	0	0									
2001	3	0	3									
2002	67	0	67									
2003	19	0	19									
2004												

Comments

No SSH SaSI stock  
No EGs set

Cowlitz River tributary  
Spawn: Feb-Apr, Peak: March 20-30

No SSH smolt plants

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Coweeman River Winter-run Steelhead

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

WRIA 26.0003

Cowlitz County

Example: Hatchery smolt releases during the spring of 1983 will produce the majority of adults returning for the 1984-85 winter and 1985 summer harvest seasons

1May-30Apr

Smolt

Revised: 05-31-06

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978/79			1,069											EG=1064
1979/80			415											
1980/81			1,098											Wild river entry: E. Dec - L. Apr
1981/82			332											Wild spawn: E. Mar - E. Jun; peak Apr 15-25
1982/83			341											Elochoman hatchery programs include
1983/84			360											transfer to Coweeman Pd #2 for rearing and release
1984/85			1,035										33,500	Segregated harvest hatchery program
1985/86			735										40,200	Nov - Feb collections from Elochoman Hatchery
1986/87	475	252	727				446	889	1,335	921	1,141	2,062	63,500	
1987/88	264	215	479				294	1,088	1,382	558	1,303	1,861	54,900	
1988/89	407	256	663				407	392	799	814	648	1,462	37,100	
1989/90	355	119	474					522			641		42,400	
1990/91	223	0	223										44,100	
1991/92	539	8	547										52,700	1992 SaSSI status Depressed
1992/93	416	7	423					438			445		45,200	
1993/94	148	6	154					362			368		46,500	
1994/95	185	9	194					68			77		51,200	
1995/96	99	3	102					44			47		29,300	
1996/97	72	3	75					108			111		40,600	
1997/98	31	0	31					486			486		41,800	Flight data corrected escapements
1998/99	30	7	37					198			205		20,000	
1999/00	125	3	128					530			533		21,400	
2000/01	37	5	42					384			389		18,200	
2001/02	102	3	105					298			301		12,000	Est loss of 88 to experimental tanglenet fishery
2002/03	98	0	98					460			460		19,800	2002 SaSI status Depressed
2003/04	142	26	168					722			748		14,879	
2004/05	134+	0+	134+					370			370+			
2005/06														Catch Record Card (CRC) reporting season change:
2006/07														Prior to 2000: 1 May to 30 April CRC year
2007/08														Year 2000: 1 May to 31 Mar CRC year
2008/09														2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Cowlitz River System Summer-run Steelhead

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

WRIA 26.0002

Cowlitz County

Example: Hatchery smolt releases during the spring of 1992 will produce the majority of adults returning for the 1993-94 winter and 1994 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-06-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			Smolt Return N+2	Comments
	Hatchery	Wild**	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978														No EG set
1979														There are no SSH SaSI stocks for the Cowlitz System
1980														
1981														
1982														Cowlitz Trout Hat. and Skamania Hatchery programs
1983														include transfers to No. Toutle Hatchery and Cowlitz
1984														Game & Anglers COOP
1985														
1986	5,581	1,507	7,088											Variable programs and marking types
1987	4,095	1,253	5,348											
1988	3,170	770	3,940											
1989	2,628	415	3,043											
1990	3,515	309	3,824											
1991	6,227	463	6,690											
1992	6,054	469	6,523										556,500	Smolt plants include mainstem and all system tributaries
1993	10,061	577	10,638										567,400	
1994	11,842	414	12,256										531,000	
1995	8,358	242	8,600										413,300	
1996	10,972	351	11,323										460,000	
1997	3,735	129	3,864										547,700	
1998	3,116	181	3,297										562,800	
1999	3,638	116	3,754										692,500	
2000	8,465	100	8,565										669,700	
2001	10,477	128	10,605										673,600	
2002	23,010	325	23,335										693,100	
2003	17,506	247	17,753										279,098	
2004														
2005														
2006														
2007														
2008														

\*\*Unmarked steelhead probably a better designation. CALL DISTRICT OFFICE for details on how to interpret this column. Most probably a mix of CRC reporting errors, mis-interpretation of various marks, tags and fin clips, hatchery and wild strays, inaccurate run timing assumptions, etc.

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Cowlitz River System Winter-run Steelhead

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

WRIA 26.0002

Cowlitz and Lewis Counties

Example: Hatchery smolt releases during the spring of 1988 will produce the majority of adults returning for the 1989-90 winter and 1990 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-26-05

Return Year	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			-May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978/79														System EG=6600
1979/80														Cowlitz Trout Hatchery
1980/81														Segregated and integrated hatchery programs;
1981/82														Winter and Late Winter programs
1982/83														
1983/84														
1984/85														
1985/86														
1986/87	12,835	5,469	18,304											
1987/88	8,248	4,407	12,655											
1988/89	6,793	2,767	9,560										570,500	Smolt plants include mainstem and all system tributaries
1989/90	5,743	2,019	7,762										938,100	
1990/91	4,794	1,411	6,205										915,900	
1991/92	9,958	2,748	12,706										913,400	1992 SaSSI status Depressed
1992/93	8,903	8,165	17,068										1,269,600	
1993/94	7,722	4,285	12,007										828,100	
1994/95	20,525	1,028	21,553										845,900	
1995/96	4,161	288	4,449					9,217			13,378		735,800	
1996/97	5,077	134	5,211					7,438	34		12,515		689,500	"U. Cowlitz" escapements - do not include transports to the Tilton River. No EG set
1997/98	2,214	73	2,287					2,069	11		4,283		944,800	
1998/99	2,211	115	2,326					3,438	52		5,649		793,900	
1999/00	4,665	137	4,802					4,465	215		9,130		798,300	
2000/01	5,226	166	5,392					3,543	295		8,769		873,500	
2001/02	20,858	318	21,176					12,796	766		33,654		1,009,000	2002 SaSI status Unknown
2002/03	6,605	245	6,850					6,937	523		13,542		758,400	
2003/04	4475+	164+	4639+					4,095					427,088	
2004/05														
2005/06														Catch Record Card (CRC) reporting season change:
2006/07														Prior to 2000: 1 May to 30 April CRC year
2007/08														Year 2000: 1 May to 31 Mar CRC year
2008/09														2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Green (Toutle) River Summer-run Steelhead

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

WRIA 26.0323

Cowlitz County

Example: Hatchery smolt releases during the spring of 1985 will produce the majority of adults returning for the 1986-87 winter and 1987 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-27-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978														No EG set
1979														There is no SaSI stock for Cowlitz system SSH
1980														
1981														
1982														
1983														
1984														
1985													23,000	
1986	108	121	229										32,000	First record of harvest since Mt St H eruption
1987	49	24	73										8,600	Segregated harvest hatchery program
1988	661	107	768										20,300	Apr - Sep local hatchery returns from Skamania Hatchery
1989	534	63	597										29,300	
1990	490	83	573										31,400	
1991	472	93	565										31,800	
1992	612	16	628										28,500	
1993	955	16	971										28,600	
1994	207	6	213										25,800	
1995	153	3	156										12,200	
1996	426	9	435										28,400	
1997	84	5	89										36,000	
1998	102	12	114										26,200	
1999	326	11	337										35,200	
2000	538	0	538										14,700	
2001	374	3	377										11,900	
2002	415	6	421										24,100	
2003	368	2	370										24,225	
2004														
2005														
2006														
2007														
2008														

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Green (Toutle) River Winter-run Steelhead

WRIA 26.0323

Cowlitz County

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

1May-30Apr

Smolt

Revised: 09-27-05

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			~May Release Return N+2
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	
1977/78													
1978/79			132										
1979/80			54										
1980/81	0	0	0										
1981/82	0	0	0										
1982/83	0	0	0										
1983/84	0	0	0										
1984/85	0	0	0					775			775		
1985/86	0	0	0										
1986/87	0	0	0					402			402	0	
1987/88	33	16	49					310			326	0	
1988/89	28	0	28					128			128	0	
1989/90	42	28	70					86			114	0	
1990/91	22	4	26					108			112	0	
1991/92	55	24	79					44			68	0	
1992/93	93	9	102					84			93	0	
1993/94	73	3	76					128			131	0	
1994/95	33	0	33					174			174	0	
1995/96	3	0	3					108			108	0	
1996/97	18	0	18					132			132	0	
1997/98	14	0	14					118			118	0	
1998/99	42	0	42					72			72	0	
1999/00	16	0	16					124			124	0	
2000/01	61	0	61					192			192	0	
2001/02	55	0	55					180			180	0	
2002/03	30	0	30					438			438	0	
2003/04	0+	0+	0+					256				0	
2004/05													
2005/06													
2006/07													
2007/08													
2008/09													

Comments

Escapement index numbers - no E.G.

Mt. St. H. eruption May, 1980

Wild river entry: E. Dec - L. Apr  
Wild spawn: E. Mar - E Jun

No winter steelhead smolt program

1992 SaSSI Depressed

Flight data corrected escapements

2002 SaSI Depressed

Catch Record Card (CRC) reporting season change:  
Prior to 2000: 1 May to 30 April CRC year  
Year 2000: 1 May to 31 Mar CRC year  
2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Kalama River Summer-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 27.0002

Kalama Research Station (360) 577 0197

Cowlitz County

Example: Hatchery smolt releases during the spring of 1974 will produce the majority of adults returning for the 1975-76 winter and 1976 summer harvest seasons

1May-30Apr

Revised: 12-16-05

Return Year	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			-May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1974/75													109,960	
1975													121,305	
1976	2,386	633	3,019				1,069	400	1,469	3,455	1,033	4,488	94,114	
1977	3,722	1,079	4,801				3,539	1,015	4,554	7,261	2,094	9,355	96,347	
1978	2,965	832	3,797				2,120	484	2,604	5,085	1,316	6,401	94,832	
1979	1,896	844	2,740				1,929	718	2,647	3,825	1,562	5,387	120,379	
1980	8,527	2,978	11,505				8,598	2,926	11,524	17,125	5,904	23,029	125,967	
1981	6,993	1,075	8,068				12,301	1,385	13,686	19,294	2,460	21,754	113,904	Wild river entry: E. Jun - L. Oct Wild spawn: M. Jan - L. Apr
1982	7,689	1,621	9,310				4,405	869	5,274	12,094	2,490	14,584	64,776	
1983	2,096	738	2,834				908	247	1,155	3,004	985	3,989	76,264	Fallert Creek Hatchery SSH program (f/Skamania Hat.)
1984	2,044	854	2,898				1,106	461	1,567	3,150	1,315	4,465	112,524	
1985	3,702	799	4,501				2,424	473	2,897	6,126	1,272	7,398	93,936	NOTE: Starting in 2001, there are both integrated and segregated hatchery programs. The segregated portion is about 30,000 smolts / year
1986	9,214	148	9,362				4,687	748	5,435	13,901	896	14,797	130,354	
1987	5,292	217	5,509				2,199	950	3,149	7,491	1,167	8,658	58,200	
1988	5,394	90	5,484				2,692	684	3,376	8,086	774	8,860	59,600	
1989	3,609	74	3,683				924	745	1,669	4,533	819	5,352	85,960	
1990	2,586	16	2,602				1,034	704	1,738	3,620	720	4,340	68,000	
1991	2,612	5	2,617				1,588	1,075	2,663	4,200	1,080	5,280	89,200	1992 SaSSI status: Depressed
1992	4,433	204	4,637				4,905	2,283	7,188	9,338	2,487	11,825	92,500	
1993	2,775	72	2,847				2,797	1,041	3,838	5,572	1,113	6,685	100,892	
1994	1,573	9	1,582				1,741	1,302	3,043	3,314	1,311	4,625	75,900	
1995	571	18	589				1,150	614	1,764	1,721	632	2,353	80,100	
1996	1,012	38	1,050				2,395	598	2,993	3,407	636	4,043	78,000	
1997	946	2	948				1,264	205	1,469	2,210	207	2,417	66,300	
1998	363	26	389				922	220	1,142	1,285	246	1,531	89,400	
1999	1,147	71	1,218				1,264	140	1,404	2,411	211	2,622	90,200	
2000	2,320	38	2,358				916	286	1,202	3,236	324	3,560	100,500	
2001	1,377	41	1,418				1,052	454	1,506	2,429	495	2,924	84,600	
2002	2,657	58	2,715				4,631	817	5,448	7,288	875	8,163	67,600	
2003	2,082	82	2,164				3,531	632	4,163	5,613	714	6,327	61,100	
2004	3,238	45	3,283					400			445		76,159	
2005														2002 SaSI status: Depressed
2006														
2007														
2008														

**Hatchery Data**

- 1) Rack Not Released and Rack Released fromr 2000/01 through 2003/04 from Adult\_Tickets database .
- 2) Other data from Pat Hulett spreadsheet Aug04 ESC&RUN Estimates\_revised 8/18/05.

**Hatchery Releases**

- 1) All release data is for fish >=10 fish/pound released between March and June.
- 2) 1976 through 1994 from historical records from WDW for releases into the Kalama River and Gobar Cr.
- 3) 1995 through 2002 from historical records from WDFW for releases into the Kalama R. and Gobar Cr.

**Sport Harvest**

- 1) 1976/77 - 1995/96 from Kalama studies with summer and winter components estimated from trap counts.
- 2) 1996/97 through 2003/2004 from WDFW CRC estimates.

**Natural Escapement**

- 1) 1976/77 through 1984/85 from Kalama Falls count (Pat Hulett spreadsheet Aug04 ESC&Run Estimates\_PLH 8/9/04) multiplied by 1.11 for expansion to entire river.
- 2) 1985/86 through 2003/04 from SaSI.

**Other Mortality**

- 1) Other mortality (illegal harvest, post-handling mortality, draopback) from P. Hulet spreadsheet Aug 04 ESC&RUN estimates\_revised 8/18/05.XLS.

PLH 8/15/05



# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Kalama River Winter-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

**WRIA 27.0002**

Kalama Research Station, (360) 577-0387

**Cowlitz County**

Example: Hatchery smolt releases during the spring of 1977 will produce the majority of adults returning for the 1978-79 winter and 1979 summer harvest seasons

1May-30Apr

**Smolt**

Revised: 12-16-05

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1975/76													69,881	EG=1000
1976/77	170	1,229	1,399				172	860	1,032	342	2,089	2,431	53,868	Includes Gobar Creek
1977/78	998	1,114	2,112				921	771	1,692	1,919	1,885	3,804	84,396	
1978/79	161	647	808				150	413	562	311	1,060	1,370	70,062	1977-1997 age structure available
1979/80	585	1,067	1,652				322	1,139	1,461	907	2,206	3,113	77,277	
1980/81	318	2,162	2,480				620	2,388	3,009	938	4,550	5,489	83,182	
1981/82	453	1,719	2,172				239	966	1,205	692	2,685	3,377	99,531	Wild river entry: E. Nov - L. Apr Wild spawn: E. Jan - E. Jun
1982/83	298	1,020	1,318				342	591	933	640	1,611	2,251	99,501	
1983/84	617	959	1,576				1,064	1,048	2,112	1,681	2,007	3,688	70,890	
1984/85	1,126	1,487	2,613				435	702	1,137	1,561	2,189	3,750	94,376	Segregated and integrated harvest hatchery programs
1985/86	1,179	643	1,822				1,613	1,021	2,634	2,792	1,664	4,456	125,150	
1986/87	647	218	865				812	1,091	1,902	1,459	1,309	2,767	125,920	Wild Escapement is total above and below KFHat
1987/88	943	486	1,429				1,056	1,199	2,255	1,999	1,685	3,684	85,417	
1988/89	1,447	571	2,018				269	556	825	1,716	1,127	2,843	103,945	Kalama and Gobar releases
1989/90	970	424	1,394				400	396	796	1,370	820	2,190	66,994	
1990/91	871	26	897				329	1,065	1,394	1,200	1,091	2,291	93,768	
1991/92	1,342	15	1,357				873	2,193	3,066	2,215	2,208	4,423	90,090	1992 SaSSI status: Healthy
1992/93	790	75	865				312	937	1,249	1,102	1,012	2,114	93,483	
1993/94	195	13	208				191	806	997	386	819	1,205	103,246	
1994/95	270	53	323				285	1,144	1,429	555	1,197	1,752	99,341	
1995/96	1,252	54	1,306				881	806	1,686	2,133	860	2,992	80,231	
1996/97	384	33	417				49	507	556	433	540	973	78,487	Began adding Hat. R. C. to runsize total in 1997
1997/98	290	4	294				92	472	588	382	500	882	88,226	
1998/99	236	22	258				104	544	672	340	590	930	106,794	Wild esc. includes 24 broodstock for 1998 thru 2000
1999/00	1,131	75	1,206				376	921	1,321	1,507	1,020	2,527	86,200	
2000/01	718	20	738				1,056	1,042	2,129	1,774	1,093	2,867	103,030	Includes 31 broodstock
2001/02	1,468	34	1,502				3,665	1,495	5,176	5,133	1,545	6,678	77,748	Includes 38 wild brood take 2002 SaSI: Healthy
2002/03	752	21	773				1,509	1,815	3,344	2,261	1,856	4,117	83,382	Includes 40 broodstock
2003/04	651	22	673				1,860	2,400	4,284	2,511	2,422	4,957	76,900	Includes 50 wild broodstock
2004/05	555+	6+	561+					1,982			1988+		77,964	
2005/06														
2006/07														
2007/08														
2008/09														

### Hatchery Escapement

- 1) 1977/78 through 1996/1997 from Pat Hulett spreadsheet Aug04 ESC&Run Estimates\_PLH 8/9/04..
- 2) 1997/98 through 2004/05 from Adult\_Tickets database for Total Trapped.  
Includes H (Chambers type fish) and M (natural-origin broodstock)

### Hatchery Releases

- 1) All release data is for fish >=10 fish/pound released between March and June.
- 2) 1976 through 1994 from historical records from WDW for releases into the Kalama River and Gobar Creek.
- 3) 1995 through 2002 from historical records from WDFW for releases into the Kalama River and Gobar Creek.

### Sport Harvest

- 1) 1976/77 through 1985/86 from WDFW estimates of total winter and summer steelhead catch apportioned to hatchery and natural-origin from Kalama Falls rack data (Kalama Steelhead Harvest 76-96.xls).
- 2) 1986/87 from WDFW estimates from returns of catch record cards.

### Natural Escapement

- 1) 1976/77 through 1985/86 from spreadsheet (Aug04 ESC&Run Estimates\_PLH 8/9/04) multiplied by 1.111 for expansion to entire river.
- 2) Below falls 1976/77 through 2000/01 computed assuming 10% of escapement occurs below .
- 3) Below falls 2001/02 through 2003/04 from Pat Hulett spreadsheet Kalama Winter\_Escapabove&Below KFH.XLS
- 4) Natural-origin broodstock fom Pat Hulett spreadsheet Aug04 ESC&Run Estimates\_PLH 8/9/04.

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Lewis River, EF Summer-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 27.0073

Clark County

Example: Hatchery smolt releases during the spring of 1983 will produce the majority of adults returning for the 1984-85 winter and 1985 summer harvest seasons

1May-30Apr

Smolt

Revised: 08-29-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978			3,298											Escapement Goal = 814
1979			989											
1980			1,725											
1981			2,117											
1982			1,543											
1983			1,204										43,900	
1984			2,167											
1985			2,161										93,900	
1986	2,058	26	2,084										120,200	WSR in 1986
1987	1,105	11	1,116										57,700	Segregated harvest hatchery program
1988	2,510	0	2,510										50,100	Local Apr - Sep return, Skamania Hatchery releases
1989	1,405	0	1,405										96,700	
1990	2,490	0	2,490										82,900	
1991	1,241	4	1,245										92,000	
1992	740	40	780										78,500	1992 SaSSI status: Unknown
1993	1,740	61	1,801										107,800	
1994	787	31	818										73,100	
1995	648	4	652					215			219		29,900	Snorkel index (mid-July survey) escapement
1996	537	50	587					197			247		77,100	Total escapement generated from early fall mark-resight project analysis
1997	198	4	202					141			145		42,300	
1998	326	5	331					139			144		26,000	
1999	436	6	442					229			235		33,400	
2000	181	0	181					271			271		26,600	
2001	337	0	337					440			440		25,200	
2002	173	10	183					910			920		27,700	2002 SaSI status: Unknown
2003	167	6	173					425			431		26,986	
2004	297	0	297					673			673			
2005														
2006														
2007														
2008														

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Lewis River (EF) Winter-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 27.0173

Clark County

Example: Hatchery smolt releases during the spring of 1983 will produce the majority of adults returning for the 1984-85 winter and 1985 summer harvest seasons

Revised: 09-27-05

1May-30Apr

Smolt

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78			2,842											
1978/79			2,204											
1979/80			3,305											
1980/81			4,470											
1981/82			2,162											
1982/83			1,623											
1983/84			2,584											
1984/85			3,587										64,200	Segregated harvest hatchery program
1985/86			2,541										90,100	Merwin Hatchery program
1986/87	2,057	634	2,691						282			826	114,300	Escapement index numbers
1987/88	2,062	679	2,741						192			937	98,500	WSR in 1986
1988/89	1,483	500	1,983				138	140	278	1,621	640	2,261	84,800	
1989/90	1,708	386	2,094					102			488		105,500	
1990/91	1,036	205	1,241					72			277		93,100	
1991/92	1,901	77	1,978					88			165		141,700	
1992/93	2,714	170	2,884					90			260		104,400	SaSSI (1992) status: Depressed
1993/94	882	9	891					78			87		140,700	
1994/95	1,350	50	1,400					53			103		120,200	
1995/96	647	40	687										135,200	
1996/97	314	39	353					192			231		105,200	New escapement index instituted in 1997
1997/98	163	8	171					420			428		106,600	Flight data corrected escapements
1998/99	554	19	573					476			495		100,900	
1999/00	896	9	905										125,100	
2000/01	439	7	446					328			335		90,000	Minimum counts--no foot surveys, only aerial
2001/02	2,149	20	2,169					316			336		91,300	Est. 120 lost to experimental tanglenet fishery
2002/03	591	27	618					624			651		90,600	SaSI (2002) status: Depressed
2003/04	857+	8+	865+					1,298			1306+		92,195	
2004/05														
2005/06														
2006/07														
2007/08														
2008/09														

Catch Record Card (CRC) reporting season change:  
 Prior to 2000: 1 May to 30 April CRC year  
 Year 2000: 1 May to 31 Mar CRC year  
 2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Lewis River (Mainstem, NF, and Cedar Cr.) Winter-run Steelhead

WRIA 27.0168

Cowlitz and Clark Counties

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

Example: Hatchery smolt releases during the spring of 1983 will produce the majority of adults returning for the 1984-85 winter and 1985 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-27-05

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78			1,270											
1978/79			952											
1979/80			1,001											
1980/81			2,393											
1981/82			1,369											
1982/83			1,515											
1983/84			2,143											
1984/85			2,524										61,100	Merwin Hatchery program
1985/86			1,618										71,100	Segregated harvest hatchery program
1986/87	1,837	415	2,252										66,600	Dec - Jun local hatchery egg collection
1987/88	1,114	414	1,528										113,200	Part season closed in 1987
1988/89	1,330	351	1,681										178,400	
1989/90	1,589	248	1,837										95,100	
1990/91	1,130	193	1,323										127,800	
1991/92	1,488	56	1,544										105,500	
1992/93	2,045	140	2,185										213,700	SaSSI status 1992: Depressed
1993/94	411	21	432										73,900	WSR in 1992
1994/95	643	9	652										162,400	
1995/96	996	43	1,039					70					159,400	
1996/97	994	19	1,013					78					122,600	
1997/98	226	6	232					38					123,200	
1998/99	260	21	281					52					124,000	Flight data corrected escapements
1999/00	591	21	612					73					104,000	
2000/01	624	8	632					41					73,400	
2001/02	2,568	39	2,607					88					101,500	
2002/03	1,074	50	1,124										104,100	SaSI status 2002: Unknown
2003/04	1196+	41+	1237+										102,600	
2004/05													102,370	
2005/06														
2006/07														
2007/08														
2008/09														

Catch Record Card (CRC) reporting season change:  
 Prior to 2000: 1 May to 30 April CRC year  
 Year 2000: 1 May to 31 Mar CRC year  
 2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Lewis River (NF) Summer-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 27.0168

Cowlitz and Clark Counties

Example: Hatchery smolt releases during the spring of 1983 will produce the majority of adults returning for the 1984-85 winter and 1985 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-27-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78			2,567											No EG set
1978			1,679											
1979			700											
1980			2,525											Wild river entry: E. May - L. Nov Wild spawn: E. Mar - E. Jun
1981			2,187											
1982			3,254											
1983			1,580										24,700	
1984			2,498											
1985			2,764										131,000	
1986	5,246	854	6,100										123,900	
1987	4,070	737	4,807										78,100	Segregated harvest hatchery program
1988	1,410	239	1,649										0	Fish 1st and Speelai Bay net pens (from Merwin Hat.)
1989	1,706	161	1,867										128,300	
1990	1,451	125	1,576										100,100	
1991	1,991	98	2,089										141,700	
1992	3,408	152	3,560										133,100	1992 SaSSI status: Depressed
1993	2,542	98	2,640										153,600	WSR in 1993
1994	2,008	70	2,078										88,500	
1995	1,237	67	1,304										0	
1996	1,198	26	1,224										122,300	
1997	442	21	463										20,600	
1998	311	22	333										201,000	
1999	453	21	474										135,200	
2000	1,806	15	1,821										172,000	
2001	3,916	80	3,996										225,100	
2002	5,229	65	5,294										285,700	2002 SaSI status: Unknown
2003	4,673	49	4,722										224,950	
2004														
2005														
2006														
2007														
2008														

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Lewis River System Summer-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 27.0168

Cowlitz County

Example: Hatchery smolt releases during the spring of 1983 will produce the majority of adults returning for the 1984-85 winter and 1985 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-28-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978														South Fork and North Fork SaSI stocks
1979														
1980														
1981			4,736											
1982			5,103											
1983			3,028										68,600	Merwin Hatchery segregated harvest programs
1984			5,027											
1985			5,686										224,900	
1986	7,784	930	8,714										244,100	WSR 1986 for South Fork
1987	5,594	801	6,395										135,800	
1988	4,341	241	4,582										50,100	
1989	3,426	161	3,587										225,000	
1990	4,283	127	4,410										183,000	
1991	3,511	106	3,617										223,700	
1992	4,662	218	4,880										211,600	
1993	4,589	189	4,778										261,400	WSR 1993 for North Fork
1994	3,035	110	3,145										161,600	
1995	2,061	83	2,144										146,900	
1996	1,798	79	1,877										199,400	
1997	754	25	779										236,900	
1998	1,105	43	1,148										227,000	
1999	1,027	30	1,057										263,800	
2000	2,855	15	2,870										307,700	
2001	6,057	92	6,149										312,500	
2002	6,106	120	6,226										313,400	2002 SaSI stock status: Unknown for both stocks
2003	5,570	66	5,636										309,968	
2004														
2005														
2006														
2007														
2008														

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Lewis River System Winter-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 27.0168

Cowlitz County

Example: Hatchery smolt releases during the spring of 1981 will produce the majority of adults returning for the 1982-83 winter and 1983 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-28-05

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			-May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978/79			3,172											
1979/80			4,320											
1980/81			6,766											
1981/82			3,141										192,300	
1982/83			2,245											
1983/84			4,693										125,300	
1984/85			6,046										161,200	
1985/86			4,145										145,700	
1986/87	3,895	1,048	4,943										227,500	
1987/88	3,176	1,093	4,269										286,500	Includes 9,600 into Cedar Creek (only one on record)
1988/89	2,813	851	3,664										179,900	
1989/90	3,297	633	3,930										233,300	
1990/91	2,166	398	2,564										198,600	
1991/92	3,389	133	3,522										355,400	
1992/93	4,759	310	5,069										178,300	
1993/94	1,293	30	1,323										303,100	
1994/95	1,993	59	2,052										279,600	
1995/96	1,643	83	1,726										257,800	
1996/97	1,308	58	1,366										228,400	
1997/98	389	14	403										230,600	
1998/99	814	40	854										204,900	
1999/00	1,487	30	1,517										198,500	
2000/01	1,063	15	1,078										191,500	
2001/02	4,717	59	4,776										195,400	
2002/03	1,665	77	1,742										193,200	
2003/04	2053+	49+	2102+										194,565	
2004/05														
2005/06														
2006/07														
2007/08														
2008/09														

Catch Record Card (CRC) reporting season change:  
 Prior to 2000: 1 May to 30 April CRC year  
 Year 2000: 1 May to 31 Mar CRC year  
 2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Salmon Creek (Clark Co) Winter-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 28.0061

Clark County

Example: Hatchery smolt releases during the spring of 1984 will produce the majority of adults returning for the 1985-86 winter and 1986 summer harvest seasons

Revised: 09-28-05

1May-30Apr

Smolt

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			Smolt Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78			155											
1978/79			242											
1979/80			34											
1980/81			36											
1981/82			58										19,800	
1982/83			44											
1983/84			64										8,000	
1984/85			75										10,100	
1985/86			86										9,800	
1986/87	66	33	99										31,600	
1987/88	74	67	141										37,100	
1988/89	22	21	43										10,600	
1989/90	10	2	12										10,300	
1990/91	6	0	6										9,900	
1991/92	13	6	19										21,500	1992 SaSSI status: Depressed
1992/93	13	0	13										16,100	
1993/94	3	0	3										18,900	
1994/95	6	0	6										17,000	
1995/96	8	0	8										15,500	
1996/97	72	0	72										20,200	
1997/98	14	0	14										20,700	
1998/99	153	0	153										30,900	
1999/00	442	10	452										14,100	
2000/01	87	0	87										20,000	
2001/02	485	0	485										20,400	2002 SaSI status: Unknown
2002/03	53	3	56										20,500	
2003/04	328+	0+	328+										19,950	
2004/05														
2005/06														
2006/07														
2007/08														
2008/09														

Catch Record Card (CRC) reporting season change:  
 Prior to 2000: 1 May to 30 April CRC year  
 Year 2000: 1 May to 31 Mar CRC year  
 2001 and on: 1 April to 31 March CRC year



# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Toutle River (MS and NF) Summer-run Steelhead

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

WRIA 26.0227

Cowlitz County

Example: Hatchery smolt releases during the spring of 1988 will produce the majority of adults returning for the 1989-90 winter and 1990 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-29-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			Smolt Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78			2,827											
1978			5,665											
1979			1,969											
1980			34											
1981			0											
1982			0											
1983			0										0	
1984			0											
1985			0										0	
1986	20	18	38										0	
1987	6	13	19										0	
1988	52	15	67										30,200	Smolt plants are in N. Fork unless stated otherwise
1989	237	31	268										50,100	25,200 in N Fk, 24,900 in Mainstem
1990	41	0	41										34,000	17,000 in N. Fk, 17,000 in Mainstem
1991	19	2	21										33,700	
1992	119	0	119										32,200	
1993	233	9	242										27,700	
1994	54	0	54										0	
1995	15	0	15										0	
1996	12	0	12										25,000	1,700 in N. Fk, 23,300 in Mainstem
1997	3	0	3										30,100	
1998	0	6	6										24,500	
1999	35	4	39										35,000	30,000 in N.Fk, 5,000 in Mainstem
2000	28	0	28										0	
2001	161	0	161										0	
2002	103	8	111										0	
2003	113	4	117										0	
2004														
2005														
2006														
2007														
2008														

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Toutle River (Mainstem and NF) Winter-run Steelhead

WRIA 26.0227

Cowlitz County

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

1May-30Apr													Smolt	Revised: 09-29-05
Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			-May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78			4,483											No EG set
1978/79			3,695											
1979/80			3,280											
1980/81			0											
1981/82			0										31,200	Mt. St. Helens eruption May, 1980
1982/83			0										0	Only WSH smolt release on record
1983/84			0										0	Wild river entry: E. Dec - L. Apr
1984/85			0										0	Wild spawn: E. Mar - E. Jun
1985/86			0										0	
1986/87	0	0	0										0	
1987/88	5	0	5										0	
1988/89	6	0	6					18			18		0	
1989/90	6	0	6					36			36		0	
1990/91	0	0	0					108			108		0	
1991/92	4	0	4					322			322		0	1992 SaSSI Depressed
1992/93	7	7	14					165			172		0	
1993/94	29	0	29					90			90		0	
1994/95	0	0	0					175			175		0	
1995/96	12	0	12					251			251		0	
1996/97	6	0	6					183			183		0	
1997/98	3	0	3					149			149		0	Flight data corrected escapements
1998/99	0	0	0					133			133		0	
1999/00	3	0	3					238			238		0	
2000/01	9	0	9					185			185		0	
2001/02	28	0	28					328			328		0	2002 SaSI Depressed
2002/03	6	0	6					410			410		0	
2003/04	12+	0+	12+					249					0	
2004/05														
2005/06														Catch Record Card (CRC) reporting season change:
2006/07														Prior to 2000: 1 May to 30 April CRC year
2007/08														Year 2000: 1 May to 31 Mar CRC year
2008/09														2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Toutle River (SF) Summer-run Steelhead

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

WRIA 26.0248

Cowlitz County

Example: Hatchery smolt releases during the spring of 1986 will produce the majority of adults returning for the 1987-88 winter and 1988 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-29-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78			139											
1978			248											No EG set
1979			61											There are no SaSI stocks for SSH in Cowlitz system
1980			0											
1981			0											Mt. St. Helens eruption May, 1980
1982			0											
1983			0										0	
1984			0										0	
1985			0										0	
1986	253	241	494										40,300	Cowlitz Game & Angler COOP (transfer f/Skamania Hat)
1987	165	104	269										22,400	Segregated harvest hatchery program
1988	636	104	740										19,900	
1989	434	37	471										28,000	
1990	421	0	421										22,000	
1991	761	4	765										30,700	
1992	320	12	332										31,900	
1993	1,300	8	1,308										27,700	
1994	387	23	410										25,600	
1995	352	3	355										0	
1996	1,243	6	1,249										0	
1997	358	3	361										32,900	
1998	138	6	144										30,900	
1999	384	4	388										23,900	
2000	577	0	577										15,000	
2001	711	6	717										11,900	
2002	265	4	269										24,100	
2003	276	2	278										24,225	
2004														
2005														
2006														
2007														
2008														

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Toutle River (SF) Winter-run Steelhead

WRIA 26.0248

Cowlitz County

WDFW District 10, 2108 Grand Blvd, Vancouver 98661, (360) 906-6709

1May-30Apr

**Smolt**

Revised: 09-29-05

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			-May Release Return N+2	Comments	
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total			
1977/78			182												EG=1058
1978/79			268												
1979/80			61												
1980/81			0					51			51				Mt. St. Helems eruption May,1980
1981/82			0					86			86				Wild river entry: E. Dec - L. Apr
1982/83			0												Wild spawn: E. Mar - E. Jun
1983/84			0					836			836				
1984/85			0					1,807			1,807				
1985/86			0					1,595			1,595				
1986/87	99	186	285					1,650			1,836		0		No WSH smolt program
1987/88	131	266	397					2,222			2,488		0		
1988/89	93	117	210					1,371			1,488		0		
1989/90	138	117	255					752			869		0		
1990/91	66	49	115					904			953		0		
1991/92	131	93	224					1,290			1,383		0		1992 SaSSI status Healthy
1992/93	294	56	350					1,242			1,298		0		
1993/94	167	27	194					632			659		0		
1994/95	79	6	85					396			402		0		
1995/96	26	0	26					150			150		0		
1996/97	125	3	128					388			391		0		
1997/98	20	0	20					374			374		0		Flight data corrected escapements
1998/99	10	3	13					562			565		0		
1999/00	20	0	20					490			490		0		
2000/01	81	0	81					348			348		0		
2001/02	34	0	34					640			640		0		Redd survey
2002/03	61	5	66					1,510			1,515		0		2002 SaSI status Depressed
2003/04	16+	2+	18+					1,212					0		
2004/05															
2005/06															
2006/07															
2007/08															
2008/09															

Catch Record Card (CRC) reporting season change:  
 Prior to 2000: 1 May to 30 April CRC year  
 Year 2000: 1 May to 31 Mar CRC year  
 2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Washougal River System Summer-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 28.0159

Clark and Skamania Counties

Example: Hatchery smolt releases during the spring of 1987 will produce the majority of adults returning for the 1988-89 winter and 1989 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-22-05

Return Year (N)	Sport Harvest (1May-31Oct)			Tribal Harvest (1May-31Oct)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1975/76													99,320	EG=1210
1976													99,995	
1977			2,560				4,008						116,350	
1978			2,287				3,463						115,110	
1979	1,250	88	1,338				2,522			3,772			114,896	Wild river entry: E. May - L. Nov Wild spawn: E. Mar - E. Jun
1980			2,321				3,361						98,434	
1981			5,042				3,202						105567	
1982			1,673				3,478						82,436	Escapement expanded from snorkel index
1983			465				1,302						160489	
1984			1,578				2,987						134245	
1985			3,160				2,286	154	2,440			5,600	104624	WSR in 1986
1986	1,872	105	1,977				1,608	419	2,027	3,480	524	4,004	110801	Skamania hatchery
1987	1,201	18	1,219				2,398	447	2,845	3,599	465	4,064	316,663	Segregated harvest hatchery program
1988	1,420	16	1,436				1,981	260	2,241	3,401	276	3,677	238998	Apr -Sep local hatchery broodstock
1989	2,297	16	2,313				3,072	306	3,378	5,369	322	5,691	100728	
1990	5,659	40	5,699				8,244	333	8,577	13,903	373	14,276	176191	
1991	2,023	16	2,039				1,671	196	1,867	3,694	212	3,906	100100	
1992	1,522	94	1,616				4,430	170	4,600	5,952	264	6,216	121000	1992 SaSSI status: Unknown
1993	1,593	27	1,620				3,044	152	3,196	4,637	179	4,816	103076	
1994	657	53	710				1,152	154	1,306	1,809	207	2,016	112152	
1995	250	9	259				1,236	103	1,339	1,486	112	1,598	105212	
1996	561	4	565				2,245	148	2,393	2,806	152	2,958	132773	
1997	172	0	172				856	120	976	1,028	120	1,148	120845	
1998	66	0	66				697	135	832	763	135	898	124979	
1999	166	2	168				607	140	747	773	142	915	127772	
2000	876	10	886				2,616	184	2,800	3,492	194	3,686	81935	
2001	1,002	11	1,013				3,668	404	4,072	4,670	415	5,085	55040	
2002	1,023	62	1,085				3,440	607	4,047	4,463	669	5,132	60957	2002SaSI status: Unknown
2003	579	45	624				1,159	607	1,766	1,738	652	2,390	61,206	
2004							1,921							
2005														
2006														
2007														
2008														

### Hatchery Escapement

- 1) 1977/78 from Kendra 1985.
- 2) 1978/79 through 1991/92 from Byrne (1993).
- 3) 1992/93 through 1993/94 from Mitchell Act report for April 1, 1995 through September 30, 1995.
- 4) 1994/95 through 2004/2005 from Adult\_Tickets database for trapped fish at Skamania Hatchery.

### Sport Catch

- 1) 1979/80 .934 hatchery origin from tagging study (Schuck 1980).
- 2) 1986/87 to present hatchery-origin based on CRC reporting of clipped fish.

### Smolt Plants

- 1) All release data is for fish >=10 fish/pound released between March and June.
- 2) 1976 through 1994 from historical records from WDW for releases into the Washougal River, NF Washougal, and WF Washougal.
- 3) 1995 through 2002 from historical records from WDFW for releases into the Washougal River and NF Washougal.

### Natural Escapement

- 1) Estimates are from SaSI based on expansion of snorkels.

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

## Washougal River System Winter-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 28.0159

Clark and Skamania Counties

Example: Hatchery smolt releases during the spring of 1983 will produce the majority of adults returning for the 1984-85 winter and 1985 summer harvest seasons

1May-30Apr

Smolt

Revised: 09-22-05

Return Year (N)	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			~May Release Return N+2	Comments	
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total			
1976/77			1356										46,884		
1977/78			2,148										50,586		
1978/79			1,372										72,470		
1979/80			1,772										73,965		
1980/81			2,461						330				105,780	Wild river entry: E. Dec - L. Apr	
1981/82			1,952						67				109,526	Wild spawn: E. Mar - E. Jun	
1982/83			1,377						295				94,655	Skamania Hatchery	
1983/84			1,927						863				94,380	Segregated harvest hatchery program	
1984/85			3,195						100				106,029	Nov - Jan local hatchery broodstock	
1985/86			1,901										92,471		
1986/87	2,005	96	2,101										99,482	Hatchery escapements from HGMP	
1987/88	1,965	40	2,005										140,824	Harvest and smolt data for mainstem and all forks	
1988/89	1,525	51	1,576										175,298		
1989/90	2,517	60	2,577										129,129		
1990/91	2,056	8	2,064						114			122	119,501	Flight and foot surveys - Redd escapement index	
1991/92	1,179	14	1,193						142			156	131,256	1992 SaSI status: Unknown	
1992/93	1,570	162	1,732						118			280	113,000		
1993/94	232	9	241						158			167	130,293		
1994/95	636	34	670					255	206	461	891	240	1,131	110,315	
1995/96	310	6	316					464			774			80,173	
1996/97	216	21	237					187	92	279	403	113	516	107,656	
1997/98	50	2	52					139	195	334	189	197	386	118,328	Flight data corrected escapements
1998/99	110	2	112					687	294	981	797	296	1,093	101,652	
1999/00	505	9	514					254	839	1,093	759	848	1,607	126,682	
2000/01	807	8	815					370	216	586	1,177	224	1,401	62,000	Flight count only this year--> a minimum number
2001/02	674	4	678					1,090	286	1,376	1,764	290	2,054	63,138	(Esc. does not include est. 50 from Little Washougal)
2002/03	188	2	190					386	764	1,150	574	766	1,340	64,639	2002 SaSI status: Depressed
2003/04	524+	23+	547+					619	1,114	1,733			1137+	63,200	
2004/05								1,086						61,735	
2005/06															
2006/07															
2007/08															
2008/09															

### Hatchery Escapement

- 1) 1980/81 from Stock Summary Report for Columbia River Anadromous Salmonids
- 2) 1981/82 through 1991/92 from Byrne (1993).
- 3) 1992/93 through 1993/94 from Byrne spreadsheet Beaver Creek Winter Steelhead .
- 4) 1994/95 through 2004/05 from Adult\_Tickets database for total trapped at Skamania Hatchery.

### Natural Escapement

- 1) Escapement index counts from redd counts from SaSI.
- 2) 1999/00 not reported but included in other reports (LC recovery plan).

### Hatchery Releases

- 1) All release data is for fish >=10 fish/pound released between March and June.
- 2) 1976 through 1994 from historical records from WDW for releases into the Washougal River, NF Washougal, and WF Washougal.
- 3) 1995 through 2002 from historical records from WDFW for releases into the Washougal River and NF Washougal.

Catch Record Card (CRC) reporting season change:  
 Prior to 2000: 1 May to 30 April CRC year  
 Year 2000: 1 May to 31 Mar CRC year  
 2001 and on: 1 April to 31 March CRC year

# Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia 98501, (360) 902-2820/2817

## Wind River Summer-run Steelhead (Inland - Columbia)

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

WRIA 29.0023

Skamania County

Example: Hatchery smolt releases during the spring of 1987 will produce the majority of adults returning for the 1988-89 winter and 1989 summer harvest seasons

1May-30Apr

Smolt

Revised: 08-09-05

Return Year (N)	Sport Harvest (1May-30Apr)			Tribal Harvest (1May-30Apr)			Escapement			Total Runsize			~May Release Return N+2	Comments
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78														
1978			1,280											EG=957
1979			898										98,706	Wild river entry: E. May - L. Nov
1980			877										75,103	Wild spawn: E. Mar - E. Jun
1981			1,308										63,573	Skamania Hatchery releases
1982			1,150										11,880	
1983			153										0	Size restriction in 1983
1984			68										40,141	WSR in 1984
1985			84										30,200	
1986	621	2	623										28,000	
1987	484	13	497										20,000	
1988	604	0	604					1,016			1,016		20,300	
1989	363	0	363					561			561		40,400	
1990	356	0	356					596			596		20,100	
1991	520	0	520					535			535		41,500	1992 SaSSI stock status: Depressed
1992	457	100	557					677			777		41,000	
1993	488	28	516					468			496		40,200	
1994	740	9	749					543			552		51,400	
1995	670	24	694					466			490		26,300	
1996	494	19	513					734			753		42,400	
1997	481	12	493					320			332		17,800	Last smolt plant 1997
1998	675	65	740					323			388		0	
1999	417	8	425					189			197		0	
2000	226	23	249					498			521		0	
2001	1,238	12	1,250					640			652			
2002	170	27	197					930			957			2002 SaSI stock status: Depressed
2003	440+	64+	504+											
2004														
2005														Catch Record Card (CRC) reporting season change:
2006														Prior to 2000: 1 May to 30 April CRC year
2007														Year 2000: 1 May to 31 Mar CRC year
2008														2001 and on: 1 April to 31 March CRC year

The majority of Mid-Columbia and all Upper Columbia and Snake River system steelhead are summer-runs.

Work has been initiated to resolve Summer/Winter run issue for Wind River steelhead. See datasheet for Wind River WSH (possible)

## Steelhead Historical Database

WDFW Fish Mgmt HQ, 600 Capitol Way N, Olympia98501, (360) 902-2820/2817

### Wind River (possible) Winter-run Steelhead

WDFW District 9, 2108 Grand Blvd, Vancouver 98661, (360) 906-6746

1May-30Apr													Smolt	Comments
Return Year	Sport Harvest (1Nov-30Apr)			Tribal Harvest (1Nov-30Apr)			Escapement			Total Runsize			~May Release Return N+2	
	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total	Hatchery	Wild	H&W Total		
1977/78													0	No EG set
1978/79			191											Data for the winter months has been isolated in anticipation of the establishment of the Wind R. WSH stock (esc. monitoring in 99-00 and 00-01).
1979/80			156											
1980/81			161											
1981/82			163											
1982/83			127											
1983/84			60											No WSH smolt plants (stopped in early 60's)
1984/85			26											
1985/86			20											
1986/87	82	9	91											
1987/88	119	54	173											
1988/89	93	16	109											
1989/90	66	31	97											
1990/91	47	0	47											
1991/92	44	0	44											1992 SaSSI stock status: Unknown
1992/93	67	21	88											
1993/94	8	0	8											
1994/95	71	0	71											
1995/96	14	3	17											
1996/97	41	0	41											
1997/98	0	0	0											
1998/99	5	0	5											
1999/00	3	0	3						53					Sport totals are Nov. thru Mar. + Apr. of next year
2000/01	25	6	31						80					
2001/02	406	3	409						60					Esc. Includes 10 from Little Wind River
2002/03	29	19	48											2002 SaSI stock status: Unknown
2003/04	8+	56+	64+											
2004/05														
2005/06														Catch Record Card (CRC) reporting season change:
2006/07														Prior to 2000: 1 May to 30 April CRC year
2007/08														Year 2000: 1 May to 31 Mar CRC year
2008/09														2001 and on: 1 April to 31 March CRC year