

Appendix B. Data on Aquatic Focal Species: Adult returns to TMD, Disposition, Escapement, Artificial Production, and Harvest

Table 1. Summer steelhead adult returns, disposition, harvest, and escapement for the Umatilla River 1987-2002. Table from Kissner (2003).

RUN YEAR	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Summer Steelhead (STS) Enumerated at TMD	2480	2474	1667	1111	2769	1914	1290	1531	2081	2477	1765	1886	2892	3662	5520
Natural STS Enumerated at Three Mile Dam (TMD)	2315	2104	1422	724	2247	1298	945	875	1296	1014	862	1135	2160	2596	3562
Hatchery STS Enumerated at TMD	165	370	245	387	522	616	345	656	785	1463	903	751	732	1066	1958
Hatchery STS Harvested below TMD						15	14	40	35	67	89	54	74	87	147
Estimated # of nonendemic STS strays to TMD						187	35	121	120	174	177	49	60		
Harvest or straying to other areas															
TMD+sport below TMD+other areas-%strays															
Natural Female STS Enumerated at TMD						942	688	645	922	742	593	774	1355	1776	2180
Hatchery Female STS Enumerated at TMD						364	251	342	447	720	529	478	377	643	965
Natural Male STS Enumerated at TMD						356	257	230	374	272	269	361	805	797	1382
Hatchery Male STS Enumerated at TMD						252	94	314	338	743	374	273	355	446	993
Natural STS Sacrificed or Mortalities at TMD	20	12	25	2	3	0	0	0	8	5	2	1	0	2	1
Hatchery STS Sacrificed or Mortalities at TMD	5	17	143	50	112	70	51	33	73	95	70	75	42	97	49
Natural STS Taken for Brood Stock	151	160	106	99	237	125	92	86	105	97	86	111	115	106	100
Natural STS Spawned	62	84	53	85	172	95	79	59	63	75	68	76			
Hatchery STS Taken for Brood Stock	0	0	0	103	95	91	42	68	26	10	30	15	15	10	10
Hatchery STS Spawned	0	0	0	42	0	3	17	22	21	3	21	4		7	
Natural Females Released above TMD	1436	1232			1193	878	641	602	863	687	549	718	1317	1721	2129
Natural Males Released above TMD	708	702			814	292	211	187	323	222	225	306	728	744	1332
Natural STS Released above TMD	2144	1934	1290	623	2007	1170	852	789	1186	909	774	1024	2045	2465	3461
Hatchery Females Released above TMD	114	216			161	266	183	289	376	669	475	427	351	583	939

Table 1. Continued

RUN YEAR	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Hatchery Males Released above TMD	46	137			154	188	69	266	305	689	328	234	324	399	960
Hatchery STS Released above TMD	160	353	102	234	315	454	252	555	681	1358	803	661	675	982	1899
Natural STS Harvested above TMD-CTUIR						5	5	5	0	0	5	5	0	0	*
Hatchery STS Harvested above TMD-CTUIR						25	20	20	39	33	33	39	99	84	*
Natural STS Harvested above TMD-ODFW								0	0	0	0	0		0	0
Hatchery STS Harvested above TMD-ODFW						22	5	21	25	24	12	47	4	3	57
Natural Female STS Potentially Available to Spawn	1436*	1232*			1193*	875	638	599	863	687	547	715	1317	1721	2129
Hatchery Female STS Potentially Available to Spawn	114*	216*			161*	242	170	268	344	640	453	384	301	539	911
Total Female STS Potentially Available to Spawn	1550*	1448*			1354*	1117	808	862	1207	1327	1000	1099	1618	2260	3040
Natural Male STS Potentially Available to Spawn	708*	702*			814*	290	209	185	323	222	222	304	728	744	1332
Hatchery Male STS Potentially Available to Spawn	46*	137*			154*	165	57	246	273	661	306	191	273	356	931
Total Male STS Potentially Available to Spawn	754*														2263
Natural STS Potentially Available to Spawn	2144	1934	1290	623	2007	1165	847	784	1186	909	769	1019	2045	2465	3461
Hatchery STS Potentially Available to Spawn	160	353	102	234	315	407	227	514	617	1301	758	575	574	895	1842
Total STS Available to Spawn	2304	2287	1392	857	2322	1572	1074	1298	1803	2210	1527	1594	2619	3360	5303
STS Redds Observed in Index Reaches	138	77	HW	HW	135	HW	64	74	119	138	126	218	238	383	347
Total STS Redds Observed	275	128	HW	HW	300	HW	224	126	150	149	217	293	523	n/a	n/a
Index Reaches Miles Surveyed	18.5	20	HW	HW	21.4	HW	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	19.4
Total Redds Per Mile in Index Reaches	7.5	3.9	HW	HW	6.3	HW	3.0	3.5	5.6	6.4	5.9	10.2	11.1	17.9	17.9
Total Miles Surveyed in Umatilla River	61.0	50.2	HW	HW	67.2	HW	65.8	35.0	34.4	24.6	38.0	37.2	47.6	n/a	n/a
Redds Per Mile in all Areas Surveyed	4.5	2.5	HW	HW	4.5	HW	3.4	3.6	4.4	6.1	5.7	7.9	11.0	n/a	n/a

Notes: Index reaches are in Squaw, N. F. Meacham, Buckaroo, Camp, and Boston Canyon Creeks and the S. F. Umatilla River.

Notes: We assumed that harvest was 50% females and 50% males. No adjustments made for hook and release mortality

Table 2 Spring Chinook salmon adult return, disposition, and escapement to the Umatilla River Subbasin, 1989-2002. Table from Kissner (2003).

YEAR	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Hatchery adults enumerated at TMFD	68	2158	1294	461	1202	261	388	2075	2033	343	1742	3863	4164	4785
Estimated natural adults enumerated at TMFD ¹								77	161	66	22	348	212	276
Total adults enumerated at TMFD	68	2158	1294	461	1202	261	388	2152	2194	409	1764	4211	4376	5061
Hatchery jacks enumerated at TMFD													161	112
Estimated natural jacks enumerated at TMFD ¹													28	70
Total jacks enumerated at TMFD	96	32	36	3	19	10	108	121	4	20	210	124	189	182
Sacrificed or mortalities at TMFD	36	25	234	200	165	31	56	57	58	11	79	27	41	25
Taken for brood stock	0	200	0	0	0	0	0	0	600	202	631	617	677	588
Adults released above TMFD	64	1949	1085	263	1050	235	378	2132	1537	207	1138	3562	3720	4322
Jacks released above TMFD	64	16	11	1	6	5	62	80	3	9	126	97	129	137
Adipose clipped CHS released above TMFD	3	685	479	135	603	133	162	572	400	38	327	1281	739	
Harvested above TMFD- CTUIR	0	0*	82	0	176	0	0	167	187	0	110 ²	695 ³	247 *	245*
Harvested above TMFD- ODFW	0	20	23	0	18	0	0	206	31	0	11	143	80	110
Adults potentially available to spawn	64	1929	980	263	856	235	378	1759	1319	207	1020	2724	3393	3967
Adults sampled on spawning grounds	6	272	228	78	471	112	194	715	667	89	539	1388	986	1269
Jacks sampled on spawning grounds			2	1	3	1	22	24	1	2	40	32	13	30
Adult percent recovered (after harvest)	4.7	13.8	23.3	29.7	55.0	47.7	51.3	40.6	50.6	43.0	52.8	51.0	29.1	32.0
Number of ad clips sampled	0	83	136	39	356	50	78	166	182	17	137	394	135	263
Percent recovered (ad clips)	0	12.1	28.4	28.9	59	37.6	48.1	29	45.5	44.7	41.9	30.8	18.3	58.1
Prespawning mortalities sampled (adults)			88	22	124	19	60	256	230	28	157	227	460	372
Prespawning mortalities sampled (jacks)			1	1	1	1	10	5	0	0	13	7	3	13
Spawned adults sampled			130	48	336	93	126	440	401	61	361	1102	501	772
Spawned jacks sampled			1		2	0	11	19	1	1	27	20	10	15
Redds observed	14	289	144	59	224	74	90	347	288	60	292	721	626	828
Spawned females sampled			81	37	205	56	73	267	244	41	228	689	335	513

Notes:

1) The estimated escapement of natural spring Chinook salmon adults was determined by scale analysis (circuli counts) of a sample of the unmarked adults returning to Three Mile Falls Dam.

2) Harvest includes 8 gaff mortalities sampled and 4 seriously injured fish that would not survive to spawn

3) Harvest includes 17 gaff mortalities sampled after fishery

* Complete creel not conducted, minimum estimate of harvest

Jack=<450 mm MEPH length

Table 3. Fall Chinook (CHF) salmon adult returns, deposition, and escapement to the Umatilla River, 1988-2001. Table from Kissner (2003).

YEAR	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Adult CHF enumerated at TMD	91	271	329	522	225	368	692	595	646	354	286	737	643	1146
Jack CHF enumerated at TMD	195	267	113	468	79	29	230	291	80	207	154	137	437	1158
Sub jack CHF enumerated at TMD	1268	65	618	273	0	15	367	343	606	189	230	152	4948	970
CHF sacrificed or mortalities at TMD	921	333	192	731	6	8	166	195	95	159	78	67	409	2/92/10
CHF taken for brood stock	0	0	0	348	211	385	0	0	576	300	201	465	603	462/24
Adult female CHF released above TMD	?	?	?	57	7	6	305	213	9	30	5	133	59	81
Adult male CHF released above TMD	?	?	?	112	29	27	288	302	79	12	84	147	10	601
Total adult CHF released above TMD	58	192	168	169	36	33	593	515	88	42	89	280	69	682
Jack CHF released above TMD	138	78	89	18	51	7	213	255	53	131	114	99	298	1042
Sub jack CHF released above TMD	0	0	611	0	0	12	317	264	520	118	188	115	4647	960
Adult female CHF outplanted in Umatilla	0	0	0	0	0	0	0	0	423	483	74	433	245	465
Maturing male CHF outplanted in Umatilla	0	0	0	0	0	0	0	0	285	457	126	458	226	478
Total female CHF released - TMD+outplant	?	?	?	57	7	6	305	213	432	513	79	566	304	546
Total male CHF released -TMD+outplant	?	?	?	130	80	46	818	821	937	718	512	819	5181	2603
CHF redds observed		0	0	0	0	0	82	9	170	301	6	89	0	0
Unidentified redds observed		92	50	18	0	0	7	1	1	22	24	25	165	0

Table 4. Disposition of coho salmon returning to the Umatilla River (1988-2003). Table from CTUIR, DNR, Fisheries Program.

	YEAR	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Coho Salmon																	
Adults enumerated at TMD		936	4154	409	1732	356	1533	984	947	618	670	3081	3702	4654	22792	3820	8319
Jacks enumerated at TMD		746	479	515	189	173	16	62	52	24	137	191	205	1276	80	971	667
Sacrificed or mortalities at TMD		0	4001	110	445	0	79	113	0	20	42	222	236	219/96	279/4	172	126
Adults taken for brood stock		0	0	0	0	0	580	0	860	0	0	0	0	0	0	0	0
Adult females released above TMD					387	141	395	398	29	293	337	1464	1595	2235	9568	1923	3571
Adult males released above TMD					612	201	486	481	76	305	301	1406	1873	2185	12945	1713	4642
Total adults released above TMD		936	580	364	999*	342	881	879	105	598	638	2870	3468	4435	22513	3636	8213
Jacks released above TMD		746	52	450	91	168	13	54	34	24	127	180	196	1180	76	914	647
Coho redds observed		NA	0	0	0	12	44	24	1	18	51	90	42	0	10	NA	NA
Unidentified redds observed		NA	92	50	18	0	0	7	1	1	22	24	25	165	0	NA	NA

*In 1991 an additional 208 female and 178 male coho were recycled from TMD to the mouth for potential harvest

Table 5. Hatchery releases of summer steelhead in the Umatilla River Basin. Data from CTUIR Umatilla Hatchery Satellite Facilities Operation and Maintenance Project.

Year of Release	Hatchery	No. Released	No./lb.	Stock
1967	Gnat Creek	109,805	75.0	Skamania
1967	Oak Springs	238,020	117.0	Idaho (Oxbow)
1967	Wallowa	142,240	240.0	Idaho (Oxbow)
1968	Gnat Creek	23,100	66.0	Skamania
1968	Gnat Creek	150,000	Eggs	Skamania
1969	Carson	174,341	145.0	Skamania
1970	Wizard Falls	39,489	8.0-9.0	Skamania
1975	Oak Springs	11,094	9.0	Umatilla River
1981	Oak Springs	17,558	6.0-9.0	Umatilla River
1981	Oak Springs	9,400	145.0	Umatilla River
1982	Oak Springs	59,494	7.0-8.0	Umatilla River
1982	Oak Springs	67,940	124.0	Umatilla River
1983	Oak Springs	60,500	11.0	Umatilla River
1983	Oak Springs	52,700	62.0	Umatilla River
1984	Oak Springs	57,939	6.5	Umatilla River
1984	Oak Springs	22,000	135.0	Umatilla River
1985	Oak Springs	39,134	150.0	Umatilla River
1986	Oak Springs	54,137	8.4	Umatilla River
1987	Oak Springs	1,485	5.5	Umatilla River
1988	Oak Springs	95,290	6.5-10.3	Umatilla River
1988	Oak Springs	10,033	57.5	Umatilla River
1988	Irrigon	24,618	3200.0	Umatilla River
1989	Oak Springs	81,712	5.5-6.6	Umatilla River
1990	Oak Springs	89,193	5.5-7.7	Umatilla River
1991	Oak Springs	71,935	6.2-8.7	Umatilla River
1991	Oak Springs	3,998	12.5	Umatilla River
1992	Umatilla	19,977	5.8	Umatilla River
1992	Umatilla	47,458	5.8	Umatilla River
1992	Umatilla	64,550	5.0	Umatilla River
1992	Umatilla	67,419	5.5	Umatilla River
1992	Umatilla	5,443	5.8	Umatilla River
1993	Umatilla	44,824	4.5	Umatilla River
1993	Umatilla	47,979	5.6	Umatilla River
1993	Umatilla	65,465	6.1	Umatilla River
1994	Umatilla	51,403	4.9	Umatilla River
1994	Umatilla	49,598	5.1	Umatilla River
1994	Umatilla	52,097	5.2	Umatilla River
1994	Umatilla	1,732	5.7	Umatilla River
1995	Umatilla	48,539	5.6	Umatilla River
1995	Umatilla	49,983	4.7	Umatilla River
1995	Umatilla	47,941	5.5	Umatilla River
1996	Umatilla	47,543	5.1	Umatilla River

Table 1 continued

Year of Release	Hatchery	No. Released	No./lb.	Stock
1996	Umatilla	49,377	5.3	Umatilla River
1996	Umatilla	49,783	5.1	Umatilla River
1997	Umatilla	46,788	4.6	Umatilla River
1997	Umatilla	41,555	5.4	Umatilla River
1997	Umatilla	48,944	4.9	Umatilla River
1998	Umatilla	49,084	4.7	Umatilla River
1998	Umatilla	41,088	5.9	Umatilla River
1998	Umatilla	47,313	5.5	Umatilla River
1999	Umatilla	41,843	4.9	Umatilla River
1999	Umatilla	44,226	5.5	Umatilla River
1999	Umatilla	35,564	5.9	Umatilla River
1999	Umatilla	9,878	43.9	Umatilla River
2000	Umatilla	51,659	4.8	Umatilla River
2000	Umatilla	52,736	4.7	Umatilla River
2000	Umatilla	49,343	6.4	Umatilla River
2001	Umatilla	50,829	4.8	Umatilla River
2001	Umatilla	48,291	5.4	Umatilla River
2001	Umatilla	41,403	4.7	Umatilla River
2002	Umatilla	54,917	5.1	Umatilla River
2002	Umatilla	54,366	4.2	Umatilla River
2002	Umatilla	47,521	4.5	Umatilla River
2002	Umatilla	1,826	3.6-4.2	Umatilla River
2003	Umatilla	41,369	4.8	Umatilla River
2003	Umatilla	42,805	4.0	Umatilla River
2003	Umatilla	42,783	4.4	Umatilla River

Table 6. Juvenile summer steelhead and coho releases in the Umatilla River Basin (1981-2003).
Data from CTUIR Umatilla Hatchery Satellite Facilities Operation and Maintenance Project.

Year	Summer Steelhead					Coho			
	Lower Umatilla	Upper Umatilla	Minthorn	Bonifer	Thornhollow & Pendleton	Lower Umatilla	Upper Umatilla	Minthorn	Pendleton
1981		17,558 (y)							
1982		9,400 (sy)							
1983		59,494 (y)							
1984		67,940 (sy)							
1985		60,500 (y)		57,939 (y)					
1986		52,700 (sy)		22,000 (sy)					
1987				53,850 (y)					
1988				39,134 (sy)					
1989				54,137 (y)					
1990		1,485 (y) (2)				786,660 (y) (6)			
1991	33,984 (y) (3)	40,790 (4 & 5)	30,549 (y)			996,433 (y) (3)			
1992		29,586 (y)	29,852 (y)	22,274 (y)			829,607 (y)	161,889 (y)	
1993		29,446 (y)		59,747 (y)		202,315 (y) (6)	654,209 (y)	157,299 (y)	
1994	3,998 (y) (7)	29,325 (y)		42,610 (y)			802,655 (y)	132,404 (y)	
1995	5,443 (y) (7)	131,969 (y)	47,458 (y)	19,977 (y)			961,386 (y)	152,974 (y)	
1996			47,979 (y)	110,289 (y)		437,884 (y) (8)	454,794 (y)		
1997	1,732 (y) (7)		49,598 (y)	103,500 (y)		418,222 (y) (8)	465,883 (y)		
1998			49,983 (y)	96,480 (y)		824,963 (y) (8)	689,303 (y)		
1999			47,543 (y)	49,377 (y)	49,783 (y)	977,378 (y) (8)	500,005 (y)		
2000			46,788 (y)	90,499 (y)		1,400,939 (y) (8)			
2001			49,084 (y)	88,401 (y)	54,974 (y)		1,606,786 (y)		
2002	9,878 (sy)		41,843 (y)	79,790 (y)			1,475,922 (y)		
2003			104,395 (y)	49,343 (y)					1,561,290 (y)
			92,232 (y)	48,291 (y)					1,474,559 (y)
			47,521 (y)	54,917 (y)	54,366 (y)				1,621,857 (y)
			42,805 (y)	41,369 (y)	42,783 (y)				1,546,167 (y)

/1 y = yearling releases; sy = subyearling releases; upper Umatilla River includes Meacham Creek

Draft Umatilla/Willow Subbasin Plan

May 28, 2004

- /2 Small release due to IHNV & IPN problems in eggs
- /3 Fish released below Westland Dam
- /4 Includes both experimental control group and gradeouts from 88 brood year
- /5 Does not include unfed fry
- /6 Released at RM 23
- /7 Passage evaluation releases
- /8 Released at RM 42.5

Table 7. Rainbow trout stocked in the Umatilla River and McKay Creek from 1991 to 1999 (no fish were stocked after 1999) Data from ODFW.

Year	Stream	Location	Number
1991	Umatilla River	Forks Area	8,004
1992	Umatilla River	Forks Area	7,802
1993	Umatilla River	Forks Area	7,814
1994	Umatilla River	Pendleton Area	7,820
1995	Umatilla River McKay Creek	Pendleton Area Below Reservoir	3,401 2,000
1996	Umatilla River	Pendleton Area	4,991
1997	Umatilla River	Pendleton Area	5,008
1998	Umatilla River	Pendleton Area	4,597
1999	Umatilla River	Pendleton Area	3,800

Table 8. Rainbow trout stocked in Willow Creek subbasin streams from 1991 to 2003. Data from ODFW.

Year	Stream	Location	Number
1991	Willow Creek	Above Reservoir	4,000
1992	Willow Creek	Above Reservoir	4,000
1993	Willow Creek	Above Reservoir	4,000
1994	Willow Creek	Below Reservoir	2,000
1995	Willow Creek	Below Reservoir	2,000
1996	Willow Creek	Below Reservoir	2,000
1997	Willow Creek	Below Reservoir	2,000
1998	Willow Creek	Below Reservoir	2,000
1999	Willow Creek	Below Reservoir	2,000
2000	Willow Creek	Below Reservoir	2,000
2001	Willow Creek	Below Reservoir	2,000
2002	Willow Creek	Below Reservoir	2,000
2003	Willow Creek	Below Reservoir	2,000

Table 9. Hatchery releases of spring Chinook in the Umatilla River Basin. Data from CTUIR Umatilla Hatchery Satellite Facilities Operation and Maintenance Project.

Year of Release	Hatchery	No. Released	No./lb.	Stock
1986	Carson	99,970	22.8	Carson
1986	Irrigon	300,438	87.0	Carson
1986	Irrigon	75,000	15.0	Carson
1987	Carson	99,897	10.4	Carson
1987	Oxbow	169,100	199.0	Carson
1988	Bonneville	1,196	21.4	Carson /a
1988	Carson	99,895	20.6	Carson
1988	Bonneville	297,377	8.3-10.3	Carson /a
1988	Bonneville	75,767	11.1	Carson /a
1989	Bonneville	325,520	10.6-12.0	Carson /a
1990	Carson	99,775	18.6	Carson
1990	Bonneville	390,208	9.0-13.4	Carson /a
1991	Carson	96,733	16.9-20.6	Carson
1991	Bonneville	196,657	10.1-11.8	Carson /a
1991	Bonneville	159,624	16.5-16.8	Carson /b
1992	Carson	90,982	18.7	Carson
1992	Carson	5,272	18.7	Carson
1992	Bonneville	208,029	8.5-9.2	Carson /a
1992	Umatilla	955,752	35.4	Carson
1992	Irrigon	294,458	32.5	Carson
1992	Bonneville	132,929	11.3	Carson
1992	Umatilla	101,416	19.4	Carson
1993	Bonneville	186,948	14.5	Carson
1993	Umatilla	208,782	8.3	Carson
1993	Carson	85,134	20.3	Carson
1993	Carson	10,952	20.0-20.5	Carson
1993	Umatilla	667,367	27.6	Carson
1993	Umatilla	460,809	19.9	Carson
1994	Umatilla	205,143	8.4	Carson
1994	Bonneville	152,854	11.5	Carson
1994	Bonneville	252,248	12.3	Carson
1994	Umatilla	8,890	8.1-8.3	Carson
1994	Umatilla	839,377	30.4	Carson
1994	Umatilla	378,225	8.7	Carson
1995	Bonneville	247,871	10.3	Carson
1995	Umatilla	275,804	7.9	Carson
1995	Bonneville	74,735	14.4	Carson
1995	Bonneville	74,921	11.4	Carson
1996	Umatilla	378,561	8.9	Carson /c
1997	Umatilla	225,883	9.1	Carson /d
1998	Umatilla	382,714	11.6	Carson /e
1998	Umatilla	114,370	18.1	Carson /f
1998	Little White Salmon	172,999	15.6	Carson /e
1998	Little White Salmon	172,258	11.6	Carson /e
1998	Carson	99,641	16.3	Carson
1999	Umatilla	253,831	13.7	Carson /f

Table 9 continued

Year of Release	Hatchery	No. Released	No./lb.	Stock
1999	Little White Salmon	302,015	12.7-16.1	Carson /f
1999	Carson	103,761	13.2	Carson
2000	Umatilla	254,101	13.3	Carson /g
2000	Umatilla	103,621	12.2	Carson /g
2000	Little White Salmon	173,545	13.1	Carson /h
2000	Little White Salmon	185,069	11.1	Carson /h
2000	Carson	99,848	14.4	Carson
2001	Umatilla	91,727	14.8	Carson /f
2001	Umatilla	244,794	10.4	Carson /f
2001	Little White Salmon	165,310	13.0	Carson /f
2001	Little White Salmon	180,919	11.3	Carson /f
2001	CNFH	99,983	13.9	Carson
2002	Umatilla	107,717	13.8	Carson /f
2002	Umatilla	104,089	12.0	Carson /f
2002	Umatilla	148,048	13.7	Carson /f
2002	Umatilla	152,026	12.3	Carson /f
2002	Willard NFH	143,516	17.0	Carson /f
2002	Willard NFH	220,725	14.9	Carson /f
2003	Umatilla	104,679	13.0	Carson /f
2003	Umatilla	102,217	12.1	Carson /f
2003	Umatilla	148,748	12.2	Carson /f
2003	Umatilla	103,656	11.6	Carson /f
2003	Little White Salmon	322,806	16.9	Carson /f

/a Carson via Lookingglass broodstock

/b Carson via Lookingglass, Umatilla River and Big Canyon broodstock

/c Carson via Lookingglass (Wallowa H.) and Ringold (Lyons Ferry H.) broodstock

/d Carson via Ringold (Lyons Ferry H.) and Little White Salmon broodstock

/e Carson via Little White Salmon broodstock

/f Carson via Umatilla River broodstock

/g Carson via Ringold (Lyons Ferry H.) and Umatilla River broodstock

/h Carson via Ringold (Little White Salmon H.) broodstock

Table 10. Juvenile fall and spring Chinook salmon releases in the Umatilla River Basin (1982-2003). Data from CTUIR Umatilla Hatchery Satellite Facilities Operation and Maintenance Project.

Year	Fall Chinook							Spring Chinook			
	Lower Umatilla	Upper Umatilla	Bonifer	Minthorn	Thornhollow	Imeques	Pendleton	Lower Umatilla	Upper Umatilla	Bonifer	Imeques
1982	3,807,171 (sy) (b)										
1983		80,564 (y)	20,000 (y)								
1984	966,250 (sy)	175,104 (y)	53,308 (y)								
1985	3,223,172 (sy)	60,507 (y)	137,655 (y)								
1986	2,029,602 (sy)		51,000 (f)	91,036 (y)					300,438 (sy)	99,970 (y)	
1987	1,476,830 (sy)		102,363 (y)	35,574 (f)	111,143 (y & sy)				169,100 (sy)	99,897 (y)	
1988	3,316,007 (sy)	79,681 (f)	99,550 (y)	115,199 (y & f)				156,312 (y)	210,496 (y & f)	107,427 (y & f)	
1989	2,393,710 (sy)	295,575 (y & f)		78,825 (f)					164,786 (y & f)	160,734 (y & f)	
1990		255,614 (y)		71,864 (f)				99,775 (y)	195,425 (y & f)	194,783 (y & f)	
1991	10,462 (sy) (c)	3,132,127 (sy & f)		79,672 (sy)							
1992	7,837 (sy) (c)	194,847 (y)							265,428 (y & f)	181,649 (y & f)	
1993	29,681 (sy) (c)	3,166,079 (sy)									
1994	22,174 (sy) (c)	220,440 (y)							5,272 (y) (c)	109,101 (y)	
1995		3,182,712 (sy)							189,910 (y)		
1996		2,629,917 (sy)							1,484,555 (sy & f)		
1997		134,837 (y)							480,864 (y)		
1998		2,843,212 (sy)							1,128,176 (sy & f)		
1999		283,453 (y)							8,890 (y) (c)	610,245 (y)	1,217,602 (sy & f)
2000					227,088 (y)	1,904,875 (sy)					673,331 (y)
2001					561,423 (sy)						
2002					204,022 (y)	360,381 (y)					378,561 (y)
2003					853,598 (sy)	2,106,815 (sy)					
2004					433,347 (y)	86,574 (y)					225,883 (y)
2005					788,310 (sy)	1,792,523 (sy)					
2006					436,010 (y)	1,767,302 (sy)					827,612 (y)
2007					1,010,140 (sy)						114,370 (f)

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Table 10 continued.

Year	Fall Chinook							Spring Chinook			
	Lower Umatilla	Upper Umatilla	Bonifer	Minthorn	Thornhollow	Imeques	Pendleton	Lower Umatilla	Upper Umatilla	Bonifer	Imeques
1999					449,568 (y)	1,842,666 (sy)					659,607 (y)
2000					469,756 (y)		2,044,648 (sy)				816,184 (y)
2001	322,283 (y)				975,871 (sy)						782,733 (y)
2002	312,869 (sy)				400,761 (y)						876,121 (y)
2003	311,406 (sy)				324,713 (sy)						782,106 (y)
					520,564 (y)						
					307,194 (sy)						
					509,135 (y)						
					313,383 (sy)						

/a y = yearling releases; sy = subyearling releases; f = fall releases; upper Umatilla River includes Meacham Creek

/b Releases in 1982 were Tule stock; all other releases have been upriver brights

/c Passage evaluation releases

Table 11. Hatchery releases of fall Chinook in the Umatilla River Basin. Data from CTUIR Umatilla Hatchery Satellite Facilities Operation and Maintenance Project.

Year of Release	Hatchery	No. Released	No. lb.	Stock
1982	Bonneville/SCNFH	3,807,171	79.0-92.0	Tule
1983	Bonneville	100,564	5.9	Bonneville URB
1984	Bonneville	228,412	8.6	Bonneville URB
1984	Bonneville	966,250	85.1	Bonneville URB
1985	Bonneville	3,223,172	92.3	Bonneville URB
1985	Bonneville	198,162	7.8	Bonneville URB
1985	Bonneville	51,000	16.2	Bonneville URB
1986	Irrigon	206,815	4.7-5.0	Bonneville URB
1986	Irrigon	2,029,602	86.0	Bonneville URB
1986	Irrigon	35,574	11.6	Bonneville URB
1987	Irrigon	1,476,830	60.4	Priest Rapids URB
1987	Bonneville	211,506	8.1-8.6	Bonneville URB
1987	Irrigon	2,000	20.0	Priest Rapids URB
1988	Irrigon	1,886,757	68.3	Priest Rapids URB
1988	Irrigon	1,429,250	93.1	Bonneville URB
1988	Irrigon	94,089	8.6-9.8	Priest Rapids URB
1988	Bonneville	200,341	8.8-10.2	Bonneville URB
1989	Bonneville	217,443	8.6	Bonneville URB
1989	Irrigon	2,393,710	66.6	Priest Rapids URB
1989	Irrigon	156,957	10.9-11.1	Priest Rapids URB
1990	Bonneville	255,614	8.2	Bonneville URB
1990	Irrigon	2,425,681	87.5	Bonneville URB
1990	Irrigon	629,800	82.4	Priest Rapids URB
1990	Irrigon	148,510	8.8-9.2	Bonneville URB
1991	Bonneville	194,847	7.8	Bonneville URB
1991	Irrigon	10,462	80.0-194.0	Bonneville URB
1991	Irrigon	3,245,751	80.5-86.0	Bonneville URB
1992	Bonneville	220,440	7.6-7.7	Bonneville URB
1992	Umatilla	2,678,343	62.2	Bonneville URB
1992	Irrigon	504,369	53.4	Umatilla River
1992	Irrigon	5,167	62.8	Umatilla River
1992	Umatilla	2,670	112.0	Bonneville URB
1993	Bonneville	134,837	9.1	Bonneville URB
1993	Umatilla	2,629,917	62.7	Upriver Brights /a
1993	Umatilla	29,681	95.5-142.0	Upriver Brights /a
1994	Bonneville	283,453	8.5-10.4	Bonneville URB
1994	Umatilla	2,843,212	65.2	Upriver Brights /b
1994	Umatilla	22,174	85.0-171.0	Upriver Brights /b
1995	Bonneville	227,088	8.0	Bonneville URB
1995	Umatilla	2,466,298	63.1-64.7	Priest Rapids URB
1996	Bonneville	421,316	7.0-7.1	Bonneville URB
1996	Umatilla	143,087	5.1	Priest Rapids URB
1996	Umatilla	2,960,413	63.9-71.0	Priest Rapids URB
1997	Umatilla	258,953	7.6-8.1	Priest Rapids URB
1997	Willard	260,968	13.6	Upriver Brights /c
1997	Umatilla	2,580,833	66.0-67.3	Upriver Brights /b

Table 11 continued.

Year of Release	Hatchery	No. Released	No. lb.	Stock
1998	Bonneville	256,910	10.8	Bonneville URB
1998	Willard	179,100	7.8	Upriver Brights /c
1998	Umatilla	2,777,442	64.9-67.7	Priest Rapids URB
1999	Bonneville	449,568	9.0-9.4	Umatilla River
1999	Umatilla	1,842,666	55.9	Upriver Brights /d
2000	Bonneville	235,246	10.9	Umatilla River
2000	Bonneville	234,510	10.1	Umatilla River
2000	Umatilla	975,871	49.0	Priest Rapids URB
2000	Umatilla	2,044,648	48.3	Priest Rapids URB
2001	Bonneville	213,499	9.7	Umatilla River
2001	Bonneville	187,262	9.2	Umatilla River
2001	Umatilla	324,713	45.3	Umatilla River
2001	Umatilla	322,283	33.6	Umatilla River
2002	Bonneville	259,607	9.0	Umatilla River
2002	Bonneville	260,957	8.7	Umatilla River
2002	Umatilla	307,194	40.6	Umatilla River
2002	Umatilla	312,869	39.0	Umatilla River
2003	Bonneville	261,065	13.1	Umatilla River
2003	Bonneville	248,070	10.5	Umatilla River
2003	Umatilla	313,383	54.6	Umatilla River
2003	Umatilla	311,406	56.2	Umatilla River

/a Bonneville, Little White Salmon and Umatilla River broodstock

/b Priest Rapids and Umatilla River broodstock

/c Little White Salmon broodstock

/d Priest Rapids and Little White Salmon broodstock

Table 12. Hatchery releases of coho salmon in the Umatilla River Basin. Data from CTUIR Umatilla Hatchery Satellite Facilities Operation and Maintenance Project.

Year of Release	Hatchery	No. Released	No./lb.	Stock
1966	Little White Salmon	500,000	1312.0	Little White Salmon
1967	Little White Salmon	200,000	1087.0	Little White Salmon
1967	Cascade	500,000	Eggs	Tanner Creek
1968	Little White Salmon	750,000	Eggs	Little White Salmon
1969	Carson	200,040	23.0	Little White Salmon
1987	Cascade	948,549	13.5-14.0	Tanner Creek
1988	Cascade	996,433	16.6	Tanner Creek
1989	Cascade	986,906	15.3-18.2	Tanner Creek
1990	Cascade	988,928	11.2-14.7	Tanner Creek
1991	Cascade	955,629	15.4-17.1	Tanner Creek
1992	Cascade	489,165	15.7	Tanner Creek
1992	Cascade	472,221	15.5	Tanner Creek
1993	Cascade	437,884	17.5	Tanner Creek
1993	Cascade	454,794	17.6	Tanner Creek
1994	Cascade	465,883	17.1	Tanner Creek
1994	Cascade	418,222	18.1	Tanner Creek
1995	Cascade	502,105	14.7	Tanner Cr. & Umatilla R
1995	Cascade	497,449	14.5	Tanner Cr. & Umatilla R
1995	Sandy	191,854	13.9	Tanner Creek
1995	Lower Herman Cr.	322,858	20.3	Tanner Creek
1996	Lower Herman Cr.	465,769	17.9	Tanner Creek
1996	Cascade	500,005	18.0	Tanner Creek
1996	Cascade	511,609	18.6	Tanner Creek
1997	Klaskanine	81,445	18.1	Tanner Creek
1997	Gnat Creek	881,341	15.3	Tanner Cr. & Sandy R.
1997	Lower Herman Cr.	438,153	16.0	Umatilla River
1998	Cascade	1,078,436	16.8	Tanner Creek
1998	Lower Herman Cr.	528,350	16.3	Tanner Creek
1999	Cascade	1,010,608	17.9	Tanner Creek
1999	Lower Herman Cr.	465,314	15.8	Tanner Creek
2000	Cascade	249,792	16.8	Tanner Creek
2000	Cascade	798,210	15.2	Tanner Creek
2000	Lower Herman Cr.	513,288	16.8	Tanner Creek
2001	Cascade	745,497	13.7	Tanner Creek
2001	Cascade	250,323	17.5	Tanner Creek
2001	Lower Herman Cr.	478,739	17.5	Tanner Creek
2002	Cascade	249,684	14.7	Tanner Creek
2002	Cascade	185,018	14.0	Tanner Creek
2002	Cascade	644,680	14.2	Tanner Creek
2002	Lower Herman Cr.	542,475	15.6	Tanner Creek
2003	Cascade	249,988	16.3	Tanner Creek
2003	Cascade	591,349	15.0	Tanner Creek
2003	Cascade	188,971	15.4	Tanner Creek
2003	Lower Herman Cr.	515,859	15.8	Tanner Creek

Table 13. Dates, sites and number of adult lamprey released in the Umatilla River and Meacham Creek. Data from A. Jackson, CTUIR, unpublished.

Date	Site Name	RM	# of adults released
2000-5-08	Umatilla R.- Thornhollow	118.4	150
2000-5-08	Umatilla R.-Bear Cr. confluence	139.9	300
2000-5-08	Meacham Cr. @ Camp Cr. confluence	17.5	150
2001-5-02	Umatilla R.- Thornhollow	118.4	82
2001-5-02	Umatilla R.-Bear Cr. confluence	139.9	81
2001-5-02	Meacham Cr. @ Camp Cr. confluence	17.5	81
2002-4-25	Umatilla R.- Mission	98.8	150
2002-4-29	Umatilla R.- Thornhollow	118.4	100
2002-4-29	Umatilla R.-Bear Cr. confluence	139.9	141
2002-4-29	Meacham Cr. @ Camp Cr. confluence	17.5	100
2003-5-06	Umatilla R.- Thornhollow	118.4	90
2003-5-06	Umatilla R.-Bear Cr. confluence	139.9	110
2003-5-07	Meacham Creek	10	115
2003-5-07	Meacham Cr. @ Camp Cr. confluence	17.5	115
2003-5-09	Iskuulpa Creek	4.8	25
2003-5-09	Iskuulpa Creek	5.0	29

Table 14. Synopsis of non-tribal steelhead angling regulations implemented by ODFW on the Umatilla River 1984-2004.

Year	Season Length	Wild or Hatchery Harvest	Bag Limit Daily/Annual
84-85	Dec 1 – March 31	Wild/Hatchery	2/10
85-86	Dec 1 – March 31	Wild/Hatchery	2/10
86-87	Dec 1 – March 31	Wild/Hatchery	2/10
87-88	Dec 1 – March 31	Wild/Hatchery	2/10
88-89	Dec 1 – March 31	Wild/Hatchery	2/10
89-90	Dec 1 – March 31	Wild/Hatchery	2/10
90-91	Dec 1 – March 31	Wild/Hatchery	2/10
91-92	Dec 1 – March 31	Wild/Hatchery	2/10
92-93	Sept 1 – April 15	Hatchery	2/40
93-94	Sept 1 – April 15	Hatchery	2/40
94-95	Sept 1 – April 15	Hatchery	2/40
95-96	Sept 1 – April 15	Hatchery	2/40
96-97	Sept 1 – April 15	Hatchery	2/20
97-98	Sept 1 – April 15	Hatchery	2/20
98-99	Sept 1 – April 15	Hatchery	2/20
99-00	Sept 1 – April 15	Hatchery	2/20
00-01	Sept 1 – April 15	Hatchery	3/20
01-02	Sept 1 – April 15	Hatchery	3/no limit
02-03	Sept 1 – April 15	Hatchery	3/no limit
03-04	Sept 1 – April 15	Hatchery	3/no limit

Table 15. Summary of steelhead catch statistics, 1992-2001 run years. Data is from creel surveys conducted from the Umatilla River mouth to the western boundary of the Confederated Tribes of the Umatilla Indian reservation near Highway 11. Table from Chess et al. (2003).

Year	No. anglers	Hours fished	No. hatchery steelhead harvested	No. hatchery steelhead released	No. natural steelhead released	Catch rate (fish/h)
1992-93	543	5,293	37	NA	140 ^a	0.040
1993-94	577	4,504	19	7	37	0.014
1994-95	1,070	6,172	61	24	172	0.042
1995-96	880	4,560	60	10	162	0.051
1996-97	1,409	6,916	90	25	169	0.048
1997-98	898	6,676	101	43	238	0.057
1998-99	1,179	9,097	101	31	272	0.044
1999-00	1,154	8,545	78	22	454	0.065
2000-01	1,455	7,283	90	24	181	0.041
2001-02	1,624	12,057	204	56	733	0.082

^a Includes an undetermined number of hatchery steelhead released.

Table 16. Summer Steelhead catch statistics from punch cards from 1970-71 through 1991-92. ODFW data.

Run Year	Catch	Run Year	Catch
1970-71	1307	1981-82	630
1971-72	735	1983-84	495
1972-73	1913	1984-85	175
1973-74	326	1985-86	196
1974-75	338	1986-87	133
1975-76	379	1987-88	76
1976-77	116	1988-89	219
1977-78	866	1989-90	400
1978-79	280	1990-91	206
1979-80	878	1991-92	418

Table 17. Tribal harvest of naturally produced or wild steelhead and hatchery produced steelhead in the Umatilla River. Data from Kissner (2003).

Run Year	Wild Catch	Hatchery Catch
1992-93	5	25
1993-94	5	20
1994-95	5	20
1995-96	0	39
1996-97	0	33
1997-98	5	33
1998-99	5	39
1999-00	0	99
2000-01	0	84

Table 18. Statistical summary of spring Chinook salmon sport fishery in the Umatilla River, 1990-2002. There was no sport fishery during years not listed. From Chess et al. (2003).

Year	Survey area ^a	Open Area	Angling Days	Number Anglers	Hours fished	Number Harvested	Number released	Catch rate (fish/h)
1990	Ryan Creek to Forks	Ryan Creek to Forks	12	80	1,248	20	0	0.016
1991	Ryan Creek to Forks	Ryan Creek to Forks	12	235	1,544	23	0	0.015
1993	Yoakum Bridge to wCTUIR	Yoakum Bridge to wCTUIR and	16	39	317	0	0	0.000
	Ryan Creek to Forks	Ryan Creek to forks	16	145	1,211	18	0	0.015
1996	Rieth Bridge to wCTUIR	Rieth Bridge to wCTUIR and	20	428	2,471	205	0	0.083
	Ryan Creek to Forks	Ryan Creek to Forks	20	67	429	1	0	0.002
1997	TMFD to Yoakam Bridge	TMFD to wCTUIR	23	58	812	19	0	0.023
	Yoakam Bridge to wCTUIR		23	337	2,529	12	0	0.005
1999	TMFD to Yoakam Bridge	TMFD to wCTUIR	23	18	21	0	0	0.000
	Yoakam Bridge to wCTUIR		23	222	531	4	2	0.011
2000	Mouth to TMFD	Mouth to wCTUIR	76	1,103	9,198	443	82	0.057
	Yoakum Bridge to wCTUIR		76	214	4,274	141 ^b	9	0.035
2001	Mouth to TMFD	Mouth to wCTUIR	76	1,404	10,872	463	13	0.043
	Yoakum Bridge to wCTUIR		76	324	4,053	80	2	0.020
2002	Mouth to TMFD	Mouth to wCTUIR	40	924	10,326	645	11	0.064
	Yoakum Bridge to wCTUIR		53	222	7,227	110	6	0.016

^a wCTUIR = west boundary of Confederated Tribes of the Umatilla Indian Reservation (RM); Forks = confluence of Umatilla River north and south forks (river mile 89.5); TMFD = Three Mile Falls Dam (river mile 3.7).

^b Includes an estimated 57 fish caught prior to the initiation of creel surveys.

Table 19. Spring Chinook harvest estimates for the tribal fishery in the Umatilla River, 1990-2002. Data provided by the CTUIR Natural Production M&E Project. Fishing effort was not estimated.

Year	Number Harvested	Year	Number Harvested
1990	No Surveys	1997	187
1991	82	1998	No fishery
1992	No Fishery	1999	110
1993	176	2000	695
1994	No fishery	2001	247
1995	No fishery	2002	245
1996	167		

Table 20. Synopsis of non-tribal coho (Co) and fall Chinook (ChF) angling regulations implemented by ODFW on the Umatilla River 1989-2004.

Year	Season Length	Open Area	Daily Bag		Season Bag
			Jacks	Adults	
1989	Oct 1 – Nov 30	Below TMFD	10 Co/ChF	2 coho, No ChF	40 adult coho
1990	Oct 1 – Nov 30	Below TMFD	10 Co/ChF	2 coho, No ChF	40 adult coho
1991	Oct 1 – Nov 30	Below TMFD	10 Co/ChF	2 coho, No ChF	40 adult coho
1992	Oct 1 – Nov 30	Below Stanfield Dam	10 Co/ChF	2 coho, No ChF	40 adult coho
1993	Oct 1 – Nov 30	Below Stanfield Dam	10 Co/ChF	2 coho, No ChF	40 adult coho
1994	Oct 1 – Nov 30	Below Stanfield Dam	10 Co/ChF	2 coho, No ChF	40 adult coho
1995	Oct 1 – Nov 30	Below Stanfield Dam	10 Co/ChF	2 coho, No ChF	40 adult coho
1996	Oct 1 – Nov 30	Below Stanfield Dam	10 Co/ChF	2 coho, No ChF	40 adult coho
1997	Oct 1 – Nov 30	Below Stanfield Dam	10 Co/ChF	2 coho, No ChF	20 adult coho
1998	Oct 1 – Nov 30	Below Stanfield Dam	5 Co/ChF	2 coho, No ChF	20 adult coho
1999	Oct 1 – Nov 30	Below Stanfield Dam	5 Co/ChF	2 coho, No ChF	20 adult coho
2000	Sept 1 – Nov 30	Mouth to CTUIR Boundary	5 Co/ChF	2 coho, No ChF	20 adult coho
2001	Sept 1 – Nov 30	Mouth to CTUIR Boundary	5 Co/ChF	2 coho, No ChF	20 adult coho
2002	Sept 1 – Nov 30	Mouth to CTUIR Boundary	5 Co/ChF	2 coho, No ChF	Fin clipped Coho – no limit Non-clipped Coho - 20
2003	Sept 1 – Nov 30	Mouth to CTUIR Boundary	5 Co/ChF	2 coho, No ChF	Fin clipped Coho – no limit Non-clipped Coho - 20

Table 21. Catch and harvest of adult (Ad), jack (Jk), and subjack (SJ) fall chinook and adult and jack coho salmon relative to run size in the Umatilla River, 1992-2001. From Chess et al. (2004).

Run year	Number caught			Number harvested			Percent of run caught			Percent of catch harvested		
	Ad	Jk	SJ	Ad	Jk	SJ	Ad	Jk	SJ	Ad	Jk	SJ
Fall Chinook												
1992	12	67	71	2	16	22	5.0	NA	NA	16.7	23.9	31.0
1993	13	1	1	9	1	1	3.4	3.6	6.3	69.2	100.0	100.0
1994	18	61	173	10	17	48	2.6	24.1	41.6	55.6	27.9	27.7
1995	34	12	76	5	10	31	5.6	4.0	20.6	14.7	83.3	40.8
1996	63	0	227	15	0	163	9.5	0.0	29.5	23.8		71.8
1997	53	105	130	11	83	95	14.5	36.2	45.8	20.8	79.0	73.1
1998	46	26	95	3	17	67	15.9	15.2	32.0	6.5	65.4	70.5
1999	51	21	92	4	8	44	6.9	14.5	46.9	7.8	38.1	47.8
2000	60	35	739	18	27	543	9.1	7.5	13.5	30.0	77.1	73.5
2001	153	69	138	8	53	103	13.3	5.7	12.9	5.2	76.8	74.6
Mean	50	40	174	9	23	112	8.6	12.3	27.7	25.0	63.5	61.1
Coho												
1992	44	88		35	70		11.3	36.2		79.5	79.5	
1993	49	4		49	4		3.1	18.2		100.0	100.0	
1994	44	31		21	12		4.4	41.9		47.7	38.7	
1995	30	25		23	25		3.1	32.1		76.7	100.0	
1996	44	51		44	51		6.6	68.0		100.0	100.0	
1997	37	158		37	134		5.2	58.3		100.0	84.8	
1998	56	37		56	33		1.8	16.4		100.0	89.2	
1999	234	70		184	56		7.2	26.8		78.6	80.0	
2000	129	133		79	112		2.7	9.6		61.2	84.2	
2001	1,736	23		455	7		7.5	26.4		26.2	30.4	
Mean	240	62		98	50		5.3	33.5		77.0	78.7	