



US Army Corps
of Engineers®

Portland District
Walla Walla District

Annual Fish Passage Report 2008



Columbia and Snake River Projects

2008

**ANNUAL FISH PASSAGE REPORT
COLUMBIA AND SNAKE RIVERS**

for

**SALMON, STEELHEAD, SHAD,
AND LAMPREY**

**BONNEVILLE DAM
THE DALLES DAM
JOHN DAY DAM
McNARY DAM
ICE HARBOR DAM
LOWER MONUMENTAL DAM
LITTLE GOOSE DAM
LOWER GRANITE DAM
PRIEST RAPIDS DAM
ROCK ISLAND DAM
ROCKY REACH DAM
WELLS DAM**

**NORTHWESTERN DIVISION
U.S. ARMY CORPS OF ENGINEERS**

**Prepared By:
U.S. Army Engineer Districts
Portland and Walla Walla**

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APPROXIMATE SCALE IN MILES

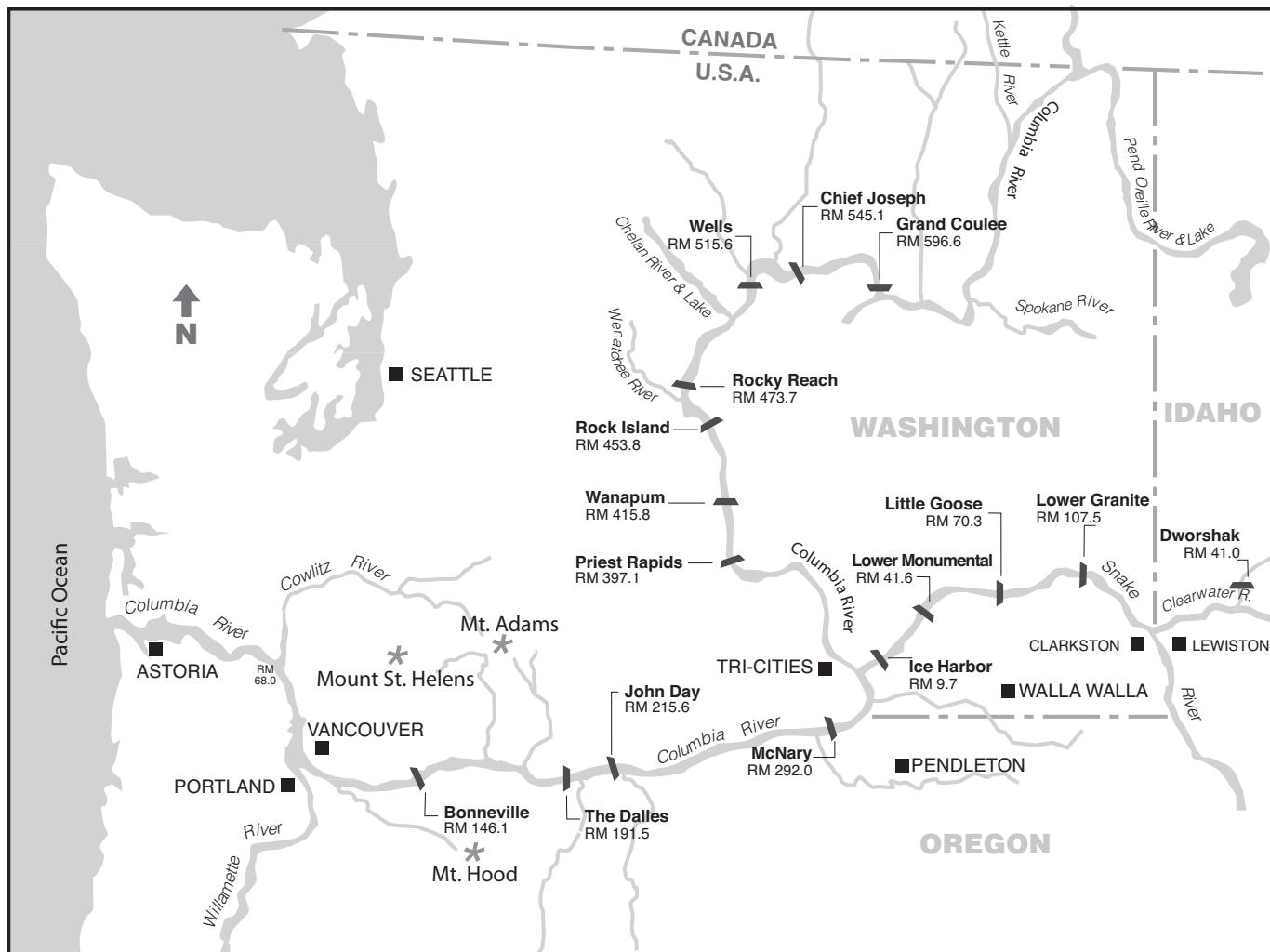


TABLE 1

FISH ESCAPEMENT AT MAIN STEM DAMS ON THE COLUMBIA AND SNAKE RIVERS: 2004-2008

SPECIES	BONNEVILLE	THE DALLES	JOHN DAY	MCNARY	ICE HARBOR	LOWER MONUMENTAL	LITTLE GOOSE	LOWER GRANITE
2004								
CHINOOK*	905,809	560,420	446,303	382,946	130,213	113,885	100,733	109,061
Spring*	179,037	137,957	118,520	115,179	81,752	75,363	65,862	75,224
Summer*	105,032	87,925	83,060	74,217	16,185	12,789	11,567	11,277
Fall*	621,740	334,538	244,723	193,550	32,276	25,733	23,304	22,560
Jacks	60,245	48,653	47,696	40,644	18,825	11,902	10,999	14,592
STEELHEAD	310,893	238,242	227,199	201,071	168,897	149,429	142,092	154,389
SOCKEYE	123,291	107,466	113,497	89,707	91	80	81	113
COHO*	119,826	40,564	34,755	20,132	3,519	3,606	3,029	3,904
Adults	115,018	38,661	32,627	19,004	3,473	3,441	2,898	3,802
Jacks	4,808	1,903	2,128	1,128	46	165	131	102
SHAD	5,355,677	5,472,400	**	1,751,728	365,493	**	**	33,987
LAMPREY	61,780	14,873	11,663	5,888	805	194	243	117
2005								
CHINOOK*	600,301	388,893	322,563	269,103	58,361	52,281	46,553	49,530
Spring*	78,326	64,174	58,742	55,056	29,306	26,935	24,918	27,286
Summer*	83,703	73,136	69,439	66,858	9,817	9,158	7,961	7,814
Fall*	438,272	251,583	194,382	147,189	19,238	16,188	13,674	14,430
Jacks	29,998	24,900	22,868	19,470	6,818	4,857	4,160	5,572
STEELHEAD	315,104	240,349	223,174	214,105	155,541	153,792	143,537	155,783
SOCKEYE	72,971	65,273	69,770	63,540	18	18	13	18
COHO*	88,791	34,629	34,197	19,776	1,621	2,095	1,992	2,183
Adults	83,305	32,447	30,869	18,577	1,601	2,065	1,913	2,077
Jacks	5,486	2,182	3,328	1,199	20	30	79	106
SHAD	4,242,129	6,067,028	**	1,951,001	281,114	**	**	13,584
LAMPREY	26,664	8,361	8,312	4,158	461	222	211	40
2006								
CHINOOK*	525,948	339,206	288,434	217,185	52,501	54,482	44,695	45,992
Spring*	99,364	64,003	52,406	48,362	26,309	24,137	21,569	23,503
Summer*	101,874	84,839	77,964	65,960	9,085	10,449	8,752	7,720
Fall*	324,710	190,364	158,064	102,863	17,107	19,896	14,374	14,769
Jacks	32,812	27,104	28,476	19,646	8,255	9,840	6,429	8,356
STEELHEAD	333,250	235,623	217,122	184,024	123,631	135,566	124,440	145,991
SOCKEYE	37,066	30,026	35,387	29,295	48	17	26	17
COHO*	109,006	32,196	33,778	13,333	971	1,180	972	1,434
Adults	101,086	29,728	28,868	12,183	897	1,101	938	1,141
Jacks	7,920	2,468	4,910	1,150	74	79	34	293
SHAD	3,965,254	4,611,592	**	1,176,899	213,229	**	**	7,923
LAMPREY	38,938	6,894	9,600	2,456	277	175	125	35
2007								
CHINOOK*	357,375	252,215	214,329	178,802	69,105	73,333	60,398	62,530
Spring*	83,230	68,201	57,042	51,104	35,355	35,064	31,187	31,455
Summer*	61,568	52,062	47,908	42,436	10,599	13,362	10,759	11,096
Fall*	212,577	131,952	109,379	85,262	23,151	24,907	18,452	19,979
Jacks	83,054	65,200	61,316	49,740	19,635	17,371	18,120	22,146
STEELHEAD	320,931	241,898	227,198	208,788	153,619	154,104	135,414	157,345
SOCKEYE	24,376	19,124	24,277	18,175	55	44	37	52
COHO*	96,058	32,749	39,226	22,587	2,147	2,231	2,141	2,798
Adults	91,994	30,661	33,017	20,217	1,994	2,092	1,963	2,532
Jacks	4,064	2,088	6,209	2,370	153	139	178	266
SHAD	2,575,277	3,591,988	**	985,466	202,818	**	**	21,386
LAMPREY	19,313	6,085	5,744	3,454	290	138	72	34
2008								
CHINOOK*	587,289	397,766	342,952	267,979	123,007	123,018	108,953	115,632
Spring*	143,097	111,239	96,697	80,213	60,899	61,397	58,201	61,092
Summer*	89,892	77,279	77,329	65,974	28,657	30,233	26,559	27,684
Fall*	354,300	209,248	168,926	121,792	33,451	31,388	24,193	26,856
Jacks	68,480	66,298	60,788	43,295	24,265	20,240	18,674	26,246
STEELHEAD	356,186	277,640	274,799	221,310	172,453	186,058	168,105	175,421
SOCKEYE	213,607	177,984	193,409	146,924	539	722	594	909
COHO*	145,913	42,682	44,898	21,806	3,003	4,513	3,806	4,770
Adults	135,399	37,982	39,975	18,756	2,889	4,143	3,440	3,458
Jacks	10,514	4,700	4,923	3,050	114	370	366	1,312
SHAD	2,144,756	1,805,516	**	623,010	119,312	**	**	3,573
LAMPREY	14,562	4,599	6,625	1,530	264	145	104	61

ASSUMED DATES FOR CHINOOK RUN (MAY VARY FROM PREVIOUS YEARS)

SPRING	15 MARCH - 31 MAY	1 APRIL - 3 JUNE	1 APR - 5 JUN	1 APR - 8 JUN	1 APR - 11 JUN	1 APR - 13 JUN	1 APR - 15-Jun	1 MAR - 17 JUN
SUMMER	1 JUN - 31 JUL	4 JUN - 3 AUG	6 JUN - 5 AUG	9 JUN - 8 AUG	12 JUN - 11 AUG	14 JUN - 13 AUG	16 JUN - 15-Aug	18 JUN - 17 AUG
FALL	1 AUG - 15 NOV	4 AUG - 31 OCT	6 AUG - 31 OCT	9 AUG - 31 OCT	12 AUG - 31 OCT	14 AUG - 31 OCT	16 AUG - 31 OCT	18 AUG - 15 DEC

*Includes Jack Counts.

TABLE 2

FISH ESCAPEMENT AT MID COLUMBIA RIVER DAMS: 2004 - 2008

SPECIES	PRIEST RAPIDS	ROCK ISLAND	ROCKY REACH	WELLS
2004				
CHINOOK*	134,620	97,765	65,538	43,417
Spring*	14,541	11,876	5,099	4,793
Summer*	72,673	67,145	49,625	32,847
Fall*	47,406	18,744	10,814	5,777
Jacks	10,526	7,854	10,324	2,083
STEELHEAD	18,727	19,547	14,580	9,317
SOCKEYE	124,943	106,666	81,338	78,053
COHO*	5,624	5,814	786	291
Adults	4,830	5,982	786	291
Jacks	794	**	**	**
SHAD	10,589	**	**	**
LAMPREY	2,647	2,362	1,043	403
2005				
CHINOOK*	109,429	80,942	56,064	40,220
Spring*	14,663	16,969	6,897	4,996
Summer*	63,125	54,121	44,665	31,763
Fall*	31,641	9,852	4,502	3,461
Jacks	2,765	3,746	3,287	1,248
STEELHEAD	12,472	12,409	9,710	7,203
SOCKEYE	74,563	71,226	55,570	55,559
COHO*	1,260	6,580	1,225	348
Adults	1,173	6,580	1,225	348
Jacks	87	**	**	**
SHAD	10,254	**	**	**
LAMPREY	2,598	2,267	404	212
2006				
CHINOOK*	87,086	81,777	54,600	36,615
Spring*	8,616	12,254	6,232	4,376
Summer*	57,792	63,962	44,077	27,196
Fall*	20,678	5,561	4,291	5,043
Jacks	2,464	4,176	3,169	3,445
STEELHEAD	10,408	9,382	8,124	6,674
SOCKEYE	26,710	35,132	25,377	22,075
COHO*	3,813	5,597	1,523	409
Adults	3,205	5,597	1,523	409
Jacks	608	**	**	**
SHAD	281	**	**	**
LAMPREY	4,381	1,326	370	21
2007				
CHINOOK*	65,962	47,659	34,581	22,280
Spring*	5,884	9,577	3,805	2,793
Summer*	33,045	34,352	27,829	16,817
Fall*	27,033	3,730	2,947	2,670
Jacks	5,960	9,974	7,450	5,362
STEELHEAD	15,183	13,296	10,146	7,500
SOCKEYE	24,645	25,122	20,683	22,273
COHO*	12,310	17,152	4,738	2,432
Adults	11,488	16,604	4,634	2,432
Jacks	822	548	104	**
SHAD	1,015	**	**	**
LAMPREY	6,593	1,299	541	35
2008				
CHINOOK*	104,001	68,075	48,135	31,992
Spring*	12,798	15,095	4,605	3,134
Summer*	42,616	41,877	33,861	22,435
Fall*	48,587	11,103	9,669	6,423
Jacks	18,637	8,019	6,202	4,261
STEELHEAD	16,725	16,288	13,871	9,808
SOCKEYE	196,835	193,739	161,343	165,334
COHO*	6,022	8,393	3,726	1,196
Adults	5,592	6,736	2,944	1,191
Jacks	430	1,657	782	5
SHAD	340	**	**	**
LAMPREY	5,083	880	368	7

ASSUMED DATES FOR CHINOOK RUNS (MAY VARY FROM PREVIOUS YEARS)

SPRING	15 APR - 31 MAY	14 APR - 23 JUN	14 APR - 23 JUN	1 MAY - 28 JUN
SUMMER	1 JUN - 13 AUG	24 JUN - 1 SEP	24 JUN - 1 SEP	29 JUN - 28 AUG
FALL	14 AUG - 15 NOV	2 SEP - 15 NOV	2 SEP - 15 NOV	29 AUG - 15 NOV

*Includes jack counts.

TABLE 3 and TABLE 4
STEELHEAD OVER COLUMBIA AND SNAKE RIVER DAMS 1953-2008
BY RUN-YEAR (JUNE 1 - MAY 31)

Information Below Concerns the Following Two Tables

Estimating the size of the upriver steelhead run has previously been hampered because of the calendar year approach used in the summary tables. Problems in accountability arise due to over wintering behavior of summer steelhead, especially Snake River stocks, which often have sizeable proportions of the run remaining below mainstem projects during the winter months. Migration of these steelhead commences again the following spring when warming reservoir temperatures trigger upstream movement. For this reason, an additional table has been prepared that summarizes steelhead trout counts at each project on a "fish year" basis: June 1 - May 31. Because all stocks of steelhead cross Bonneville Dam during the calendar year, those summary counts have not been modified.

Footnotes for the Following Two Tables

*Because counting started at each dam early in the year after construction was complete, these figures are for the latter part of the run year only. That part of the run year starting after June 1st of the previous 'year passed the dams without being counted.

**1981 was the last year visual counts were made at Little Goose Project until 1991.

TABLE 3
STEELHEAD OVER COLUMBIA AND SNAKE RIVER DAMS 1953 - 2008
BY RUN-YEAR (JUNE 1 - MAY 31)

RUN-YEAR	THE DALLES	JOHN DAY	MCNARY	ICE HARBOR	LOWER MONUMENTAL	LITTLE GOOSE**	LOWER GRANITE
1953-54			8,252 *				
1954-55			72,913				
1955-56			84,434				
1956-57	3,531 *		40,660				
1957-58	128,124		105,136				
1958-59	120,170		87,413				
1959-60	155,892		111,288				
1960-61	110,955		95,556				
1961-62	134,740		104,679	9,474 *			
1962-63	163,125		163,333	108,186			
1963-64	118,899		113,676	76,788			
1964-65	110,509		99,872	58,025			
1965-66	142,376		120,469	62,566			
1966-67	144,267		144,461	64,987			
1967-68	122,231	6,598 *	83,948	47,536			
1968-69	147,844	122,649	107,806	85,273	16,240 *		
1969-70	111,617	81,623	74,933	58,172	63,269	9,256 *	
1970-71	99,319	81,238	68,598	54,445	58,430	54,257	
1971-72	151,329	117,402	110,450	66,196	68,704	70,867	
1972-73	135,730	149,704	95,837	63,584	66,650	63,033	
1973-74	100,924	93,951	62,158	37,245	38,288	37,099	
1974-75	71,336	40,868	26,191	12,170	14,851	13,818	2,789 *
1975-76	57,695	33,640	25,150	15,895	17,236	15,177	16,592
1976-77	83,194	59,368	54,409	24,140	21,801	21,109	22,562
1977-78	133,096	102,193	86,962	54,911	48,160	47,617	57,029
1978-79	58,995	43,554	34,580	27,252	19,849	24,050	26,473
1979-80	86,317	59,825	54,213	26,790	20,073	23,816	28,758
1980-81	93,309	77,113	63,957	47,778	32,599	36,680	37,996
1981-82	112,265	96,663	62,955	43,274	37,755	36,896	42,420
1982-83	116,178	105,438	72,246	70,236	60,775	**	72,384
1983-84	172,033	157,602	126,706	90,030	82,555		88,760
1984-85	221,299	204,595	142,246	101,008	92,947		104,417
1985-86	274,826	245,087	181,635	123,187	104,400		116,147
1986-87	280,671	234,651	193,096	142,273	121,107		129,983
1987-88	219,822	172,290	151,587	77,565	64,717		71,280
1988-89	197,669	163,283	150,361	98,950	81,324		87,137
1989-90	236,584	193,951	170,014	149,361	131,050	**	131,420
1990-91	128,123	107,117	94,522	54,370	44,518	1,070	56,865
1991-92	199,244	158,790	168,156	122,874	97,454	96,421	99,052
1992-93	233,430	197,715	197,739	166,654	136,820	118,949	128,265
1993-94	123,449	94,080	90,359	68,568	65,883	58,747	59,768
1994-95	111,378	92,362	92,568	49,450	48,231	46,258	47,302
1995-96	146,152	123,319	114,813	91,938	89,953	77,417	79,126
1996-97	162,447	156,924	124,820	101,384	96,785	82,573	86,898
1997-98	164,657	159,442	129,772	104,220	85,959	74,845	86,617
1998-99	116,262	156,628	98,606	84,135	65,173	62,641	70,721
1999-00	157,062	165,239	84,413	84,253	73,135	65,505	73,811
2000-01	205,801	219,433	131,330	126,989	113,454	102,074	116,490
2001-02	504,704	489,215	401,881	286,874	298,042	270,031	269,281
2002-03	389,119	393,339	292,034	213,944	230,466	215,586	222,050
2003-04	281,586	298,452	242,677	189,143	181,005	170,582	172,487
2004-05	240,134	232,656	210,249	169,797	154,386	146,810	151,634
2005-06	244,295	231,858	224,369	158,099	155,682	145,202	158,511
2006-07	250,603	233,841	210,672	127,216	135,029	124,052	148,982
2007-08	244,996	234,667	215,873	154,512	155,817	135,730	154,534
Total	8,520,313	6,388,363	6,593,085	4,251,717	3,490,572	2,448,168	3,218,541
10-Year Average	263,456	265,533	211,210	159,496	156,219	143,821	153,850

*Partial year

** 1981 was the last year visual counts were made at Little Goose Project until 1991.

Note: Extended video counts from participating projects included for 1996 - 2008.

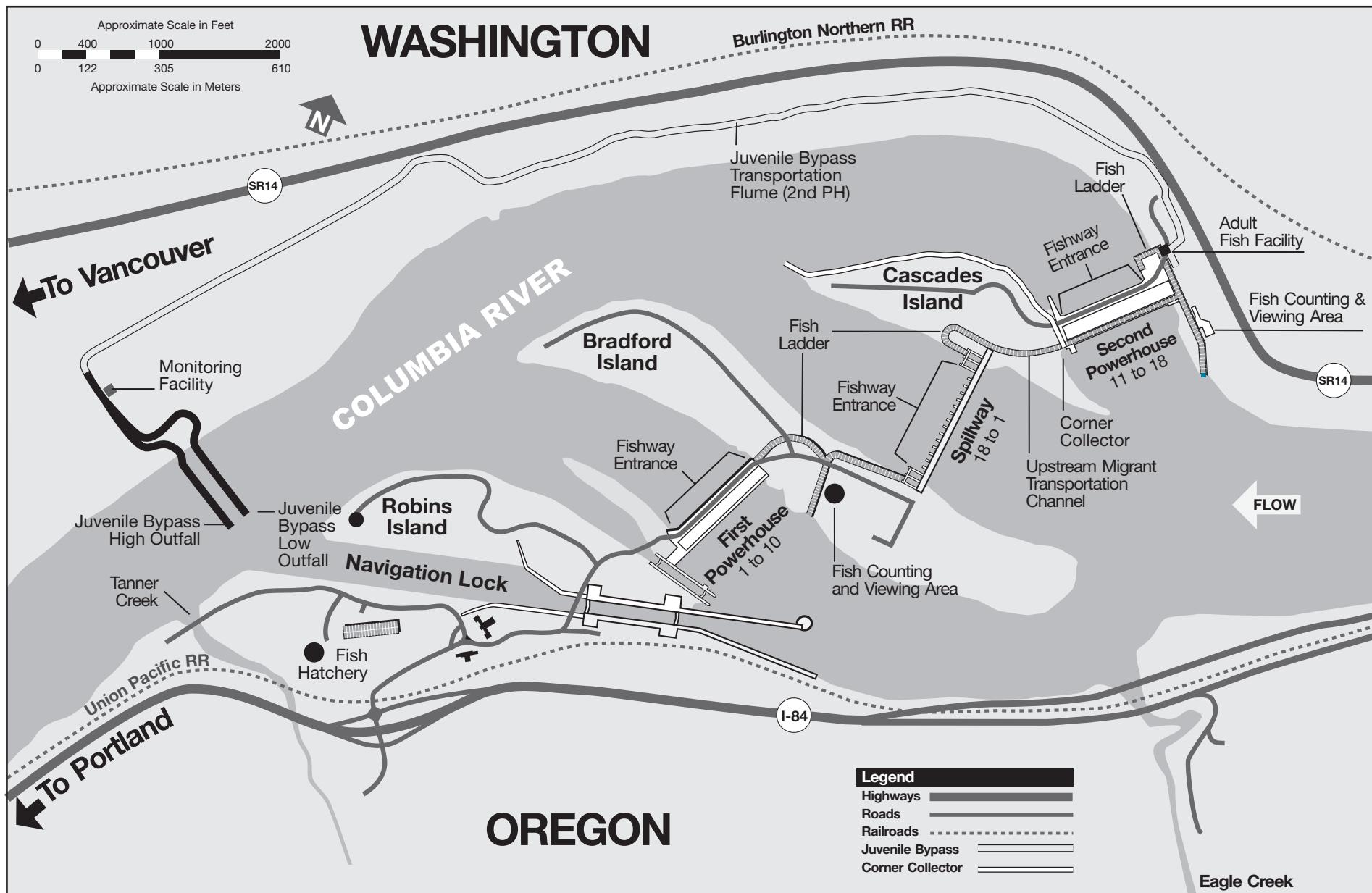
TABLE 4

STEELHEAD OVER MID COLUMBIA RIVER DAMS 1959 - 2008
BY RUN-YEAR (JUNE 1 - MAY 31)

RUN-YEAR	PRIEST RAPIDS	ROCK ISLAND	ROCKY REACH	WELLS
1959-60	810 *			
1960-61	7,277			
1961-62	8,970			
1962-63	9,408			
1963-64	8,808			
1964-65	6,137			
1965-66	9,055			
1966-67	13,159			
1967-68	8,402			
1968-69	9,672			
1969-70	6,140			
1970-71	5,764			
1971-72	11,331			
1972-73	6,006			
1973-74	6,881			
1974-75	2,955			
1975-76	2,558			44 *
1976-77	9,490			4,636
1977-78	9,632			5,464
1978-79	4,479			1,475
1979-80	8,704			3,771
1980-81	8,308			3,363
1981-82	9,122	7,607	5,567	4,107
1982-83	10,948	9,737	6,037	7,805
1983-84	32,103	29,885	19,864	19,540
1984-85	26,566	25,287	17,349	16,663
1985-86	34,007	31,813	22,621	19,712
1986-87	22,332	22,766	15,060	13,251
1987-88	14,054	12,887	7,243	5,565
1988-89	10,138	9,100	5,573	4,358
1989-90	10,720	9,244	5,991	4,577
1990-91	7,858	6,926	5,023	3,842
1991-92	14,047	11,125	7,788	7,823
1992-93	13,596	12,382	7,429	7,029
1993-94	5,405	4,689	2,738	2,359
1994-95	6,710	5,633	2,825	2,181
1995-96	4,357	4,168	1,777	951
1996-97	8,323	7,295	5,780	4,154
1997-98	8,942	7,718	6,756	4,074
1998-99	5,846	4,968	4,404	2,676
1999-00	8,267	6,346	4,848	3,514
2000-01	11,341	10,565	8,307	6,287
2001-02	30,102	28,614	22,114	18,519
2002-03	15,867	15,243	11,718	9,430
2003-04	17,729	17,633	13,919	10,016
2004-05	18,655	19,448	14,624	9,306
2005-06	12,502	12,413	9,498	7,168
2006-07	10,415	9,371	8,141	6,691
2007-08	15,257	13,516	10,487	7,600
Total	549,155	356,379	253,481	227,951
10-Year Average	14,598	13,812	10,806	8,121

*Partial year

Plate 2 Bonneville Lock and Dam



BONNEVILLE DAM

FISH COUNTING SCHEDULE

Jan 1 – Mar 31	Video counting daily 0400-2000 hours Pacific Standard Time.
Apr 1 – Oct 31	Visual counting daily 0400-2000 hours Pacific Standard Time.
Nov 1 – Dec 31	Video counting daily 0400-2000 hours Pacific Standard Time.

FISH FACILITIES OPERATION SCHEDULE

BI Lamprey Ramp

01 Jan – 19 May Winter Maintenance
13 Jun – 18 Jun Pump failure
28 Oct – 31 Dec Winter Maintenance

WA Shore Lamprey Ramp

01 Jan – May 19 Winter Maintenance
28 Oct – 31 Dec Winter Maintenance

Cascades Island exit

01 Mar – 11 Jul Closed to prevent fallback during spill

UMT

01 Jan – 01 Mar VBS modifications to PH2 gatewells

SMF

01 Jan – 03 Mar System in bypass
31 Oct – 31 Dec System in bypass

B2 Corner Collector

01 Jan – 29 Feb Winter maintenance
01 Mar Forebay debris removal
02 Mar – 05 Mar Open for fish passage season
13 Mar – 13 Mar Closed to facilitate the repositioning or research equipment
18 Mar – 22 Mar Closed daily from approximately 0700-1800 to facilitate BGS alignment dives
29 Mar – 29 Mar Closed to facilitate BGS alignment dive
16 Apr – 16 Apr Closed to facilitate hydrophone install
12 May – 12 May Closed to facilitate hydrophone install
01 Sep – 31 Dec Closed for winter Maintenance

PHI ITS

25 Mar – 25 Mar Closed to facilitate trash raking

Bradford Island Ladder

01 Jan – 29 Feb Winter maintenance.
03 Dec – 31 Dec Winter maintenance

DSM1

01 Jan – 15 Sept Winter Maintenance

DSM2

01 Jan – 25 Feb Winter Maintenance

27 Feb ERG tripped due to STS installation

26 Mar ERG tripped due to opening too many orifices at once.

18 Dec – 31 Dec Winter Maintenance

WA shore fishway

14 Jan – 14 Jan Exit closed for body search

AFF

01 Jan – 14 Apr Winter Maintenance

* Cascades Island exit was opened on 11 July to provide an exit for fish caught upstream of the Upstream Migrant Transportation channel (UMT) picket leads.

** The Washington shore exit was closed from 1756 until 1940 on 14 January to facilitate a search for a possible suicide victim in the fishway.

FISHWAY ACTIVITIES

Sealion exclusion devices (SLEDS) installed at the fishway entrances to prevent sea lion access to the fish ladder. New FOG SLEDs manufactured and installed at Powerhouse II.

FISH REMOVAL

Fish passage facilities and turbine units are taken out of service and dewatered to allow for inspection, preventative maintenance, repairs, and modifications. As facilities and turbine units are dewatered, project biologists, outside agency personnel, and other project personnel follow procedures outlined in the Fish Passage Plan and detailed in the Fish Salvage Plan to minimize impacts on fish. Fish recovered are typically released into the forebay above the new navigation lock. Salvaged sturgeon and juvenile salmonids, however, are released below the dam at Hamilton Island. The following is a summary of the number of fish that were removed during facility and turbine unit dewaterings. All fish were recovered in good condition unless otherwise noted.

Unit 1 tail logs (2/13/08): five sturgeon, one unclipped steelhead, 14 sculpin, four crayfish, one sucker, one juvenile Chinook

Unit 18 tail logs (2/21/08): 23 live sturgeon, two sculpin; two sturgeon mortalities observed.

Unit 16 draft tube (3/6/08): one 7-8' sturgeon, two 5-6' sturgeon, 21 other sturgeon

Unit 16 tail logs (3/31/08): 15 sturgeon and one catfish

Unit 3 draft tube (4/15/08): one chinook smolt and two fry

Unit 3 scroll case (4/18/08): 35 juvenile salmonids

Unit 3 tail logs (5/29/08): Nine sculpin, one catfish, two Chinook smolt mortalities

Unit 1 scroll case and draft tube (7/8/08): 150 juvenile salmonids, six adult shad, 11 adult lamprey, six 2-3' sturgeon.

Unit 8 tail logs (7/14/08): Four juvenile chinook, one juvenile steelhead, four sculpin, two sturgeon, one bass.

Unit 1 tail logs (8/5/08): Two juvenile steelhead, one juvenile chinook, one adult unclipped chinook, four sturgeon, 12 sculpin.

Unit 9 draft tube (8/6/08): Four sturgeon, one lamprey, one catfish.

DSM1 (9/2/08): Two juvenile chinook, one juvenile steelhead, two sculpin

Unit 11 draft tube (9/30/08): 35 sturgeon, six catfish, three bullhead, one pikeminnow

Bradford Island Ladder (12/03/080: From the main ladder, bios salvaged two adult coho, two adult steelhead, 14 juvenile steelhead, four juvenile chinook, one sculpin, 22 whitefish/peamouth/suckers (residents), one catfish, one crawdad, 100 juvenile shad. From the Junction pool, bios salvaged two adult steelhead, 53 juvenile steelhead, 10 juvenile chinook, three lamprey, 12 sturgeon (3'-8'), one adult shad, twenty four juvenile shad, fifty four resident fish.

TABLE 5

**MONTHLY TOTALS OF SALMONID, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER BONNEVILLE DAM.
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*		3	170	40,547	102,419	67,117	22,775	115,815	222,385	15,479	710	8	587,428
STEELHEAD	133	106	780	1,427	1,896	12,509	122,870	102,636	107,693	6,053	1,325	392	357,820
SOCKEYE					53	188,756	24,735	46	17				213,607
COHO*	-1						2	8,335	84,639	51,771	1,309	4	146,059
CHUM							5	0	0	13	56	1	75
PINK							54	6					60
TOTAL	132	109	950	41,974	104,368	268,382	170,441	226,838	414,734	73,316	3,400	405	1,305,049
SHAD					67,013	1,856,442	217,538	3,763					2,144,756
LAMPREY					444	3,942	6,276	3,159	680	59	2		14,562
STURGEON							1	2	4	10			17
BULL TROUT													0

*Jacks included

note: Counts were taken from 0400-2000 PST Jan 1 - Dec 31. Visual counting occurred Apr 1 - Oct 31.

Video counting occurred Jan 1 - Mar 31 and Nov 1 - Dec 31.

TABLE 6

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

JANUARY 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK SPRING	ADULT SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	WILD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI DEG F
Jan 1				0				28		18						147.5	0.6	4.5 41.0
Jan 2				0				-2		-1						160.6	0.5	7.0 41.0
Jan 3				0				3		1						130.3	0.5	7.0 40.0
Jan 4				0				9		4						145.9	0.6	7.0 40.0
Jan 5				0				8		6						149.3	0.5	7.0 40.0
Jan 6				0				3		2						149.9	0.5	7.0 40.0
Jan 7				0				2		3						145.5	0.5	7.0 41.0
Jan 8				0				4		1						167.1	0.5	7.0 41.0
Jan 9				0				2		2						175.6	0.5	7.0 40.0
Jan 10				0				6		3						149.8	0.5	7.0 40.0
Jan 11				0				25		13						156.4	0.6	6.0 40.0
Jan 12				0				14		5						157.4	0.5	7.0 40.0
Jan 13				0				4		3						128.1	0.5	7.0 40.0
Jan 14				0				9		8						134.6	0.5	5.0 40.0
Jan 15				0				3		3						156.7	0.6	7.0 40.0
Jan 16				0				0		0						164.1	0.5	7.0 40.0
Jan 17				0				1		1						173.9	0.5	7.0 39.0
Jan 18				0				1		2						139.1	0.5	7.0 39.0
Jan 19				0				-1		-1						162.5	0.5	7.0 39.0
Jan 20				0				2		2						114.1	0.6	7.0 39.0
Jan 21				0				1		1						155.6	0.6	7.0 39.0
Jan 22				0				2		1						159.0	0.6	5.0 39.0
Jan 23				0				1		0						165.6	0.6	4.5 38.0
Jan 24				0				0		0						161.3	0.6	5.0 37.0
Jan 25				-1				0		0						154.0	0.5	5.0 37.0
Jan 26				0				0		0						178.1	0.6	5.0 37.0
Jan 27				0				3		2						117.4	0.6	7.0 36.0
Jan 28				0				-1		-1						163.6	0.6	7.0 36.0
Jan 29				0				1		1						153.3	0.6	7.0 37.0
Jan 30				0				1		-1						127.1	0.6	7.0 37.0
Jan 31				0				4		1						125.2	0.6	7.0 37.0
TOTAL				-1				133		79						150.6	0.5	6.5 39.0
AVG				0				4		3								

Note: January 1 to March 31 counts were from video tape. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST.

TABLE 7

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT
FEBRUARY 2008

DATE	FISH COUNTS												RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI DEG F	
Feb 1	0								-1	-1				111.4	0.6	7.0	37.0	
Feb 2	0								2	1				144.4	0.6	7.0	37.0	
Feb 3	0								-1	-1				124.8	0.6	7.0	37.0	
Feb 4	0								-2	-1				157.2	0.7	7.0	37.0	
Feb 5	1								0	0				154.7	0.5	7.0	36.0	
Feb 6	0								1	0				127.8	0.6	7.0	36.0	
Feb 7	0								1	0				135.2	0.6	7.0	36.0	
Feb 8	0								-1	1				109.4	0.6	6.0	36.0	
Feb 9	0								2	1				143.5	0.6	7.0	37.0	
Feb 10	0								8	3				106.7	0.6	6.0	37.0	
Feb 11	1								1	-3				127.2	0.6	5.5	38.0	
Feb 12	0								10	3				135.5	0.6	5.5	38.0	
Feb 13	0								4	4				163.5	0.6	4.0	38.0	
Feb 14	0								2	1				182.5	0.6	6.0	38.0	
Feb 15	0								-1	-1				176.0	0.6	5.0	38.0	
Feb 16	0								2	0				128.2	0.6	5.0	38.0	
Feb 17	0								10	5				129.5	1.0	5.0	38.0	
Feb 18	0								2	2				142.2	0.7	4.0	39.0	
Feb 19	0								4	2				174.6	0.0	6.0	39.0	
Feb 20	1								4	2				160.2	0.6	5.0	39.0	
Feb 21	0								10	2				141.3	0.7	4.5	40.0	
Feb 22	0								5	3				142.7	0.6	4.0	40.0	
Feb 23	0								7	3				126.3	0.6	5.0	40.0	
Feb 24	0								5	3				119.1	0.6	5.0	40.0	
Feb 25	0								0	-1				123.3	0.6	5.5	41.0	
Feb 26	0								4	1				128.2	0.6	6.0	41.0	
Feb 27	0								21	10				146.6	0.7	6.0	41.0	
Feb 28	0								0	0				147.3	0.6	7.0	41.0	
Feb 29	0								7	3				133.1	0.7	7.0	41.0	
TOTAL	3								106	42					139.4	0.6	5.8	38.4
Avg	0								4	1								

Note: January 1 to March 31 counts were from video tape. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST.

TABLE 8

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

MARCH 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD			PINK	CHUM	SHAD	LAMPREY	STURGEON	RIVER CONDITIONS		
	SPRING	SUMMER	FALL						STEELHEAD	STEELHEAD	PINK						DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI
Mar 1	0								33	15						127.4	1.0	7.0	41.0
Mar 2	0								19	10						129.5	1.3	7.0	42.0
Mar 3	1								7	5						141.7	1.3	6.0	42.0
Mar 4	1								14	5						161.0	1.4	5.0	42.0
Mar 5	0								17	8						175.2	1.4	7.0	42.0
Mar 6	1								29	13						148.2	1.4	5.0	42.0
Mar 7	1								12	9						154.6	37.0	5.0	42.0
Mar 8	3								18	8						143.8	36.9	6.5	42.0
Mar 9	6								13	5						145.6	35.1	5.0	42.0
Mar 10	4								55	27						127.7	10.2	5.0	42.0
Mar 11	1								13	3						135.6	1.4	7.0	43.0
Mar 12	10								41	16						144.5	1.4	7.0	43.0
Mar 13	5								19	13						157.1	1.4	6.0	44.0
Mar 14	6								39	15						172.5	1.4	5.0	43.0
Mar 15	4								27	12						151.2	1.4	6.0	43.0
Mar 16	6								21	8						133.7	1.3	6.0	43.0
Mar 17	5								19	8						163.2	1.5	6.0	43.0
Mar 18	11								40	24						145.3	1.4	6.0	43.0
Mar 19	7								34	18						164.4	1.3	6.0	43.0
Mar 20	3								22	8						163.9	1.4	6.0	44.0
Mar 21	5								19	9						162.4	1.4	6.0	44.0
Mar 22	2								19	7						152.8	1.4	4.0	44.0
Mar 23	12								22	12						121.4	1.4	6.0	44.0
Mar 24	2								6	0						126.6	1.3	5.0	44.0
Mar 25	10								29	11						163.7	1.2	5.5	44.0
Mar 26	3								38	15						168.4	1.1	5.0	44.0
Mar 27	4								48	11						163.8	1.2	6.9	44.0
Mar 28	12								26	14						187.4	1.4	5.0	44.0
Mar 29	4								13	7						137.0	1.4	5.5	44.0
Mar 30	20								45	20						128.0	1.4	5.0	44.0
Mar 31	21								23	7						148.6	1.4	4.0	44.0
TOTAL	170								780	343						149.9	5.0	5.7	43.1
Avg	5								25	11									

Note: January 1 to March 31 counts were from video tape. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST. Visual counting started April 1. Official Spring Chinook run started March 15. January, February, and March 1-14 Chinook counts were not added to spring totals

TABLE 9

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

FISH COUNTS

BONNEVILLE PROJECT

APRIL 2008

RIVER CONDITIONS

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK FALL JACK	COHO ADULT	COHO JACK	SOCKEYE	WILD STEELHEAD	PINK CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	26		0				52	24				172.5	1.4	4.0	44.0
Apr 2	42		0				47	24				160.1	1.4	5.0	45.0
Apr 3	62		0				53	14				160.5	1.4	4.0	45.0
Apr 4	87		0				44	16				136.8	1.5	4.0	45.0
Apr 5	71		0				43	19				119.4	1.6	4.5	45.0
Apr 6	91		0				78	30				124.9	1.6	5.5	45.0
Apr 7	111		0				61	13				149.4	1.6	5.0	45.0
Apr 8	109		2				68	32				139.7	1.6	5.5	45.0
Apr 9	180		0				61	15				149.3	1.6	5.5	45.0
Apr 10	509		0				51	16				142.2	98.9	5.0	45.0
Apr 11	1,373		3				58	23				146.9	99.3	5.0	46.0
Apr 12	1,475		4				61	22				165.2	97.5	6.0	46.0
Apr 13	1,293		1				63	26				140.1	90.2	6.0	47.0
Apr 14	1,286		1				72	23				141.2	89.5	5.0	47.0
Apr 15	954		1				32	8				158.8	95.9	5.6	47.0
Apr 16	750		1				36	19				199.7	99.4	3.0	47.0
Apr 17	407		1				34	8				186.3	100.9	4.8	48.0
Apr 18	449		4				32	12				158.1	100.2	4.0	47.0
Apr 19	1,612		5				20	5				145.7	100.3	4.0	47.0
Apr 20	2,618		5				32	6				160.7	100.9	4.0	47.0
Apr 21	2,708		8				53	12				192.0	100.3	5.0	48.0
Apr 22	1,582		13				41	17				208.1	99.3	3.0	48.0
Apr 23	934		11				34	12				183.1	98.1	5.0	48.0
Apr 24	572		1				29	6				200.9	98.2	4.2	48.0
Apr 25	1,570		11				43	15				205.4	98.8	5.0	48.0
Apr 26	1,514		19				44	16				213.5	100.6	5.0	48.0
Apr 27	3,523		49				48	11				185.0	99.5	4.0	49.0
Apr 28	3,643		52				46	10				198.1	99.1	4.0	49.0
Apr 29	3,994		50				42	13				186.5	98.9	4.5	50.0
Apr 30	6,645		115				49	17				183.6	99.3	4.5	50.0
TOTAL	40,190		357				1,427	484				167.1	69.3	4.7	46.8
AVG	1,340		12				48	16							
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK					WILD STEELHEAD	WILD STEELHEAD							
	SPRING	40,321	357				1,878	675							

TABLE 10

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

MAY 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD		PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL																
May 1	2,935			66			0	41	7		0	0	0	0		223.4	99.8	4.5	50.0
May 2	2,027			104			0	49	10		0	0	0	0		218.0	100.1	4.7	51.0
May 3	6,340			236			0	50	10		0	0	0	0		183.3	101.0	3.5	51.0
May 4	9,686			409			0	35	4		0	0	0	0		159.5	101.1	4.5	51.0
May 5	4,134			375			0	54	11		1	0	0	0		201.0	99.1	3.5	51.0
May 6	2,843			291			0	27	2		7	0	0	0		209.8	95.7	3.8	51.0
May 7	4,099			543			0	37	6		6	0	0	0		236.8	97.0	3.5	52.0
May 8	1,841			238			0	37	10		0	0	0	0		237.8	102.4	3.5	51.0
May 9	3,078			574			0	73	8		17	0	0	0		298.0	102.4	3.5	52.0
May 10	2,129			439			0	38	6		7	0	0	0		300.5	99.4	3.0	53.0
May 11	2,550			511			0	24	1		11	2	0	0		239.5	97.1	5.0	53.0
May 12	4,613			1,171			0	43	8		16	0	0	0		273.2	110.6	4.0	53.0
May 13	3,627			1,208			0	39	5		68	0	0	0		297.8	97.4	3.5	53.0
May 14	5,596			2,035			0	36	3		350	0	0	0		252.5	97.5	3.5	53.0
May 15	5,349			2,009			0	38	10		1,982	0	0	0		272.7	97.1	3.5	53.0
May 16	3,931			1,288			1	48	3		4,269	4	0	0		298.4	95.5	3.0	55.0
May 17	2,023			727			0	31	2		2,200	2	0	0		276.2	105.6	3.5	55.0
May 18	2,839			1,090			0	38	3		2,843	1	0	0		346.0	152.7	3.0	55.0
May 19	1,961			461			0	98	14		2,478	36	0	0		402.4	195.5	3.0	55.0
May 20	1,368			349			0	100	21		1,153	32	0	0		402.7	202.5	3.0	55.0
May 21	690			184			0	88	12		630	13	0	0		414.7	222.7	2.5	55.0
May 22	529			162			2	80	11		284	20	0	0		418.6	230.9	2.5	56.0
May 23	636			283			0	85	9		662	38	0	0		415.2	217.3	3.0	56.0
May 24	1,072			385			0	87	13		3,966	10	0	0		399.2	192.7	3.0	56.0
May 25	1,495			475			2	80	11		10,863	12	0	0		397.5	189.8	3.0	56.0
May 26	1,320			298			0	91	15		7,916	6	0	0		387.4	178.4	3.0	56.0
May 27	1,588			312			0	98	17		6,257	53	0	0		373.5	167.9	3.0	56.0
May 28	1,161			275			2	80	9		9,081	42	0	0		401.1	195.2	3.0	56.0
May 29	1,174			271			7	91	8		5,439	78	0	0		416.0	211.8	3.0	56.0
May 30	1,373			211			15	99	12		2,670	33	0	0		410.8	202.9	2.9	56.0
May 31	1,215			217			24	81	7		3,837	62	0	0		413.8	197.9	3.0	56.0
TOTAL	85,222			17,197			53	1,896	268		67,013	444				315.4	143.8	3.4	53.8

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE	125,543	17,554

SOCKEYE	STEELHEAD	WILD STEELHEAD
53	3,774	943

SHAD	LAMPREY
67,013	444

TABLE 11

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT
JUNE 2008

DATE	FISH COUNTS												RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	1,070			131			25	85	8			2,439	42		417.5	200.0	3.0	56.0
Jun 2	979			134			49	112	20			2,573	28		417.7	207.5	2.0	56.0
Jun 3	1,331			338			44	129	17			6,595	28		417.5	202.7	2.0	56.0
Jun 4	1,613			393			101	194	38			7,440	64		416.8	199.6	2.0	56.0
Jun 5	2,058			401			233	163	27			17,663	98		417.7	201.2	2.0	56.0
Jun 6	2,334			345			294	162	30			16,423	34		414.5	198.2	2.5	56.0
Jun 7	1,777			299			435	160	28			21,904	15		389.0	173.5	2.5	56.0
Jun 8	1,793			266			666	129	22			24,256	13		376.7	161.6	3.0	56.0
Jun 9	1,684			305			1,104	156	30			39,999	46		346.9	129.2	3.0	56.0
Jun 10	1,671			282			1,596	188	31			28,616	28		342.4	125.5	3.0	56.0
Jun 11	1,799			276			1,428	238	41			27,754	7		393.9	173.4	3.0	56.0
Jun 12	1,802			348			1,719	277	61			20,099	29		403.0	204.0	3.0	55.0
Jun 13	2,350			473			3,174	344	82			37,342	40		387.1	188.4	2.8	56.0
Jun 14	2,272			445			5,162	331	88			42,059	22		366.6	168.4	3.0	56.0
Jun 15	1,775			364			6,651	420	90			47,291	26		316.3	119.3	3.5	57.0
Jun 16	1,721			334			7,489	293	68			65,086	40		318.3	123.5	3.0	57.0
Jun 17	2,380			430			9,407	432	108			91,476	70		355.7	156.7	3.0	57.0
Jun 18	2,494			381			11,295	426	84			99,837	65		386.4	187.6	3.2	58.0
Jun 19	2,683			562			15,543	532	141			143,638	85		374.7	165.9	4.0	58.0
Jun 20	2,937			329			14,513	564	152			223,502	418		357.6	141.0	4.0	59.0
Jun 21	2,987			278			12,664	441	111			184,612	386		325.6	112.6	3.0	60.0
Jun 22	2,562			220			12,955	513	145			109,720	337		332.2	124.3	4.0	60.0
Jun 23	2,344			199			15,910	595	159			107,693	230		300.9	87.7	4.0	60.0
Jun 24	1,868			271			13,925	567	160			71,268	197		327.2	110.5	5.0	60.0
Jun 25	1,879			287			10,419	648	251			74,705	189		358.5	141.3	4.0	60.0
Jun 26	2,157			248			10,632	790	313			72,564	342		329.4	115.8	3.5	61.0
Jun 27	1,400			228			9,252	777	273			57,526	115		372.5	155.0	4.2	61.0
Jun 28	1,535			212			8,121	865	345			60,607	238		346.0	132.8	4.0	62.0
Jun 29	1,523			160			7,531	998	399			97,297	373		330.9	118.3	4.4	63.0
Jun 30	1,256			144			6,419	980	415			54,458	337		326.8	118.9	5.0	64.0
TOTAL	58,034			9,083			188,756	12,509	3,737			1,856,442	3,942					
AVG	1,934			303			6,292	417	125			61,881	131		365.5	154.8	3.3	58.0

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	125,543	17,554
SUMMER	58,034	9,083
TOTAL	183,577	26,637

SOCKEYE	STEELHEAD	WILD STEELHEAD
188,809	16,283	4,680
SHAD	LAMPREY	
1,923,455	4,386	

TABLE 12

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

JULY 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD			PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F	
	SPRING	SUMMER	FALL						STEELHEAD	STEELHEAD	PINK										
Jul 1	1,128			129	0	0	4,898	1,061	473	0	0	26,268	342	0			305.9	104.1	5.0	64.0	
Jul 2	1,086			110	0	0	4,019	1,184	522	1	0	21,722	172	0			322.6	118.7	4.5	64.0	
Jul 3	1,033			95	0	0	2,715	1,229	587	0	0	34,195	222	0			327.3	114.4	4.0	64.0	
Jul 4	1,032			122	0	0	2,736	1,359	726	0	0	36,966	324	0			316.1	100.0	4.0	65.0	
Jul 5	933			163	0	0	1,817	1,432	677	0	1	19,523	162	0			289.4	84.5	4.0	65.0	
Jul 6	688			129	0	0	1,321	1,613	866	0	1	9,644	121	0			250.7	84.6	5.0	65.0	
Jul 7	849			145	0	0	1,380	2,164	1,135	0	0	6,403	90	0			272.0	85.5	5.0	65.0	
Jul 8	611			64	0	0	1,004	2,034	1,078	0	0	6,599	237	0			268.9	90.4	5.0	65.0	
Jul 9	769			58	0	0	893	2,718	1,419	0	0	6,889	231	0			265.8	88.4	5.1	65.0	
Jul 10	704			54	0	0	649	2,572	1,375	0	0	4,469	322	0			241.4	88.7	6.0	67.0	
Jul 11	805			117	0	0	646	3,383	1,706	0	0	4,574	96	0			238.2	88.2	5.0	66.0	
Jul 12	849			90	0	0	474	3,274	1,618	0	0	4,246	183	0			232.3	89.8	4.5	67.0	
Jul 13	830			95	0	0	433	4,087	1,955	1	0	5,927	108	0			220.9	91.3	4.5	67.0	
Jul 14	1,061			83	1	0	390	5,085	2,470	1	1	7,010	230	0			178.0	89.7	7.0	67.0	
Jul 15	876			129	0	0	330	4,352	2,041	0	0	3,805	201	0			185.5	85.7	7.0	68.0	
Jul 16	771			149	0	0	279	5,361	2,382	0	0	3,047	166	0			175.7	86.7	7.0	68.0	
Jul 17	707			93	0	0	206	6,349	2,794	0	0	1,936	170	1			163.0	88.6	7.0	69.0	
Jul 18	601			80	0	0	105	6,558	2,801	5	0	2,059	101	0			160.4	90.1	4.0	68.0	
Jul 19	500			51	0	0	82	6,225	2,526	2	1	1,702	97	0			171.5	91.7	6.0	68.0	
Jul 20	463			43	0	0	71	5,818	2,214	8	0	1,454	79	0			164.7	93.5	3.5	68.0	
Jul 21	465			33	0	0	53	5,342	1,942	1	0	1,298	272	0			181.4	86.5	6.0	68.0	
Jul 22	392			36	0	0	69	4,883	1,759	5	0	1,288	361	0			155.7	88.3	6.0	68.0	
Jul 23	337			43	0	0	37	3,785	1,362	5	0	1,002	269	0			157.7	89.1	3.5	68.0	
Jul 24	408			45	0	0	39	3,831	1,423	3	0	736	186	0			160.1	86.0	7.0	68.0	
Jul 25	388			67	0	0	24	4,791	1,715	7	0	1,107	259	0			167.7	90.8	6.0	67.0	
Jul 26	322			57	0	0	20	4,527	1,637	4	0	749	305	0			174.8	91.1	6.0	68.0	
Jul 27	358			57	0	0	8	4,910	1,693	6	1	742	305	0			165.0	91.7	6.0	68.0	
Jul 28	347			48	0	0	12	5,894	1,985	0	0	694	168	0			166.3	91.5	5.0	69.0	
Jul 29	337			54	0	1	8	5,873	1,855	1	0	605	191	0			157.2	90.7	6.0	69.0	
Jul 30	292			38	0	0	6	5,407	1,583	2	0	681	228	0			160.9	90.5	5.0	69.0	
Jul 31	295			61	0	0	11	5,769	1,738	2	0	198	78	0			177.2	90.3	7.0	69.0	
TOTAL	20,237			2,538	1	1	24,735	122,870	50,057	54	5	217,538	6,276	1			212.1	91.6	5.4	67.0	
AVG	653			82	0	0	798	3,964	1,615	2	0	7,017	202	0							
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK		COHO ADULT	COHO JACK		SOCKEYE	STEELHEAD	STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON							
	125,543	17,554		1	1		213,544	139,153	54,737	54	5	2,140,993	10,662	1							
	78,271	11,621																			
	TOTAL	203,814	29,175																		

TABLE 13

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

AUGUST 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	WILD	PINK	CHUM	SHAD	LAMPREY	STURGEON	RIVER CONDITIONS				
	SPRING	SUMMER	FALL													DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI DEG F		
Aug 1				298	43	0	0	8	4,213	1,234	0			416	75	0	151.7	91.8	7.0	69.0
Aug 2				259	42	0	0	5	4,036	1,230	1			500	46	0	138.0	92.1	6.0	68.0
Aug 3				319	34	0	1	3	4,090	1,159	3			243	80	0	135.5	90.0	7.0	68.0
Aug 4				373	48	0	0	1	3,991	1,087	0			201	137	0	130.7	86.9	7.0	68.0
Aug 5				361	54	0	0	3	4,199	1,244	0			248	121	0	143.5	88.4	7.0	68.0
Aug 6				360	63	0	0	3	3,931	1,117	0			221	104	0	153.3	86.9	6.0	69.0
Aug 7				485	77	2	1	9	3,563	997	1			235	162	0	161.3	82.2	4.0	69.0
Aug 8				570	90	2	0	2	3,823	1,079	0			165	206	0	134.7	81.3	3.0	70.0
Aug 9				502	67	5	0	2	3,027	792	0			156	130	0	123.8	81.0	4.0	69.0
Aug 10				548	117	6	2	1	3,014	806	0			171	107	0	124.4	80.7	4.5	70.0
Aug 11				639	107	6	1	1	3,095	757	0			120	157	0	136.3	81.5	6.0	69.0
Aug 12				751	124	6	0	0	2,819	707	0			97	131	0	138.3	80.4	6.0	70.0
Aug 13				892	134	1	0	1	3,104	914	0			69	144	0	145.2	78.5	6.0	70.0
Aug 14				895	127	15	1	0	2,590	750	0			64	84	0	121.4	78.4	7.0	70.0
Aug 15				1,157	258	13	1	1	3,215	888	0			101	80	0	133.6	77.9	7.0	70.0
Aug 16				1,174	264	18	1	0	3,215	898	1			87	74	0	122.2	78.4	7.0	71.0
Aug 17				1,087	289	25	3	0	3,902	1,085	0			48	39	0	117.0	74.1	4.5	72.0
Aug 18				854	315	23	10	0	4,460	1,178	0			76	127	0	133.5	66.5	6.0	72.0
Aug 19				692	307	24	7	1	2,843	703	0			67	90	1	124.4	72.1	7.0	72.0
Aug 20				671	312	24	1	1	1,976	524	0			61	160	1	127.3	78.4	6.5	72.0
Aug 21				935	275	36	2	1	1,602	444	0			77	62	0	123.5	80.8	6.3	72.0
Aug 22				2,955	348	122	8	0	1,702	488	0			58	121	0	138.8	83.8	6.0	71.0
Aug 23				8,364	690	341	27	1	2,471	588	0			26	267	0	131.6	84.7	2.0	71.0
Aug 24				14,913	1,027	814	45	1	4,495	1,079	0			48	110	0	157.3	90.8	5.0	70.0
Aug 25				11,261	945	636	51	0	4,821	1,031	0			32	135	0	141.8	90.6	6.0	71.0
Aug 26				5,519	782	485	68	0	3,912	934	0			49	57	0	131.5	87.2	7.0	71.0
Aug 27				5,006	527	246	29	1	2,855	648	0			33	37	0	122.6	79.3	6.5	71.0
Aug 28				7,458	587	278	64	0	2,186	495	0			24	35	0	126.1	82.7	7.0	70.0
Aug 29				9,264	606	672	55	0	2,332	563	0			12	40	0	144.0	95.1	6.0	70.0
Aug 30				13,758	966	1,819	105	0	3,213	724	0			25	13	0	135.6	90.1	6.0	70.0
Aug 31				12,882	988	2,152	81	0	3,941	839	0			33	28	0	125.0	81.8	7.0	70.0
TOTAL				105,202	10,613	7,771	564	46	102,636	26,982	6			3,763	3,159	2				
AVG				3,394	342	251	18	1	3,311	870				121	102	0	134.6	83.0	5.9	70.1
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK		COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	WILD	PINK	CHUM	SHAD	LAMPREY	STURGEON						
SPRING	125,543	17,554		7,772	565	213,590	241,789	81,719		60	5	2,144,756	13,821	3						
SUMMER	78,271	11,621																		
FALL	105,202	10,613																		
TOTAL	309,016	39,788																		

TABLE 14

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

SEPTEMBER 2008

RIVER CONDITIONS

DATE	FISH COUNTS										RIVER CONDITIONS							
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Sep 1		13,265	1,248	3,430	218	0	5,225	1,055					35	0	100.3	7.3	6.4	69.0
Sep 2		13,682	1,002	3,791	257	0	5,990	1,175					34	0	109.9	7.2	7.0	68.0
Sep 3		15,301	1,134	5,575	413	1	6,941	1,300					28	0	114.0	5.3	6.5	68.0
Sep 4		14,924	1,426	6,112	397	1	7,312	1,363					32	0	112.8	1.4	7.0	67.0
Sep 5		11,553	1,523	5,465	555	0	6,130	1,191					40	0	118.7	1.5	6.0	67.0
Sep 6		10,289	1,412	4,770	432	2	5,627	1,115					36	0	100.5	1.5	4.0	67.0
Sep 7		11,472	1,444	4,773	344	1	6,240	1,289					72	0	91.0	1.4	7.0	68.0
Sep 8		11,288	1,690	4,287	325	2	6,510	1,464					63	0	104.5	1.4	4.0	68.0
Sep 9		9,712	1,508	2,240	179	4	5,218	1,090					73	0	94.7	1.5	5.0	68.0
Sep 10		7,851	1,306	1,873	226	1	5,488	1,073					54	0	117.0	1.5	7.0	69.0
Sep 11		9,464	1,151	1,200	171	2	4,584	924					39	0	98.5	1.5	7.0	69.0
Sep 12		7,964	1,244	989	435	1	3,586	762					41	1	83.4	1.6	7.0	68.0
Sep 13		7,206	1,143	959	324	0	3,565	762					10	0	79.8	1.5	7.0	69.0
Sep 14		6,770	936	2,083	300	1	4,656	984					42	0	76.5	1.5	7.0	68.0
Sep 15		6,099	764	2,884	242	0	4,849	922					13	0	78.8	1.5	7.0	68.0
Sep 16		5,292	888	3,378	282	0	4,815	914					6	0	100.0	1.5	5.0	68.0
Sep 17		4,451	780	2,602	165	0	3,828	714					10	0	105.2	1.4	7.0	68.0
Sep 18		3,152	613	1,642	182	0	2,767	558					8	0	93.6	1.4	6.5	68.0
Sep 19		3,446	671	1,200	172	1	2,346	483					11	1	82.6	1.5	7.0	68.0
Sep 20		1,940	371	910	93	0	1,712	346					3	1	73.6	1.4	5.0	68.0
Sep 21		2,795	496	711	119	0	1,335	226					-4	-1	72.2	1.4	7.0	67.0
Sep 22		2,273	457	642	94	0	1,068	200					1	0	73.4	1.4	7.0	67.0
Sep 23		2,538	588	908	161	0	1,225	250					1	1	97.4	1.4	7.0	66.0
Sep 24		2,474	431	927	116	0	1,153	279					8	0	100.4	1.4	7.0	65.0
Sep 25		2,550	470	1,470	189	0	1,513	326					3	0	89.8	1.4	7.0	65.0
Sep 26		2,343	597	1,589	218	0	1,309	279					1	0	106.5	1.4	7.0	65.0
Sep 27		1,199	290	1,883	195	0	807	203					11	0	82.7	1.4	7.0	65.0
Sep 28		1,844	357	3,376	209	0	762	131					4	0	81.2	1.4	7.0	65.0
Sep 29		1,361	325	2,735	191	0	588	142					3	1	94.8	1.5	5.0	65.0
Sep 30		1,330	292	2,830	201	0	544	98					2	0	83.3	1.4	6.0	65.0
TOTAL		195,828	26,557	77,234	7,405	17	107,693	21,618					680	4				
Avg		6,528	885	2,574	247	1	3,590	721					23	0	93.9	2.0	6.4	67.2
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON						
SPRING	125,543	17,554	85,006	7,970	213,607	349,482	103,337	60	5	2,144,756	14,501	7						
SUMMER	78,271	11,621																
FALL	301,030	37,170																
TOTAL	504,844	66,345																

TABLE 15

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

OCTOBER 2008

RIVER CONDITIONS

DATE	FISH COUNTS												RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI DEG F	
Oct 1		920	251	2,826	198		447	105		0		9	0		74.3	1.3	7.0	65.0
Oct 2		1,131	203	2,782	143		611	131		0		5	1		80.7	1.3	7.0	65.0
Oct 3		1,136	140	2,443	140		384	102		0		12	0		107.0	1.3	7.0	65.0
Oct 4		483	53	1,615	123		342	77		0		2	2		74.1	1.4	6.0	65.0
Oct 5		803	115	2,687	187		427	108		0		14	0		72.6	1.2	7.0	65.0
Oct 6		1,034	103	3,052	126		353	70		0		4	0		79.4	1.3	7.0	64.0
Oct 7		1,013	152	2,738	135		307	82		0		7	-2		79.6	1.3	7.0	64.0
Oct 8		925	123	2,867	117		215	51		0		0	0		105.6	1.3	7.0	64.0
Oct 9		720	122	3,968	159		252	72		0		0	1		107.6	1.3	7.0	64.0
Oct 10		469	70	2,540	113		214	58		1		5	1		102.6	1.2	7.0	62.0
Oct 11		291	84	2,204	115		149	42		0		1	-1		94.9	1.2	7.0	62.0
Oct 12		336	75	2,311	102		201	31		0		0	-1		79.6	1.3	4.5	61.0
Oct 13		551	87	2,881	158		180	43		0		0	1		90.2	1.2	7.0	61.0
Oct 14		483	63	2,344	98		180	44		0		0	0		99.7	1.3	6.0	60.0
Oct 15		504	48	2,032	97		158	41		0		-1	-1		131.3	1.3	7.0	60.0
Oct 16		267	32	1,411	47		161	47		0		0	1		96.7	1.2	7.0	60.0
Oct 17		312	42	1,738	82		182	38		1		0	2		107.6	1.2	6.0	60.0
Oct 18		258	49	1,235	45		121	41		0		1	1		102.4	1.2	7.0	60.0
Oct 19		205	38	945	37		129	33		0		0	0		95.3	1.2	7.0	60.0
Oct 20		111	12	430	41		109	20		0		0	0		97.5	1.2	6.0	60.0
Oct 21		162	18	525	34		113	27		0		0	0		116.7	1.2	7.0	60.0
Oct 22		217	40	652	12		131	44		2		0	2		125.2	1.2	6.0	60.0
Oct 23		150	30	692	18		138	55		0		0	1		100.4	1.3	7.0	58.0
Oct 24		129	12	927	25		109	27		2		0	1		97.0	1.2	7.0	58.0
Oct 25		91	21	313	19		74	16		0		0	0		87.4	1.2	7.0	58.0
Oct 26		134	15	318	35		92	40		0		0	0		83.9	1.2	6.0	58.0
Oct 27		232	21	264	24		68	18		0		0	0		105.0	1.2	6.5	57.0
Oct 28		107	24	235	20		59	10		1		0	0		99.8	1.1	6.5	56.0
Oct 29		136	8	139	13		47	10		2		0	1		99.6	1.2	7.0	56.0
Oct 30		51	12	108	12		55	16		2		0	0		113.2	1.1	7.0	57.0
Oct 31		49	6	72	2		45	21		2		0	0		107.0	1.1	7.0	57.0
TOTAL		13,410	2,069	49,294	2,477		6,053	1,520		13		59	10		97.2	1.2	6.7	60.7
Avg		433	67	1590	80		195	49		0		2	0					

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	125,543	17,554
SUMMER	78,271	11,621
FALL	314,440	39,239
TOTAL	518,254	68,414

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	WILD	PINK	CHUM	SHAD	LAMPREY	STURGEON
134,300	10,447	213,607	355,535	104,857	60	18	2,144,756	14,560	17	

TABLE 16

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

NOVEMBER 2008

DATE	FISH COUNTS												RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI DEG F	
Nov 1		53	9	127	10			62	16		4		0	0	94.5	1.2	7.0	57.0
Nov 2		45	7	97	6			42	15		1		0	-1	81.7	1.0	7.0	57.0
Nov 3		89	9	73	5			48	9		3		0	0	91.7	1.1	7.0	56.0
Nov 4		88	11	81	7			48	22		4		0	0	87.2	1.2	7.0	56.0
Nov 5		68	2	110	11			48	12		6		0	1	132.0	1.1	7.0	55.0
Nov 6		28	2	90	6			48	14		6		0	0	120.7	1.1	7.0	55.0
Nov 7		36	9	91	6			63	36		2		0	0	125.5	1.1	7.0	55.0
Nov 8		24	5	66	4			37	14		4		0	0	124.7	1.1	7.0	55.0
Nov 9		26	1	61	0			43	15		7		0	0	121.2	1.1	7.0	55.0
Nov 10		31	3	29	1			54	22		3		0	0	120.5	1.2	7.0	55.0
Nov 11		14	1	29	2			27	15		2		0	0	117.2	1.1	7.0	55.0
Nov 12		17	1	35	2			44	23		4		1	1	125.6	1.1	5.5	54.0
Nov 13		19	4	72	3			37	5		1		1	0	119.0	1.2	1.5	54.0
Nov 14		6	1	52	3			17	2		0		0	0	165.0	1.1	1.0	54.0
Nov 15		11	1	86	1			33	16		1		0	0	125.2	1.1	1.5	53.0
Nov 16		3	3	57	4			68	31		0		0	-1	122.0	1.2	5.0	53.0
Nov 17		8	0	15	2			58	18		1		0	0	123.6	1.1	6.0	52.0
Nov 18		14	0	15	0			50	14		3		0	0	120.3	1.1	6.0	52.0
Nov 19		5	0	8	1			68	20		1		0	0	140.1	1.1	6.0	52.0
Nov 20		10	0	7	0			62	26		0		0	0	140.5	1.1	6.5	52.0
Nov 21		5	0	5	0			54	14		2		0	0	124.3	1.1	7.0	52.0
Nov 22		6	0	8	1			58	19		0		0	0	122.2	1.1	7.0	52.0
Nov 23		7	0	1	1			43	6		0		0	0	127.0	1.1	7.0	52.0
Nov 24		7	0	3	-1			28	7		0		0	0	127.9	1.1	7.0	51.0
Nov 25		6	0	4	1			30	3		0		0	0	124.2	1.1	7.0	50.0
Nov 26		3	0	2	0			36	9		0		0	0	127.8	1.2	5.5	51.0
Nov 27		3	0	5	0			26	7		0		0	0	125.6	1.2	5.5	51.0
Nov 28		3	0	1	0			46	14		1		0	0	122.4	1.2	5.5	50.0
Nov 29		3	0	0	0			25	4		0		0	0	122.6	1.1	5.5	50.0
Nov 30		2	1	2	1			22	9		0		0	0	124.5	1.2	7.0	50.0
TOTAL		640	70	1,232	77			1,325	437		56		2	0				
Avg		21	2	41	3			44	15		2		0	0	121.6	1.1	6.0	53.2
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON						
SPRING	125,543	17,554	135,399	10,514	213,607	356,186	105,093	60	74	2,144,756	14,562	17						
SUMMER	78,271	11,621																
FALL	314,995	39,305																
TOTAL	518,809	68,480																

Note: November 1 to December 31 counts were from video tape. The counts are 16-hour counts and occurred between 0400-2000 PST. Visual counting ended October 31. Official Fall Chinook run ended November 15. Counts on November 16-30 are not included in fall totals. Pink, chum, and sturgeon counts are totals for the entire calendar year.

TABLE 17

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT

DECEMBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD		PINK	CHUM	SHAD	LAMPREY	STURGEON	RIVER CONDITIONS			
	SPRING	SUMMER	FALL						STEELHEAD	STEELHEAD						DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Dec 1				0	0	0	-2		26	8		0				125.3	0.6	7.0	51.0
Dec 2				1	0	-1	0		16	4		0				124.5	0.5	7.0	51.0
Dec 3				1	1	2	1		10	7		1				130.1	0.5	7.0	51.0
Dec 4				0	0	0	0		28	10		0				136.1	0.5	4.5	50.0
Dec 5				1	0	2	0		21	6		0				135.7	0.5	6.0	49.0
Dec 6				1	0	1	0		15	4		0				131.5	0.5	7.0	48.0
Dec 7				0	0	-1	0		12	2		0				123.9	0.5	6.0	48.0
Dec 8				2	0	1	0		15	4		0				123.8	0.6	6.0	48.0
Dec 9				0	0	0	0		20	5		0				124.6	0.5	7.0	48.0
Dec 10				0	0	-1	0		23	8		0				123.2	0.5	7.0	48.0
Dec 11				0	0	0	0		19	3		0				123.1	0.5	6.5	47.0
Dec 12				0	0	0	1		21	5		0				116.7	0.5	4.5	47.0
Dec 13				-1	0	0	0		30	9		0				113.8	0.5	*	47.0
Dec 14				0	0	0	0		19	6		0				140.4	0.5	6.0	46.0
Dec 15				0	0	0	0		11	3		0				151.8	0.5	4.0	45.0
Dec 16				0	0	0	0		6	-1		0				148.6	0.5	6.5	43.0
Dec 17				0	0	0	0		6	1		0				138.0	0.5	7.0	43.0
Dec 18				0	1	0	0		16	-1		0				124.8	0.5	7.0	43.0
Dec 19				0	0	0	0		7	2		0				138.3	0.5	7.0	43.0
Dec 20				0	0	1	0		4	1		0				162.6	0.5	7.0	43.0
Dec 21				0	0	0	0		5	0		0				145.5	0.6	7.0	40.0
Dec 22				0	0	0	0		-1	0		0				125.9	0.5	7.0	40.0
Dec 23				0	0	0	0		3	0		0				146.4	0.5	7.0	40.0
Dec 24				0	0	0	0		4	0		0				144.2	0.5	7.0	40.0
Dec 25				0	0	0	0		2	1		0				122.3	0.5	7.0	40.0
Dec 26				0	0	0	0		1	0		0				127.7	0.5	7.0	39.0
Dec 27				0	0	0	0		-1	0		0				130.8	0.5	7.0	39.0
Dec 28				0	0	0	0		34	11		0				120.3	0.6	6.0	38.0
Dec 29				0	0	0	0		4	1		0				122.8	0.5	6.0	39.0
Dec 30				1	0	0	0		12	1		0				141.8	0.6	7.0	39.0
Dec 31				0	0	0	0		4	1		0				128.5	0.5	4.0	39.0
TOTAL				6	2	4	0		392	101		1				132.0	0.5	6.4	44.3
Avg				0	0	0	0		13	3		0							

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD		PINK	CHUM	SHAD	LAMPREY	STURGEON
	SPRING	SUMMER					STEELHEAD	STEELHEAD					
SPRING	125,543	17,554											
SUMMER	78,271	11,621											
FALL	314,995	39,305											
TOTAL	518,809	68,480											

Note: November 1 to December 31 counts were from video tape. The counts are 16-hour counts and occurred between 0400-2000 PST. Visual counting ended October 31.

Official Fall Chinook run ended November 15. December counts were not added to fall totals. Pink, chum, and sturgeon counts are totals for the entire calendar year

TABLE 18

YEARLY TOTALS OF SALMONIDS COUNTED OVER BONNEVILLE DAM

1938 - 2008

YEAR	CHINOOK*	STEELHEAD	SOCKEYE	COHO*	CHUM	PINK	TOTAL SALMONID
1938	271,799	107,003	75,040	15,185	2,117	0	471,144
1939	286,189	122,032	73,382	14,383	1,168	0	497,154
1940	391,587	185,174	148,807	11,917	1,729	0	739,214
1941	461,443	118,089	65,741	17,911	5,269	4	668,457
1942	401,942	151,800	55,464	12,402	1,865	11	623,484
1943	313,123	92,133	39,845	2,547	788	0	448,436
1944	240,764	100,518	15,072	4,207	954	1	361,516
1945	297,478	120,133	9,501	790	728	1	428,631
1946	446,052	142,807	74,376	3,898	1,178	2	668,313
1947	480,377	135,444	171,139	11,174	199	3	798,336
1948	419,555	139,062	131,541	4,081	3,636	2	697,877
1949	277,697	119,285	51,444	1,004	2,028	6	451,464
1950	357,375	114,087	77,993	10,151	1,069	8	560,683
1951	331,788	140,689	169,428	5,201	1,044	7	648,157
1952	420,879	260,990	184,645	7,768	1,505	9	875,796
1953	332,479	223,914	235,215	13,018	1,728	10	806,364
1954	320,947	176,260	130,107	4,062	1,569	4	632,949
1955	359,853	198,411	237,748	3,725	318	9	800,064
1956	300,917	131,116	156,418	6,127	693	4	595,275
1957	403,286	139,183	82,915	4,675	569	12	630,640
1958	426,419	131,437	122,389	3,673	455	6	684,379
1959	345,028	129,026	86,560	2,695	906	22	564,237
1960	256,049	113,676	59,713	3,268	1,026	0	433,732
1961	281,980	139,719	17,111	3,456	896	12	443,174
1962	286,625	164,025	28,179	14,788	1,013	27	494,657
1963	278,560	129,418	60,319	12,658	739	34	481,728
1964	344,422	117,252	99,856	53,602	632	45	615,809
1965	317,957	166,453	55,125	76,032	496	64	616,127
1966	340,111	143,661	156,661	71,891	872	58	713,254
1967	366,237	121,872	144,158	96,488	352	50	729,157
1968	341,154	106,974	108,207	63,488	79	21	619,923
1969	507,543	140,782	59,636	49,378	143	86	757,568
1970	384,780	113,510	70,762	80,116	209	150	649,527
1971	405,702	193,966	87,447	75,989	29	176	763,309
1972	394,456	185,886	56,323	65,932	1	51	702,649
1973	398,635	157,823	58,979	54,609	43	12	670,101
1974	366,759	137,054	43,837	60,955	23	2	608,630
1975	425,566	85,540	58,212	58,307	11	309	627,945
1976	507,773	124,177	43,611	53,150	11	2	728,724
1977	366,657	193,437	99,829	19,408	17	0	679,348
1978	394,600	104,431	18,436	52,590	28	0	570,085
1979	276,306	113,979	52,628	45,328	1	23	488,265
1980	245,518	129,254	58,882	22,052	44	0	455,750

TABLE 18
(continued)

YEARLY TOTALS OF SALMONIDS COUNTED OVER BONNEVILLE DAM

1938 - 2008

YEAR	CHINOOK*	STEELHEAD	Sockeye	COHO*	CHUM	PINK	TOTAL SALMONID
1981	285,650	159,270	56,037	30,510	4	20	531,491
1982	322,809	157,640	50,219	73,832	12	0	604,512
1983	244,346	218,439	100,545	15,173	50	52	578,605
1984	324,425	315,560	152,541	29,487	64	8	822,085
1985	463,873	343,987	166,340	56,857	97	147	1,031,301
1986	570,881	379,891	58,123	130,853	77	23	1,139,848
1987	547,494	303,081	116,993	27,635	147	20	995,370
1988	494,025	279,072	79,714	39,620	60	6	892,497
1989	416,117	287,798	41,884	39,281	16	12	785,108
1990	340,990	183,027	49,581	24,845	26	0	598,469
1991	274,622	274,545	76,481	64,057	5	550	690,260
1992	256,299	314,975	84,992	18,126	39	24	674,455
1993	277,657	188,386	80,178	11,732	17	15	557,985
1994	243,450	161,978	12,678	22,794	26	5	440,931
1995	240,050	202,448	8,774	12,034	30	36	463,372
1996	296,635	205,213	30,252	18,747	22	1	550,870
1997	387,088	258,385	47,008	27,267	47	64	719,859
1998	280,944	185,094	13,218	49,920	21	13	529,210
1999	343,176	206,488	17,877	45,152	43	28	612,764
2000	491,905	275,178	93,398	97,032	17	0	957,530
2001	971,119	633,073	114,934	266,314	29	-4	1,985,465
2002	924,585	480,309	49,610	94,901	72	0	1,549,477
2003	992,231	361,412	39,291	133,870	411	637	1,527,852
2004	906,197	313,378	123,291	119,851	80	1	1,462,798
2005	600,415	315,650	72,971	88,791	139	22	1,077,988
2006	526,534	339,141	37,066	110,053	155	6	1,012,955
2007	357,562	323,917	24,376	96,576	121	27	802,579
2008	587,428	357,820	213,607	146,059	75	60	1,305,049
Total	28,342,874	14,086,637	5,844,660	3,085,448	40,082	3,016	51,402,717
10-Year Average	670,115	360,637	78,642	119,860	114	78	1,229,446

*Jacks included

TABLE 19

YEAR	MONTHLY COUNT OF CHINOOK SALMON BONNEVILLE DAM - 1938 - 2008												TOTAL*	SPRING Jan 1- May 31	SUMMER Jun 1- Jul 31	FALL Aug 1- Dec 31	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1938				22,371	8,221	6,556	34,765	197,294	2,302	263	27		271,799	22,371	14,777	234,651	
1939	6	12	121	51,410	25,159	5,602	17,828	32,909	150,851	2,197	78	16		286,189	76,708	23,430	186,051
1940		504	37,253	28,621	7,027	14,938	58,643	240,515	3,765	287	34		391,587	66,378	21,965	303,244	
1941	4	1,360	51,486	19,445	7,013	9,395	12,590	351,967	7,179	866	138		461,443	72,295	16,408	372,740	
1942	1	15	34	9,506	30,915	11,816	12,821	27,581	303,939	4,485	639	190		401,752	40,471	24,637	336,644
1943	11	6	43	12,172	53,268	5,440	8,044	28,985	201,414	3,354	365	21		313,123	65,500	13,484	234,139
1944	1	2	65	15,671	15,127	4,363	8,241	55,468	139,254	2,388	164	20		240,764	30,866	12,604	197,294
1945	6	4	81	17,148	26,276	11,293	16,317	32,254	189,675	4,281	137	6		297,478	43,515	27,610	226,353
1946	1	2	25	14,196	53,313	30,253	20,967	45,422	277,152	4,523	173	25		446,052	67,537	51,220	327,295
1947		2	141	83,520	49,899	25,502	13,358	43,062	260,385	3,945	526	37		480,377	133,562	38,860	307,955
1948	10		251	21,205	20,262	44,137	23,100	35,934	270,238	3,928	467	23		419,555	41,728	67,237	310,590
1949			5	5,765	44,304	24,232	22,500	41,500	137,599	1,571	215	6		277,697	50,074	46,732	180,891
1950		21	6,630	50,638	16,667	32,937	40,462	205,521	4,356	143			357,375	57,289	49,604	250,482	
1951	32	28,801	86,055	54,889	24,394	33,785	97,131	6,489	212				331,788	114,888	79,283	137,617	
1952	255	8,130	107,807	62,491	21,800	82,290	135,053	2,576	477				420,879	116,192	84,291	220,396	
1953	1,254	126,450	42,583	27,228	30,593	27,398	75,145	1,495	333				332,479	170,287	57,821	104,371	
1954	2	657	82,877	51,230	46,801	32,596	24,969	80,426	1,189	200			320,947	134,766	79,397	106,784	
1955	1,391	84,436	85,769	45,502	37,437	32,833	70,558	1,803	124				359,853	171,596	82,939	105,318	
1956	161	8,850	54,438	64,262	36,938	42,203	92,030	1,854	179	2			300,917	63,449	101,200	136,268	
1957	328	90,984	45,128	104,243	30,790	34,829	95,457	1,352	175				403,286	136,440	135,033	131,813	
1958	468	15,361	59,377	74,375	27,524	19,735	227,504	1,948	127				426,419	75,206	101,899	249,314	
1959	182	26,944	34,007	39,581	49,371	24,945	168,187	1,643	168				345,028	61,133	88,952	194,943	
1960	184	37,064	32,349	65,247	19,923	22,719	76,327	2,012	224				256,049	89,597	85,170	101,282	
1961	476	72,526	25,693	41,302	25,159	22,675	90,688	3,108	353				281,980	98,695	66,461	116,824	
1962	1,278	56,201	33,637	52,392	25,093	23,526	91,320	2,759	419				286,625	91,116	77,485	118,024	
1963	2,802	43,859	28,810	36,836	27,178	28,586	104,415	5,571	503				278,560	75,471	64,014	139,075	
1964	2,418	69,031	19,979	35,814	44,717	26,546	141,525	4,157	235				344,422	91,428	80,531	172,463	
1965	1,238	47,083	35,945	38,482	37,515	38,727	112,664	6,074	229				317,957	84,266	75,997	157,694	
1966	2,168	92,637	17,864	40,233	31,764	20,608	128,421	6,052	364				340,111	112,669	71,997	155,445	
1967	1,620	71,957	11,358	41,847	53,812	25,760	154,323	5,405	155				366,237	84,935	95,659	185,643	
1968	1,342	69,420	28,425	46,793	36,126	27,779	126,994	4,010	265				341,154	99,187	82,919	159,048	
1969	1,910	65,371	106,281	59,177	42,976	38,456	187,502	5,511	359				507,543	173,562	102,153	231,828	
1970	2,020	78,605	30,351	35,091	29,811	44,559	159,710	4,364	269				384,780	110,976	64,902	208,902	
1971	683	60,849	63,985	37,757	40,154	26,749	166,346	8,820	359				405,702	125,517	77,911	202,274	
1972	426	154,443	31,271	36,758	34,072	23,577	109,820	3,939	150				394,456	186,140	70,830	137,486	
1973	1,585	128,495	12,068	24,164	21,196	31,513	170,895	8,457	262				398,635	142,148	45,360	211,127	
1974	434	57,516	76,585	13,424	32,472	15,554	156,543	13,923	308				366,759	134,535	45,896	186,328	
1975	162	48,295	55,647	16,989	27,362	37,907	234,145	4,847	212				425,566	104,104	44,351	277,111	
1976	587	58,978	53,883	39,130	29,883	48,776	262,615	13,395	526				507,773	113,448	69,013	325,312	
1977	3,569	98,710	17,229	21,790	19,233	21,992	171,303	11,805	1,026				366,657	119,508	41,023	206,126	
1978	4,291	100,712	44,860	27,125	17,198	23,513	165,411	11,104	386				394,600	149,863	44,323	200,414	
1979	790	29,751	20,921	15,924	18,293	41,273	142,241	6,865	248				276,306	51,462	34,217	190,627	
1980	535	30,732	29,720	15,384	15,681	26,106	118,669	8,404	287				245,518	60,987	31,065	153,466	

TABLE 19

(Continued)

YEAR	MONTHLY COUNT OF CHINOOK SALMON BONNEVILLE DAM - 1938-2008												TOTAL*	SPRING Jan 1- May 31	SUMMER Jun 1- Jul 31	FALL Aug 1- Dec 31	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1981		1,853	41,917	21,239	13,262	13,667	32,519	154,696	6,288	209			285,650	65,009	26,929	193,712	
1982		312	30,282	45,450	15,439	11,175	34,058	174,348	11,487	258			322,809	76,044	26,614	220,151	
1983		144	25,423	31,154	12,793	10,665	26,147	116,879	20,458	683			244,346	56,721	23,458	164,167	
1984		351	27,185	23,509	13,060	15,447	41,909	180,867	21,673	424			324,425	51,045	28,507	244,873	
1985		2,036	52,145	36,780	16,763	13,107	64,899	255,020	22,099	1,024			463,873	90,961	29,870	343,042	
1986		2,292	82,356	38,395	18,365	12,676	38,737	337,721	39,511	828			570,881	123,043	31,041	416,797	
1987		2,727	68,866	30,214	22,728	14,979	82,500	298,865	25,614	1,001			547,494	101,807	37,707	407,980	
1988		2,663	69,689	22,394	18,191	18,333	111,905	236,662	13,656	532			494,025	94,746	36,524	362,755	
1989		36	56,583	30,640	15,659	17,316	102,573	181,691	11,218	401			416,117	87,259	32,975	295,883	
1990		677	67,536	28,039	16,990	11,031	59,066	149,404	8,015	232			340,990	96,252	28,021	216,717	
1991		601	41,431	19,196	12,755	9,198	21,959	159,068	10,116	298			274,622	61,228	21,953	191,441	
1992		2,188	68,073	20,321	11,871	7,374	28,537	107,620	10,043	272			256,299	90,582	19,245	146,472	
1993		226	77,174	34,772	15,968	7,648	37,893	97,693	6,036	247			277,657	112,172	23,616	141,869	
1994		505	13,499	6,562	9,743	10,458	47,787	145,801	9,669	296			244,320	20,566	20,201	203,553	
1995		206	7,144	5,511	8,565	9,226	47,145	150,990	15,614	835	14		245,250	12,861	17,791	214,598	
1996	4	110	20,923	35,571	11,136	7,768	58,909	154,420	10,451	647	23		299,962	56,608	18,904	224,450	
1997		466	67,577	49,921	20,162	10,943	82,123	158,589	9,488	516	-1		399,784	117,964	31,105	250,715	
1998	0	1	695	24,549	14,587	14,500	10,396	58,135	155,716	11,308	398	7		290,292	39,117	24,111	217,716
1999		2	251	19,016	28,831	14,830	16,121	66,546	186,880	14,624	378	7		347,486	48,098	30,951	268,428
2000		4	3,166	130,193	71,222	25,864	19,209	100,658	139,073	11,380	227	16		501,012	204,581	45,073	251,338
2001	0	25	16,653	324,800	98,080	53,860	45,825	116,981	351,892	25,875	3,379	70		1,037,440	439,533	99,685	498,127
2002	74	207	1,875	149,293	124,122	89,419	45,969	149,283	344,754	18,449	1,421	255		925,121	275,290	135,388	513,907
2003	6	93	19,283	120,626	70,020	81,333	46,833	90,884	533,913	30,440	2,827	402		996,660	210,028	128,166	658,466
2004		17	593	104,978	73,605	69,622	35,410	111,550	473,727	34,858	1,760	77		906,197	179,193	105,032	621,972
2005	-1	2	43	31,504	46,793	52,917	30,786	47,880	363,426	25,199	1,855	11		600,415	78,341	83,703	438,371
2006	0	1	35	7,030	92,300	71,473	30,401	55,410	236,605	28,653	4,536	90		526,534	99,366	101,874	325,294
2007	1	1	75	31,919	51,256	39,619	21,949	53,174	136,977	21,707	851	33		357,562	83,252	61,568	212,742
2008		3	170	40,547	102,419	67,117	22,775	115,815	222,385	15,479	710	8		587,428	143,139	89,892	354,397
TOTAL	124	401	98,129	4,073,288	3,035,756	2,296,601	1,654,748	3,314,445	13,244,854	698,613	40,502	1,367		28,458,828	7,206,671	3,950,564	17,291,585
10-Year Average				4,214	95,991	75,865	56,605	31,528	90,818	298,963	22,666	1,794		678,586	176,082	88,133	414,304

*Jacks included

1994 counts include nighttime video counts during the hours of 2100-0500 PST June 1 through August 16.

1995 counts include nighttime video counts during the hours of 2000 and 0400 PST April 1 through November 15. 24 hour counts November 16 through December 31.

1996 - 2002 counts include 24 hour video counts January 1 through March 15 and November 16 through Dec 31.

From March 16 through November 15, video counts took place between 2000 and 0400 hours PST.

2003 - 2008 counts include 16 hour video counts between 0400-2000 PST January 1 through March 31 and November 1 through December 31.

TABLE 20

MONTHLY COUNT OF SOCKEYE SALMON
BONNEVILLE DAM 1938 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL		
1938					1,025	17,811	53,864	2,097	235	6	2		75,040		
1939					48	189	29,386	43,124	616	19			73,382		
1940					206	59,639	85,885	3,063	13	1			148,807		
1941					299	1,052	23,536	39,193	1,615	46			65,741		
1942						13	12,624	41,301	1,477	49			55,464		
1943						9	4,525	33,613	1,697	1			39,845		
1944					1	16	3,099	11,171	659	126			15,072		
1945					10	51	521	1,507	6,903	498	10	1	9,501		
1946					9	67	7,815	64,715	1,747	21	2		74,376		
1947						5	59,378	108,175	3,564	15	1	1	171,139		
1948							12,023	117,652	1,849	13	4		131,541		
1949						151	9,013	41,619	655	6			51,444		
1950							341	75,784	1,826	42			77,993		
1951						25	81,045	87,104	1,214	40			169,428		
1952					7	1	3	136,939	47,188	467	30	2	8	184,645	
1953					57	27	663	45,711	186,933	1,774	50			235,215	
1954						1	13	52,359	76,505	1,212	17			130,107	
1955						79	21,923	214,860	866	11	9			237,748	
1956						10	29,649	125,185	1,564	7	3			156,418	
1957						21	38,616	43,938	323	14				82,915	
1958						25	38,736	82,719	878	23	8			122,389	
1959					2	153	10,155	75,325	906	14	5			86,560	
1960						4	41,758	17,615	321	15				59,713	
1961					3	22	7,960	9,059	56	9	2			17,111	
1962						1	21	9,713	18,310	82	47	5			28,179
1963						492	25,010	34,275	216	304	17	5			60,319
1964					3	570	32,079	66,857	213	110	10	14			99,856
1965						457	21,860	31,776	744	285	3				55,125
1966					10	338	57,509	97,845	800	155	4				156,661
1967					18	38	36,091	107,558	344	106	3				144,158
1968					54	372	74,226	33,245	199	101	9	1			108,207
1969					5	165	24,238	34,970	120	124	13	1			59,636
1970					5	269	22,977	46,062	1,147	290	12				70,762
1971						70	14,789	72,203	313	69	2	1			87,447
1972						614	16,505	37,939	1,254	9	2				56,323
1973						17	29,314	29,308	337	3					58,979
1974						14	8,073	35,407	340	3					43,837
1975						2	17,961	40,050	192	7					58,212
1976						94	22,532	20,661	297	26	1				43,611
1977					1	38	74,551	25,178	61						99,829
1978					1	2	12,442	5,884	101	6					18,436
1979						1	25,474	26,297	826	30					52,628
1980							22,949	35,764	164	4	1				58,882

TABLE 20
(Continued)
MONTHLY COUNT OF SOCKEYE SALMON
BONNEVILLE DAM 1938 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1981					1	36,931	19,001	100	4				56,037
1982					12	20,731	29,207	264	4	1			50,219
1983						52,134	48,004	400	5	2			100,545
1984					6	106,892	45,141	494	7	1			152,541
1985					3	112,054	53,842	422	4	2			166,340
1986					2	27,303	30,279	475	63	1			58,123
1987					1	75,674	40,930	383	5				116,993
1988					11	44,409	35,168	121	5				79,714
1989					3	24,638	17,000	231	11	1			41,884
1990						26,141	23,244	195	1				49,581
1991						22,318	53,699	457	7				76,481
1992					20	54,292	30,409	271					84,992
1993					7	49,667	30,377	127					80,178
1994					2	9,835	3,306	11					13,154
1995					1	5,924	3,151	59					9,135
1996					3	23,005	8,044	41					31,093
1997					9	23,559	24,392	381	1				48,342
1998					1	7,796	5,723	93					13,613
1999						8,613	9,629	61	1				18,304
2000					146	83,479	13,847	69					97,541
2001					32	102,570	20,496	317	1				123,416
2002					3	32,760	18,349	85	3				51,200
2003					2	26,432	12,714	139	4				39,291
2004					134	100,702	22,253	194	3		5		123,291
2005					16	47,093	25,724	118	20				72,971
2006					9	27,398	9,518	129	12				37,066
2007					36	18,742	5,487	107	4				24,376
2008					53	188,756	24,735	46	17				213,607
TOTAL	76	541	8,369		2,653,689	3,152,688	44,484	2,687	137	37	1		5,862,709
10-Year Average					48	63,655	16,275	127					80,106

1994 counts include nighttime video counts during the hours of 2100-0500 PST June 1 through August 16.

1995 counts include nighttime video counts during the hours of 2000 and 0400 PST April 1 through November 15.

24 hour counts November 16 through December 31.

1996 - 2002 counts include 24 hour video counts January 1 through March 15 and November 16 through Dec 31.

From March 16 through November 15, video counts took place between 2000 and 0400 hours PST.

2003-2008 counts include video counts which took place between 0400-2000 PST January 1 through March 31 and November 1 through December 31.

TABLE 21

MONTHLY COUNT OF COHO SALMON
BONNEVILLE DAM 1938 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	JACKS
1938	3							3,070	10,995	972	141	7	15,188	
1939	3							1,811	12,226	310	15	18	14,383	
1940	2							1,451	10,212	213	33	5	11,916	
1941								1,317	16,061	369	160	2	17,909	
1942								1,193	11,062	147			12,402	
1943								762	1,676	89	20		2,547	
1944								1,052	3,021	103	29	2	4,207	
1945							2	239	533	15		1	790	
1946		10	4				22	228	3,609	1			3,898	
1947	12	2	1					217	10,928	10	3	1	11,174	
1948		1					11	158	3,893	10	3	5	4,081	
1949							17	270	703	5	8	1	1,004	
1950								1,570	8,545	36			10,151	
1951								197	4,773	225	6		5,201	
1952							10	2,581	5,131	22	24		7,768	
1953							1	7,094	5,890	22	11		13,018	
1954								668	3,319	74	1		4,062	
1955								443	3,188	94			3,725	
1956							7	1,158	4,879	83			6,127	
1957								1,564	3,046	63	2		4,675	
1958								341	3,220	99	13		3,673	
1959								122	2,551	22			2,695	
1960								538	2,502	224	4		3,268	
1961								277	2,867	306	6		3,456	
1962							1	1,116	13,091	543	37		14,788	
1963							4	1,071	8,664	2,724	195		12,658	
1964							23	3,776	46,535	3,069	199		53,602	
1965							2	21	5,911	61,335	8,566	197	76,032	
1966							46	874	4,921	59,457	6,361	232	71,891	34,919
1967							33	715	3,814	87,254	4,560	112	96,488	47,893
1968							48	124	10,450	50,900	1,868	98	63,488	20,435
1969							38	443	4,671	41,176	2,998	52	49,378	25,216
1970							2	128	6,604	70,631	2,631	120	80,116	25,248
1971								57	7,292	58,235	9,753	652	75,989	22,172
1972								66	9,481	52,456	3,792	137	65,932	31,716
1973								636	12,656	33,736	6,715	866	54,609	28,760
1974								539	8,805	40,761	8,631	2,219	60,955	29,350
1975								56	5,373	39,167	11,892	1,819	58,307	25,535
1976								143	5,970	40,505	5,417	1,115	53,150	16,484
1977								55	1,134	15,163	2,582	474	19,408	10,083
1978							1	2	2,643	38,308	10,531	1,105	52,590	22,312
1979								68	7,324	28,732	7,583	1,621	45,328	15,716
1980								10	781	13,601	3,327	4,333	22,052	9,078

TABLE 21

(Continued)

MONTHLY COUNT OF COHO SALMON
BONNEVILLE DAM 1938 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	JACKS		
1981							4	3,162	23,962	3,108	274		30,510	8,575		
1982							79	3,687	55,743	13,182	1,141		73,832	18,016		
1983							44	319	7,237	5,020	2,553		15,173	6,775		
1984							41	1,394	20,174	6,229	1,649		29,487	12,728		
1985							1	92	3,977	46,749	5,670	361	56,857	18,307		
1986								181	2,502	110,714	14,436	3,020	130,853	22,204		
1987								464	2,364	21,002	3,556	249	27,635	9,713		
1988								78	3,377	26,303	8,614	1,248	39,620	12,566		
1989								60	2,353	24,089	9,543	3,236	39,281	11,863		
1990								9	587	18,202	5,230	817	24,845	13,218		
1991								5	941	46,331	13,713	3,067	64,057	5,189		
1992								19	222	10,304	5,953	1,628	18,126	3,757		
1993								15	448	8,191	2,786	292	11,732	1,090		
1994								5	1,608	12,521	8,239	421	22,794	2,503		
1995								118	978	7,049	3,969	458	12,572	1,639		
1996								66	431	10,413	7,775	392	19,077	3,010		
1997								22	1,441	19,412	6,755	289	27,919	3,206		
1998								13	896	35,245	13,047	282	49,488	3,630		
1999								19	1	34,901	9,673	252	45,805	4,468		
2000									3	13,348	55,550	29,698	949	99,660	11,383	
2001								15	2	145	34,112	205,352	34,401	3,907	277,934	6,781
2002									6	4,742	54,917	38,184	2,803	100,835	6,817	
2003									10	11,389	86,621	35,516	334	133,874	8,127	
2004									1	11,171	78,512	29,544	622	119,851	4,809	
2005										3,487	64,253	20,414	637	88,791	5,486	
2006											12,771	58,048	35,014	4,192	110,053	7,943
2007									-2	6	8,888	55,968	28,712	2,947	96,576	12,125
2008									-1	2	8,335	84,639	51,771	1,309	146,059	68,486
TOTAL	34	31	6	1	0	179	5,525	271,995	2,216,939	556,809	55,391	465	3,107,375	659,331		
10 Year Average										25	10,919	77,876	31,293	1,795	121,944	13,643

*Jacks included

1995 counts include nighttime video counts during the hours of 2000 and 0400 PST April 1 through November 15.

24 hour counts November 16 through December 31.

1996 - 2002 counts include 24 hour video counts January 1 through March 15 and November 16 through Dec 31.

From March 16 through November 15, video counts took place between 2000 and 0400 hours PST.

2003-08 counts include 16 hour video counts between 0400-2000 PST January 1 through March 31
and November 1 through December 31.

TABLE 22

MONTHLY COUNT OF STEELHEAD
BONNEVILLE DAM 1938 -2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	A-Run Jan 1- Aug 25	B-Run Aug 26- Dec 31	
	1938	23	19	570	8,110	1,587	1,490	36,681	38,062	33,891	1,264	216	119			
1939	5	96	1,688	4,125	998	4,489	61,188	46,071	64,377	1,786	292	59	185,174	107,003	49,306	57,697
1940	37	76	1,641	6,392	1,518	996	21,940	29,600	50,542	3,980	1,063	304	118,089	122,032	80,096	41,936
1941	4	37	256	3,642	4,159	1,588	19,905	41,973	77,076	2,412	566	182	151,800	92,133	65,219	86,581
1942	14	18	654	3,374	4,698	1,564	7,755	29,894	41,051	2,444	573	94	100,518	100,518	41,219	50,914
1943	50	157	1,019	6,142	2,224	1,169	21,868	24,508	35,907	6,129	1,119	226	120,133	72,685	51,585	48,933
1944	1,003	1,078	3,008	4,685	1,557	1,109	24,537	40,593	40,194	1,925	302	142	114,087	58,109	47,448	59,980
1945	64	551	3,040	9,839	5,482	3,265	20,600	58,466	38,399	2,070	262	769	142,807	135,444	93,422	49,385
1946	197	321	1,968	6,889	2,025	1,595	28,134	40,819	50,025	2,905	443	123	139,062	119,285	75,035	60,409
1947	154	119	1,631	4,473	1,170	1,895	33,191	53,621	40,609	1,742	381	76	114,087	102,100	87,453	51,609
1948	1	1,689	3,293	1,712	1,264	34,314	54,281	20,786	1,161	686	98	140,689	121,100	90,762	28,523	
1949	13	8	1,156	4,537	1,667	691	25,142	53,904	24,226	1,932	811	7	120,133	80,191	51,585	48,933
1950	375	2,338	1,568	5,187	74,980	39,712	15,357	947	225	140,689	120,012	99,692	31,424	19,589	19,589	
1951	278	1,248	1,751	8,202	118,110	79,735	48,293	2,735	638	260,990	173,135	190,012	70,978	50,779	50,779	
1952	1,310	5,308	1,456	5,313	106,712	64,006	36,107	2,797	905	223,914	176,260	173,135	50,175	50,175	50,175	
1953	6	679	5,511	1,571	6,115	59,443	65,234	34,941	2,209	551	198,411	161,614	161,614	36,797	36,797	
1954	1,006	2,100	1,149	2,418	79,124	84,746	24,239	3,361	268	131,116	139,183	99,692	34,004	34,004		
1955	1,409	2,718	1,582	3,122	48,306	47,148	23,343	2,846	635	131,437	129,026	105,179	77,141	77,141	77,141	
1956	926	2,081	760	8,434	66,738	34,915	24,029	1,069	231	139,719	129,418	105,179	79,533	51,904	51,904	
1957	495	651	1,457	5,645	53,734	22,827	44,478	1,859	291	113,676	117,252	98,198	66,453	45,560	45,560	
1958	219	746	1,236	2,562	60,549	38,417	23,579	1,540	178	113,676	117,252	98,198	66,453	45,560	45,560	
1959	412	904	1,090	4,314	44,026	33,571	28,058	1,090	211	131,116	131,437	102,100	77,141	51,904	51,904	
1960	374	1,161	692	2,246	44,379	41,237	47,409	1,561	660	139,719	129,418	99,692	77,141	51,904	51,904	
1961	381	1,957	1,491	3,737	49,789	40,177	64,084	1,798	611	164,025	117,252	86,990	76,135	50,779	50,779	
1962	503	1,035	1,385	4,192	51,951	31,441	35,446	2,920	545	166,453	113,510	83,858	76,135	41,117	41,117	
1963	490	1,609	769	1,940	50,640	26,892	32,406	1,954	552	140,782	113,510	104,051	76,135	41,117	41,117	
1964	211	1,516	1,419	4,265	89,405	29,506	37,529	1,971	631	143,661	113,510	97,545	78,106	45,893	45,893	
1965	658	2,682	2,389	13,051	57,975	25,779	37,733	2,657	737	143,661	121,872	97,545	78,106	45,893	45,893	
1966	416	1,182	899	3,062	40,881	36,787	35,472	2,701	472	143,661	106,974	86,990	77,035	51,904	51,904	
1967	340	861	1,315	3,664	29,773	41,006	27,865	1,645	505	143,661	140,782	83,858	76,135	41,117	41,117	
1968	911	2,164	2,897	6,889	63,222	36,077	26,565	1,484	573	143,661	113,510	104,051	76,135	41,117	41,117	
1969	244	1,267	1,331	4,208	30,866	46,307	27,073	1,909	305	143,661	113,510	78,106	55,224	35,404	35,404	
1970	463	1,377	1,810	4,469	84,877	58,249	38,619	3,739	363	143,661	121,872	97,545	78,106	45,893	45,893	
1971	492	2,562	2,137	3,444	59,933	48,223	65,523	3,432	140	143,661	106,974	86,990	77,035	51,904	51,904	
1972	830	2,534	1,367	5,360	53,820	46,399	43,275	3,918	320	143,661	140,782	83,858	76,135	41,117	41,117	
1973	1,292	4,127	5,547	6,349	57,212	44,266	14,654	3,080	527	143,661	113,510	100,011	76,135	51,904	51,904	
1974	1,080	4,284	4,324	6,058	30,823	28,623	9,106	904	338	143,661	113,510	84,402	76,135	51,904	51,904	
1975	1,285	3,459	3,677	9,130	38,907	44,204	21,084	1,953	478	143,661	124,177	92,370	76,135	51,904	51,904	
1976	1,159	4,121	4,115	11,395	67,554	35,161	66,084	3,298	550	143,661	139,437	113,682	79,755	51,904	51,904	
1977	1,750	3,327	4,587	10,883	25,284	30,461	2,168	334	40,243	104,431	64,188	40,243	34,507	34,507		
1978	1,333	1,905	1,785	7,585	33,379	39,399	23,592	4,710	291	143,661	113,979	79,472	54,254	44,244		
1979	1,139	3,378	1,409	7,790	28,448	51,073	32,277	3,233	507	143,661	129,254	85,010	64,244	44,244		

TABLE 22

(Continued)

**MONTHLY COUNT OF STEELHEAD
BONNEVILLE DAM 1938 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	Jan 1- Aug 25	Aug 26- Dec 31
1981			1,031	3,812	3,887	12,628	56,787	52,435	25,737	2,650	303		159,270	121,785	37,485
1982			1,239	4,188	5,335	8,636	39,159	51,329	44,456	3,146	152		157,640	103,159	54,481
1983			458	1,253	1,638	6,017	69,036	86,066	48,920	4,636	415		218,439	148,853	69,586
1984			579	2,106	4,216	14,454	92,546	93,866	102,877	4,463	453		315,560	189,365	126,195
1985			977	2,956	3,997	13,036	102,256	152,455	63,575	4,088	647		343,987	251,723	92,264
1986			2,712	3,674	4,500	16,655	136,622	129,089	76,532	9,280	827		379,891	279,154	100,737
1987			1,189	2,112	3,233	12,443	104,615	115,481	58,815	4,331	862		303,081	227,013	79,120
1988			1,158	3,728	5,016	13,615	72,718	113,791	63,864	4,421	761		279,072	190,030	89,042
1989			630	2,213	3,343	10,176	62,913	117,686	84,665	5,419	753		287,798	176,965	110,833
1990			966	2,563	4,501	11,643	37,140	52,327	65,813	7,522	552		183,027	89,144	93,883
1991			640	2,082	2,196	6,601	52,187	110,027	93,152	6,947	713		274,545	150,542	124,003
1992			646	1,964	3,239	9,708	55,090	135,162	103,792	4,918	456		314,975	175,218	139,757
1993			771	1,744	2,691	9,923	34,148	64,062	69,129	5,531	387		188,386	99,941	88,445
1994			422	1,976	3,132	7,511	27,202	59,157	54,856	8,079	789		163,124	83,968	79,156
1995			333	863	1,257	6,419	29,305	112,812	48,781	6,691	1,104	1,506	209,071	126,537	82,534
1996	793	57	1,862	1,776	2,424	6,912	40,813	102,200	48,397	6,143	761	337	212,475	141,999	70,476
1997	342	426	1,966	1,950	2,485	530+166	57,472	127,882	53,571	18,428	2,234	84	266,840	177,685	89,155
1998	161	239	984	883	1,655	7,236	36,437	60,403	76,293	12,136	489	585	197,501	87,422	97,672
1999	15	287	699	833	1,308	5,157	48,278	101,610	46,200	6,509	637	585	212,118	138,258	68,230
2000	340	420	1,495	1,235	2,006	13,594	80,259	106,918	68,407	7,306	510	175	282,665	185,066	90,112
2001	333	239	2,196	2,043	3,331	24,076	199,969	263,518	152,434	21,542	4,343	2,769	676,793	435,035	198,038
2002	1,311	833	1,770	2,918	2,752	19,918	119,923	180,381	151,807	24,004	4,140	923	510,680	285,229	195,080
2003	724	1,728	2,264	1,474	1,714	10,966	95,185	139,612	95,759	12,467	3,115	813	365,821	231,717	134,104
2004	236	646	1,799	1,815	2,947	16,183	66,621	111,886	94,482	15,024	972	767	313,378	178,653	134,725
2005	149	62	103	1,064	1,517	9,286	84,968	110,487	83,450	21,694	2,598	272	315,650	191,275	124,375
2006	1,587	446	944	1,174	1,537	7,172	46,912	154,325	104,659	13,400	5,750	1,235	339,141	180,418	158,723
2007	601	387	1,514	1,020	1,666	6,789	58,362	185,281	54,543	11,734	1,332	688	323,917	232,586	91,331
2008	133	106	780	1,427	1,896	12,509	122,870	102,636	107,693	6,053	1,325	392	357,820	223,918	133,902
TOTAL	8,290	8,362	72,907	192,460	173,803	493,789	4,085,343	5,020,661	3,725,041	362,064	58,005	13,422	14,214,147	9,098,886	5,018,698
10-Year Average			1,356	1,500	2,067	12,565	92,335	145,665	95,943	13,973	2,472		369,798	228,216	132,862

1994 counts include nighttime video counts during the hours of 2100-0500 PST June 1 through August 16

1995 counts include nighttime video counts during the hours of 2000 and 0400 PST April 1 through November 15.

24 hour counts November 16 through December 31.

1996 - 2002 counts include 24 hour video counts January 1 through March 15 and November 16 through Dec 31.

From March 16 through November 15, video counts took place between 2000 and 0400 hours PST.

2003 - 2008 counts include 16 hour video counts between 0400-2000 PST January 1 through March 31 and November 1 through December 31.

TABLE 23

**MONTHLY COUNT OF SHAD at
BONNEVILLE DAM 1938 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1938						39	3,184	1,502	527	21			5,273
1939					14	1,539	3,065	157	28				4,803
1940					48	12,931	9,178	72	1				22,230
1941					5	2,417	16,010	197	12	16			18,657
1942					2	38	11,341	1,473	5				12,859
1943						18	2,545	265	20				2,848
1944						287	16,568	248					17,103
1945						2,801	90,773	948	4				94,526
1946						3,895	16,073	415					20,383
1947					8	5,645	20,280	105	3				26,041
1948						8	6,458	1,953	2	1			8,422
1949						2,647	19,609	322	1				22,579
1950							7,265	548	3				7,816
1951						1,269	6,792	277	15				8,353
1952						487	2,595	45	4				3,131
1953						53	14,856	1,502	19				16,430
1954						34	3,848	1,136	11				5,029
1955						21	4,411	1,358	18				5,808
1956					1	67	6,838	1,168	11				8,085
1957						1,695	11,039	422	1	2			13,159
1958						3,885	6,257	59					10,201
1959					3	32	6,315	369	1				6,720
1960						35,259	57,443	594	72				93,368
1961						18,952	245,471	1,236	33	5			265,697
1962						43,689	387,554	4,657	82	4	2		435,988
1963					70	77,961	307,466	4,044	217	14			389,772
1964						19	3,203	236,321	13,008	121	2		252,674
1965						1	33,815	570,432	12,844	194	35	2	617,323
1966					94	181,187	367,643	7,988	545	51	5		557,513
1967		1	1			6,673	212,681	2,944	152	8			222,460
1968						800	107,881	183,878	1,387	121	10	1	294,078
1969		2	5		158	233,018	81,159	2,846	163	7			317,358
1970			2		250	228,519	99,659	566	262	18			329,276
1971					30	34,345	154,215	951	55	1			189,597
1972					38	16,689	192,608	5,301	88	1			214,725
1973					116,057	377,830	24,701	577	38	4			519,207
1974					7	6,122	91,302	1,496	17	1			98,945
1975					11	43,712	219,133	1,349	38	3			264,246
1976					4	123,053	179,994	2,112	49	7			305,219
1977					51,709	431,540	11,818	568	76	12			495,723
1978					30	802,110	57,997	991	33	5			861,166
1979					800	994,253	43,734	658	258	141	13		1,039,857
1980					1,460	766,473	170,705	685	51	15	1		939,390

TABLE 23
(Continued)
MONTHLY COUNT OF SHAD at
BONNEVILLE DAM 1938 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1981				2	20,976	708,295	150,730	1,080	79	17			881,179
1982				1	6,888	655,037	117,325	914	37	9	1		780,212
1983					78,105	1,224,342	118,975	1,103	112	37			1,422,674
1984					553	950,406	320,526	4,097	153	55	1		1,275,791
1985					101,770	816,288	55,233	1,410	206	39	5		974,951
1986					104,724	722,443	29,622	1,164	166	47	4		858,170
1987				28	254,326	678,850	10,254	379	32	5	1		943,875
1988				20	408,822	734,635	20,146	697					1,164,320
1989				1	199,327	1,651,338	24,697	2,041					1,877,404
1990				4	532,617	2,296,098	116,799	2,347					2,947,865
1991				1	37,677	1,566,933	307,835	1,971					1,914,417
1992				256	685,939	1,767,696	93,446	4,102					2,551,439
1993			11	10	111,459	1,883,831	167,900	3,463					2,166,674
1994				53	136,547	1,223,421	195,894	1,640					1,557,555
1995				1	231,973	1,289,390	193,091	1,724					1,716,179
1996					24,653	1,676,695	221,795	1,514					1,924,657
1997					97,507	1,760,507	312,779	768					2,171,561
1998				1	185,810	1,660,405	44,656	120					1,890,992
1999					132,782	1,374,822	129,625	1,043					1,638,272
2000				6	229,344	961,587	52,558	822					1,244,317
2001				9	704,104	1,550,639	41,596	1,611					2,297,959
2002				0	382,611	2,670,772	110,780	393					3,164,556
2003					420,265	4,025,864	108,226	4,195					4,558,550
2004					662,249	4,544,400	142,236	6,792					5,355,677
2005					288,233	3,768,400	182,603	2,893					4,242,129
2006					205,664	3,555,887	197,303	6,400					3,965,254
2007			56		695,605	1,763,670	112,508	3,438					2,575,277
2008					67,013	1,856,442	217,538	3,763					2,144,756
TOTAL				14	457	7,179,162	53,945,185	7,977,890	143,227	4,136	593	36	69,250,700
10 Year - Average						378,787	2,607,248	129,497	3,135				3,118,675

TABLE 24

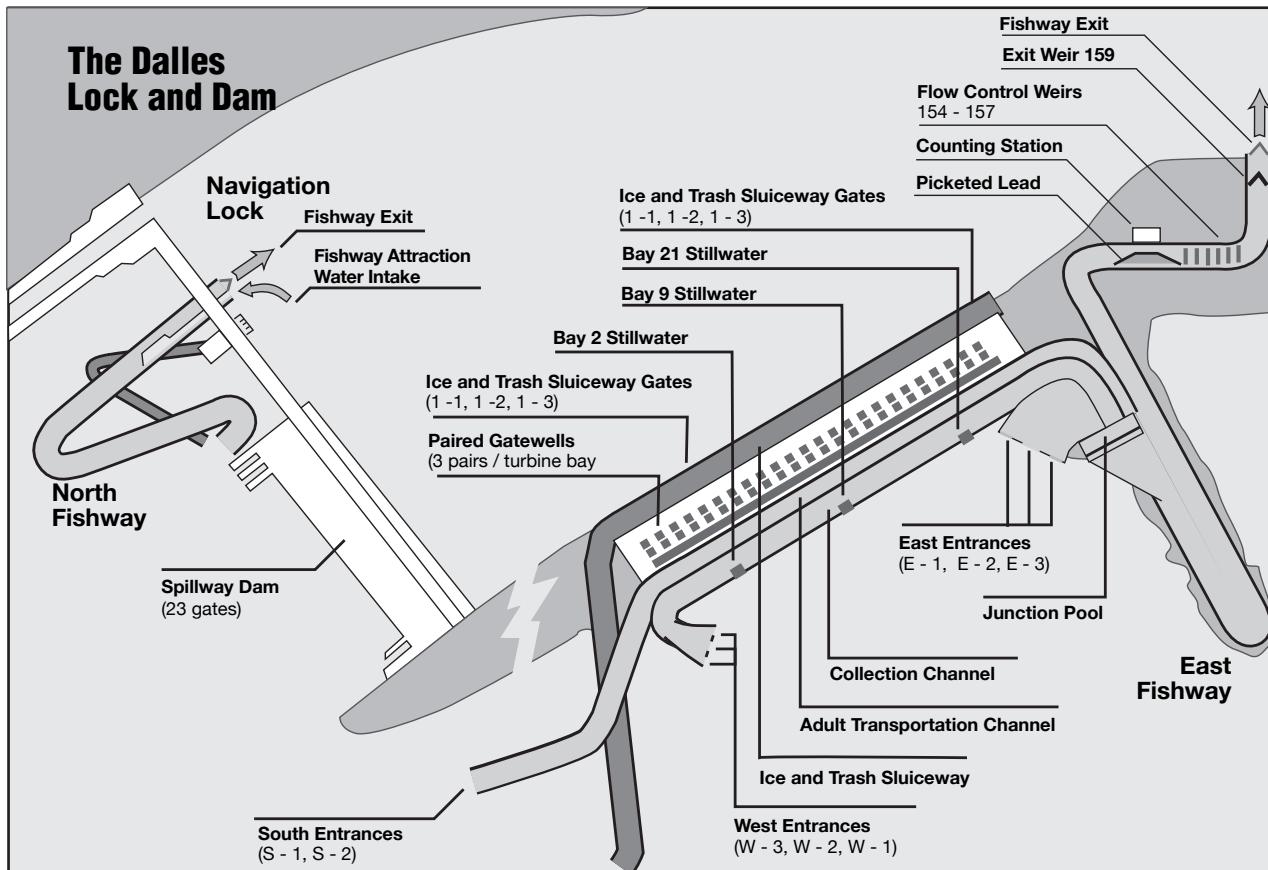
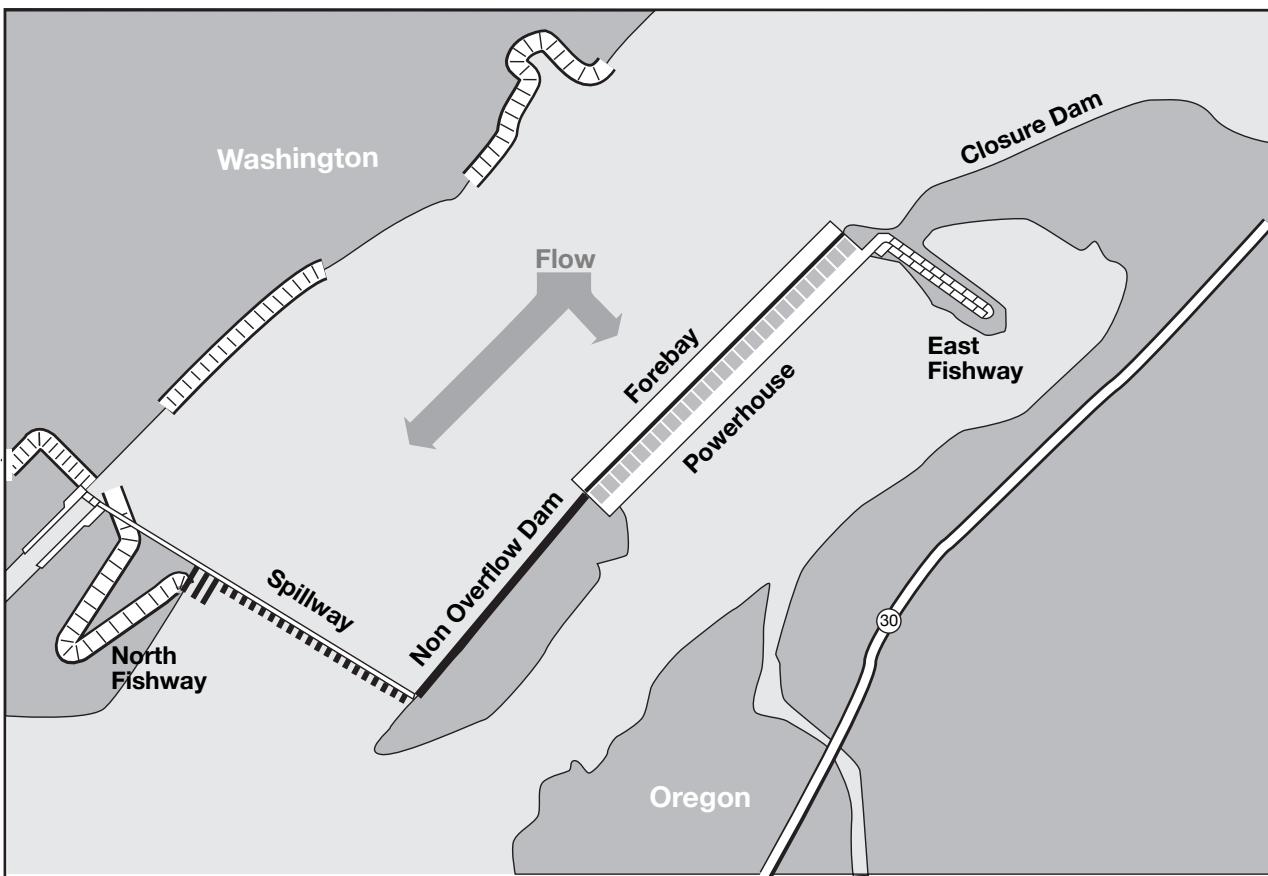
**MONTHLY COUNT OF LAMPREY at
BONNEVILLE DAM 1939¹ - 1969, 1997 – 2008**

The counts in the following table can be considered an approximation of trends, only. Lamprey are difficult animals to count in that they move back and forth in front of the fish count window. They also spend long periods of time resting. Lamprey also are more likely to pass at night than are salmon and for most of the years, fish counting took place only in the daytime. Further, during the 1970s, the count station was changed from a flashboard counting system in which the fish passed over a white board to a vertical slot system in which the fish pass through a lighted window. This change could have made a difference in the counts. In addition, it is known that lamprey do not always use the fish ladder and may pass over a dam through several routes including the navigation lock and the auxiliary water supply.

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1939		732	9,027	95,814	103,726	14,403	3,349	71	0				227,122
1940		338	24,551	40,642	67,760	20,554	2,217	40	0				156,102
1941		1,428	7,449	6,960	34,952	12,801	1,305	57	2				64,954
1942		13	1,302	3,457	28,641	16,270	2,619	40	19				52,361
1943		0	1,684	3,539	14,332	26,508	5,017	14	2				51,096
1944		22	2,189	1,411	19,288	11,853	1,342	86	18				36,209
1945		56	1,676	4,365	16,395	11,533	2,407	56	0				36,488
1946		57	684	13,834	42,772	15,820	1,565	93	0				74,825
1947		158	9,183	7,563	54,032	17,680	3,566	2,141	3				94,326
1948	1	82	295	13,744	79,507	44,511	4,948	725	2				143,815
1949		5	1,105	5,678	41,438	8,264	1,372	40	7	19			57,928
² 1950		207	1,073	6,702	22,128	2,436	140	7					32,693
1951		1	4	11,001	8,554	25,078	420	51	1				45,110
1952			8	3,674	13,854	7,462	1,194	11					26,203
1953		79	946	727	17,917	26,053	1,381	25	1				47,129
1954		33	201	1,001	10,303	26,535	2,824	89					40,986
1955			210	764	16,368	21,765	3,341	154	1				42,603
1956			24	657	36,987	10,181	1,949	113					49,911
1957		19	185	17,698	28,506	5,907	699	17					53,031
1958		132	877	8,092	79,548	7,448	1,036	171	1,115				98,419
1959		23	67	6,273	123,104	79,976	4,006	1,626	8				215,083
1960		8	1,521	12,185	125,962	30,751	7,329	142					177,898
1961		30	649	16,786	200,722	126,438	20,110	70					364,805
1962		1	441	13,573	49,868	30,253	7,103	166	21				101,426
1963		21	20,827	5,803	28,348	24,639	7,702	597					87,937
1964	2	8	2,575	17,796	39,223	41,214	3,167	347	5				104,337
1965		54	6,674	8,886	71,027	16,949	4,617	772	8				108,987
1966		168	6,562	11,772	25,813	20,543	2,207	844	5				67,914
1967		211	4,416	6,348	38,591	14,792	1,570	225	18				66,171
1968		92	14,698	18,389	57,011	17,611	949	275	4				109,029
1969		44	24,386	230,096	87,769	32,908	4,126	170	10				379,509
*** Counting lamprey was stopped after 1969. It was resumed again in 1997. ***													
1997		4	1,691	³ #####	1,939	9,783	8,643	770	0				22,830
1998		103	2,213	12,851	14,548	5,304	2,211	285	0				37,515
1999		65	4,780	8,801	12,047	7,584	3,717	302	0				37,296
2000		91	2,204	7,953	4,184	3,408	1,038	123	1				19,002
2001		1	2,075	11,143	9,895	4,141	620	72					27,947
2002		0	1,280	34,070	39,405	17,380	7,977	364					100,476
2003		6	2,874	50,875	45,863	13,230	3,843	336					117,027
2004			1,670	27,515	23,607	6,644	2,170	174					61,780
2005		-1	774	10,706	12,271	2,320	498	96					26,664
2006		1	446	8,874	18,603	6,868	4,013	122	13				38,940
2007		0	297	2,397	12,948	2,884	818	-26	-9				19,309
2008			444	3,942	6,276	3,159	680	59	2				14,562
TOTAL		3	4,085	165,371	768,728	1,770,606	871,533	144,101	12,045	1,264			3,737,755
10-Year Average		20	1,684	16,628	18,510	6,762	2,537	162					46,300

¹No data are available for 1938.²Because of changes in the Washington shore counting station, lamprey counts from 1939-1949 cannot be compared with counts from 1950 on.³Because of the heavy shad run, fish counters were not asked to count lamprey from June 1 through July 27.

Plate 3 The Dalles Lock and Dam



THE DALLES DAM

FISH COUNTING SCHEDULE

Apr 1 – Oct 31 Visual counting daily 0400-2000 hours Pacific Standard Time.

FISHWAY OPERATING SCHEDULE

The following information includes fishway operation for calendar year 2008. Total length of time for annual fishway outages can be determined by referring to previous years' annual reports.

East Adult Fishway

Jan 1 – Feb 6: dewatered for winter maintenance
Feb 7 – Nov. 29: in full operation with attraction water
Aug 7: attraction water off half day for required ROV grating inspection
Dec 2 – Dec 31: dewatered for winter maintenance (ladder flow only 48 hrs prior)

North Adult Fishway

Jan 1-Feb 10: in full operation with attraction water
Feb 11 – Feb 27: dewatered for winter maintenance (ladder flow only 24 hrs prior)
Aug 7: attraction water off half day for required ROV grating inspection
Feb 28 - Dec 31: in full operation with attraction water

Ice/Trash Sluiceway (Juvenile)

Jan 1-March 31: OOS, end gate closed
Apr 1-Dec 15: IN service with skimmer gates 1-1, 1-2, 1-3, 5-3, 18-2, 18-3
(season extended due to research)
Dec 15 -Dec 31: OOS, end gate closed

Spillway

Jan 1-Apr 9: closed, all gates on seal

FISH RELATED DEWATERINGS

FISHWAY DEWATERING PROCEDURES

Bulkheads are installed and drain valves open to dewater various areas of fishways. Fisheries personnel enter these areas to salvage fish that become entrapped. Minimal handling of fish is applied. Fish that are reluctant to vacate an area are captured and transported to the forebay or tailwater, depending on circumstances such as fish species, age class and stress levels. A follow up inspection is made to account for possible missed fish. Efforts are made to provide continual water supply during the entire operation to reduce fish stranding. Fishway areas not included on this list are inspected by ROV.

Fish Ladder Dewatering Results

Key; catfish=cc, smallmouth bass=smb, sturgeon=st, juvenile=j, adult=a

Date	Event	Chinook	Steelhead	Lamprey	Shad	Sturgeon	Comments	Morts
2/12/2008	N. upper	0	0	8	0	0	none	0
12/2/2008	E. upper	0	2a, 24 j	0	300a	1a	1a st > 5'	0
12/4/2008	E. ent.	1 j	0	12a	20a	9j	st ~ 2'-4'	0

TURBINE DEWATERING PROCEDURES

Turbine dewatering for routine maintenance usually involves low numbers of fish, due to operational guidelines. If a turbine unit fails, operational guidelines cannot always be followed, which usually results in higher numbers of fish entrapment. Removal of fish from these areas has a greater fish stress risk due to handling. Procedures are continually analyzed to determine the best method for preventing fish stress or loss. Fish are removed from scroll case and draft tubes by fish bags. If numbers of fish are higher than two bags, transport tanks are placed in the draft tube gallery for transport by crane. Fish are released to tailwater either with bag and rope or tank and crane.

Turbine Dewatering Results

Key; catfish=c, crappie=cr, sculpin=sc, shad=sh, juvenile=j, adult=a, scroll case=sc, draft tube=dt

Date	Event	Chinook	Lamprey	Shad	Sturgeon	Other	Comments	Morts
5/20/2008	MU 5 dt	0	0	0	1j	2c	none	0
5/20/2008	MU 5 sc	0	0	0	2j	0	st < 1'	0
6/24/2008	MU 22 sc	0	0	24	25	1cr	2 st >3'	0
6/25/2008	MU 22 dt	0	0	0	19	5c	none	0
10/8/2008	MU 20 sc	3j	3j	0	0	1sc	none	0
10/9/2008	MU 20 dt	0	0	0	7j	1c	st < 3'	0
11/4/2008	MU 14 sc	0	0	0	0	0	none	2 sh
11/4/2008	MU 14 dt	0	0	0	0	0	none	0

TABLE 25

MONTHLY TOTALS OF SALMONIDS, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER THE DALLES DAM

2008

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				21,531	86,590	58,430	21,041	46,608	147,583	15,983			397,766
STEELHEAD				1,084	383	4,847	69,771	47,273	131,616	22,666			277,640
SOCKEYE					6	152,255	25,678	45					177,984
COHO*								1,369	26,714	14,599			42,682
CHUM													0
PINK													12
TOTAL	22,615	86,979	215,532	116,498	95,298	305,914	53,248						896,084
SHAD				9,488	1,485,371	303,720	6,937						1,805,516
LAMPREY					174	2,609	1,592	210	14				4,599
STURGEON					1	4	43	23	25	2			98
BULL TROUT													0

*Jacks included

Shad are not counted after August 31.

TABLE 26

DISCHARGE AND WATER QUALITY DATA

THE DALLES PROJECT 2008

JANUARY				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	142.5	0.0	6.0	41.0
Jan 2	143.5	0.0	6.0	41.0
Jan 3	122.8	0.0	6.0	41.0
Jan 4	139.1	0.0	6.0	41.0
Jan 5	145.6	0.0	6.0	41.0
Jan 6	134.6	0.0	6.0	40.0
Jan 7	134.1	0.0	6.0	41.0
Jan 8	163.2	0.0	6.0	41.0
Jan 9	147.7	0.0	6.0	41.0
Jan 10	140.4	0.0	6.0	41.0
Jan 11	158.3	0.0	6.0	41.0
Jan 12	133.3	0.0	6.0	41.0
Jan 13	101.5	0.0	6.0	40.0
Jan 14	126.8	0.0	6.0	40.0
Jan 15	136.9	0.0	6.0	40.0
Jan 16	157.3	0.0	6.0	41.0
Jan 17	150.3	0.0	6.0	40.0
Jan 18	133.9	0.0	6.0	40.0
Jan 19	154.3	0.0	6.0	40.0
Jan 20	97.7	0.0	6.0	40.0
Jan 21	144.2	0.0	6.0	40.0
Jan 22	140.0	0.0	6.0	40.0
Jan 23	166.7	0.0	6.0	40.0
Jan 24	150.8	0.0	6.0	39.0
Jan 25	143.4	0.0	6.0	39.0
Jan 26	177.7	0.0	6.0	38.0
Jan 27	110.0	0.0	6.0	38.0
Jan 28	152.7	0.0	6.0	38.0
Jan 29	126.5	0.0	6.0	39.0
Jan 30	136.8	0.0	6.0	37.0
Jan 31	117.1	0.0	6.0	39.0
AVG.	139.7	0.0	6.0	40.0

FEBRUARY				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	91.6	0.0	6.0	39.0
Feb 2	147.5	0.0	6.0	38.0
Feb 3	109.7	0.0	6.0	37.0
Feb 4	142.7	0.0	6.0	39.0
Feb 5	141.4	0.0	6.0	39.0
Feb 6	122.0	0.0	6.0	39.0
Feb 7	106.8	0.0	6.0	39.0
Feb 8	128.1	0.0	6.0	39.0
Feb 9	126.8	0.0	6.0	37.0
Feb 10	76.8	0.0	6.0	37.0
Feb 11	115.6	0.0	5.0	37.0
Feb 12	126.9	0.0	6.0	38.0
Feb 13	156.2	0.0	6.0	38.0
Feb 14	164.8	0.0	6.0	38.0
Feb 15	156.5	0.0	5.0	37.0
Feb 16	114.1	0.0	6.0	38.0
Feb 17	118.4	0.0	6.0	38.0
Feb 18	129.1	0.0	6.0	38.0
Feb 19	151.2	0.0	6.0	38.0
Feb 20	155.1	0.0	6.0	39.0
Feb 21	118.0	0.0	6.0	39.0
Feb 22	150.0	0.0	6.0	40.0
Feb 23	105.3	0.0	6.0	40.0
Feb 24	106.8	0.0	5.0	40.0
Feb 25	121.6	0.0	5.0	40.0
Feb 26	107.0	0.0	5.5	42.0
Feb 27	149.0	0.0	5.5	41.0
Feb 28	130.2	0.0	5.5	41.0
Feb 29	113.1	0.0	6.0	41.0
AVG.	127.0	0.0	5.8	38.8

MARCH				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	104.7	0.0	6.0	40.0
Mar 2	113.2	0.0	6.0	40.0
Mar 3	137.7	0.0	6.0	41.0
Mar 4	140.6	0.0	6.0	41.0
Mar 5	164.1	0.0	6.0	41.0
Mar 6	137.4	0.0	5.0	41.0
Mar 7	139.2	0.0	5.5	41.0
Mar 8	133.2	0.0	4.5	42.0
Mar 9	108.4	0.0	6.0	42.0
Mar 10	119.5	0.0	6.0	42.0
Mar 11	116.3	0.0	6.0	42.0
Mar 12	140.0	0.0	6.0	43.0
Mar 13	141.5	0.0	6.0	42.0
Mar 14	158.7	0.0	6.0	43.0
Mar 15	133.3	0.0	6.0	43.0
Mar 16	115.3	0.0	6.0	44.0
Mar 17	135.0	0.0	6.0	43.0
Mar 18	131.2	0.0	6.0	43.0
Mar 19	158.1	0.0	6.0	43.0
Mar 20	142.8	0.0	6.0	43.0
Mar 21	149.0	0.0	6.0	43.0
Mar 22	123.9	0.0	6.0	43.0
Mar 23	111.6	0.0	4.0	44.0
Mar 24	128.5	0.0	4.0	44.0
Mar 25	144.3	0.0	5.5	44.0
Mar 26	155.1	0.0	6.0	44.0
Mar 27	155.3	0.0	6.0	44.0
Mar 28	159.6	0.0	5.5	44.0
Mar 29	121.1	0.0	6.0	44.0
Mar 30	129.6	0.0	4.0	44.0
Mar 31	144.5	0.0	4.5	44.0
AVG.	135.2	0.0	5.6	42.6

TABLE 27

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT
APRIL 2008

DATE	FISH COUNTS										RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL	WILD STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	7			0			31	19					150.5	0.0	4.0	44.0
Apr 2	13			0			19	7					152.9	0.0	4.5	44.0
Apr 3	14			0			43	12					144.1	0.0	5.0	44.0
Apr 4	32			0			59	23					129.9	0.0	5.0	44.0
Apr 5	32			0			52	20					103.2	0.0	6.0	44.0
Apr 6	43			0			56	16					127.3	0.0	4.0	45.0
Apr 7	53			0			60	24					135.3	0.0	4.0	45.0
Apr 8	79			6			49	17					130.4	0.0	4.0	45.0
Apr 9	72			0			48	20					130.2	0.0	4.0	45.0
Apr 10	57			0			46	18					120.8	48.9	4.0	45.0
Apr 11	111			0			41	13					140.8	56.3	4.0	45.0
Apr 12	204			1			41	19					152.3	60.8	3.5	46.0
Apr 13	1,115			0			58	28					104.4	41.9	3.5	47.0
Apr 14	1,314			5			42	14					127.5	51.0	3.5	48.0
Apr 15	665			1			44	26					156.2	62.4	3.5	47.0
Apr 16	798			0			45	20					186.5	75.0	4.0	46.0
Apr 17	650			1			34	22					156.3	62.6	3.5	47.0
Apr 18	467			1			28	16					140.1	56.1	5.0	46.0
Apr 19	581			4			29	12					138.0	55.1	4.0	46.0
Apr 20	462			2			28	9					147.9	59.3	3.5	48.0
Apr 21	906			5			22	11					175.7	70.3	3.0	48.0
Apr 22	1,334			1			30	12					168.7	67.6	4.0	48.0
Apr 23	1,679			10			27	11					165.7	66.3	4.0	48.0
Apr 24	1,185			14			43	11					182.4	72.7	3.5	48.0
Apr 25	659			4			12	4					216.6	86.1	3.5	49.0
Apr 26	414			5			14	7					197.0	78.7	3.5	49.0
Apr 27	1,075			14			11	6					154.8	61.9	2.0	51.0
Apr 28	1,275			28			9	5					178.4	71.2	3.0	51.0
Apr 29	3,797			43			39	11					165.5	66.3	4.0	51.0
Apr 30	2,261			32			24	12					179.8	71.6	4.0	49.0
TOTAL	21,354			177			1,084	445					152.0	44.7	3.9	46.8
AVG.	712			6			36	15								

Note: Visual counts occurred April 1 through October 31. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST.

TABLE 28

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT
MAY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	RIVER CONDITIONS			
	SPRING	SUMMER	FALL											KCFS	KCFS	SECCHI	DEG F
May 1	3,443			56			0	20	7		0		0	198.9	79.7	4.0	49.0
May 2	3,262			91			0	20	7		0		0	207.0	82.9	4.0	48.0
May 3	2,816			105			0	12	3		0		0	169.4	67.7	3.5	49.0
May 4	3,096			123			0	16	12		0		0	140.0	56.1	4.0	53.0
May 5	6,708			175			0	5	0		0		0	188.8	75.7	3.0	52.0
May 6	4,159			306			0	14	2		0		0	186.7	74.4	3.0	52.0
May 7	2,241			340			0	14	4		0		0	230.4	92.2	4.0	51.0
May 8	1,862			311			0	18	5		5		0	222.6	88.9	4.0	51.0
May 9	1,915			368			0	5	0	12		0	0	284.2	113.3	4.5	50.0
May 10	2,205			366			0	7	1		0		0	262.6	105.0	3.0	51.0
May 11	3,159			498			0	9	1		0		0	203.1	81.6	4.0	52.0
May 12	1,873			695			0	6	1		0		0	282.6	113.0	4.0	53.0
May 13	2,431			686			0	13	2		14		0	263.4	105.3	4.0	53.0
May 14	4,146			1,385			0	8	2		6		0	226.8	90.8	4.0	53.0
May 15	2,529			932			0	10	2		5		0	249.7	99.6	3.5	53.0
May 16	4,599			1,682			0	9	1		8		0	261.3	104.5	3.5	54.0
May 17	4,357			1,724			0	13	6		32		0	260.8	104.3	3.0	55.0
May 18	2,887			965			0	8	2		222		0	342.4	128.6	3.5	56.0
May 19	1,563			716			0	9	5		841		0	377.1	144.6	3.5	56.0
May 20	1,937			563			0	19	10		652		0	382.5	151.7	3.5	56.0
May 21	1,638			519			0	13	5		1,708		0	396.2	161.5	3.5	57.0
May 22	1,279			234			0	4	1		642		0	398.2	165.0	4.0	58.0
May 23	883			245			0	14	0		112		0	388.1	154.2	3.0	56.0
May 24	719			231			0	7	1		533		0	384.9	164.0	3.0	56.0
May 25	608			214			0	13	2		137		0	382.7	152.9	3.5	55.0
May 26	749			360			0	23	5		527		0	355.2	142.3	3.5	56.0
May 27	1,054			325			2	20	2		1,645		0	351.4	139.2	3.5	56.0
May 28	887			288			0	19	5		790		0	386.6	154.8	3.5	56.0
May 29	1,010			226			0	13	1		638		1	389.0	159.3	3.0	56.0
May 30	749			204			0	8	2		450		0	396.7	169.4	4.0	56.0
May 31	726			167			4	14	4		509		0	402.1	159.3	2.0	56.0
TOTAL	71,490			15,100			6	383	101		9,488		1				
Avg.	2,306			487			0	12	3		306		0	295.9	118.8	3.5	53.7

RUN YEAR	CHINOOK	CHINOOK
TOTALS TO DATE	ADULT	JACK
SPRING	92,844	15,277

SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD
6	1,467	546

SHAD
9,488

STURGEON
1

TABLE 29

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT

JUNE 2008

DATE	FISH COUNTS										RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL	WILD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFs	SPILL KCFs	TURBIDITY SECCHI DEG F	
Jun 1	743			156			1	10	0				389.3	158.3	3.0	57.0
Jun 2	934			206			0	9	2				397.7	158.3	3.0	57.0
Jun 3	917			162			13	23	0				398.9	176.4	2.0	56.0
Jun 4		803		197			38	21	7				399.9	169.9	2.0	56.0
Jun 5		1,040		275			37	30	5				404.4	154.5	2.0	57.0
Jun 6		1,275		330			67	22	2				389.8	153.2	2.0	56.0
Jun 7		1,449		331			161	33	13				359.4	145.8	3.0	56.0
Jun 8		1,194		199			167	29	6				364.7	144.3	3.0	56.0
Jun 9		1,245		344			427	51	11				313.0	126.4	2.5	56.0
Jun 10		1,330		212			476	46	16				335.1	150.4	3.0	56.0
Jun 11		1,462		243			787	26	2				370.3	168.0	2.5	56.0
Jun 12		1,029		183			756	36	7				393.0	165.0	4.0	56.0
Jun 13		1,244		343			1,209	66	16				353.1	155.0	4.0	56.0
Jun 14		1,292		444			1,994	74	14				338.2	135.0	3.5	56.0
Jun 15		1,746		539			3,611	107	24				302.3	121.5	2.5	56.0
Jun 16		1,404		236			4,068	112	42				312.8	125.0	4.0	57.0
Jun 17		1,863		335			5,713	145	31				332.6	148.3	3.5	58.0
Jun 18		2,490		549			8,156	164	49				373.0	161.6	3.5	59.0
Jun 19		2,626		478			10,064	180	50				353.7	152.8	4.0	59.0
Jun 20		2,479		404			13,237	206	46				330.7	131.8	4.0	60.0
Jun 21		2,716		420			13,183	263	78				305.8	122.6	4.0	60.0
Jun 22		2,990		275			11,142	254	96				321.2	134.6	4.0	60.0
Jun 23		2,848		453			11,121	251	88				282.1	113.0	4.0	59.0
Jun 24		1,923		426			9,726	240	71				317.3	127.6	5.0	60.0
Jun 25		1,608		290			11,832	223	66				335.8	144.6	4.0	60.0
Jun 26		1,965		336			11,023	402	143				318.3	136.3	4.0	61.0
Jun 27		1,860		245			8,406	392	134				345.7	143.7	3.0	61.0
Jun 28		1,695		337			8,437	447	181				323.9	142.1	3.5	62.0
Jun 29		1,457		228			8,436	407	167				321.4	126.4	4.0	62.0
Jun 30		1,387		240			7,967	578	236				305.7	116.9	4.0	62.0
TOTAL	2,594	46,420		9,416			152,255	4,847	1,603				1,485,371	174	4	
AVG.	865	1719		314			5,075	162	53				49,512	6	0	346.3 143.6 3.4 58.1
RUN YEAR	CHINOOK ADULT	CHINOOK JACK					TOTAL		WILD				SHAD	LAMPREY	STURGEON	
TOTALS TO DATE	95,438	15,801					SOCKEYE	STEELHEAD	STEELHEAD				1,494,859	174	5	
SPRING	95,438	15,801					152,261	6,314	2,149							
SUMMER	46,420	8,892														
TOTAL	141,858	24,693														

TABLE 30

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT

JULY 2008

DATE	FISH COUNTS										RIVER CONDITIONS						
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jul 1		1,245		159			5,258	541	216	0	59,515	65	0	295.2	123.2	4.0	62.0
Jul 2		881		118			3,485	485	237	0	45,566	54	0	308.6	119.6	4.0	63.0
Jul 3		689		154			3,323	469	207	0	22,924	87	2	313.3	123.4	4.0	63.0
Jul 4		1,070		155			2,965	751	358	0	29,041	85	1	282.6	112.6	4.0	63.0
Jul 5		876		241			2,185	857	421	0	34,940	62	0	259.0	104.0	4.0	63.0
Jul 6		964		104			1,709	887	452	0	24,576	82	0	237.1	94.8	4.5	64.0
Jul 7		751		138			1,024	805	385	0	16,020	46	0	265.5	106.2	4.0	63.0
Jul 8		604		137			1,039	953	439	0	11,060	116	0	246.3	98.4	4.0	64.0
Jul 9		456		118			688	992	500	0	7,608	70	2	254.9	102.1	4.0	64.0
Jul 10		481		179			784	1,601	863	0	8,588	72	1	224.9	89.7	5.0	65.0
Jul 11		642		82			628	1,864	899	0	7,956	82	0	223.9	89.4	4.0	66.0
Jul 12		634		92			507	1,819	911	0	5,754	40	4	220.8	88.1	3.5	66.0
Jul 13		676		97			386	2,115	1,122	0	4,123	90	1	180.2	72.2	5.0	66.0
Jul 14		704		94			283	2,052	1,019	0	3,508	50	1	174.6	65.1	5.0	67.0
Jul 15		827		90			283	2,917	1,499	0	3,028	101	3	165.7	64.9	5.0	67.0
Jul 16		618		100			225	2,842	1,381	1	1,763	60	1	156.1	62.1	4.5	67.0
Jul 17		579		113			217	3,022	1,480	0	2,085	75	4	156.1	62.4	4.5	67.0
Jul 18		691		199			203	4,348	2,105	0	1,800	124	1	161.0	64.2	4.5	67.0
Jul 19		668		109			114	4,164	1,898	0	1,607	89	0	165.2	66.1	4.5	67.0
Jul 20		550		90			88	5,336	2,455	0	2,271	113	0	141.7	56.8	5.0	68.0
Jul 21		438		55			52	3,721	1,614	0	1,654	54	5	173.7	69.3	5.0	68.0
Jul 22		359		28			40	3,986	1,668	-1	1,772	89	0	132.5	52.9	5.0	68.0
Jul 23		318		38			37	3,230	1,355	1	706	61	1	143.3	57.0	4.0	69.0
Jul 24		257		24			32	3,072	1,155	4	548	133	0	146.2	58.2	5.0	69.0
Jul 25		339		56			48	2,677	1,006	0	894	159	1	172.6	69.1	4.5	68.0
Jul 26		338		89			31	3,262	1,275	1	925	150	3	166.9	66.5	4.5	69.0
Jul 27		329		70			18	2,715	978	0	1,087	100	1	142.7	56.9	4.0	69.0
Jul 28		287		55			10	2,573	936	0	606	78	5	154.6	61.8	3.0	69.0
Jul 29		295		61			8	2,328	896	1	496	82	3	135.9	54.2	4.5	69.0
Jul 30		159		51			7	1,749	662	1	803	73	2	154.8	61.7	4.0	68.0
Jul 31		181		39			1	1,638	601	0	496	67	1	158.3	63.4	4.0	68.0
TOTAL		17,906		3,135			25,678	69,771	30,993	8	303,720	2,609	43				
AVG		578		101			828	2,251	1,000	0	9,797	84	1	197.2	78.6	4.3	66.3
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK					SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	PINK	SHAD	LAMPREY	STURGEON				
SPRING	95,438	15,801					177,939	76,085	33,142	8	1,798,579	2,783	48				
SUMMER	64,326	12,027															
TOTAL	159,764	27,828															

TABLE 31

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT
AUGUST 2008

DATE	FISH COUNTS												RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	Sockeye	Total	Wild Steelhead	Pink	Shad	Lamprey	Sturgeon	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Aug 1	267			85	0	0	8	2,575	934	0	853	102	2	129.5	51.9	5.0	68.0
Aug 2	253			39	0	0	1	3,236	1,077	0	464	40	0	123.5	49.4	4.5	68.0
Aug 3	227			55	0	0	10	2,074	679	0	668	55	0	123.9	49.4	5.5	68.0
Aug 4	253			63	0	0	1	2,224	696	1	428	38	0	123.2	49.3	4.5	69.0
Aug 5	270			63	0	0	5	1,965	567	0	400	70	2	135.0	54.2	4.0	69.0
Aug 6	288			88	0	0	1	1,832	396	0	314	39	1	142.9	57.5	4.0	69.0
Aug 7	318			55	0	0	1	1,371	458	0	402	67	0	113.4	53.2	4.0	69.0
Aug 8	280			63	0	0	4	1,056	300	0	355	96	0	123.1	49.4	4.0	69.5
Aug 9	377			78	0	0	4	1,142	345	0	522	48	1	106.1	42.2	4.0	70.0
Aug 10	373			68	0	0	2	1,126	339	0	382	78	0	99.6	39.7	4.0	69.0
Aug 11	227			49	0	0	1	772	256	1	157	60	1	125.9	50.4	5.0	69.0
Aug 12	454			101	0	0	1	1,028	308	0	217	84	-1	121.3	48.5	4.5	69.0
Aug 13	496			107	0	0	4	916	301	0	117	39	2	130.1	51.9	5.0	70.0
Aug 14	517			125	0	0	0	798	269	0	56	70	0	124.5	49.8	4.5	70.0
Aug 15	534			204	0	0	0	959	261	0	63	33	2	123.8	49.6	5.0	70.5
Aug 16	600			185	1	0	0	979	297	0	183	66	0	102.0	40.7	5.0	71.0
Aug 17	568			190	2	0	0	773	222	0	107	41	0	106.7	42.7	5.0	71.5
Aug 18	389			209	1	1	0	507	166	0	118	36	0	122.6	48.7	5.0	71.0
Aug 19	427			218	0	1	0	443	134	0	120	58	1	109.2	43.6	5.0	70.0
Aug 20	358			315	0	0	0	562	167	0	92	69	0	109.3	43.8	3.0	71.0
Aug 21	354			275	5	2	0	564	174	0	60	65	2	114.1	45.9	5.0	71.0
Aug 22	491			292	10	2	0	991	275	0	156	38	1	125.3	50.2	5.0	71.0
Aug 23	914			292	14	2	1	1,071	289	0	108	58	1	127.8	50.7	6.0	71.0
Aug 24	2,546			331	18	2	0	952	280	0	74	11	0	137.0	54.6	4.5	72.0
Aug 25	4,374			474	34	4	0	758	218	0	63	30	3	131.3	52.4	5.0	72.0
Aug 26	4,384			966	50	5	0	910	213	0	167	23	1	120.9	48.5	5.0	70.0
Aug 27	3,843			789	69	26	0	1,371	310	0	64	39	0	106.4	42.5	5.0	70.0
Aug 28	1,523			650	80	78	1	1,097	242	0	108	47	2	117.7	46.9	5.0	70.0
Aug 29	2,272			571	119	63	0	3,015	564	0	22	24	1	135.6	54.4	5.0	70.0
Aug 30	3,860			795	126	30	0	3,213	591	1	71	51	0	121.7	48.9	5.0	70.0
Aug 31	6,179			597	585	39	0	6,993	1,354	0	26	17	1	116.0	46.3	5.0	69.0
TOTAL	747	37,469	8,392	1,114	255	45	47,273	12,682	3	6,937	1,592	23					
Avg.	249	1,338	271	36	8	1	1525	409	0	224	51	1	120.9	48.6	4.7	69.9	

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	95,438	15,801
SUMMER	65,073	12,206
FALL	37,469	8,213
TOTAL	197,980	36,220

COHO ADULTS	COHO JACKS	Sockeye	Total	Wild Steelhead	PINK	SHAD	LAMPREY	STURGEON
1,114	255	177,984	123,358	45,824	11	1,805,516	4,375	71

Note: Shad counts ended August 31.

TABLE 32

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT

SEPTEMBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD	STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	RIVER CONDITIONS				
	SPRING	SUMMER	FALL												KCFS	KCFS	SECCHI	DEG F	
Sep 1	6,247	788	795	74				6,247	1,513	0				14	2	86.7	0.0	5.0	67.0
Sep 2	6,434	617	816	90				6,708	1,614	0				7	2	113.7	0.0	6.0	68.0
Sep 3	5,605	1,094	1,160	92				7,368	1,572	0				9	2	103.0	0.0	5.0	67.0
Sep 4	4,787	863	989	132				4,865	1,080	0				14	1	103.3	0.0	5.0	68.0
Sep 5	5,479	1,291	1,657	159				6,336	1,216	0				8	1	113.7	0.0	5.0	68.0
Sep 6	5,908	1,563	1,817	263				7,584	1,662	1				8	0	91.8	0.0	6.0	68.0
Sep 7	6,290	1,406	2,357	215				7,282	1,187	0				2	1	78.8	0.0	6.0	68.0
Sep 8	5,497	1,026	1,496	244				4,026	867	0				6	2	99.7	0.0	5.0	69.0
Sep 9	5,772	1,384	1,274	209				4,218	663	0				10	2	88.6	0.0	5.0	68.5
Sep 10	5,495	1,571	980	250				4,553	1,062	0				6	2	108.0	0.0	5.0	68.0
Sep 11	4,719	1,408	831	283				3,672	614	0				17	1	88.6	0.0	5.0	68.0
Sep 12	4,209	1,299	429	171				3,627	775	0				10	0	74.1	0.0	5.0	68.0
Sep 13	5,431	1,250	330	113				4,171	933	0				11	0	70.2	0.0	5.0	68.0
Sep 14	5,245	1,260	244	162				3,477	752	0				5	0	69.3	0.0	5.0	68.5
Sep 15	5,109	1,020	390	78				3,216	706	0				4	2	73.4	0.0	5.0	68.0
Sep 16	4,280	717	363	89				3,240	673	0				2	2	93.8	0.0	6.0	68.0
Sep 17	3,931	895	409	135				3,256	446	0				1	2	97.5	0.0	5.0	65.0
Sep 18	4,215	1,033	417	121				3,602	821	0				6	0	85.8	0.0	6.0	65.0
Sep 19	3,639	930	559	145				5,741	715	0				8	2	76.5	0.0	5.0	68.0
Sep 20	3,058	628	821	112				6,884	1,521	0				8	0	67.8	0.0	5.5	68.0
Sep 21	3,224	849	724	156				7,117	1,241	0				22	0	64.9	0.0	5.0	67.0
Sep 22	2,600	597	738	75				5,345	1,269	0				7	0	65.6	0.0	5.0	66.0
Sep 23	1,939	505	491	67				3,548	847	0				4	-1	85.3	0.0	6.0	66.0
Sep 24	1,657	309	372	30				2,457	564	0				1	0	96.2	0.0	5.0	65.5
Sep 25	1,599	517	306	44				2,077	485	0				1	0	79.7	0.0	5.0	66.0
Sep 26	1,942	469	444	70				2,697	491	0				9	1	99.2	0.0	5.0	66.0
Sep 27	1,794	464	614	64				2,674	625	0				2	0	77.5	0.0	5.0	66.0
Sep 28	2,183	651	496	57				2,508	422	0				2	0	72.2	0.0	5.0	66.0
Sep 29	939	250	289	56				1,532	341	0				4	0	88.4	0.2	5.0	66.0
Sep 30	1,341	361	284	66				1,588	266	0				2	1	75.3	0.0	6.0	66.0
TOTAL	120,568	27,015	22,892	3,822				131,616	26,943	1				210	25				
AVG.	4,019	901	763	127				4,387	898	0				7	1	86.3	0.0	5.3	67.2
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	PINK	SHAD	LAMPREY	STURGEON								
SPRING	95,438	15,801	24,006	4,077	177,984	254,974	72,767	12	1,805,516	4,585	96								
SUMMER	65,073	12,206																	
FALL	158,037	35,228																	
TOTAL	318,548	63,235																	

TABLE 33

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT

OCTOBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	RIVER CONDITIONS				
	SPRING	SUMMER	FALL												KCFS	KCFS	SECCHI	DEG F	
Oct 1				915	326	268	22		1,093	287				0	0	67.8	0.0	6.0	65.0
Oct 2				683	290	156	48		800	154				3	1	74.2	0.0	6.0	65.0
Oct 3				434	141	32	11		411	109				2	0	98.0	0.0	6.0	65.0
Oct 4				995	263	119	15		954	290				0	0	67.2	0.0	6.0	65.0
Oct 5				1,386	201	1,488	33		2,245	588				2	0	65.3	0.0	6.0	64.5
Oct 6				1,247	288	3,129	101		2,406	707				1	0	71.5	0.0	5.0	63.0
Oct 7				601	123	796	40		1,075	302				0	0	72.3	0.0	5.0	63.0
Oct 8				745	201	226	30		950	187				1	0	93.1	0.0	6.0	64.0
Oct 9				529	136	203	30		1,065	279				1	0	101.0	0.0	6.0	65.0
Oct 10				531	106	153	26		825	170				0	0	97.3	0.0	5.0	64.0
Oct 11				494	136	1,131	38		1,373	387				0	0	84.3	0.0	6.0	64.5
Oct 12				457	104	902	36		1,403	270				0	0	71.6	0.0	5.0	63.0
Oct 13				264	90	765	28		884	230				1	1	84.3	0.0	6.0	63.0
Oct 14				289	55	889	12		990	296				1	0	91.2	0.0	6.0	62.0
Oct 15				445	76	581	18		1,218	373				1	0	120.1	0.0	6.0	61.0
Oct 16				319	75	313	11		628	177				1	0	87.0	0.0	6.0	61.0
Oct 17				433	55	243	8		700	158				0	0	104.3	0.0	6.0	61.0
Oct 18				287	85	201	9		393	131				0	0	94.4	0.0	6.0	61.0
Oct 19				222	27	456	10		443	145				0	0	82.9	0.0	6.0	61.0
Oct 20				217	60	255	12		421	129				0	0	89.8	0.0	6.0	61.0
Oct 21				225	29	143	18		421	98				0	0	113.0	0.0	6.0	59.0
Oct 22				103	34	111	12		238	74				0	0	109.0	0.0	6.0	58.0
Oct 23				132	26	253	7		235	51				0	0	95.0	0.0	6.0	58.0
Oct 24				138	20	641	15		212	77				0	0	89.6	0.0	6.0	57.0
Oct 25				188	23	247	11		341	110				0	0	79.7	0.0	6.0	57.0
Oct 26				72	9	68	5		161	46				0	0	72.2	0.0	6.0	56.0
Oct 27				92	16	61	5		198	82				0	0	97.6	0.0	6.0	58.0
Oct 28				130	27	52	4		195	70				0	0	96.5	0.0	6.0	58.0
Oct 29				157	18	56	2		177	49				0	0	90.4	0.0	6.0	57.0
Oct 30				96	14	18	1		109	34				0	0	104.4	0.0	6.0	56.0
Oct 31				94	9	20	5		102	22				0	0	101.6	0.0	6.0	56.0
TOTAL				12,920	3,063	13,976	623		22,666	6,082				14	2				
AVG.				417	99	451	20		731	196				0	0	89.2	0.0	5.9	61.0

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	95,438	15,801
SUMMER	65,073	12,206
FALL	170,957	38,291
TOTAL	331,468	66,298

COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	STEELHEAD	PINK	SHAD	LAMPREY	STURGEON
37,982	4,700	177,984	277,640	78,849	12	1,805,516	4,599	98	

Note: Visual counts ended October 31.

TABLE 34

**DISCHARGE AND WATER QUALITY DATA
THE DALLES PROJECT 2008**

NOVEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Nov 1	86.0	0.0	6.0	56.0
Nov 2	70.2	0.0	6.0	56.0
Nov 3	86.5	0.0	6.0	56.0
Nov 4	83.3	0.0	6.0	56.0
Nov 5	123.1	0.0	6.0	56.0
Nov 6	108.7	0.0	6.0	56.0
Nov 7	109.7	0.0	6.0	55.0
Nov 8	107.3	0.0	6.0	55.0
Nov 9	113.4	0.0	6.0	55.0
Nov 10	112.9	0.0	6.0	55.0
Nov 11	107.9	0.0	6.0	54.0
Nov 12	106.2	0.0	6.0	54.0
Nov 13	99.8	0.0	6.0	54.0
Nov 14	150.4	0.0	6.0	56.0
Nov 15	106.2	0.0	6.0	53.0
Nov 16	110.1	0.0	6.0	53.0
Nov 17	108.8	0.0	6.0	53.0
Nov 18	110.2	0.0	6.0	53.0
Nov 19	122.9	0.0	6.0	53.0
Nov 20	127.3	0.0	6.0	52.0
Nov 21	122.2	0.0	6.0	52.0
Nov 22	109.5	0.0	6.0	52.0
Nov 23	120.4	0.0	6.0	52.0
Nov 24	110.9	0.0	6.0	52.0
Nov 25	125.0	0.0	6.0	51.0
Nov 26	119.8	0.0	6.0	51.0
Nov 27	113.9	0.0	6.0	51.0
Nov 28	114.9	0.0	6.0	51.0
Nov 29	111.8	0.0	6.0	51.0
Nov 30	110.1	0.0	6.0	51.0
AVG.	110.3	0.0	6.0	53.5

DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Dec 1	115.4	0.0	6.0	51.0
Dec 2	127.1	0.0	6.0	49.0
Dec 3	111.9	0.0	6.0	49.0
Dec 4	133.8	0.0	6.0	49.0
Dec 5	139.0	0.0	6.0	48.0
Dec 6	126.4	0.0	6.0	46.0
Dec 7	110.4	0.0	6.0	49.0
Dec 8	116.2	0.0	6.0	49.0
Dec 9	117.4	0.0	6.0	47.0
Dec 10	109.5	0.0	6.0	47.0
Dec 11	123.2	0.0	6.0	47.0
Dec 12	108.0	0.0	5.0	47.0
Dec 13	113.5	0.0	6.0	47.0
Dec 14	116.5	0.0	6.0	47.0
Dec 15	147.2	0.0	5.0	45.0
Dec 16	147.0	0.0	6.0	45.0
Dec 17	129.9	0.0	6.0	44.0
Dec 18	116.3	0.0	6.0	44.0
Dec 19	127.8	0.0	6.0	43.0
Dec 20	155.3	0.0	6.0	43.0
Dec 21	140.5	0.0	6.0	43.0
Dec 22	123.4	0.0	6.0	42.0
Dec 23	136.4	0.0	6.0	41.0
Dec 24	130.6	0.0	6.0	40.0
Dec 25	118.6	0.0	*	*
Dec 26	120.7	0.0	5.0	38.5
Dec 27	112.4	0.0	5.0	38.0
Dec 28	105.0	0.0	5.0	38.0
Dec 29	107.6	0.0	5.0	38.0
Dec 30	133.3	0.0	6.0	38.0
Dec 31	118.4	0.0	6.0	37.0
AVG.	123.8	0.0	5.8	44.3

*Data unavailable

TABLE 35

**YEARLY TOTALS OF SALMONIDS COUNTED OVER THE DALLES DAM
1957 - 2008**

YEAR	CHINOOK*	STEELHEAD	Sockeye	Coho*	Chum	Pink	TOTALS
1957	312,678	129,361	90,201	6,793	75	4	539,112
1958	301,960	121,420	111,039	2,395	31	5	536,850
1959	207,461	156,090	86,259	2,709	25	9	452,553
1960	196,962	111,189	59,441	3,000	35	5	370,632
1961	201,335	134,572	16,689	2,139		4	354,739
1962	187,132	163,301	27,127	3,696		5	381,261
1963	180,969	118,957	56,931	3,716	23	3	360,599
1964	183,842	110,033	79,042	5,978		5	378,900
1965	195,049	141,052	44,279	17,468	1	3	397,852
1966	240,671	146,172	147,886	32,279		1	567,009
1967	280,112	121,614	120,589	32,015	1	4	554,335
1968	262,975	147,481	116,897	42,687		1	570,041
1969	314,258	112,529	37,226	17,054		1	481,068
1970	261,457	99,187	77,678	23,219		4	461,545
1971	250,528	151,348	76,103	29,061		3	507,043
1972	268,628	135,303	44,671	16,562			465,164
1973	280,945	100,082	52,303	11,152		1	444,483
1974	217,181	70,875	28,827	14,655			331,538
1975	217,283	57,675	43,198	13,976			332,132
1976	216,163	82,568	27,747	19,392			345,870
1977	224,950	133,882	86,252	10,021			455,105
1978	199,228	60,485	11,845	18,877			290,435
1979	150,647	83,364	32,791	8,726		4	275,532
1980	113,951	93,963	42,088	6,326			256,328
1981	135,176	113,268	35,447	6,941		1	290,833
1982	172,682	117,434	33,331	7,383			330,830
1983	156,190	171,055	84,204	3,459	1		414,909
1984	203,920	219,123	101,177	3,142		1	527,363
1985	370,982	276,025	117,254	4,625		5	768,891
1986	443,013	281,953	48,477	4,842	3	4	778,292
1987	421,190	217,768	87,599	3,310	1	2	729,870
1988	378,080	198,499	55,802	9,226			641,607
1989	282,168	235,639	39,672	12,611			570,090
1990	207,556	129,271	40,230	4,645			381,702
1991	153,023	199,853	63,405	9,601	103		425,985
1992	168,507	232,179	66,384	3,825		3	470,898
1993	184,953	124,829	62,252	4,360			376,394
1994	161,758	112,253	9,356	4,376			287,743
1995	141,793	145,844	7,166	3,269			298,072
1996	167,911	162,456	25,055	4,583			360,005
1997	223,801	164,756	32,430	4,729			425,716
1998	154,132	116,682	8,826	8,970			288,610
1999	199,491	156,874	13,715	15,041		19	385,140
2000	316,836	205,241	73,383	29,536		1	624,997
2001	629,334	503,327	102,562	64,557			1,299,780
2002	583,155	387,920	40,554	12,786			1,024,415
2003	608,153	273,172	34,176	45,374	29	128	961,032
2004	562,737	241,123	107,466	41,645	5	0	952,976
2005	389,905	244,213	65,273	36,129	0	23	735,543
2006	341,371	249,223	30,026	34,339	3	3	654,965
2007	253,613	246,960	19,124	32,961	11	1	552,670
2008	397,766	277,640	177,984	42,682	0	12	896,084
Totals	13,875,561	8,787,083	3,099,439	802,843	244	368	26,565,538
10-Year Average	428,236	278,569	66,426	35,505			808,760

*Jacks included

TABLE 36

MONTHLY COUNT OF CHINOOK SALMON
THE DALLES DAM 1957 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC						
													TOTAL*	SPRING 1 JAN- 3 JUN	SUMMER 4 JUN- 3 AUG	FALL 4 AUG- 31 DEC	JACKS	
1957		22	42,161	59,410	86,096	35,643	28,828	56,753	3,564	201			312,678	109,723	116,661	86,294	37,374	
1958		114	8,268	47,862	59,955	24,381	17,211	141,262	2,788	119			301,960	61,747	80,139	160,074	19,747	
1959		8	16,771	32,634	27,799	42,817	20,142	65,229	2,022	39			207,461	50,874	71,362	85,225	39,857	
1960		17,073	40,091	52,577	22,549	15,225	46,453	2,720		274			196,962	58,406	75,315	63,241	30,847	
1961		43,822	35,059	24,478	24,596	16,866	53,371	3,143					201,335	79,183	50,824	71,328	35,409	
1962		33,069	35,629	34,488	21,515	13,461	46,135	2,835					187,132	69,139	57,007	60,986	17,835	
1963		19,119	33,207	25,063	20,414	21,865	57,248	4,053					180,969	52,937	47,333	80,699	54,749	
1964		340	35,551	24,447	16,801	37,697	17,452	49,811	1,743				183,842	60,691	56,360	66,791	30,900	
1965		190	17,870	24,930	17,900	31,072	25,119	74,904	3,064				195,049	43,617	50,527	100,905	67,552	
1966	1,068	72,267	22,837	25,530	33,712	14,978	65,380	4,899					240,671	96,628	61,062	82,981	36,482	
1967		48,744	22,817	24,718	45,346	23,927	107,427	7,133					280,112	71,976	72,582	135,554	98,817	
1968	100	52,144	45,057	32,827	33,272	22,361	72,209	4,800		205			262,975	98,742	67,391	96,842	64,644	
1969	65	19,025	80,162	33,432	27,750	29,330	118,890	5,604					314,258	100,482	61,978	151,798	96,244	
1970		53,370	29,670	22,903	23,318	34,906	93,633	3,657					261,457	83,549	48,115	129,793	85,471	
1971		28,227	44,181	22,011	29,655	16,190	103,370	6,894					250,528	73,655	51,847	125,026	75,329	
1972		68,955	33,508	17,354	29,756	21,828	91,666	5,561					268,628	103,107	48,660	116,861	81,668	
1973		94,334	15,040	19,548	19,181	23,341	101,771	7,730					280,945	111,088	38,774	131,083	72,088	
1974		13,415	41,902	7,141	22,709	13,964	103,804	14,246					217,181	56,397	30,273	130,511	79,840	
1975		18,526	32,869	12,155	26,447	28,973	90,193	8,120					217,283	52,483	39,062	125,738	74,418	
1976		20,266	35,434	17,828	20,129	17,278	90,933	14,295					216,163	56,570	38,733	120,860	74,275	
1977		72,726	16,672	22,084	22,059	12,266	69,927	9,216					224,950	90,373	44,378	90,199	55,067	
1978		52,425	30,472	19,477	15,978	11,251	57,786	11,839					199,228	84,924	34,396	79,908	32,503	
1979		13,993	12,569	14,310	17,687	20,458	61,757	9,516		357			150,647	27,297	32,298	91,052	42,886	
1980		12,434	15,441	7,948	12,832	12,881	43,675	8,740					113,951	28,237	21,133	64,581	20,016	
1981		24,227	16,335	8,491	10,779	15,802	53,840	5,702					135,176	41,160	19,676	74,340	33,919	
1982		10,569	33,296	10,058	9,554	17,466	79,487	12,252					172,682	44,750	19,342	108,590	60,165	
1983		13,270	22,893	8,766	8,430	12,501	73,942	16,388					156,190	36,856	17,051	102,283	41,335	
1984		9,326	23,784	9,992	12,332	23,495	105,786	19,205					203,920	33,848	22,472	147,600	70,798	
1985		36,035	39,173	15,785	10,332	37,806	203,470	27,058	1,323				370,982	76,514	25,385	269,083	145,007	
1986	175	48,892	36,928	14,175	10,452	22,684	264,091	45,616					443,013	87,004	24,826	331,183	176,461	
1987		48,812	27,586	17,923	12,145	50,680	236,216	27,828					421,190	77,453	30,804	312,933	65,115	
1988		51,680	20,756	16,644	13,494	66,509	193,490	15,507					378,080	73,663	29,892	274,525	69,631	
1989		24,474	27,477	15,539	13,899	58,674	130,931	10,438		736			282,168	53,014	30,555	198,599	28,671	
1990	115	36,062	20,749	13,390	9,099	22,152	96,538	9,451					207,556	57,424	22,615	127,517	32,794	
1991		14,513	17,313	10,949	7,638	8,384	84,861	9,365					153,023	32,359	18,467	102,197	36,820	
1992		38,141	19,414	9,595	5,797	14,589	71,281	9,690					168,507	58,451	14,976	95,080	27,160	
1993		42,391	25,824	14,165	6,481	19,297	71,395	5,400					184,953	69,356	20,063	95,534	12,298	
1994		6,573	4,938	7,376	8,360	22,910	98,997	12,604					161,758	11,798	15,997	133,963	25,470	
1995		3,008	4,244	6,176	7,111	23,094	82,723	15,437					141,793	7,553	13,558	120,682	32,813	
1996		5,631	20,896	8,018	6,718	26,505	90,762	9,381					167,911	27,127	14,488	126,296	5,851	
1997		25,639	42,467	14,718	8,011	23,666	100,652	8,648					223,801	69,740	21,134	132,704	16,249	
1998		14,927	10,488	10,289	6,702	20,129	78,191	13,406					154,132	25,743	16,906	111,483	20,513	
1999		5,396	17,579	10,972	13,864	30,830	107,411	13,439					199,491	23,743	24,937	150,811	28,412	
2000		68,618	47,131	20,878	15,442	57,600	97,042	10,125					316,836	117,749	35,580	163,507	63,769	
2001		228,568	79,627	50,030	35,889	38,452	172,871	23,897					629,334	313,865	80,249	233,081	72,644	
2002		63,869	116,008	76,400	45,761	63,943	197,956	19,218					583,155	185,046	118,812	279,297	42,982	
2003	11	7,227	84,312	54,173	70,347	43,926	42,146	280,091	33,070	3,085	84		618,472	149,967	111,931	356,574	62,007	
2004		272	74,705	59,127	59,859	30,999	41,935	261,434	32,361	2,017	28		562,737	138,229	87,925	336,583	48,732	
2005	1	44	18,797	41,560	48,505	27,685	25,764	203,518	23,064	958	9		389,905	64,219	73,136	252,550	24,991	
2006		9	1,006	61,711	58,394	26,404	24,419	141,212	26,060	2,140	16		341,371	64,012	84,839	192,520	27,212	
2007		1	51	19,338	46,147	34,405	19,510	21,415	93,517	17,883	1,326	20		253,613	68,253	52,062	133,298	65,306
2008				21,531	86,590	58,430	21,041	46,608	147,583	15,983				397,766	111,239	77,279	209,248	66,298
Total				9,800	1,914,865	1,836,114	1,344,692	1,088,370	1,359,556	5,682,875	636,658	12,780		13,885,880	3,841,960	2,421,167	7,620,391	2,727,441
10-Year Average					58,614	60,965	48,822	28,052	39,311	170,264	21,510			429,268	123,632	74,675	230,747	50,235

*Jacks included

TABLE 37

**MONTHLY COUNT OF SOCKEYE SALMON
THE DALLES DAM
1957 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
1957					125	33,476	54,294	2,081	221	4			90,201	
1958					29	28,854	80,324	1,583	248	1			111,039	
1959					413	7,176	76,347	2,245	77				86,259	
1960					2	36,907	22,228	297	7				59,441	
1961					66	5,863	10,629	116	15				16,689	
1962					55	8,333	18,545	180	14				27,127	
1963					199	17,914	38,633	185	0				56,931	
1964					23	9,984	68,205	758	72				79,042	
1965					184	11,023	31,622	1,438	12				44,279	
1966					65	36,539	109,167	2,106	9				147,886	
1967					114	15,713	103,862	892	8				120,589	
1968					5	77,878	38,542	462	10				116,897	
1969					22	15,165	21,933	102	3	1			37,226	
1970					1	18,309	56,903	2,387	75	3			77,678	
1971					0	8,887	66,841	369	6				76,103	
1972					0	9,276	34,924	466	5				44,671	
1973					8	19,510	32,674	105	6				52,303	
1974					4	3,935	24,790	98	0				28,827	
1975					0	7,679	35,291	225	2	1			43,198	
1976					1	10,988	16,637	121	0				27,747	
1977					5	60,049	26,146	52	0				86,252	
1978					24	7,158	4,559	104	0				11,845	
1979					0	14,750	17,734	307	0				32,791	
1980					0	11,096	30,046	927	19				42,088	
1981					0	17,692	17,686	68	1				35,447	
1982					0	11,430	21,742	144	15				33,331	
1983					1	34,684	49,302	197	19	1			84,204	
1984					0	62,500	37,926	745	6				101,177	
1985				1	17	75,603	41,107	521	4		1		117,254	
1986				12		17,224	30,686	550	4	1			48,477	
1987				1		48,798	38,443	348	8	1			87,599	
1988				5		30,443	25,096	208	50				55,802	
1989				1		22,196	17,321	152	2				39,672	
1990				0		17,603	22,406	218	3				40,230	
1991				1		14,106	48,824	443	27	4			63,405	
1992				16		38,319	27,812	232	4	1			66,384	
1993				2		36,517	25,584	146	3				62,252	
1994				0		6,752	2,594	8	2				9,356	
1995				1		4,195	2,890	61	15	4			7,166	
1996				0		17,013	7,983	44	15				25,055	
1997				4		11,707	20,292	395	29	3			32,430	
1998				0		4,777	3,978	65	6				8,826	
1999				0		5,210	8,445	57	3				13,715	
2000				69		61,980	11,242	88	4				73,383	
2001				12		85,939	16,527	82	2				102,562	
2002				1		22,714	17,746	93	0				40,554	
2003				8		21,233	12,862	70	3				34,180	
2004				61		84,332	22,978	94	1				107,466	
2005				4		38,474	26,688	98	7	2			65,273	
2006				1		20,817	9,099	105	4				30,026	
2007				10		13,475	5,540	99					19,124	
2008				6		152,255	25,678	45					177,984	
Total				11		1,578	1,454,450	1,619,353	22,982	1,046	28	1		3,099,443
10-Year Average				17		50,643	15,681	83						66,427

TABLE 38

MONTHLY COUNT OF COHO SALMON
THE DALLES DAM: 1957-2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	JACKS	
1957							220	605	5,615	342	11		6,793		
1958								96	2,132	161	6		2,395		
1959								46	2,428	234	1		2,709		
1960								475	2,288	227	10		3,000		
1961							4	5	1,898	232			2,139		
1962							5	258	3,194	239			3,696		
1963							2	361	2,931	422			3,716		
1964								506	4,723	749			5,978		
1965							7	200	13,064	4,197			17,468		
1966							225	3,850	25,476	2,728			32,279		
1967							192	494	27,860	3,469			32,015	20,456	
1968							372	3,319	36,568	2,346	82		42,687	13,035	
1969							412	970	13,179	2,493			17,054	11,218	
1970							96	2,064	19,983	1,076			23,219	11,327	
1971							1	1,589	26,066	1,405			29,061	11,174	
1972							3	1,090	14,564	905			16,562	10,272	
1973								793	9,443	916			11,152	5,256	
1974								522	10,715	3,418			14,655	9,054	
1975								465	10,356	3,155			13,976	8,534	
1976								608	14,609	4,175			19,392	13,083	
1977							1	91	8,131	1,798			10,021	6,096	
1978								355	13,069	5,453			18,877	13,533	
1979								211	7,109	1,367	39		8,726	4,836	
1980								287	5,064	975			6,326	2,970	
1981								295	6,061	585			6,941	4,405	
1982								336	5,792	1,255			7,383	3,047	
1983								65	2,343	1,051			3,459	2,256	
1984								24	2,521	597			3,142	1,282	
1985							4	208	3,537	828	48		4,625	1,555	
1986							2	1	3,772	1,067			4,842	1,458	
1987							12	91	2,409	798			3,310	1,953	
1988								232	7,082	1,912			9,226	2,701	
1989								283	9,027	3,173	128		12,611	4,781	
1990								60	3,229	1,356			4,645	2,340	
1991								30	7,714	1,857			9,601	1,053	
1992								11	3,119	695			3,825	1,239	
1993								18	3,256	1,086			4,360	3,416	
1994							1	121	2,922	1,332			4,376	590	
1995							6	204	2,013	1,046			3,269	483	
1996							3	73	3,795	712			4,583	967	
1997								35	3,649	1,045			4,729	662	
1998								7	3,520	5,443			8,970	774	
1999								37	11,456	3,548			15,041	1,226	
2000								2,248	20,526	6,762			29,536	4,570	
2001								1,351	36,099	27,107			64,557	2,179	
2002								275	8,286	4,225			12,786	3,021	
2003								1,084	29,129	15,161	713	14	46,101	2,853	
2004		-1						565	29,591	10,408	1,072	10	41,645	1,919	
2005							1	438	20,376	13,814	1,500	0	36,129	2,187	
2006							1	1,541	18,080	12,574	2,142	1	34,339	2,468	
2007								596	17,545	14,608	198	14	32,961	2,095	
2008								1,369	26,714	14,599			42,682	4,700	
Total								1,570	30,858	574,028	191,126	5,950	39	803,570	203,024
10-Year Average									950	21,780	12,281			35,578	2,722

*Includes Jacks

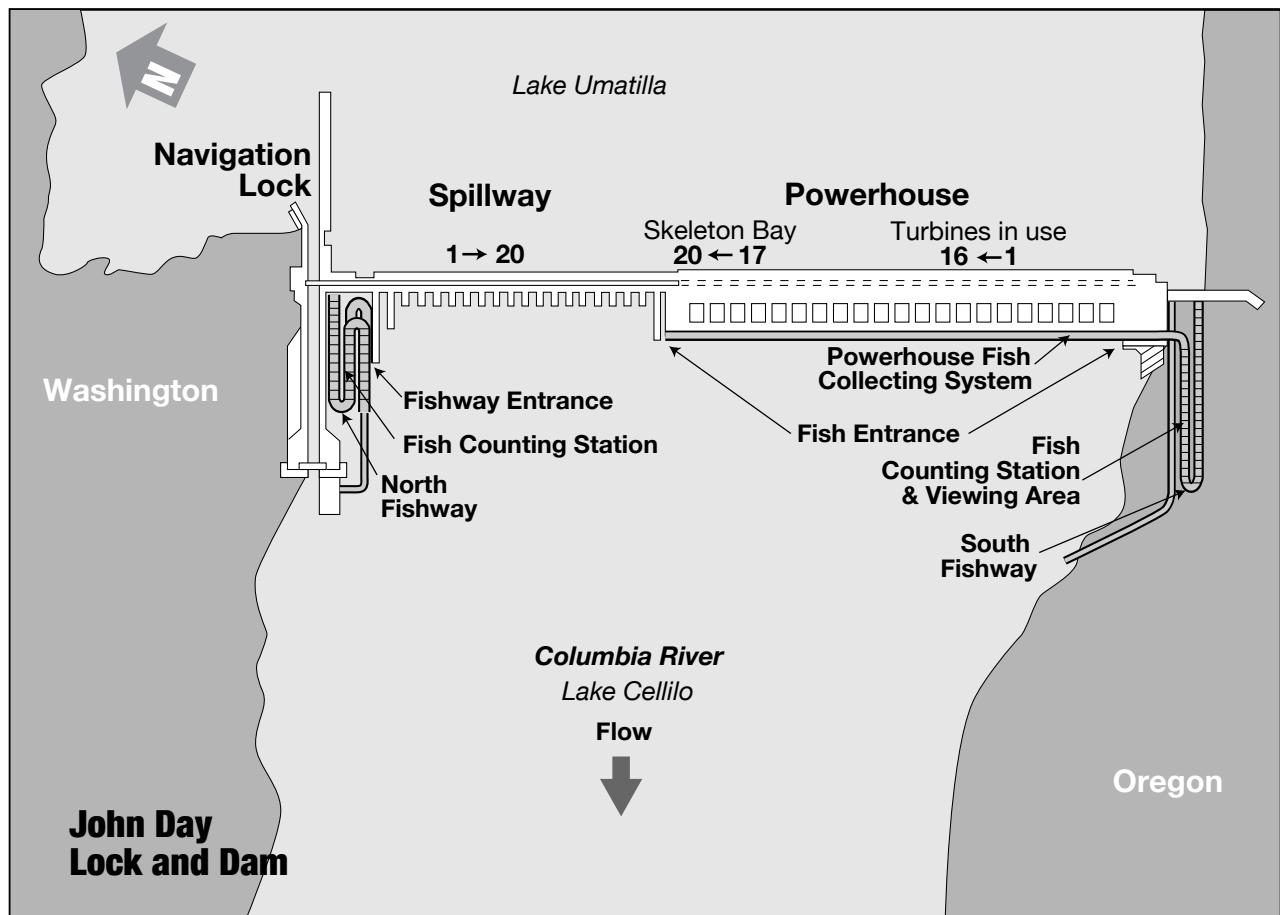
TABLE 39

MONTHLY COUNT OF STEELHEAD
THE DALLES DAM 1957 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1957		1,603	951	977	4,782	45,445	33,319	35,396	6,545	343			129,361
1958		122	274	1,898	4,906	20,384	11,442	75,036	6,846	512			121,420
1959		1	541	502	2,227	46,271	60,841	41,026	4,502	179			156,090
1960		289	557	2,591	28,218	32,667	42,447	4,021	399				111,189
1961		305	307	1,396	21,906	17,850	87,344	5,464					134,572
1962		528	252	1,068	36,609	31,507	87,463	5,874					163,301
1963		153	451	1,361	30,485	25,360	48,066	13,081					118,957
1964	50	369	127	493	36,773	31,742	38,197	2,282					110,033
1965	36	502	484	896	60,522	21,132	53,389	4,091					141,052
1966	25	788	933	600	3,816	52,975	26,382	53,721	6,932				146,172
1967		258	183	435	27,914	22,746	56,082	13,996					121,614
1968	23	691	344	973	20,974	58,866	57,666	7,456	488				147,481
1969	54	953	414	1,442	33,952	22,963	44,146	8,605					112,529
1970		337	172	733	15,905	32,752	44,823	4,465					99,187
1971		408	233	821	40,712	31,812	69,602	7,760					151,348
1972		463	159	604	35,569	30,631	63,748	4,129					135,303
1973		723	326	1,981	29,067	25,437	38,017	4,531					100,082
1974		529	1,362	1,859	24,779	21,835	15,059	5,452					70,875
1975		1,018	1,334	1,973	18,046	20,531	11,519	3,254					57,675
1976		768	1,604	3,357	22,021	30,386	21,586	2,846					82,568
1977		1,666	1,332	5,038	42,859	13,022	61,678	8,287					133,882
1978		834	1,378	3,459	13,493	11,457	26,189	3,675					60,485
1979		478	244	1,942	23,054	21,974	20,961	14,079	632				83,364
1980		2,885	790	2,134	15,114	30,755	34,447	7,838					93,963
1981		1,389	1,632	3,768	34,242	36,537	26,837	8,863					113,268
1982		729	1,289	2,710	22,607	31,410	49,050	9,639					117,434
1983		438	324	1,492	37,029	47,521	75,210	9,041					171,055
1984		846	894	3,715	52,825	36,859	107,377	16,607					219,123
1985		2,405	1,511	5,679	41,534	102,866	107,574	13,337	1,119				276,025
1986	1,395	610	712	4,492	78,494	60,458	111,066	24,726					281,953
1987		1,069	366	3,280	55,395	58,850	76,461	22,347					217,768
1988		2,520	969	3,984	34,612	54,986	85,061	16,367					198,499
1989		1,810	849	3,950	35,167	45,694	119,322	25,880	2,967				235,639
1990	1,169	1,515	920	3,078	17,942	17,772	58,805	28,070					129,271
1991		1,826	630	1,755	25,686	37,560	104,833	27,563					199,853
1992		1,104	743	3,494	18,753	37,269	157,216	13,600					232,179
1993		2,367	731	3,847	17,962	20,194	61,600	18,128					124,829
1994		1,327	391	2,263	11,434	11,703	55,247	29,889					112,254
1995		435	407	2,329	11,953	46,428	59,604	24,688					145,844
1996		669	481	1,981	20,317	61,136	65,400	12,472					162,456
1997		658	483	2,187	18,916	34,055	84,006	24,451					164,756
1998		609	433	2,433	9,911	12,180	62,331	28,785					116,682
1999		279	343	1,625	25,277	56,665	60,762	11,923					156,874
2000		491	319	6,467	37,760	48,697	96,040	15,467					205,241
2001		788	582	13,063	100,501	95,859	226,711	65,823					503,327
2002		2,308	439	7,027	67,132	84,140	170,382	56,492					387,920
2003	485	2,389	801	271	4,882	36,960	35,275	158,525	36,458	6,004	524		282,574
2004	140	1,072	1,066	680	7,116	23,581	30,398	152,302	23,099	1,647	22		241,123
2005	107	688	558	616	4,483	33,476	33,332	126,710	41,174	3,020	49		244,213
2006	16	811	972	252	2,241	15,892	43,884	138,845	33,537	12,641	132		249,223
2007	195	1,948	1,033	255	2,155	25,008	66,310	121,058	26,079	2,776	143		246,960
2008			1,084	383	4,847	69,771	47,273	131,616	22,666				277,640
Total		12,149	48,562	33,935	160,630	1,723,184	1,962,720	3,977,559	843,182	32,727			8,796,486
10-Year Average		938	414	5,391	43,536	54,183	138,295	33,272					279,510

Plate 4 John Day Lock and Dam

0 200 400 600 800 1000
Approximate scale in feet



JOHN DAY DAM

FISH COUNTING SCHEDULE

Apr 1 – Oct 31 Visual counting daily 0400-2000 hours Pacific Standard Time.

FISHWAY OPERATING SCHEDULE

The following information includes fishway operation for calendar year 2008. Total length of time for annual fishway outages can be determined by referring to previous years' annual reports.

North Adult Fishway

Jan 1-Feb 16: in full operation with attraction water
Feb 19 – Feb 29: dewatered for winter maintenance (ladder flow only for 48 hrs prior)
March 1- Dec 31: in full operation with attraction water
Aug 6: attraction water off half day for required ROV grating inspection

South Adult Fishway

Jan 1- Feb 20: dewatered for winter maintenance (back to service delayed due to fish turbine problems)
Feb 21 -Dec 1: in full operation with attraction water (two fish turbines operation, third OOS on overhaul)
Dec 3 – Dec 31: dewatered for maintenance (ladder flow only 72 hrs prior)
Aug 6: attraction water off half day for required ROV grating inspection

Comments: South fishway operated with two out of the total of three AWS fish turbines and with two out of the total of four floating orifices (FOGs) in its collection channel due to the overhaul activities of turbine # 3 lasting entire 2008 passage season. This operation was coordinated in advance with agencies through FPOM and we also scrutinized the fish passage and a number of out of criteria which showed no significant difference in 2008 as compared with the previous years.

Smolt Monitoring Facility

Jan 1-March 30: dewatered
Apr 1-Aug 14: in full operation with juvenile sampling
Aug 15-Aug 31: water temperature 70° F. Condition sampling of 100 fish on Monday and Thursday. System in bypass at switch gate on other days.
Sep 1- Sep 14: in full operation with juvenile sampling.
Sep 15-Nov 30: system in bypass for full flow PIT tag detection.
Dec 1-Dec 31: System dewatered for winter maintenance.

Juvenile Bypass System

Jan 1-Apr 1: 1/3 gatewell orifice open, rotated twice weekly
Apr 1-Dec 31: full operation (submersible travelling screens removed 2 weeks late)

Spillway

Jan 1-Apr 9: closed (except for a few, short duration, preseason TSW tests):
Apr 10-Aug 31: 0% day, 60% night spring - 30% 24hr/day summer.
(late April – July: 30% versus 40%, 24 hrs spill according to experimental block design for TWS evaluations)
Sept 1-Nov 31: Bay 2 only, 1.5 KCFS daylight hours only (attraction water for north fishway)
Dec 1-Dec 31: closed

FISH RELATED DEWATERINGS

FISHWAY DEWATERING PROCEDURES

Bulkheads are installed and drain valves open to dewater various areas of fishways. Fisheries personnel enter these areas to salvage fish that become entrapped. Minimal handling of fish is applied. Fish that are reluctant to vacate an area are captured and transported to the forebay or tailwater, depending on circumstances such as fish species, age class and stress levels. A follow up inspection is made to account for possible missed fish. Efforts are made to provide continual water supply during the entire operation to reduce fish stranding. Fishway areas not included on this list are inspected by ROV.

Fish Ladder Dewatering Results

Key; juvenile salmonid=js, adult = a

Date	Event	Steelhead	Lamprey	Comments	Morts
12/3/2008	S. ladder	4js, 2a	6	none	0

Smolt Monitoring Facility Dewatering Results

Key; carp=ca, catfish=c, sculpin=sc, smallmouth bass=smb, juvenile=j, adult=a

Date	Event	Chinook	Steelhead	Lamprey	Sturgeon	Other	Morts
2/7/2008	JBS	0	15a, 5j	0	0	0	0
12/1/2008	PDS	4	70	27a	11j	6c,1sc1ca	0

TURBINE DEWATERING PROCEDURES

Turbine dewatering for routine maintenance usually involves low numbers of fish, due to operational guidelines. If a turbine unit fails, operational guidelines cannot always be followed, which usually results in higher numbers of fish entrapment. Removal of fish from these areas has a greater fish stress risk due to handling. Procedures are continually analyzed to determine the best method for preventing fish stress or loss. Fish are removed from scroll case and draft tubes by fish bags. If numbers of fish are higher than two bags, transport tanks are placed in the draft tube gallery for transport by crane. Fish are released to tailwater either with bag and rope or tank and crane.

Turbine Dewatering Results

Key; carp=ca, catfish=c, crappie=cr, smallmouth bass=smb, shad=sh, juvenile=j, adult=a

Date	Event	Salmonid	Lamprey	Sturgeon	Other	Morts
7/29/2008	MU 9 sc	0	0	0	1cr, 1smb	0
7/29/2008	MU 9 dt	0	0	0	30c	0
9/3/2008	MU 5 sc	0	0	0	2c, 1smb	0
9/3/2008	MU 5 dt	0	0	6j	20c	6 sh
11/17/2008	MU 1 sc	0	0	0	1ca,1c,1cr	0

TABLE 40

MONTHLY TOTALS OF SALMONIDS, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER JOHN DAY DAM

2008

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*
CHINOOK*				14,050	77,177	58,652	22,929	29,293	126,961	13,890			342,952
STEELHEAD				2,363	1,004	5,973	45,572	41,931	144,781	35,538			277,162
SOCKEYE					1	150,928	42,325	153	2				193,409
COHO*								810	29,451	14,637			44,898
CHUM													0
PINK													0
TOTAL	16,413	78,182	215,553	110,826	72,187	301,195	64,065						858,421
LAMPREY				52	52	2,365	3,228	878	50				6,625
STURGEON						4	13	24	3				44
BULL TROUT													0

*Jacks Included

TABLE 41
DISCHARGE AND WATER QUALITY DATA
JOHN DAY PROJECT 2008

JANUARY				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	140.7	0.0	6.0	41.0
Jan 2	138.4	0.0	6.0	41.0
Jan 3	124.6	0.0	6.0	41.0
Jan 4	142.3	0.0	6.0	41.0
Jan 5	147.6	0.0	6.0	41.0
Jan 6	131.7	0.0	6.0	40.0
Jan 7	135.7	0.0	6.0	40.0
Jan 8	162.9	0.0	6.0	41.0
Jan 9	148.4	0.0	6.0	40.0
Jan 10	141.4	0.0	6.0	41.0
Jan 11	157.2	0.0	6.0	41.0
Jan 12	134.6	0.0	6.0	41.0
Jan 13	97.6	0.0	5.0	40.0
Jan 14	123.2	0.0	6.0	40.0
Jan 15	137.6	0.0	6.0	40.0
Jan 16	160.5	0.0	6.0	40.0
Jan 17	148.1	0.0	6.0	40.0
Jan 18	132.8	0.5	6.0	40.0
Jan 19	155.8	0.0	6.0	40.0
Jan 20	96.6	0.0	6.0	40.0
Jan 21	138.8	0.0	6.0	40.0
Jan 22	142.7	0.0	6.0	40.0
Jan 23	167.6	0.0	6.0	40.0
Jan 24	150.0	0.0	6.0	39.0
Jan 25	145.4	0.0	6.0	38.0
Jan 26	177.0	0.0	6.0	38.0
Jan 27	113.7	0.0	6.0	38.0
Jan 28	151.2	0.0	6.0	38.0
Jan 29	127.6	0.0	6.0	38.0
Jan 30	135.2	0.0	6.0	37.0
Jan 31	113.5	0.0	6.0	37.0

AVG.

139.4	0.0	6.0	39.7
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FEBRUARY				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	91.5	0.0	6.0	36.0
Feb 2	149.6	0.0	6.0	36.0
Feb 3	107.1	0.0	6.0	36.0
Feb 4	144.9	0.0	6.0	36.0
Feb 5	139.1	0.0	6.0	37.0
Feb 6	121.6	0.0	6.0	36.0
Feb 7	105.9	0.0	6.0	36.0
Feb 8	129.1	0.0	6.0	36.0
Feb 9	126.5	0.0	6.0	37.0
Feb 10	74.9	0.0	5.5	37.0
Feb 11	114.2	0.0	6.0	37.0
Feb 12	125.8	0.0	6.0	37.0
Feb 13	158.0	0.0	6.0	38.0
Feb 14	161.9	0.0	6.0	37.0
Feb 15	158.3	0.0	6.0	38.0
Feb 16	114.9	0.0	6.0	38.0
Feb 17	115.8	0.0	6.0	38.0
Feb 18	130.6	0.0	5.0	39.0
Feb 19	147.9	0.0	4.0	39.0
Feb 20	158.0	0.0	4.0	39.0
Feb 21	117.7	0.0	6.0	40.0
Feb 22	149.9	0.0	6.0	39.0
Feb 23	102.1	0.0	6.0	40.0
Feb 24	105.0	0.0	6.0	40.0
Feb 25	120.6	0.0	6.0	40.0
Feb 26	108.8	0.0	6.0	40.0
Feb 27	147.6	0.0	6.0	41.0
Feb 28	128.1	0.0	6.0	41.0
Feb 29	112.1	0.0	6.0	41.0

AVG.

126.5	0.0	5.8	38.1
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MARCH				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	102.0	0.0	6.0	41.0
Mar 2	111.0	0.0	6.0	41.0
Mar 3	135.8	0.0	6.0	42.0
Mar 4	143.6	0.0	6.0	41.0
Mar 5	160.6	0.0	6.0	41.0
Mar 6	142.4	0.0	6.0	41.0
Mar 7	141.3	0.0	5.5	42.0
Mar 8	131.0	0.0	5.5	41.0
Mar 9	107.0	0.0	6.0	42.0
Mar 10	115.9	0.0	5.5	42.0
Mar 11	117.6	0.0	6.0	42.0
Mar 12	137.4	0.0	6.0	42.0
Mar 13	141.0	0.0	5.0	42.0
Mar 14	155.1	0.0	5.5	42.0
Mar 15	130.7	0.0	6.0	43.0
Mar 16	112.1	0.0	6.0	43.0
Mar 17	133.5	0.0	6.0	45.0
Mar 18	129.2	0.0	6.0	44.0
Mar 19	154.3	0.0	6.0	44.0
Mar 20	142.2	0.0	6.0	44.0
Mar 21	144.1	0.0	6.0	44.0
Mar 22	122.6	0.0	6.0	44.0
Mar 23	107.7	0.0	4.0	44.0
Mar 24	127.0	0.0	6.0	45.0
Mar 25	139.6	0.0	6.0	45.0
Mar 26	150.6	0.0	6.0	45.0
Mar 27	158.7	0.0	6.0	44.0
Mar 28	156.0	0.1	6.0	44.0
Mar 29	116.6	0.0	6.0	44.0
Mar 30	125.2	0.0	6.0	44.0
Mar 31	141.7	4.1	6.0	44.0

AVG.

133.3	0.1	5.8	43.0
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TABLE 42

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT

APRIL 2008

FISH COUNTS

DATE	FISH COUNTS								RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	WILD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI DEG F
	SPRING	SUMMER	FALL									
Apr 1	5			0			39	15		148.7	17.6	5.5 43.0
Apr 2	0			0			56	31		149.7	18.2	5.5 44.0
Apr 3	15			0			48	21		139.5	16.8	5.0 43.0
Apr 4	1			0			103	39		128.2	11.5	5.5 44.0
Apr 5	17			0			152	45		98.4	0.0	5.5 44.0
Apr 6	16			0			128	50		126.4	0.0	6.0 44.0
Apr 7	40			0			156	79		128.9	0.0	6.0 45.0
Apr 8	32			0			70	19		130.4	0.0	5.0 45.0
Apr 9	29			0			141	36		128.2	0.0	5.0 45.0
Apr 10	56			0			74	26		117.9	38.2	5.0 45.0
Apr 11	52			0			116	59		145.4	42.7	5.0 44.0
Apr 12	76			0			90	29		155.9	44.3	5.0 45.0
Apr 13	105			0			162	65		104.6	33.4	3.5 46.0
Apr 14	681			1			99	39		137.1	32.5	4.5 47.0
Apr 15	828			6			176	60		160.6	44.1	5.0 48.0
Apr 16	594			0			91	44		187.4	47.6	5.5 48.0
Apr 17	447			1			129	63		162.0	44.6	6.0 47.0
Apr 18	930			2			71	52		137.3	43.6	5.5 48.0
Apr 19	576			5			54	31		142.9	45.9	5.0 49.0
Apr 20	526			2			53	31		153.0	47.2	3.5 47.0
Apr 21	456			6			27	14		175.2	37.7	3.5 47.0
Apr 22	417			0			54	14		171.5	52.0	5.5 48.0
Apr 23	920			1			33	21		168.8	51.2	5.5 48.0
Apr 24	982			3			42	6		195.0	59.1	4.5 49.0
Apr 25	1223			11			21	22		227.9	68.9	4.5 48.0
Apr 26	652			8			-7	0		206.0	61.7	4.5 49.0
Apr 27	550			10			31	16		157.5	47.4	4.0 52.0
Apr 28	1013			18			22	14		186.7	56.4	5.0 52.0
Apr 29	1262			20			68	57		167.7	51.1	4.5 50.0
Apr 30	1432			23			64	58		190.2	57.3	4.0 50.0
TOTAL	13,933			117			2,363	1,056				
AVG.	464			4			79	35		154.3	35.7	4.9 46.8

Note: Visual counts occurred April 1 through October 31. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST.
 Official Spring Chinook run started April 1.

TABLE 43

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT

MAY 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
May 1	1,670			98			0	38	35	0		206.8	62.3	4.0	50.0
May 2	2,511			44			0	37	21	0		213.7	81.0	5.0	49.0
May 3	3,062			88			0	33	24	0		180.4	72.3	4.5	49.0
May 4	2,022			85			0	39	25	0		147.4	59.0	5.0	52.0
May 5	3,079			106			0	25	19	0		190.1	76.0	5.0	52.0
May 6	3,716			212			1	64	41	0		191.9	61.4	5.5	52.0
May 7	3,116			297			0	18	12	0		240.3	72.5	5.0	52.0
May 8	2,488			316			0	27	12	0		230.7	69.6	4.0	52.0
May 9	1,660			283			0	13	3	0		290.9	87.3	4.5	50.0
May 10	2,006			357			0	17	3	0		268.2	97.0	5.5	52.0
May 11	2,132			426			0	17	3	0		209.4	84.0	5.0	53.0
May 12	2,473			473			0	5	0	0		292.7	111.2	5.5	52.0
May 13	1,669			454			0	71	25	0		263.8	105.5	4.5	53.0
May 14	1,802			401			0	30	11	1		236.4	77.3	4.5	54.0
May 15	3,403			995			0	199	48	16		260.9	78.4	4.5	53.0
May 16	3,145			1039			0	21	2	1		270.4	81.1	4.5	55.0
May 17	4,266			1530			0	18	7	6		263.8	79.6	4.0	54.0
May 18	4,509			1631			0	28	14	0		349.3	110.6	4.5	56.0
May 19	2,697			983			0	21	12	2		387.5	133.5	4.0	57.0
May 20	2,253			821			0	46	18	10		385.9	125.1	4.5	57.0
May 21	1,680			688			0	26	2	0		414.9	123.6	4.5	57.0
May 22	1,373			486			0	11	5	5		409.4	137.3	4.5	56.0
May 23	1,250			325			0	7	0	2		396.0	143.0	4.5	56.0
May 24	1,119			270			0	7	6	0		388.5	154.6	4.0	54.0
May 25	803			244			0	38	30	4		393.2	139.7	4.0	55.0
May 26	638			211			0	16	0	1		363.4	117.4	4.5	55.0
May 27	521			230			0	50	8	0		365.0	111.0	3.5	56.0
May 28	522			192			0	15	3	0		394.9	137.8	3.0	56.0
May 29	416			200			0	10	1	-1		399.1	137.3	2.5	56.0
May 30	623			190			0	21	1	4		413.9	129.9	3.0	56.0
May 31	670			208			0	36	13	1		412.9	124.3	2.5	56.0
TOTAL	63,294			13,883			1	1,004	404	52					
AVG.	2042			448			0	32	13	2		304.2	102.6	4.3	53.8

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	77,227	14,000

SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY
1	1,004	404	52

TABLE 44

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT

JUNE 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	470			120			1	18	4	1		394.2	126.6	4.0	57.0
Jun 2	329			136			0	31	13	-1		400.0	135.0	4.5	57.0
Jun 3	1,267			259			3	17	2	2		417.8	150.9	4.0	57.0
Jun 4	1,115			208			22	17	-5	2		417.1	178.6	3.5	57.0
Jun 5	1,364			202			34	25	10	1		410.8	135.0	4.0	57.0
Jun 6		1,561		228			20	51	3	1		395.9	135.0	2.5	56.0
Jun 7		1,153		179			46	18	6	0		370.8	117.1	2.5	55.0
Jun 8		1,390		321			128	51	10	1		381.5	114.4	3.5	55.0
Jun 9		828		238			266	54	15	-1		320.2	97.9	3.5	55.0
Jun 10		1,044		239			208	63	23	0		346.0	126.8	3.5	56.0
Jun 11		1,114		214			175	94	23	0		385.2	165.1	3.5	56.0
Jun 12		716		126			260	24	8	2		401.7	164.7	3.0	56.0
Jun 13		916		187			402	54	6	-1		364.1	128.4	3.0	55.0
Jun 14		1,699		421			940	64	13	1		348.9	105.1	3.5	56.0
Jun 15		2,143		539			1,580	86	18	3		317.6	117.4	4.0	57.0
Jun 16		1,701		438			2,669	94	25	4		319.5	121.0	4.0	58.0
Jun 17		1,881		349			3,670	229	55	9		351.3	137.2	4.5	59.0
Jun 18		2,235		455			6,732	170	44	1		384.9	156.7	4.5	59.0
Jun 19		2,226		482			8,538	260	64	6		370.9	125.9	4.5	59.0
Jun 20		2,857		920			12,409	348	103	-1		342.9	103.2	4.5	59.0
Jun 21		2,271		604			13,439	411	107	2		318.9	118.3	4.5	60.0
Jun 22		2,418		673			13,236	531	191	2		329.7	138.9	4.5	60.0
Jun 23		1,960		554			12,183	351	116	1		295.4	94.8	4.5	60.0
Jun 24		1,701		282			9,130	212	40	2		329.8	100.2	5.0	60.0
Jun 25		1,848		271			9,412	254	48	3		347.5	120.5	5.0	60.0
Jun 26		2,275		389			12,812	329	120	1		331.7	114.3	4.0	61.0
Jun 27		1,930		404			12,248	475	127	0		357.2	136.2	4.5	61.0
Jun 28		2,025		328			9,693	472	136	5		341.1	133.7	4.5	61.0
Jun 29		1,992		316			10,102	560	184	3		324.6	121.9	4.5	62.0
Jun 30		1,703		438			10,570	610	223	3		320.8	114.2	4.5	62.0
TOTAL	4,545	43,587		10,520			150,928	5,973	1,732	52					
Avg.	909	1,743		351			5,031	199	58	2		357.9	127.8	4.0	58.1

RUN YEAR	CHINOOK	CHINOOK
TOTALS TO DATE	ADULT	JACK
SPRING	81,772	14,925
SUMMER	43,587	9,595
TOTAL	125,359	24,520

SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY
150,929	6,977	2,136	104

TABLE 45

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT
JULY 2008

DATE	FISH COUNTS										RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jul 1	1,328			406			9,173	828	305	22	0	308.2	101.7	5.0	63.0
Jul 2	1,186			317			6,767	710	288	25	0	320.7	96.3	5.0	63.0
Jul 3	1,067			188			4,001	394	186	37	1	319.3	110.4	5.0	63.0
Jul 4	967			155			3,961	418	145	24	0	283.1	113.8	5.0	64.0
Jul 5	856			181			3,444	458	202	23	0	265.3	85.3	5.0	63.0
Jul 6	854			147			2,374	500	162	82	0	246.6	73.6	5.5	64.0
Jul 7	605			116			1,917	484	227	49	0	281.3	84.5	5.5	64.0
Jul 8	985			223			1,501	930	388	55	1	254.5	76.8	5.0	64.0
Jul 9	418			100			1,151	408	220	45	0	260.3	97.7	5.0	66.0
Jul 10	730			131			1,103	880	366	40	0	231.8	93.0	5.5	66.0
Jul 11	454			108			1,116	1,106	516	97	0	233.7	74.8	5.5	64.0
Jul 12	700			125			940	1,313	644	50	0	219.8	65.7	4.5	65.0
Jul 13	451			60			669	843	387	79	0	182.3	68.9	4.5	66.0
Jul 14	803			112			879	1,823	903	68	0	192.5	76.5	5.5	66.0
Jul 15	804			112			577	1,726	835	69	0	177.1	70.9	5.5	67.0
Jul 16	446			133			673	1,812	696	37	0	156.2	62.8	5.5	67.0
Jul 17	474			45			338	1,229	520	48	0	166.3	52.9	5.5	68.0
Jul 18	916			119			428	2,115	960	40	0	170.7	51.2	5.5	68.0
Jul 19	680			131			254	2,164	998	44	0	172.5	51.8	5.5	68.0
Jul 20	588			83			186	2,311	1,021	92	0	151.4	45.8	5.5	68.0
Jul 21	473			95			167	2,739	1,146	76	0	173.6	52.2	5.5	68.0
Jul 22	963			131			230	3,035	1,290	94	0	140.5	42.0	5.5	68.0
Jul 23	364			96			139	3,097	1,400	116	0	147.2	44.4	5.5	68.0
Jul 24	341			93			78	2,438	890	135	0	147.3	44.2	5.5	67.0
Jul 25	170			23			52	1,570	630	116	0	173.3	52.2	5.5	68.0
Jul 26	370			59			61	1,708	565	116	0	174.6	52.2	5.5	68.0
Jul 27	358			51			49	2,091	824	78	0	143.5	43.2	5.5	68.0
Jul 28	153			70			26	1,771	542	191	1	163.1	49.2	5.5	68.0
Jul 29	261			88			40	2,008	630	188	0	141.6	42.4	6.0	68.0
Jul 30	131			47			20	1,074	342	114	0	164.2	49.4	5.5	68.0
Jul 31	221			67			11	1,589	519	115	1	162.3	48.5	6.0	68.0
TOTAL	19,117			3,812			42,325	45,572	18,747	2,365	4	204.0	66.9	5.4	66.3
Avg	617			123			1,365	1,470	605	76	0				
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK					SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY	STURGEON				
SPRING	81,772	14,925					193,254	52,549	20,883	2,469	4				
SUMMER	62,704	13,407													
TOTAL	144,476	28,332													

TABLE 46

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT

AUGUST 2008

DATE	FISH COUNTS										RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Aug 1	121			26	0	0	4	1,091	415	137	1	136.0	40.9	5.5	68.0
Aug 2	347			86	0	0	15	1,471	484	147	1	129.8	39.0	5.5	68.0
Aug 3	156			31	0	0	7	1,187	407	210	0	127.4	38.0	6.0	68.0
Aug 4	83			46	0	0	7	1,054	319	223	1	127.2	38.2	6.0	69.0
Aug 5	238			84	0	0	9	1,330	432	122	0	142.1	42.6	6.0	70.0
Aug 6		225	259	1	0		28	1,763	458	126	1	147.7	44.3	6.0	70.0
Aug 7		187	51	0	0		13	1,744	574	107	2	136.7	40.9	6.0	70.0
Aug 8		200	102	1	0		1	1,798	570	94	2	126.4	38.1	6.0	70.0
Aug 9		257	72	0	0		4	1,554	501	115	0	103.0	30.9	6.0	70.0
Aug 10		338	57	0	0		5	1,741	617	118	0	111.1	33.2	4.0	69.0
Aug 11		270	62	0	0		2	1,196	378	101	0	125.0	37.5	4.5	69.0
Aug 12		78	24	0	0		5	856	240	83	1	131.1	39.2	6.0	69.0
Aug 13		424	121	0	0		7	1,443	471	209	2	130.7	39.2	6.0	69.0
Aug 14		103	60	0	0		0	644	168	74	0	131.6	39.3	6.0	70.0
Aug 15		224	106	1	0		3	868	304	92	0	130.6	39.3	7.5	71.0
Aug 16		160	80	0	0		1	1,029	445	73	0	105.8	31.8	7.5	73.0
Aug 17		84	110	0	0		2	846	323	75	-1	110.2	33.2	7.5	72.0
Aug 18		582	381	1	0		-1	1,592	493	58	0	128.0	38.2	7.0	72.0
Aug 19		606	378	18	7	0		1,332	457	103	0	108.1	32.5	7.0	72.0
Aug 20		444	268	18	6	1		679	233	84	0	115.3	34.5	7.0	72.0
Aug 21		205	317	1	7	0		769	246	91	0	114.5	34.4	6.0	72.0
Aug 22		68	98	2	7	0		337	115	138	0	129.6	38.8	7.0	71.0
Aug 23		264	209	1	5	1		532	138	140	0	136.0	41.0	7.0	71.0
Aug 24		385	207	1	5	2		472	152	88	0	138.3	41.8	6.0	71.0
Aug 25		646	222	3	9	1		573	162	80	0	133.1	40.2	6.0	72.0
Aug 26		2,321	416	18	1	31		921	286	28	1	123.6	37.3	6.0	71.0
Aug 27		3,034	725	5	4	5		767	190	57	0	111.4	33.3	6.0	70.0
Aug 28		1,641	606	22	11	0		1,074	187	47	1	118.3	35.5	6.0	70.0
Aug 29		898	329	24	32	0		1,182	277	56	0	135.6	40.7	6.0	70.0
Aug 30		4,668	1131	192	140	0		4,803	1,050	60	1	130.7	39.2	6.0	70.0
Aug 31		2,676	696	177	90	0		5,283	972	92	0	114.2	34.1	6.0	69.0
TOTAL		945	20,988	7,360	486	324	153	41,931	12,064	3,228	13				
AVG.		189	807	237	16	10	5	1,353	389	104	0	125.5	37.6	6.2	70.3
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	LAMPREY	STURGEON						
SPRING	81,772	14,925	486	324	193,407	94,480	32,947	5,697	17						
SUMMER	63,649	13,680													
FALL	20,988	7,087													
TOTAL	166,409	35,692													

TABLE 47

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT

SEPTEMBER 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD		LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL						STEELHEAD	WILD STEELHEAD						
Sep 1				4,326	548	338	98	0	6,574	1,633	11	2	93.2	0.9	6.0	69.0
Sep 2				4,896	575	1,686	121	2	5,927	1,698	37	1	114.6	0.9	6.5	68.0
Sep 3				3,406	681	484	108	0	5,504	1,226	48	1	99.6	0.9	7.0	69.0
Sep 4				4,075	789	1,495	121	0	5,849	1,560	31	0	103.7	0.8	7.0	69.0
Sep 5				3,706	1152	895	220	0	5,830	1,204	63	1	112.4	0.9	6.5	68.0
Sep 6				4,128	1151	835	162	0	5,429	1,449	65	3	88.7	0.9	6.5	68.0
Sep 7				5,807	1056	1,517	204	0	8,276	2,010	45	1	76.8	0.7	6.5	68.0
Sep 8				5,114	1203	1,323	134	0	8,475	1,950	44	1	99.6	0.9	6.5	68.0
Sep 9				3,699	991	1,081	82	0	5,269	1,377	88	1	86.3	0.9	6.5	68.0
Sep 10				5,394	1104	2,232	309	0	4,376	1,375	30	0	106.7	0.9	5.5	68.0
Sep 11				5,034	1422	918	217	0	4,465	1,081	30	0	82.2	0.9	5.5	68.0
Sep 12				3,368	1003	656	180	0	3,649	996	20	0	71.5	0.9	5.5	69.0
Sep 13				4,357	951	619	68	0	4,183	1,051	60	1	68.5	0.8	6.0	68.0
Sep 14				5,064	868	699	346	0	4,760	1,188	25	1	68.3	0.8	6.0	68.0
Sep 15				3,566	950	427	92	0	3,478	765	74	1	73.9	0.8	6.0	68.0
Sep 16				4,691	940	455	352	0	2,968	1,393	5	1	94.2	0.8	6.0	68.0
Sep 17				3,146	965	587	199	0	2,992	736	7	0	97.3	0.7	6.0	69.0
Sep 18				3,463	531	582	181	0	3,485	803	1	1	85.2	0.8	6.0	68.0
Sep 19				3,088	612	358	125	0	3,640	814	15	1	74.1	0.7	6.0	69.0
Sep 20				3,805	1115	608	132	0	6,396	1,638	21	1	62.6	0.8	6.0	69.0
Sep 21				4,174	659	2,289	186	0	10,856	2,970	20	0	65.8	0.9	6.0	68.0
Sep 22				2,845	705	736	102	0	6,125	1,628	28	0	63.3	0.8	6.0	68.0
Sep 23				2,471	504	1,342	119	0	4,907	1,530	20	0	81.5	0.8	6.0	67.0
Sep 24				1,679	449	367	45	0	3,495	924	24	2	93.9	0.8	6.0	67.0
Sep 25				1,427	380	646	65	0	3,158	924	18	1	78.2	1.0	6.0	66.0
Sep 26				1,580	390	496	117	0	3,764	990	15	1	94.8	0.8	6.0	66.0
Sep 27				1,286	249	241	28	0	2,717	727	8	0	77.5	0.8	6.0	66.0
Sep 28				1,857	425	647	78	0	3,585	960	15	1	68.3	0.8	6.0	66.0
Sep 29				1,606	250	295	31	0	2,218	560	5	0	85.9	0.8	6.0	66.0
Sep 30				1,004	281	352	23	0	2,431	653	5	1	72.1	0.8	6.0	66.0
TOTAL	104,062	22,899	25,206	4,245	2				144,781	37,813	878	24				
AVG.	3,469	763	840	142	0				4,826	1,260	29	1	84.7	0.8	6.1	67.8
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK		COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	WILD STEELHEAD	LAMPREY	STURGEON					
SPRING	81,772	14,925		25,692	4,569	193,409	239,261	70,760	6,575	41						
SUMMER	63,649	13,680														
FALL	125,050	29,986														
TOTAL	270,471	58,591														

TABLE 48

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT

OCTOBER 2008

RIVER CONDITIONS

DATE	FISH COUNTS				WILD				DISCH				SPILL KCFS	TURBIDITY SECCHI	DEG F
	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	COHO JACK FALL	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	LAMPREY	STURGEON	KCFS	KCFS				
Oct 1	1,089	112	319	11		1,622	445	4	0	66.8	0.8	6.0	66.0		
Oct 2	596	195	258	14		1,517	440	12	0	72.4	0.7	6.0	66.0		
Oct 3	826	176	349	26		1,318	386	-2	1	92.1	0.7	6.0	66.0		
Oct 4	758	269	309	14		2,438	873	3	0	66.1	0.7	6.0	65.0		
Oct 5	948	130	468	26		2,511	906	4	1	62.5	0.8	6.0	65.0		
Oct 6	920	125	987	23		2,378	754	5	0	70.5	0.7	5.5	65.0		
Oct 7	1,146	86	3,181	75		3,349	1,004	2	1	70.2	0.7	6.0	65.0		
Oct 8	345	99	1,079	16		2,136	642	6	-2	88.7	0.8	6.0	65.0		
Oct 9	271	49	243	2		1,223	347	-6	1	99.0	0.7	6.0	65.0		
Oct 10	540	105	248	6		1,434	454	4	0	96.8	0.6	6.0	64.0		
Oct 11	509	148	200	15		1,173	336	4	0	82.1	0.8	6.0	63.0		
Oct 12	718	75	720	7		1,168	399	1	0	68.7	0.8	6.0	63.0		
Oct 13	358	100	820	14		1,453	389	0	0	81.5	0.8	6.0	62.0		
Oct 14	291	62	953	4		1,256	363	4	0	91.9	0.8	6.0	62.0		
Oct 15	283	101	899	26		1,436	356	6	0	115.4	0.8	6.0	62.0		
Oct 16	293	51	635	7		1,079	328	2	0	89.4	0.7	6.0	62.0		
Oct 17	179	54	307	2		1,285	383	-1	0	102.1	0.7	6.0	61.0		
Oct 18	176	15	186	0		900	284	4	0	92.4	0.7	6.0	61.0		
Oct 19	81	15	153	2		800	270	0	0	79.9	0.7	6.0	61.0		
Oct 20	271	20	291	2		432	132	-1	0	88.3	0.6	6.0	60.0		
Oct 21	240	56	418	4		757	280	-2	0	111.6	0.7	6.0	60.0		
Oct 22	43	12	121	5		357	105	0	0	106.0	0.7	6.0	58.0		
Oct 23	57	24	103	5		441	134	-1	0	93.4	0.7	6.0	58.0		
Oct 24	90	23	148	16		529	177	1	0	87.2	0.8	6.0	59.0		
Oct 25	247	33	384	5		446	162	1	0	78.6	0.7	6.0	59.0		
Oct 26	90	9	189	4		431	113	0	0	70.8	0.7	6.0	59.0		
Oct 27	67	18	75	1		427	156	0	0	93.3	0.8	6.0	58.0		
Oct 28	54	4	103	10		408	123	0	0	89.6	0.7	6.0	57.0		
Oct 29	42	8	55	1		235	92	0	0	90.7	0.7	6.0	57.0		
Oct 30	60	14	52	8		301	84	0	0	101.0	0.8	6.0	57.0		
Oct 31	105	9	30	3		298	118	0	1	102.7	0.7	6.0	57.0		
TOTAL	11,693	2,197	14,283	354		35,538	11,035	50	3						
AVG.	377	71	461	11		1,146	356	2	0	87.2	0.7	6.0	61.5		

RUN YEAR	CHINOOK	CHINOOK
TOTALS TO DATE	ADULT	JACK
SPRING	81,772	14,925
SUMMER	63,649	13,680
FALL	136,743	32,183
TOTAL	282,164	60,788

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	STEELHEAD	WILD
					LAMPREY STURGEON
39,975	4,923	193,409	274,799	81,795	6,625 44

Note: Visual counts ended October 31.

TABLE 49
DISCHARGE AND WATER QUALITY DATA
JOHN DAY PROJECT 2008

NOVEMBER					DECEMBER				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F	DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Nov 1	85.6	0.7	6.0	57.0	Dec 1	110.7	0.0	7.0	50.0
Nov 2	65.7	0.6	6.0	57.0	Dec 2	119.7	0.0	7.0	50.0
Nov 3	85.0	0.7	6.0	56.0	Dec 3	114.2	0.0	7.0	50.0
Nov 4	79.3	0.7	5.5	57.0	Dec 4	133.5	0.0	6.0	5.0
Nov 5	123.6	0.7	5.5	56.0	Dec 5	135.5	0.0	6.0	49.0
Nov 6	106.8	0.7	6.0	56.0	Dec 6	124.5	0.0	6.0	49.0
Nov 7	106.0	0.6	6.0	56.0	Dec 7	107.0	0.0	6.0	49.0
Nov 8	99.4	0.5	6.0	55.0	Dec 8	113.4	0.0	6.0	49.0
Nov 9	114.8	0.7	6.0	55.0	Dec 9	116.4	0.0	6.0	48.0
Nov 10	110.9	0.7	6.0	54.0	Dec 10	106.0	0.0	6.0	48.0
Nov 11	109.7	0.7	6.0	54.0	Dec 11	119.4	0.0	6.0	48.0
Nov 12	103.0	0.7	6.0	54.0	Dec 12	106.2	0.0	6.0	47.0
Nov 13	99.8	0.7	6.0	54.0	Dec 13	110.5	0.0	6.0	47.0
Nov 14	150.4	0.7	6.0	54.0	Dec 14	112.0	0.0	6.0	46.0
Nov 15	102.9	0.6	6.0	54.0	Dec 15	146.9	0.0	6.0	46.0
Nov 16	106.6	0.6	6.0	54.0	Dec 16	143.7	0.0	6.0	44.0
Nov 17	104.6	0.6	6.0	54.0	Dec 17	131.2	0.0	6.0	44.0
Nov 18	112.6	0.6	6.0	53.0	Dec 18	112.5	0.0	6.0	44.0
Nov 19	117.6	0.7	6.0	53.0	Dec 19	127.9	0.0	5.0	44.0
Nov 20	123.8	0.7	6.0	53.0	Dec 20	157.6	0.0	6.0	43.0
Nov 21	122.3	0.6	6.0	53.0	Dec 21	139.8	0.0	6.0	43.0
Nov 22	107.9	0.6	6.0	53.0	Dec 22	123.0	0.0	6.0	42.0
Nov 23	120.6	0.7	6.0	53.0	Dec 23	136.0	0.0	6.0	41.0
Nov 24	108.6	0.6	6.0	52.0	Dec 24	131.1	0.0	6.0	40.0
Nov 25	124.6	0.7	6.0	52.0	Dec 25	116.7	0.0	*	*
Nov 26	116.4	0.6	6.0	52.0	Dec 26	121.7	0.0	6.0	40.0
Nov 27	111.7	0.6	6.0	52.0	Dec 27	111.2	0.0	6.0	38.0
Nov 28	115.8	0.6	6.0	51.0	Dec 28	104.7	0.0	5.0	38.0
Nov 29	106.8	0.6	6.0	51.0	Dec 29	107.1	0.0	6.0	38.0
Nov 30	110.1	0.6	6.0	50.0	Dec 30	135.8	0.0	6.0	38.0
	Avg.	108.4	0.6	6.0	Avg.	122.4	0.0	6.0	43.2

*Data unavailable

TABLE 50

**YEARLY TOTALS OF SALMONIDS COUNTED OVER
JOHN DAY DAM
1968 - 2008**

YEAR	CHINOOK*	STEELHEAD	SOCKEYE	COHO*	TOTAL
1968	233,654	121,256	87,847	38,233	480,990
1969	276,051	86,348	39,847	13,589	415,835
1970	222,506	82,440	78,133	19,543	402,622
1971	193,881	115,977	72,232	40,830	422,920
1972	225,631	141,628	51,793	17,533	436,585
1973	249,492	101,440	64,744	13,359	429,035
1974	167,888	43,756	33,121	14,651	259,416
1975	159,079	32,651	50,774	6,305	248,809
1976	175,911	59,808	30,446	5,806	271,971
1977	194,931	102,558	85,701	1,123	384,313
1978	174,852	44,188	13,778	8,355	241,173
1979	118,154	55,877	43,630	5,061	222,722
1980	100,664	78,199	50,675	1,924	231,462
1981	114,359	95,172	46,146	2,562	258,239
1982	144,082	108,603	37,970	4,063	294,718
1983	139,866	154,425	91,917	1,640	387,848
1984	188,373	201,154	107,951	2,080	499,558
1985	337,624	247,093	124,941	1,652	711,310
1986	346,700	238,010	46,327	1,933	632,970
1987	327,752	170,654	75,529	3,355	577,290
1988	277,251	164,650	48,095	6,813	496,809
1989	208,254	193,460	39,374	9,663	450,751
1990	156,313	107,849	42,077	3,023	309,262
1991	118,921	160,257	63,760	8,021	350,959
1992	132,025	195,194	69,731	2,633	399,583
1993	141,705	95,642	61,218	2,995	301,560
1994	126,645	93,075	11,170	2,842	233,732
1995	107,277	123,246	8,667	2,117	241,307
1996	130,602	156,002	25,698	4,279	316,581
1997	185,240	157,038	35,830	4,229	382,337
1998	130,028	158,547	9,837	8,497	306,909
1999	163,282	165,314	14,809	13,232	356,638
2000	269,371	220,328	88,372	23,969	602,040
2001	510,987	483,409	107,869	51,181	1,153,446
2002	447,729	390,300	41,915	9,272	889,216
2003	467,116	286,176	35,417	38,577	827,286
2004	447,891	233,431	113,497	35,522	830,341
2005	322,991	232,103	69,770	36,205	661,081
2006	290,161	231,355	35,387	38,374	595,281
2007	215,876	237,517	24,277	39,421	517,091
2008	342,952	277,162	193,409	44,898	858,421
TOTALS	9,284,067	6,643,292	2,373,681	589,360	18,890,417
10-Year Average	347,836	275,710	72,472	33,065	729,084

*Jacks included

1999 - Total includes 1 pink

2005 - Total includes 12 pinks

2006 - Total includes 1 chum and 3 pinks

TABLE 51

**MONTHLY COUNT OF CHINOOK SALMON
JOHN DAY DAM 1968 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	SPRING Apr 1- Jun 5	SUMMER Jun 6- Aug 5	FALL Aug 6- Oct 31	JACKS	
	29,973	46,272	30,702	42,212	16,726	62,709	4,851	209	233,654	77,482	75,494	80,678	67,284	276,051	81,724	64,732	129,595	93,928
1968														222,506	72,555	43,093	106,858	74,090
1969	6	4,266	72,966	35,899	31,071	18,523	103,778	9,542						193,881	56,625	50,030	87,226	61,380
1970	35,750	35,248	20,439	21,542	24,784	80,969	3,774							225,631	71,569	44,542	109,520	82,646
1971	13,995	40,620	24,364	25,692	10,403	73,157	5,650							249,492	96,710	34,206	118,576	73,687
1972	28,535	41,882	15,833	27,484	14,208	90,181	7,508							167,888	46,191	25,865	95,832	61,669
1973	67,467	27,091	18,972	15,067	16,995	89,913	13,987							159,079	37,716	32,179	89,184	62,403
1974	5,174	38,058	8,115	18,985	8,112	77,296	12,148							175,911	45,419	36,037	94,455	62,793
1975	7,727	27,989	11,058	21,359	18,250	65,367	7,329							194,931	75,782	29,194	89,955	60,386
1976	10,428	32,985	17,836	18,506	10,114	72,467	13,575							174,852	72,723	30,371	71,758	36,289
1977	55,061	19,422	15,674	13,764	7,853	71,302	11,855							118,154	21,981	23,572	72,601	41,364
1978	34,735	35,206	15,104	16,764	8,149	52,975	11,919							100,664	27,202	19,664	53,798	25,877
1979	8,224	12,568	9,537	13,580	14,128	50,977	8,566	574						114,359	37,677	15,813	60,869	34,547
1980	7,995	18,311	7,125	12,522	9,063	37,023	8,625							144,082	36,530	16,360	91,192	56,966
1981	18,178	18,325	7,292	8,992	8,524	44,626	8,422							139,866	33,480	14,834	91,552	43,440
1982	3,396	30,444	11,031	7,359	10,881	67,271	13,700							188,373	32,035	22,795	133,543	69,874
1983	7,123	25,391	7,990	7,064	8,195	66,078	18,025							337,624	72,389	23,489	241,746	149,281
1984	4,329	26,561	9,706	12,892	15,422	96,399	22,255	809						346,700	77,884	22,051	246,765	133,827
1985	27,539	42,487	15,585	9,663	27,387	178,322	34,192	2,449						327,752	62,313	22,244	243,195	53,794
1986	21	38,075	37,959	13,227	9,703	10,797	194,928	41,990						277,251	55,195	23,569	198,487	51,330
1987	33,985	26,852	13,641	8,948	24,363	196,596	23,367							208,254	37,773	23,868	146,613	25,092
1988	33,323	20,170	14,731	9,648	37,002	147,553	14,824							156,313	43,127	20,532	92,654	22,195
1989	12,510	23,983	12,793	10,124	35,985	101,794	11,065							118,921	21,847	16,872	80,202	28,646
1990	23,689	18,854	11,209	9,199	13,542	71,508	8,312							132,025	45,457	13,910	72,658	22,084
1991	7,419	13,668	8,868	8,390	4,879	64,950	10,747							141,705	56,144	18,364	67,197	9,621
1992	27,538	16,623	9,452	5,263	7,677	58,140	7,332							126,645	9,745	12,935	103,965	18,867
1993	26,309	28,204	13,295	6,311	10,703	51,667	5,216							107,277	5,776	11,476	90,025	24,192
1994	4,436	4,937	6,305	6,397	13,345	79,538	11,687							130,602	21,599	13,148	95,855	12,071
1995	2,034	3,378	4,977	6,273	14,694	61,273	14,648							185,240	62,580	21,769	100,891	1,588
1996	1,860	18,616	7,419	6,356	18,550	68,198	9,603							130,028	22,177	17,780	90,071	13,745
1997	13,579	45,408	16,551	8,328	10,355	81,039	9,980							163,282	20,498	24,714	118,070	19,611
1998	9,279	12,439	10,076	7,535	11,073	62,107	17,519							269,371	98,710	31,056	139,605	56,892
1999	3,008	16,517	10,206	14,226	20,201	86,380	12,744							510,987	270,385	74,235	166,367	57,877
2000	48,176	47,705	19,201	13,579	44,377	86,737	9,596							447,729	142,290	110,969	194,470	37,568
2001	187,104	74,233	46,449	33,904	20,506	128,230	20,561							472,340	111,642	105,615	249,828	54,680
2002	36,677	99,270	69,941	44,890	37,086	143,126	16,739							447,891	118,520	83,060	244,723	47,708
2003	3,951	61,184	45,880	62,159	45,782	22,222	201,192	28,666	1,238	66				322,991	58,742	69,439	194,382	37,622
2004	127	62,999	50,288	55,728	30,998	24,383	192,606	29,301	1,410	51				290,161	52,406	77,964	158,064	28,507
2005	15	13,680	39,563	45,107	28,340	15,637	158,917	21,319	411	2				215,876	57,042	47,908	109,379	61,316
2006		420	49,051	50,206	28,688	14,821	118,233	27,015	1,710	17				342,952	96,697	77,329	168,926	60,788
2007	3	13,080	40,896	30,282	19,378	12,140	81,091	17,462	1,256	288								
2008		14,050	77,177	58,652	22,929	29,293	126,961	13,890										
TOTAL		4,123	1,044,309	1,403,497	872,737	709,707	701,348	3,943,574	599,506	10,066				9,289,291	2,544,339	1,543,077	5,191,330	2,037,525
10-Year Average		44,038	54,058	44,793	28,271	24,067	132,347	19,729						348,358	102,693	70,229	174,381	46,257

*Jacks included

TABLE 52
MONTHLY COUNT OF SOCKEYE SALMON
JOHN DAY DAM
1968 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1968						42,175	44,942	690	32	7	1		87,847
1969						13,383	26,174	245	37		8		39,847
1970						18,029	58,176	1,909	19				78,133
1971						5,219	66,183	787	38	5			72,232
1972						6,762	43,704	1,257	68	2			51,793
1973					2	21,283	42,588	864	6	1			64,744
1974						2,024	30,687	403	6	1			33,121
1975						6,154	44,454	163	2	1			50,774
1976						8,907	21,278	258	1	2			30,446
1977					6	52,852	32,269	537	34	3			85,701
1978						5,633	8,006	119	20				13,778
1979						13,466	29,603	560	1				43,630
1980						9,596	40,536	530	13				50,675
1981						17,064	28,975	94	13				46,146
1982						8,708	28,974	286	2				37,970
1983						27,372	63,995	506	37	7			91,917
1984						54,975	51,728	1,230	16	2			107,951
1985						78,326	46,184	421	10				124,941
1986						13,472	32,116	738	0	1			46,327
1987						35,022	39,983	513	11				75,529
1988						25,001	22,855	225	12	2			48,095
1989						18,883	20,330	148	12	1			39,374
1990					1	15,247	26,580	245	4				42,077
1991						10,917	52,130	699	9	5			63,760
1992					1	38,618	30,788	303	20	1			69,731
1993						1 30,668	30,348	198	2	1			61,218
1994						7,004	4,141	22	2	1			11,170
1995						1 4,242	4,352	71	1				8,667
1996						15,316	10,323	59	0				25,698
1997					10	11,605	23,604	603	4	4			35,830
1998						4,371	5,314	131	19	2			9,837
1999					1	4,803	9,910	88	2	5			14,809
2000					15	73,119	15,122	108	7	1			88,372
2001						7 86,624	21,062	100	75	1			107,869
2002					1	20,044	21,772	96	1	1			41,915
2003						19,260	16,004	151	2				35,417
2004					34	84,659	28,663	133	5	3			113,497
2005					-3	35,616	33,988	162	6	1			69,770
2006						20,279	14,949	154	5				35,387
2007					6	16,083	7,994	141	53				24,277
2008					1	150,928	42,325	153	2				193,409
TOTAL						84	1,133,709	1,223,109	16,100	609	69	1	2,373,681
10-Year Average													72,472

TABLE 53

**MONTHLY COUNT OF COHO SALMON
JOHN DAY DAM 1968 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	
1968							4	1,311	32,882	3,848	188		38,233	
1969							25	308	9,879	3,377			13,589	
1970							14	1,026	17,272	1,231			19,543	
1971								944	36,401	3,485			40,830	
1972								1,253	14,965	1,315			17,533	
1973								788	11,350	1,221			13,359	
1974								730	11,253	2,668			14,651	
1975								85	4,266	1,954			6,305	
1976								57	3,739	2,010			5,806	
1977								8	534	581			1,123	
1978								6	2,676	5,673			8,355	
1979							1	132	2,853	1,753	322		5,061	
1980								27	1,431	466			1,924	
1981								90	2,030	442			2,562	
1982								145	3,032	886			4,063	
1983								99	1,353	188			1,640	
1984								4	1,736	331	9		2,080	
1985								95	1,140	395	22		1,652	
1986									1,527	406			1,933	
1987							1	16	3,205	133			3,355	
1988							3	241	5,170	1,399			6,813	
1989								264	6,832	2,567			9,663	
1990								1	1,890	1,132			3,023	
1991								5	6,140	1,876			8,021	
1992									2,153	480			2,633	
1993								11	2,233	751			2,995	
1994								164	1,892	786			2,842	
1995								63	1,199	855			2,117	
1996								11	3,432	836			4,279	
1997								1	2,860	1,368			4,229	
1998								18	2,806	5,673			8,497	
1999								8	9,471	3,753			13,232	
2000							2	921	15,355	7,691			23,969	
2001							49	480	23,204	27,448			51,181	
2002								66	5,101	4,105			9,272	
2003								282	24,786	13,509	183	5	38,765	
2004								161	24,884	9,710	766	1	35,522	
2005								334	20,981	12,882	2,005	3	36,205	
2006								613	20,825	12,340	4,543	53	38,374	
2007							1	1	248	21,179	17,799	193		39,421
2008									810	29,451	14,637			44,898
TOTAL	0	2	1	98	11,826	395,368	173,960	8,231					589,548	
10-Year Average								392	19,524	12,387			33,084	

*Jacks included

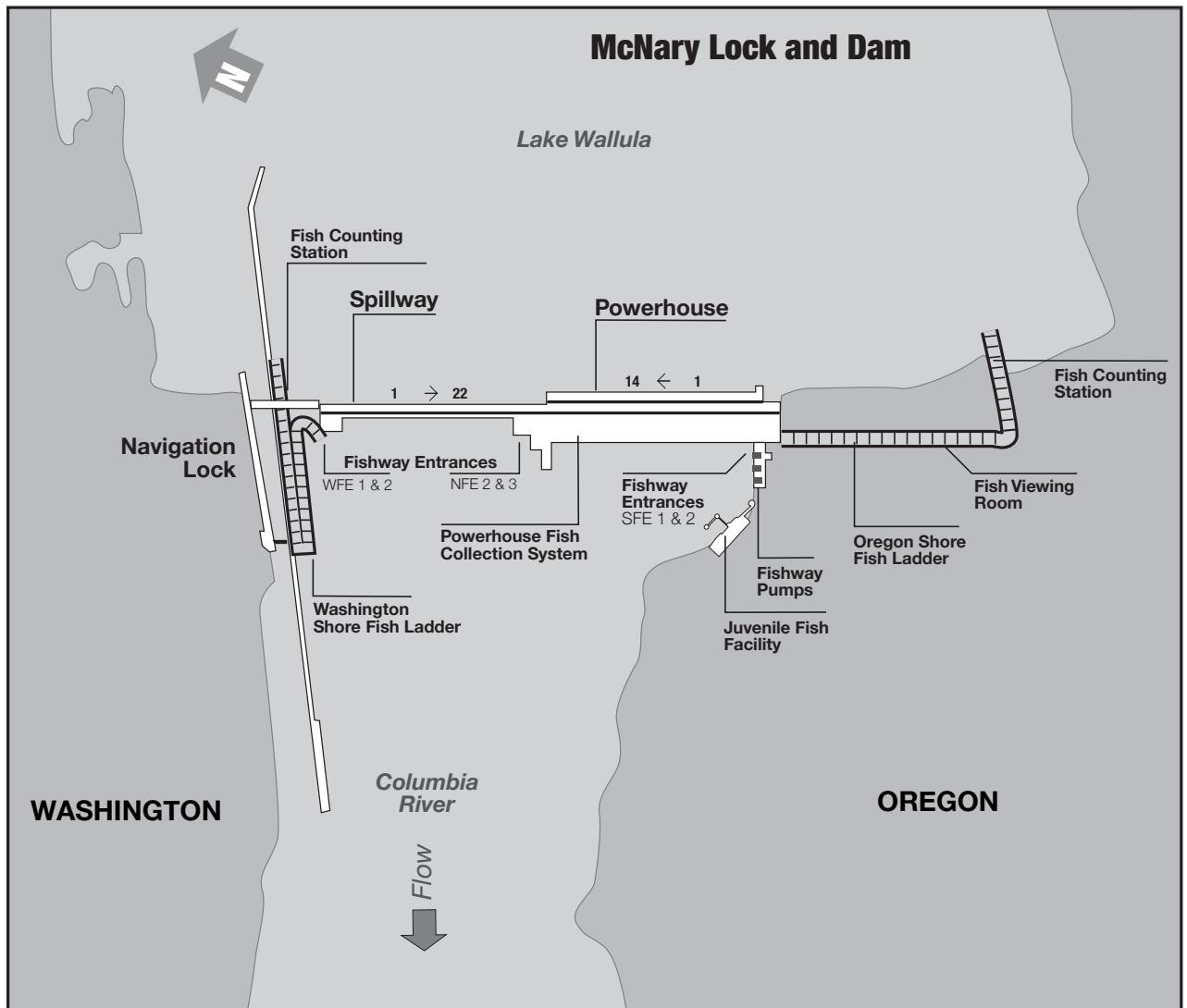
TABLE 54

**MONTHLY COUNT OF STEELHEAD
JOHN DAY DAM 1968 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1968				3,939	2,659	151	6,094	26,824	68,791	11,405	1,393		121,256
1969			314	3,986	3,691	714	12,004	13,267	40,082	12,290			86,348
1970				1,987	1,279	253	7,373	19,412	46,036	6,100			82,440
1971				1,472	592	263	17,459	19,693	63,868	12,630			115,977
1972				1,523	1,966	356	17,656	20,502	78,138	21,487			141,628
1973				8,019	3,546	785	12,134	15,608	46,566	14,782			101,440
1974				1,713	2,363	1,361	9,713	8,419	12,479	7,708			43,756
1975				760	428	648	6,251	8,583	9,977	6,004			32,651
1976				929	1,248	1,868	9,254	17,964	22,754	5,791			59,808
1977				1,319	418	2,341	18,366	7,088	56,134	16,892			102,558
1978				741	631	1,601	5,573	6,911	22,896	5,835			44,188
1979				602	136	253	8,012	10,717	16,202	18,072	1,883		55,877
1980				4,131	555	577	5,850	18,114	34,700	14,272			78,199
1981				2,061	1,539	2,515	15,999	18,283	34,098	20,677			95,172
1982				3,393	1,698	1,167	10,168	19,693	50,725	21,759			108,603
1983				1,492	434	560	15,088	31,453	83,215	22,183			154,425
1984				3,316	1,787	2,101	21,442	19,743	100,437	46,506	5,822		201,154
1985				6,821	1,723	3,583	19,631	64,456	109,488	37,227	4,164		247,093
1986		3,611		2,040	887	2,362	37,732	31,576	107,002	52,800			238,010
1987				3,926	-747	942	23,614	34,203	69,585	39,131			170,654
1988				4,290	525	2,188	17,649	25,741	81,859	32,398			164,650
1989				2,940	508	2,445	18,254	22,548	104,521	42,244			193,460
1990				3,339	600	1,902	10,544	9,445	42,888	39,131			107,849
1991				2,547	660	1,256	12,827	18,310	87,277	37,380			160,257
1992				1,334	406	2,337	10,732	17,326	143,823	19,236			195,194
1993				3,453	808	2,845	9,434	11,018	46,447	21,637			95,642
1994				2,286	413	1,647	6,961	7,140	44,175	30,453			93,075
1995				1,498	488	1,757	7,755	26,450	45,087	40,211			123,246
1996				1,597	462	1,576	11,885	42,853	67,171	30,458			156,002
1997				2,171	810	2,021	12,847	22,179	75,119	41,891			157,038
1998				4,367	1,018	2,460	9,827	9,053	67,322	64,500			158,547
1999				2,702	764	1,975	17,083	42,160	72,719	27,911			165,314
2000				2,607	784	4,500	23,496	37,827	113,619	37,495			220,328
2001				1,946	550	11,031	52,946	50,723	230,803	135,410			483,409
2002				7,330	972	5,875	42,167	59,430	170,893	103,633			390,300
2003		9,792		1,327	222	4,888	28,019	23,687	177,058	50,975	7,666	1,408	305,042
2004	186	2,591		1,437	537	6,840	20,250	24,594	145,241	28,300	3,401	54	233,431
2005	106	2,571		843	456	3,424	24,705	27,445	116,336	49,965	6,158	94	232,103
2006	32	1,252		2,104	343	2,575	15,719	25,008	125,323	46,050	12,909	40	231,355
2007	400	3,584		1,592	641	2,450	16,497	43,710	119,499	42,809	5,509	826	237,517
2008				2,363	1,004	5,973	45,572	41,931	144,781	35,538			277,162
TOTAL				23,715	108,243	39,804	96,366	694,582	1,001,087	3,295,134	1,351,176	48,905	6,662,158
10-YR Average				2,425	627	4,953	28,645	37,652	141,627	55,809		277,596	

Plate 5 McNary Lock and Dam

600 0 600 1200
SCALE IN FEET



McNARY DAM

FISH COUNTING SCHEDULE

Washington Ladder Schedule

1 January – 31 March	No counting
1 April – 31 October	Visual counting daily 0400-2000 hours PST.
1 November – 31 December	No counting

Oregon Ladder Schedule

1 January – 31 March	No counting
1 April – 31 October	Visual counting daily 0400-2000 hours PST.
1 November – 31 December	No counting

FISH LADDER OPERATING SCHEDULE

Washington Ladder

1 January	Ladder in service.
2 January – 10 February	Ladder dewatered for annual maintenance
11 February – 31 December	Ladder in Service

Oregon Ladder

1 January – 3 February	Ladder in service
4 February – 26 February	Ladder dewatered for annual maintenance
27 February – 31 December	Ladder in service.

FISHWAY ACTIVITIES

Washington ladder maintenance activities consist of total rebuild of all three main entrance gates. The fish exit regulating weir was also rebuilt with new steel rollers and rebuild of the roller guide surfaces in the lower regions.

Oregon ladder maintenance activities consist of total rebuild on all three north powerhouse (NFE) entrances with the addition of new stainless lifting cables on both the north and south (SFE) entrances.

Pump #3 of the AWS system for the Oregon shore fishway, was placed back on line 5 March. However, the pump developed a significant oil leak and was taken out of service July 23 and remained out the rest of the season.

The Juvenile bypass channel was operated for both juvenile and adult fallback passage, from 12 March to 30 December.

TABLE 55

**MONTHLY TOTALS OF SALMONIDS, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER McNARY DAM
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*
CHINOOK*				7,133	64,596	48,906	24,035	13,094	94,986	15,229			267,979
STEELHEAD				2,066	362	2,342	27,375	26,588	122,078	40,499			221,310
SOCKEYE					1	96,655	50,196	70	2				146,924
COHO*								63	14,588	7,155			21,806
CHUM							2	3					0
PINK													5
TOTAL	9,199	64,959	147,903	101,608	39,818	231,654	62,883						658,024
SHAD				12	222,495	388,657	11,846						623,010
LAMPREY				6	14	322	915	252	21				1,530
STURGEON													0
BULL TROUT													0

*Jacks Included

TABLE 56

DISCHARGE AND WATER QUALITY DATA

MCNARY PROJECT 2008

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	128.7	0.0	6.0	41.0
Jan 2	136.7	0.0	6.0	41.0
Jan 3	129.8	0.0	6.0	40.0
Jan 4	147.2	0.0	6.0	40.0
Jan 5	145.3	0.0	6.0	40.0
Jan 6	120.8	0.0	6.0	40.0
Jan 7	143.7	0.0	6.0	40.0
Jan 8	156.5	0.0	6.0	40.0
Jan 9	139.6	0.0	6.0	40.0
Jan 10	148.2	0.0	6.0	40.0
Jan 11	146.8	0.0	6.0	40.0
Jan 12	129.8	0.0	6.0	40.0
Jan 13	88.7	0.0	6.0	40.0
Jan 14	115.8	0.0	6.0	40.0
Jan 15	136.2	0.0	6.0	40.0
Jan 16	159.6	0.0	6.0	40.0
Jan 17	141.9	0.0	6.0	39.0
Jan 18	133.9	0.0	6.0	39.0
Jan 19	153.9	0.0	6.0	38.0
Jan 20	91.7	0.0	6.0	38.0
Jan 21	128.2	0.0	6.0	38.0
Jan 22	149.5	0.0	6.0	38.0
Jan 23	157.4	0.0	6.0	37.0
Jan 24	143.0	0.0	6.0	36.0
Jan 25	149.5	0.0	6.0	36.0
Jan 26	156.1	0.0	6.0	36.0
Jan 27	112.5	0.0	*	36.0
Jan 28	145.0	0.0	6.0	36.0
Jan 29	129.7	0.0	6.0	36.0
Jan 30	131.8	0.0	6.0	36.0
Jan 31	112.5	0.0	6.0	35.0

AVG. 135.8 0.0 6.0 38.6

FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	93.1	0.0	6.0	35.0
Feb 2	140.6	0.0	6.0	35.0
Feb 3	108.4	0.0	6.0	35.0
Feb 4	135.9	0.0	6.0	35.0
Feb 5	123.8	0.0	6.0	36.0
Feb 6	112.4	0.0	6.0	36.0
Feb 7	121.0	0.0	6.0	36.0
Feb 8	126.3	0.0	6.0	36.0
Feb 9	119.5	0.0	6.0	36.0
Feb 10	81.0	0.0	6.0	36.0
Feb 11	101.8	0.0	6.0	37.0
Feb 12	133.3	0.0	6.0	37.0
Feb 13	148.3	0.0	5.0	38.0
Feb 14	154.0	0.0	*	38.0
Feb 15	147.5	0.0	6.0	38.0
Feb 16	119.6	0.0	6.0	38.0
Feb 17	108.6	0.0	*	38.0
Feb 18	127.1	0.0	6.0	38.0
Feb 19	150.2	0.0	6.0	38.0
Feb 20	144.6	0.0	6.0	39.0
Feb 21	123.2	0.0	6.0	39.0
Feb 22	134.9	0.0	6.0	39.0
Feb 23	98.8	0.0	6.0	38.0
Feb 24	109.0	0.0	6.0	38.0
Feb 25	109.7	0.0	6.0	38.0
Feb 26	108.3	0.0	6.0	38.0
Feb 27	138.2	0.0	6.0	38.0
Feb 28	121.6	0.0	6.0	39.0
Feb 29	104.6	0.0	6.0	39.0

AVG. 122.3 0.0 6.0 37.3

MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	92.5	0.0	6.0	39.0
Mar 2	107.1	0.0	6.0	39.0
Mar 3	130.3	0.0	6.0	39.0
Mar 4	142.1	0.0	6.0	39.0
Mar 5	149.5	0.0	6.0	40.0
Mar 6	139.1	0.0	5.0	41.0
Mar 7	137.8	0.0	5.4	41.0
Mar 8	122.2	0.0	5.4	40.0
Mar 9	99.5	0.0	6.0	40.0
Mar 10	118.6	0.0	6.0	40.0
Mar 11	116.8	0.0	5.5	40.0
Mar 12	131.1	0.0	6.0	41.0
Mar 13	131.9	0.0	5.9	41.0
Mar 14	151.0	0.0	*	41.0
Mar 15	114.4	0.0	5.7	42.0
Mar 16	126.0	0.0	5.1	42.0
Mar 17	122.7	0.0	4.8	43.0
Mar 18	139.2	0.0	5.0	43.0
Mar 19	137.8	0.0	5.0	43.0
Mar 20	140.1	0.0	5.0	43.0
Mar 21	131.0	0.0	5.0	42.0
Mar 22	126.5	0.0	5.0	42.0
Mar 23	102.9	0.0	5.0	42.0
Mar 24	118.7	0.0	5.0	42.0
Mar 25	133.6	0.0	5.0	42.0
Mar 26	155.4	0.0	4.5	42.0
Mar 27	155.4	0.0	4.3	43.0
Mar 28	158.9	0.0	5.0	43.0
Mar 29	117.0	0.0	5.3	42.0
Mar 30	121.5	0.0	5.5	42.0
Mar 31	142.9	0.0	5.5	43.0

AVG. 129.5 0.0 5.4 41.4

* Data unavailable

TABLE 57

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT

APRIL 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO JACK	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	PINK	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	2			0				92	37				149.2	0.0	5.0	43.0
Apr 2	2			0				89	19				149.6	0.0	4.5	43.0
Apr 3	1			0				95	36				122.4	0.0	4.5	43.0
Apr 4	1			0				77	28				130.2	0.0	4.8	43.0
Apr 5	0			0				76	37				120.3	0.0	4.6	43.0
Apr 6	9			-2				107	49				135.3	0.0	4.8	43.0
Apr 7	7			0				97	47				116.5	0.0	4.5	43.0
Apr 8	7			0				125	54				131.2	0.0	4.8	44.0
Apr 9	5			0				84	36				113.2	6.5	5.4	44.0
Apr 10	11			1				73	26				112.5	45.1	5.0	44.0
Apr 11	38			1				104	43				139.3	56.0	5.0	*
Apr 12	5			0				88	40				154.2	62.2	5.0	*
Apr 13	50			1				91	33				121.0	49.0	5.3	45.0
Apr 14	57			0				73	32				141.8	57.1	4.7	45.0
Apr 15	59			2				108	46				160.6	64.6	4.9	47.0
Apr 16	226			2				97	48				178.4	71.8	5.0	47.0
Apr 17	423			0				104	54				160.2	64.5	4.8	*
Apr 18	390			2				75	37				140.0	56.3	4.9	47.0
Apr 19	439			3				87	44				151.6	60.9	5.4	47.0
Apr 20	334			0				40	24				152.6	61.6	5.5	47.0
Apr 21	653			6				54	29				168.1	67.8	4.0	47.0
Apr 22	301			2				24	11				176.0	71.2	5.2	47.0
Apr 23	213			2				24	12				181.1	73.0	5.3	47.0
Apr 24	370			0				40	22				193.1	77.6	4.7	47.0
Apr 25	365			2				33	19				219.0	87.7	4.6	47.0
Apr 26	488			1				14	7				210.1	84.3	5.0	48.0
Apr 27	658			3				16	7				169.7	68.0	5.0	47.0
Apr 28	642			3				19	12				179.1	72.0	5.0	48.0
Apr 29	619			23				33	29				184.1	73.9	4.8	48.0
Apr 30	694			12				27	12				191.1	76.4	4.0	48.0
TOTAL	7,069			64				2,066	930				155.1	46.9	4.9	45.6
Avg.	236			2				69	31							

*Data unavailable

Note: Visual counts occurred April 1 through October 31. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST.
 Official Spring Chinook run started April 1.

TABLE 58

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT

MAY 2008

RIVER CONDITIONS

DATE	FISH COUNTS										RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	PINK	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
May 1	761			10			0	20	8	0	0		200.9	80.4	4.2	48.0
May 2	873			13			0	22	15	0	0		195.7	78.3	4.5	49.0
May 3	953			24			0	16	10	0	0		182.6	73.5	4.5	49.0
May 4	2,124			48			0	18	6	0	0		154.3	62.3	4.7	49.0
May 5	2,809			90			0	21	14	0	0		190.8	76.5	4.6	50.0
May 6	1,668			71			0	16	5	0	1		187.6	75.1	5.4	50.0
May 7	1,617			90			0	18	12	0	1		241.4	96.9	5.0	50.0
May 8	1,742			96			0	16	10	0	0		239.8	96.4	5.5	51.0
May 9	2,081			196			0	8	3	0	0		285.6	114.5	5.0	52.0
May 10	2,323			274			0	15	7	0	0		268.1	107.6	4.6	52.0
May 11	2,166			233			0	18	8	0	1		224.1	89.7	4.3	*
May 12	1,625			243			0	10	1	0	0		275.7	110.6	5.0	53.0
May 13	1,630			342			0	11	1	0	0		265.6	107.0	5.0	53.0
May 14	3,264			552			0	12	5	0	0		252.6	101.5	5.0	53.0
May 15	2,004			460			0	10	1	0	0		253.1	101.5	5.8	52.0
May 16	1,971			516			0	8	1	0	0		268.3	107.4	6.0	52.0
May 17	2,603			688			0	6	4	0	0		265.7	106.6	6.0	*
May 18	2,600			572			0	6	4	0	0		341.3	165.3	5.0	55.0
May 19	4,197			756			0	12	2	1	0		385.0	210.2	6.0	56.0
May 20	3,895			991			0	10	1	0	0		390.6	219.0	4.8	56.0
May 21	2,083			696			0	9	5	0	1		401.1	233.0	5.0	56.0
May 22	1,237			566			0	9	3	1	0		393.5	221.3	4.2	55.0
May 23	1,731			648			1	10	1	4	0		370.0	197.8	3.4	54.0
May 24	1,088			440			0	14	2	0	0		377.3	209.1	3.1	55.0
May 25	735			261			0	6	0	2	0		375.2	218.7	2.4	54.0
May 26	788			268			0	2	0	0	1		374.4	213.0	1.8	54.0
May 27	869			246			0	5	2	0	0		367.4	196.6	1.5	54.0
May 28	354			155			0	9	1	0	1		390.9	222.0	1.7	54.0
May 29	574			213			0	8	1	0	0		393.1	220.3	1.4	54.0
May 30	677			258			0	3	1	0	0		398.2	224.4	1.6	54.0
May 31	1,146			392			0	14	1	4	0		395.9	224.1	1.7	54.0
TOTAL	54,188			10,408			1	362	135	12	6		300.2	147.1	4.2	52.7

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	61,257	10,472

SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY
1	2,428	1,065	12	6

TABLE 59

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT

JUNE 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL		WILD		SHAD	LAMPREY	PINK	DISCH RIVER CONDITIONS			
	SPRING	SUMMER	FALL				SOCKEYE	STEELHEAD	STEELHEAD	STEELHEAD				KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	652			230			0	14	0	2	0			392.1	220.2	1.7	55.0
Jun 2	761			194			0	10	5	9	0			391.3	219.0	1.8	56.0
Jun 3	860			188			0	16	3	47	2			400.1	230.7	3.5	56.0
Jun 4	583			202			7	10	0	25	0			424.0	250.3	2.5	56.0
Jun 5	662			196			1	6	0	15	0			403.9	228.6	2.5	55.0
Jun 6	1,081			216			8	14	1	2	0			388.3	213.7	2.9	55.0
Jun 7	1,093			179			12	12	2	11	6			365.7	191.0	2.8	55.0
Jun 8	1,131			256			8	18	1	18	0			359.8	184.8	3.1	55.0
Jun 9		1,296		282			24	18	3	72	0			329.6	154.2	2.4	55.0
Jun 10		1,515		339			25	27	1	66	0			362.7	200.7	3.0	55.0
Jun 11		770		234			72	14	2	24	0			384.1	223.9	2.2	55.0
Jun 12		1,082		298			104	19	1	35	0			383.8	224.6	2.8	55.0
Jun 13		945		212			109	20	3	153	0			367.2	209.9	3.8	55.0
Jun 14		763		179			163	27	5	408	0			325.0	162.2	3.4	56.0
Jun 15		1,024		239			254	37	11	302	0			321.6	158.2	3.6	56.0
Jun 16		1,124		331			390	26	5	448	0			335.7	168.7	4.8	58.0
Jun 17		1,888		514			614	24	4	476	0			358.7	183.7	4.0	58.0
Jun 18		1,813		415			1,461	61	7	740	0			382.8	208.8	4.3	58.0
Jun 19		1,224		314			1,648	47	16	774	0			359.5	186.7	4.5	58.0
Jun 20		1,732		484			3,660	79	10	1,425	0			342.5	167.9	4.5	58.0
Jun 21		1,948		475			6,931	127	30	6,246	0			340.2	165.8	4.0	59.0
Jun 22		2,447		597			9,636	135	30	15,947	0			327.1	165.2	5.3	59.0
Jun 23		1,642		444			9,377	139	42	22,611	1			301.1	166.8	4.7	59.0
Jun 24		1,728		373			10,564	164	41	17,526	0			340.3	184.6	3.8	58.0
Jun 25		1,393		647			8,995	248	58	25,542	0			345.4	173.2	4.6	58.0
Jun 26		1,440		334			7,656	172	38	23,968	0			349.4	174.2	4.0	*
Jun 27		1,520		318			7,555	167	37	22,355	0			354.4	183.1	4.2	60.0
Jun 28		1,445		273			10,470	208	44	24,958	0			338.0	174.9	4.1	60.0
Jun 29		1,716		270			8,342	239	45	25,937	1			320.6	155.0	4.3	61.0
Jun 30		2,080		315			8,569	244	58	32,353	4			324.1	153.6	5.6	61.0
TOTAL	6,823	32,535		9,548			96,655	2,342	503	222,495	14			357.3	189.5	3.6	57.1

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	68,080	12,133
SUMMER	32,535	7,887
TOTAL	100,615	20,020

SOCKEYE	TOTAL		WILD	
	STEELHEAD	STEELHEAD	SHAD	LAMPREY
96,656	4,770	1,568	222,507	20

TABLE 60

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT

JULY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	STEELHEAD	SHAD	LAMPREY	PINK	RIVER CONDITIONS			
	SPRING	SUMMER	FALL											KCFS	KCFS	SECCHI	DEG F
Jul 1		1,841		351			8,983	254	69	42,072	2	0		321.7	154.0	5.3	62.0
Jul 2		1,623		306			8,133	236	64	31,196	2	0		326.8	150.6	5.5	62.0
Jul 3		1,220		213			6,505	336	97	29,490	3	0		328.9	159.9	4.8	63.0
Jul 4		1,071		158			5,244	299	101	30,113	1	0		289.9	162.8	*	63.0
Jul 5		1,184		196			4,586	403	114	32,372	1	0		267.2	119.3	5.0	63.0
Jul 6		1,324		132			3,952	394	114	35,329	2	0		264.5	106.3	5.2	63.0
Jul 7		702		108			2,416	287	91	13,234	5	0		275.1	147.8	6.0	63.0
Jul 8		760		110			1,834	303	114	11,565	6	0		272.6	161.7	6.0	63.0
Jul 9		748		103			1,412	303	112	11,829	1	0		262.3	127.8	6.0	64.0
Jul 10		679		83			1,080	333	112	18,348	1	0		255.8	105.4	4.8	65.0
Jul 11		464		101			893	356	114	8,611	1	0		227.1	124.9	5.7	64.0
Jul 12		548		105			896	424	155	7,091	2	0		225.5	135.5	6.0	65.0
Jul 13		478		82			674	432	149	7,612	3	0		196.0	117.6	6.0	65.0
Jul 14		535		92			605	556	198	7,121	8	0		202.0	121.3	5.0	65.0
Jul 15		840		56			682	924	314	15,266	11	0		194.5	88.4	*	65.0
Jul 16		648		44			456	716	251	12,949	22	0		166.4	67.3	5.0	65.0
Jul 17		605		82			402	639	234	12,186	14	0		166.3	66.0	6.0	66.0
Jul 18		390		54			254	803	300	8,501	17	0		178.6	71.6	6.0	66.0
Jul 19		519		52			234	947	391	6,298	9	0		180.0	99.1	6.0	66.0
Jul 20		723		98			216	1,388	534	7,722	7	0		171.7	103.2	6.0	66.0
Jul 21		707		89			185	1,442	538	7,442	5	0		161.0	69.7	6.0	67.0
Jul 22		590		81			125	1,356	505	4,615	38	0		152.0	61.1	6.0	67.0
Jul 23		510		72			97	1,692	601	5,054	20	1		162.6	88.0	6.0	67.0
Jul 24		467		95			94	2,002	773	4,679	13	0		140.3	84.4	6.0	67.0
Jul 25		298		53			39	1,723	638	4,453	15	0		191.6	114.0	6.0	67.0
Jul 26		310		49			32	1,393	511	2,872	10	0		193.4	116.2	6.0	67.0
Jul 27		176		14			41	1,442	463	4,541	8	1		153.5	68.5	6.0	67.0
Jul 28		424		51			48	1,958	653	1,932	23	0		159.2	64.0	6.0	67.0
Jul 29		276		42			33	1,538	554	1,726	21	0		150.3	81.3	6.0	68.0
Jul 30		138		23			22	1,192	389	928	26	0		181.0	108.9	6.0	68.0
Jul 31		110		32			23	1,304	475	1,510	25	0		168.5	75.3	5.8	67.0
TOTAL		20,908		3,127			50,196	27,375	9,728	388,657	322	2		212.5	107.2	5.7	65.3
AVG.		674		101			1,619	883	314	12,537	10	0					

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	SOCKEYE	TOTAL		WILD		SHAD	LAMPREY	PINK
				STEELHEAD	STEELHEAD	STEELHEAD	SHAD			
SPRING	68,080	12,133	146,852	32,145	11,296	611,164	342	2		
SUMMER	53,443	11,014								
TOTAL	121,523	23,147								

TABLE 61

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT

AUGUST 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	SHAD	LAMPREY	PINK	RIVER CONDITIONS			
	SPRING	SUMMER	FALL										KCFS	KCFS	SECCHI	DEG F
Aug 1		130		38	0	0	13	1,255	416	1234	39	0	155.9	62.6	5.8	68.0
Aug 2		180		38	0	0	5	1,090	409	949	38	1	131.1	68.2	6.0	68.0
Aug 3		124		26	0	0	6	1,317	410	613	29	0	130.4	74.9	6.0	67.0
Aug 4		188		29	0	0	10	1,319	428	906	46	0	139.4	62.3	6.0	67.0
Aug 5		226		30	0	0	6	998	294	653	23	1	148.6	59.8	6.0	68.0
Aug 6		140		28	0	0	14	1,207	373	531	32	0	136.0	74.9	6.0	68.0
Aug 7		117		12	0	0	2	1,135	365	260	8	0	153.8	69.4	6.0	68.0
Aug 8		187		24	0	0	4	1,270	413	547	28	0	141.9	77.1	6.0	69.0
Aug 9		216		16	0	0	1	1,052	338	510	17	1	105.3	49.2	6.0	69.0
Aug 10		180		23	0	0	1	1,354	474	619	34	0	125.6	69.9	6.0	69.0
Aug 11		205		31	0	0	1	1,109	348	401	21	0	137.6	82.7	6.0	69.0
Aug 12		247		42	0	0	3	1,287	426	371	32	0	143.7	63.6	6.0	*
Aug 13		259		26	0	0	0	984	313	377	37	0	130.2	52.3	6.0	69.0
Aug 14		147		26	0	0	0	1,040	270	515	53	0	130.6	69.6	5.5	69.0
Aug 15		312		54	0	0	1	781	236	225	27	0	139.8	83.9	5.8	70.0
Aug 16		146		42	0	0	0	712	225	379	21	0	119.9	54.2	5.9	70.0
Aug 17		191		46	0	0	1	625	173	540	43	0	122.5	49.5	5.8	70.0
Aug 18		113		36	0	0	0	525	142	471	38	0	137.4	76.6	6.0	71.0
Aug 19		105		32	0	0	0	493	156	175	29	0	110.6	55.5	6.0	71.0
Aug 20		269		127	0	0	0	672	256	243	32	0	115.1	46.5	6.0	70.0
Aug 21		377		133	0	0	0	839	279	203	49	0	125.2	50.1	5.0	71.0
Aug 22		156		115	0	0	0	813	249	216	24	0	131.0	72.9	6.0	71.0
Aug 23		152		115	2	0	0	541	162	160	31	0	144.8	87.2	6.0	71.0
Aug 24		88		76	0	0	0	352	102	151	21	0	149.5	67.1	5.3	70.0
Aug 25		207		132	1	0	2	403	128	91	24	0	142.8	57.4	6.0	69.0
Aug 26		515		193	0	0	0	674	230	127	25	0	128.7	69.7	6.0	69.0
Aug 27		597		177	8	0	0	512	149	91	27	0	117.4	60.8	6.0	69.0
Aug 28		751		235	7	0	0	537	137	125	12	0	121.0	54.7	6.0	69.0
Aug 29		1,220		350	7	1	0	373	110	109	37	0	140.6	56.5	6.0	68.0
Aug 30		1,204		371	6	0	0	550	153	34	26	0	148.8	81.4	6.0	68.0
Aug 31		1,239		283	25	6	0	769	184	20	12	0	119.3	62.8	*	*
TOTAL	1,292	8,896	2,906	56	7	70	26,588	8,348	11,846	915	3					
AVG.	162	387	94	2	0	2	858	269	382	30	0	133.0	65.3	5.9	69.1	

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	SHAD	LAMPREY	PINK
TOTALS TO DATE										
SPRING	68,080	12,133								
SUMMER	54,735	11,239								
FALL	8,896	2,681								
TOTAL	131,711	26,053								
	56	7	146,922		58,733	19,644	623,010	1,257	5	

TABLE 62

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT

SEPTEMBER 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	PINK	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL													
Sep 1	3,830	779	30	5	0		1,540	406		19			89.4	0.3	5.8	*
Sep 2	2,587	393	50	8	0		2,629	560		9			117.6	0.0	5.5	*
Sep 3	3,413	360	68	11	0		3,372	781		22			101.4	0.0	5.7	68.0
Sep 4	1,538	311	96	6	0		3,138	651		21			111.1	0.0	5.9	67.0
Sep 5	1,685	273	126	7	-2		3,729	926		17			110.6	0.0	5.7	67.0
Sep 6	1,741	283	120	13	0		3,125	744		13			84.8	0.0	5.6	67.0
Sep 7	2,203	509	222	17	0		3,698	954		24			73.7	0.0	5.8	67.0
Sep 8	3,614	541	396	32	0		4,225	947		14			103.8	0.0	6.0	67.0
Sep 9	4,434	592	1,046	94	0		6,439	1,331		8			85.0	0.0	6.0	67.0
Sep 10	3,655	628	948	100	0		5,143	1,245		6			107.1	0.0	5.8	67.0
Sep 11	1,475	551	898	109	0		5,421	1,138		5			62.8	0.0	6.0	67.0
Sep 12	2,666	642	606	79	1		3,723	837		2			81.0	0.0	6.0	*
Sep 13	4,328	1,003	573	114	1		4,560	1,002		13			69.8	0.0	6.0	67.0
Sep 14	3,782	955	641	143	0		4,343	964		7			70.0	0.0	6.0	67.0
Sep 15	3,128	591	671	137	0		2,913	657		5			78.2	0.0	6.0	67.0
Sep 16	4,584	780	822	155	1		3,386	673		2			95.0	0.0	6.0	67.0
Sep 17	3,643	683	608	120	1		4,369	907		2			95.5	0.0	6.0	*
Sep 18	2,096	521	487	120	0		3,694	727		7			83.2	0.0	6.0	67.0
Sep 19	2,464	665	282	131	0		2,667	586		2			76.9	0.0	*	67.0
Sep 20	2,715	674	334	163	1		3,462	781		1			76.2	0.0	6.0	67.0
Sep 21	3,817	920	448	204	-1		5,847	1,310		7			64.4	0.0	6.0	67.0
Sep 22	3,863	657	423	184	0		5,146	1,130		8			60.8	0.0	6.0	67.0
Sep 23	2,985	444	543	89	0		6,392	1,547		6			73.4	0.0	6.0	66.0
Sep 24	1,478	408	339	118	0		5,838	1,266		6			94.2	0.0	5.5	66.0
Sep 25	1,288	234	198	72	0		4,632	1,089		6			85.1	0.0	6.0	66.0
Sep 26	1,284	267	255	37	0		4,556	1,197		7			92.9	0.0	5.8	65.0
Sep 27	1,092	161	266	44	0		4,136	1,127		2			78.6	0.0	5.6	64.0
Sep 28	1,220	132	233	22	0		3,185	821		3			68.0	0.0	6.0	64.0
Sep 29	1,542	200	265	30	0		3,267	769		6			82.5	0.0	6.0	63.0
Sep 30	1,498	181	192	38	0		3,503	995		2			76.5	0.0	6.0	63.0
TOTAL	79,648	15,338	12,186	2,402	2		122,078	28,068		252			85.0	0.0	5.9	66.3
Avg.	2,655	511	406	80	0		4,069	936		8						

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	68,080	12,133
SUMMER	54,735	11,239
FALL	88,544	18,019
TOTAL	211,359	41,391

COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	PINK
12,242	2,409	146,924	180,811	47,712	623,010	1,509	5

TABLE 63

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT

OCTOBER 2008

DATE	FISH COUNTS										RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	PINK	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Oct 1		1,685	143	287	29			2,389	536	5			80.1	0.0	6.0	63.0
Oct 2		1,009	116	201	26			2,382	632	3			87.5	0.0	6.0	64.0
Oct 3		561	119	129	21			1,555	375	2			88.2	0.0	6.0	*
Oct 4		657	124	151	26			2,194	536	1			62.6	0.0	5.0	64.0
Oct 5		708	127	155	18			2,003	507	1			61.1	0.0	5.5	64.0
Oct 6		1,070	124	194	31			2,307	589	1			75.4	0.0	6.0	64.0
Oct 7		993	144	262	51			2,514	652	1			76.7	0.0	6.0	64.0
Oct 8		1,134	136	551	54			3,267	986	1			79.5	0.0	6.0	64.0
Oct 9		710	88	624	46			1,927	527	2			100.3	0.0	6.0	63.0
Oct 10		308	61	588	63			1,925	579	0			92.3	0.0	6.0	63.0
Oct 11		221	71	335	49			1,973	593	1			83.5	0.0	6.0	62.0
Oct 12		299	65	165	30			1,251	350	0			67.4	0.0	6.0	61.0
Oct 13		439	69	247	42			1,195	335	0			81.7	0.0	6.0	60.0
Oct 14		814	119	376	30			1,920	519	2			98.4	0.0	6.0	60.0
Oct 15		311	69	313	17			1,432	411	0			106.3	0.0	*	60.0
Oct 16		193	36	172	15			858	239	1			86.6	0.0	6.0	60.0
Oct 17		230	32	316	13			960	240	0			109.5	0.0	5.2	60.0
Oct 18		422	52	368	7			1,813	459	0			90.7	0.0	5.5	60.0
Oct 19		281	36	252	6			1,635	481	0			76.2	0.0	*	59.0
Oct 20		158	21	83	4			777	218	0			96.0	0.0	6.0	59.0
Oct 21		112	14	72	5			909	271	0			105.9	0.0	6.0	59.0
Oct 22		36	2	25	0			255	74	0			100.3	0.0	6.0	58.0
Oct 23		122	13	36	2			313	100	0			90.4	0.0	*	*
Oct 24		147	24	46	6			327	100	0			85.9	0.0	6.0	58.0
Oct 25		113	23	51	7			339	106	0			83.1	0.0	6.0	58.0
Oct 26		99	15	61	9			376	96	0			68.8	0.0	6.0	58.0
Oct 27		132	14	94	11			344	97	0			81.7	0.0	6.0	57.0
Oct 28		198	20	137	5			357	115	0			89.9	0.0	6.0	57.0
Oct 29		60	13	77	5			327	94	0			86.0	0.0	6.0	56.0
Oct 30		54	9	95	1			337	100	0			110.8	0.0	6.0	57.0
Oct 31		49	5	51	12			338	119	0			98.1	0.0	*	56.0
TOTAL		13,325	1,904	6,514	641			40,499	11,036	21			87.1	0.0	5.9	60.3

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	PINK
TOTALS TO DATE										
SPRING	68,080	12,133								
SUMMER	54,735	11,239								
FALL	101,869	19,923								
TOTAL	224,684	43,295								

Note: Visual counts ended October 31.

Official Fall Chinook run ended October 31.

TABLE 64
DISCHARGE AND WATER QUALITY DATA
MCNARY PROJECT 2008

NOVEMBER					DECEMBER					
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F	DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F	
Nov 1	85.6	0.0	6.0	56.0	Dec 1	118.7	0.0	6.0	48.0	
Nov 2	68.6	0.0	6.0	56.0	Dec 2	113.6	0.0	6.0	48.0	
Nov 3	80.6	0.0	6.0	56.0	Dec 3	117.6	0.0	6.0	*	
Nov 4	83.9	0.0	6.0	56.0	Dec 4	148.3	0.0	6.0	48.0	
Nov 5	118.7	0.0	6.0	*	Dec 5	130.7	0.0	6.0	48.0	
Nov 6	105.6	0.0	6.0	55.0	Dec 6	117.7	0.0	6.0	48.0	
Nov 7	87.5	0.0	6.0	55.0	Dec 7	104.3	0.0	6.0	48.0	
Nov 8	101.7	0.0	6.0	55.0	Dec 8	107.9	0.0	6.0	48.0	
Nov 9	100.5	0.0	6.0	55.0	Dec 9	107.5	0.0	6.0	47.0	
Nov 10	112.1	0.0	6.0	54.0	Dec 10	114.9	0.0	6.0	47.0	
Nov 11	105.1	0.0	6.0	54.0	Dec 11	108.5	0.0	6.0	47.0	
Nov 12	108.7	0.0	6.0	54.0	Dec 12	121.2	0.0	6.0	47.0	
Nov 13	121.2	0.0	6.0	54.0	Dec 13	102.1	0.0	6.0	47.0	
Nov 14	152.6	0.0	6.0	54.0	Dec 14	133.2	0.0	6.0	47.0	
Nov 15	92.5	0.0	6.0	54.0	Dec 15	134.1	0.0	*	47.0	
Nov 16	106.8	0.0	6.0	54.0	Dec 16	137.2	0.0	6.0	47.0	
Nov 17	90.4	0.0	6.0	53.0	Dec 17	112.8	0.0	6.0	43.0	
Nov 18	102.8	0.0	6.0	54.0	Dec 18	136.9	0.0	6.0	41.0	
Nov 19	121.3	0.0	6.0	53.0	Dec 19	142.5	0.0	6.0	39.0	
Nov 20	123.6	0.0	6.0	52.0	Dec 20	157.9	0.0	6.0	39.0	
Nov 21	115.8	0.0	6.0	51.0	Dec 21	134.5	0.0	6.0	39.0	
Nov 22	103.6	0.0	6.0	*	Dec 22	117.2	0.0	6.0	39.0	
Nov 23	109.4	0.0	6.0	51.0	Dec 23	136.9	0.0	6.0	38.0	
Nov 24	99.1	0.0	*	51.0	Dec 24	137.7	0.0	6.0	39.0	
Nov 25	127.8	0.0	6.0	51.0	Dec 25	107.6	0.0	6.0	39.0	
Nov 26	122.0	0.0	6.0	51.0	Dec 26	123.4	0.0	6.0	38.0	
Nov 27	123.4	0.0	6.0	50.0	Dec 27	107.8	0.0	6.0	38.0	
Nov 28	96.0	0.0	6.0	49.0	Dec 28	105.2	0.0	6.0	38.0	
Nov 29	98.3	0.0	6.0	48.0	Dec 29	108.1	0.0	6.0	38.0	
Nov 30	107.2	0.0	6.0	48.0	Dec 30	139.8	0.0	6.0	*	
	AVG.	105.7	0.0	6.0		111.7	0.0	6.0	*	
						AVG.	122.5	0.0	6.0	43.6

*Data unavailable

TABLE 65

**YEARLY TOTALS OF SALMONIDS COUNTED OVER McNARY DAM
1954 - 2008**

YEAR	CHINOOK*	STEELHEAD	SOCKEYE	COHO*	TOTALS*
1954	126,555	75,059	108,181	950	310,745
1955	108,915	85,575	173,758	643	368,891
1956	114,342	42,554	102,145	683	259,724
1957	292,696	105,728	85,460	2,855	486,739
1958	226,092	87,890	102,397	1,350	417,729
1959	171,490	110,475	83,977	1,970	367,912
1960	176,767	96,895	55,372	1,580	330,614
1961	154,996	103,743	16,388	2,045	277,172
1962	152,756	163,181	29,372	3,195	348,504
1963	154,459	113,646	59,744	3,113	330,962
1964	167,934	100,742	83,931	3,317	355,924
1965	150,907	118,960	42,052	2,700	314,619
1966	223,141	145,130	173,028	8,525	549,824
1967	195,653	77,700	105,635	27,226	406,214
1968	200,488	112,522	101,007	39,518	453,535
1969	213,407	76,681	29,787	53,716	373,591
1970	168,892	69,759	59,636	36,399	334,686
1971	171,448	109,630	52,867	39,358	373,303
1972	168,821	93,820	26,422	45,635	334,698
1973	184,112	64,620	42,731	17,682	309,145
1974	127,858	26,932	26,505	13,746	195,041
1975	133,150	23,663	43,143	3,975	203,931
1976	163,314	54,000	24,632	7,539	249,485
1977	183,581	87,712	80,781	4,622	356,696
1978	144,148	34,740	18,511	20,356	217,755
1979	95,275	50,304	37,792	12,800	196,171
1980	80,773	66,524	44,301	571	192,169
1981	80,619	61,985	26,644	3,736	172,984
1982	102,225	75,099	15,077	3,119	195,520
1983	121,636	125,254	40,903	2,470	290,263
1984	159,071	135,515	56,906	2,841	354,333
1985	288,483	188,204	98,457	6,917	582,061
1986	342,417	193,481	46,443	1,374	583,715
1987	286,638	148,811	72,190	615	508,254
1988	243,608	151,765	50,080	2,010	447,463
1989	176,407	170,467	41,318	3,383	391,575
1990	147,439	95,061	46,145	2,059	290,704
1991	114,841	168,692	69,365	2,272	355,170
1992	135,707	194,026	68,737	1,801	400,271
1993	143,412	93,183	66,485	481	303,561
1994	128,868	94,427	10,603	1,735	235,633
1995	113,354	114,910	8,320	1,021	237,605
1996	114,947	124,177	28,585	1,853	269,562
1997	162,946	129,817	38,043	2,580	333,386
1998	114,604	99,705	9,391	6,173	229,873
1999	121,946	84,088	11,884	4,934	222,852
2000	191,231	130,332	60,242	11,152	392,957
2001	489,784	398,784	97,188	24,730	1,010,486
2002	417,090	286,805	39,424	3,192	746,511
2003	420,603	230,418	32,037	19,830	702,888
2004	384,808	212,683	89,707	20,570	707,768
2005	270,003	224,292	63,540	20,600	578,435
2006	219,191	206,155	29,295	13,923	468,564
2007	180,435	221,534	18,175	22,825	442,969
2008	267,979	221,310	146,924	21,806	658,019
Totals	10,392,262	6,879,165	3,191,663	566,071	21,029,161
10-Year Average	296,307	221,640	58,842	16,356	593,145

*Jacks included

TABLE 66

**MONTHLY COUNT OF CHINOOK SALMON
McNARY DAM
1954 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	SPRING MAR 15- JUN 8	SUMMER JUN 9- AUG 8	FALL AUG 9- OCT 31
	14	919	42,625	28,510	35,993	9,287	8,626	568	13	126,555	52,014	61,065	13,476	108,915	21,309	71,180
1954													114,342	12,717	90,335	11,290
1955													292,696	99,511	122,578	70,607
1956	7	307	10,746	34,360	50,409	11,073	5,636	1,360	444				226,092	54,910	73,654	97,528
1957	6	14,489	67,939	91,473	41,485	25,621	48,685	2,998					171,490	40,775	74,985	55,730
1958			1,864	36,684	61,898	25,140	11,120	82,890	6,496				176,767	52,490	76,940	47,337
1959			3,914	31,923	23,461	51,478	14,929	42,756	3,029				154,996	68,539	45,257	41,200
1960			4,808	44,721	49,506	25,710	13,376	35,329	3,317				152,756	55,884	52,756	44,116
1961			21,669	44,260	19,722	23,192	10,661	31,447	4,045				154,459	52,336	44,760	57,363
1962			10,527	44,053	28,621	21,008	11,751	33,541	3,255				167,934	54,279	55,062	58,593
1963			7,765	42,804	22,454	18,659	13,757	43,731	5,289				150,907	29,206	45,375	76,326
1964			19,856	33,310	10,893	39,334	14,930	45,514	4,097				223,141	87,195	60,827	75,119
1965			6,114	20,559	14,094	28,599	12,856	60,185	8,500				195,653	62,591	59,975	73,087
1966			53,484	32,282	21,161	35,895	13,811	58,275	8,233				200,488	67,092	60,639	72,757
1967			32,790	28,174	13,244	44,612	10,788	54,314	11,731				213,407	70,079	63,953	79,375
1968			13,328	51,443	20,456	37,127	15,713	53,597	8,824				168,892	63,982	43,356	61,554
1969			809	60,241	39,074	30,556	12,200	59,889	10,638				171,448	42,601	59,129	69,718
1970			28,015	34,027	18,661	23,132	13,773	44,635	6,649				168,821	69,023	50,491	49,307
1971			5,642	32,688	24,007	35,152	9,680	55,297	8,982				184,112	79,047	31,812	73,253
1972			25,911	41,609	12,553	35,322	10,154	37,131	6,141				127,858	40,037	25,812	62,009
1973			44,878	31,727	16,836	14,520	10,400	57,716	8,035				133,150	32,718	31,713	68,719
1974			1,918	34,767	7,976	18,181	6,251	45,845	12,920				163,314	38,505	36,818	87,991
1975			4,694	24,752	11,590	20,497	12,485	53,125	6,007				183,581	66,934	32,277	84,370
1976			4,868	30,435	16,714	19,821	9,143	64,863	17,470				144,148	68,414	31,589	44,145
1977			40,692	23,895	16,768	16,256	7,348	64,785	13,837				95,275	21,153	24,161	49,961
1978			27,191	37,613	14,505	18,095	7,799	30,273	7,296	1,376			80,773	23,001	18,862	38,910
1979	6	5,424	13,696	9,763	14,601	8,030	34,702	8,171	882				80,619	32,330	15,141	33,148
1980	3	3,481	18,108	6,705	12,166	7,001	24,409	8,284	616				102,225	28,352	16,574	57,299
1981	3	12,923	16,904	8,288	8,243	5,584	23,323	4,926	425				121,636	31,636	16,199	73,801
1982	3	1,638	23,487	10,357	8,749	5,091	44,276	8,624					159,076	27,474	21,201	110,401
1983			4,481	25,074	9,202	7,882	5,217	54,339	15,441				288,483	63,265	22,029	203,189
1984			1,772	23,806	9,235	12,256	8,845	79,004	23,391	767						
1985	18	18,267	41,962	14,117	9,912	17,222	140,034	46,951								

TABLE 66

(Continued)

MONTHLY COUNT OF CHINOOK SALMON
McNARY DAM: 1954 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	SPRING MAR 15- JUN 8	SUMMER JUN 9- AUG 8	FALL AUG 9- OCT 31
	1986	2	28,739	44,459	14,515	12,315	9,636	168,230	64,521				342,417	76,077	25,798	240,542
1987		26,258	32,171	12,889	11,219	19,123	151,410	33,568					286,638	60,396	25,353	200,889
1988		26,267	22,245	14,605	9,282	30,714	115,878	24,617					243,608	51,178	23,621	168,809
1989		9,625	24,281	12,484	11,112	23,034	80,089	15,782					176,407	35,954	24,708	115,745
1990		19,309	23,861	11,007	11,148	7,306	61,718	13,090					147,439	44,499	22,248	80,692
1991		4,942	15,838	9,289	9,409	4,328	56,251	13,674	1,074	36			114,841	22,631	17,588	74,622
1992		25,549	22,799	9,511	6,159	5,846	51,961	13,882					135,707	50,590	14,414	70,703
1993		18,649	37,255	14,880	8,119	8,414	48,093	8,002					143,412	59,556	20,374	63,482
1994		2,940	5,513	5,486	8,242	11,085	80,693	14,909					128,868	8,987	14,313	105,568
1995		1,392	3,871	4,343	8,270	13,224	61,633	20,621					113,354	5,930	13,219	94,205
1996		426	15,212	8,242	8,206	13,964	56,847	12,050					114,947	17,832	15,102	82,013
1997		6,529	44,264	18,384	10,584	6,892	63,484	12,809					162,946	56,826	23,649	82,471
1998		6,645	11,964	9,965	8,249	5,652	50,987	21,142					114,604	19,752	17,634	77,218
1999		1,193	10,841	7,570	13,475	15,402	59,360	14,105					121,946	13,232	21,618	87,096
2000		25,136	46,396	16,096	13,641	27,931	50,138	11,893					191,231	75,644	27,696	87,891
2001		164,846	86,605	50,064	36,562	16,605	111,369	23,733					489,784	265,372	77,514	146,898
2002		14,867	108,862	65,935	56,149	26,798	123,089	21,390					417,090	133,229	116,747	167,114
2003	853	53,947	46,116	57,732	50,157	13,667	166,635	32,349	1,750	157			423,363	107,522	104,948	208,982
2004	72	53,405	53,267	47,903	32,067	12,212	149,297	34,795	1,659	131			384,808	115,251	74,217	193,550
2005	4	6,750	38,439	45,654	28,928	11,655	111,701	25,976	825	71			270,003	55,056	66,858	147,189
2006	1	121	43,778	40,077	27,708	10,210	71,105	24,186	1,810	195			219,191	48,363	65,960	102,863
2007	3	7,073	38,622	27,760	18,036	8,565	60,291	18,455	1,538	92			180,435	51,104	42,436	85,262
2008		7,133	64,596	48,906	24,035	13,094	94,986	15,229					267,979	80,213	65,974	121,792
Total		995	936,265	1,900,347	1,265,626	1,253,075	676,026	3,570,637	777,931	13,443	682		10,395,027	3,064,593	2,458,494	4,863,701
10-Year Average		33,447	53,752	40,770	30,076	15,614	99,797	22,211					296,583	94,499	66,397	134,864

*Jacks included

TABLE 67

MONTHLY COUNT OF SOCKEYE SALMON
McNARY DAM
1954 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1954					1	1,107	93,452	11,382	2,214	25			108,181
1955					43	287	163,902	9,402	121	3			173,758
1956					1	639	94,352	6,882	262	7	2		102,145
1957					13	6,318	74,874	4,233	22				85,460
1958						12,542	82,547	5,474	1,819	15			102,397
1959					21	2,031	73,735	7,981	209				83,977
1960						9,374	43,749	2,241	8				55,372
1961						1,088	14,149	1,138	11	2			16,388
1962						1,721	27,134	511	6				29,372
1963					78	8,712	50,415	535	4				59,744
1964						770	81,536	1,617	8				83,931
1965						328	40,790	923	10	1			42,052
1966						6,202	162,267	4,548	11				173,028
1967						1,935	101,044	2,647	9				105,635
1968						28,928	70,413	1,666					101,007
1969						5,787	23,353	647					29,787
1970						7,152	47,339	5,134	11				59,636
1971						317	50,568	1,982					52,867
1972						366	24,452	1,604					26,422
1973						9,011	32,301	999	420				42,731
1974						188	25,816	486	15				26,505
1975						1,517	41,011	615					43,143
1976						4,461	19,319	415	437				24,632
1977					8	36,708	43,077	739	207	42			80,781
1978						3,211	10,376	714	1,583	2,627			18,511
1979						6,317	29,571	1,547	321	36			37,792
1980						3,400	40,469	432					44,301
1981						4,419	22,042	180	1	2			26,644
1982						812	13,489	281	292	203			15,077
1983						5,897	33,851	997	142	16			40,903
1984						18,762	37,409	637	85	11	2		56,906
1985					1	60,067	36,567	522	593	707			98,457

TABLE 67

(Continued)

**MONTHLY COUNT OF SOCKEYE SALMON
McNARY DAM; 1954 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
1986						8,362	36,863	819	348	51			46,443	
1987					4	28,742	42,464	889	85	6			72,190	
1988						23,466	25,984	599	14	17			50,080	
1989					1	14,721	26,239	334	21	2			41,318	
1990					1	8,922	36,791	427	0	4			46,145	
1991					1	6,509	61,780	1,024	38	11	1	1	69,365	
1992					7	30,339	37,915	448	28				68,737	
1993						26,492	39,607	377	9				66,485	
1994					1	5,910	4,672	20					10,603	
1995					1	3,001	5,259	58		1			8,320	
1996						11,594	16,927	64					28,585	
1997						7,706	29,645	688	4				38,043	
1998						3,585	5,754	45	7				9,391	
1999						2,842	8,940	99	1	2			11,884	
2000					4	44,379	15,752	106	1				60,242	
2001					4	70,327	26,610	225	17	5			97,188	
2002					1	12,518	26,745	156	2	2			39,424	
2003					4	13,277	18,728	28	0				32,037	
2004					10	61,547	28,107	38	5				89,707	
2005						27,341	36,009	182	8				63,540	
2006					0	14,675	14,473	142	5				29,295	
2007					1	11,087	6,974	105	6	2			18,175	
2008					1	96,655	50,196	70	2				146,924	
Total					1	206	784,371	2,307,803	86,054	9,422	3,800	5	1	3,191,663
10-Year Average						35,465	23,253	115	5				58,842	

TABLE 68

MONTHLY COUNT OF COHO SALMON
McNARY DAM
1954 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS*
1954								4	751	180	14	1	950
1955									350	260	33		643
1956								16	462	157	48		683
1957							18	208	2,364	265			2,855
1958								29	1,091	230			1,350
1959								32	1,892	46			1,970
1960								24	1,432	124			1,580
1961								22	1,731	292			2,045
1962							5	106	2,884	200			3,195
1963							5	437	2,259	412			3,113
1964							3	307	2,734	273			3,317
1965							22	105	2,264	309			2,700
1966								811	7,195	519			8,525
1967							11	11	22,492	4,712			27,226
1968								1,010	36,260	2,248			39,518
1969								1,643	45,497	6,576			53,716
1970								3,576	31,161	1,662			36,399
1971								927	33,828	4,603			39,358
1972								2,433	38,747	4,455			45,635
1973							66	1,768	14,452	1,396			17,682
1974								1,160	10,052	2,534			13,746
1975							1	268	3,675	31			3,975
1976								373	5,201	1,965			7,539
1977							2	274	2,698	1,648			4,622
1978							1	138	10,445	7,459	2,313		20,356
1979				1	4	194	652	9,058	2,431	460			12,800
1980								2	180	203	186		571
1981								421	2,840	435	40		3,736
1982							141	235	2,148	595			3,119
1983								229	1,536	705			2,470
1984							6	147	2,506	154	28		2,841
1985							14	37	2,040	4,493	289		6,917

TABLE 68

(Continued)

MONTHLY COUNT OF COHO SALMON
McNARY DAM; 1954 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS*
1986								1	851	522			1,374
1987							3	24	377	211			615
1988								17	1,210	783			2,010
1989								35	2,043	1,305			3,383
1990								1	1,007	1,051			2,059
1991									1,105	937	211	19	2,272
1992								1	1,130	670			1,801
1993								2	254	225			481
1994								9	978	748			1,735
1995								8	344	669			1,021
1996							2	1	1,212	638			1,853
1997								29	1,577	974			2,580
1998								6	687	5,480			6,173
1999								6	2,931	1,997			4,934
2000								309	6,947	3,896			11,152
2001								59	11,631	13,040			24,730
2002								10	1,765	1,417			3,192
2003								25	11,788	8,017	401		20,231
2004								17	13,954	6,161	427	11	20,570
2005								59	11,327	8,390	819	5	20,600
2006								90	7,893	5,350	588	2	13,923
2007								9	11,263	11,315	238		22,825
2008								63	14,588	7,155			21,806
TOTAL	1	14	50	515	20,189	411,540	128,319	5,806	38				566,472
10-Year Average								65	9,409	6,674			16,396

*Jacks included

TABLE 69

MONTHLY COUNT OF STEELHEAD
McNARY DAM: 1954-2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1954			376	5,569	2,307	128	2,628	20,939	26,944	11,627	2,937	1,604	75,059
1955	931	35	70	3,279	1,791	162	5,257	36,035	17,463	16,941	2,874	737	85,575
1956	66	753	563	2,365	1,218	276	5,440	14,492	8,245	6,787	2,349		42,554
1957			840	2,084	147	334	18,100	28,926	34,478	20,775	8	36	105,728
1958	62	137	1,069	877	334	1,265	9,967	6,535	50,229	17,415			87,890
1959				1,317	685	748	10,508	32,872	49,542	14,803			110,475
1960				1,579	1,236	908	8,475	22,443	51,749	10,505			96,895
1961				896	580	1,281	7,469	11,428	64,521	17,568			103,743
1962				1,650	762	1,108	11,321	28,288	98,042	22,010			163,181
1963				813	1,751	2,639	8,252	26,282	47,982	25,927			113,646
1964				1,789	805	486	7,602	25,918	53,180	10,962			100,742
1965				1,361	363	231	11,749	31,155	54,450	19,651			118,960
1966				2,279	954	1,476	18,241	26,062	71,180	24,938			145,130
1967				1,434	1,130	152	5,771	14,894	32,310	22,009			77,700
1968				5,451	3,361	247	4,058	22,268	61,167	15,970			112,522
1969				2,304	1,792	711	7,668	13,641	35,836	14,729			76,681
1970				1,347	1,001	340	5,183	15,236	39,150	7,502			69,759
1971				813	374	271	8,931	21,324	62,083	15,834			109,630
1972				1,614	393	130	8,155	20,548	46,393	16,587			93,820
1973				3,178	846	270	6,898	11,121	32,701	9,606			64,620
1974				847	715	681	4,093	5,242	8,648	6,706			26,932
1975				612	209	254	3,623	6,708	9,329	2,928			23,663
1976				936	1,372	1,949	5,772	16,145	22,423	5,403			54,000
1977				1,730	987	2,916	13,132	7,833	43,792	17,322			87,712
1978				1,266	701	1,832	3,444	4,863	15,627	5,708	1,299		34,740
1979				970	681	156	93	4,955	9,970	14,648	15,580	3,251	50,304
1980				1,753	3,355	608	381	2,740	14,431	27,706	12,776	2,774	66,524
1981				861	1,479	809	878	7,212	12,839	19,961	15,652	2,294	61,985
1982				1,530	1,764	825	321	4,279	12,621	36,282	17,477		75,099
1983					1,051	215	137	7,746	25,821	70,369	19,915		125,254
1984					1,858	860	653	13,165	14,944	68,837	33,608	1,590	135,515
1985				1,583	6,483	1,383	2,949	13,818	46,632	87,026	28,330		188,204

TABLE 69

(Continued)

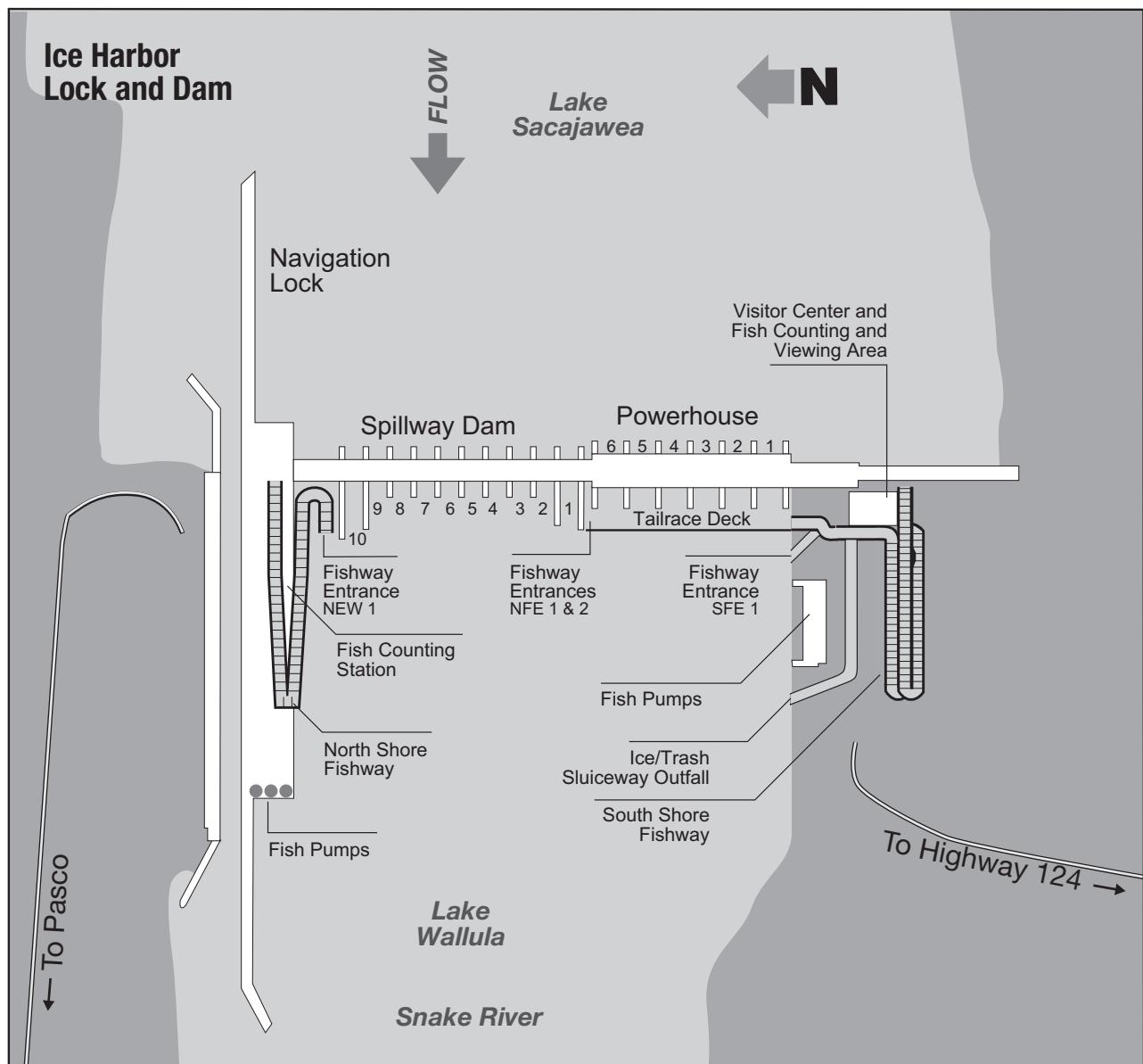
MONTHLY COUNT OF STEELHEAD
McNARY DAM; 1954 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS*
1986		1,282	1,184	414	1,193	27,563	32,339	74,769	54,737				193,481
1987		2,082	413	885	16,658	35,661	59,326	33,786					148,811
1988		4,176	1,095	2,117	11,609	25,875	69,259	37,634					151,765
1989		3,269	598	1,921	16,002	20,819	87,722	40,136					170,467
1990		2,754	660	1,489	9,105	10,368	33,452	37,233					95,061
1991		2,245	630	846	9,921	17,752	78,363	46,941	9,388	2,876			168,962
1992		1,427	642	1,921	10,989	15,504	127,626	35,917					194,026
1993		5,194	588	2,197	9,692	10,003	35,287	30,222					93,183
1994		2,622	336	1,169	7,436	5,468	40,871	36,525					94,427
1995		774	325	998	8,042	21,720	45,237	37,814					114,910
1996		701	301	950	8,726	34,385	50,723	28,391					124,177
1997		1,210	435	1,241	10,174	19,917	58,210	38,630					129,817
1998		1,236	364	1,391	6,372	4,040	38,324	47,978					99,705
1999		253	248	905	7,175	27,592	35,243	12,672					84,088
2000		588	238	1,901	16,311	23,148	59,803	28,343					130,332
2001		1,337	487	7,741	46,981	50,463	190,205	101,570					398,784
2002		4,650	271	2,957	29,979	48,226	120,936	79,786					286,805
2003	8,696	1,309	145	2,298	20,439	15,184	139,321	51,722	6,307	1,477			246,898
2004	4,316	1,133	480	3,901	14,376	10,863	132,387	37,931	4,348	2,948			212,683
2005	2,271	847	377	2,669	17,371	19,933	109,198	63,710	7,248	668			224,292
2006	1,388	2,009	175	1,272	9,214	14,519	104,009	52,826	17,808	2,935			206,155
2007	6,155	1,693	241	1,616	13,232	32,652	109,015	50,339	4,805	1,786			221,534
2008		2,066	362	2,342	27,375	26,588	122,078	40,499					221,310
Total	1,059	925	33,723	108,820	40,495	72,127	610,394	1,131,475	3,283,657	1,528,893	69,280	15,067	6,895,915
10-Year Avg.													223,288
	1,589	302	2,760	20,245	26,917	112,220	51,940						

Plate 6 Ice Harbor Lock and Dam

0 200 400

approximate scale in feet



ICE HARBOR DAM

FISH COUNTING SCHEDULE

1 January – 31 March	No counting
1 April – 31 October	Visual counting daily from 0400-2000 hours PST
1 November – 31 December	No counting

FISH LADDER OPERATING SCHEDULE

North Ladder

1 January – 3 February	Ladder in service
4 February – 13 February	Ladder dewatered for annual maintenance
14 February – 31 December	Ladder in service

South Ladder

1 January – 8 January	Ladder in service
9 January – 19 January	Ladder dewatered for annual maintenance
20 January – 31 December	Ladder in service

FISHWAY ACTIVITIES

Water temperatures were recorded hourly from fish ladder exit pool and the downstream end of the juvenile channels. Hourly readings were taken from 17 June to 1 October.

The gear reducers for the north shore AWS pumps continue to be problems. The north shore adult fishway was operated with 2 fish pumps and no back up pump the entire season. Repairs are on going.

Idaho Cooperative Fisheries Research Unit conducted an evaluation of adult salmon and steelhead migration past the Snake and Columbia River Dams. In addition, lamprey passage was monitored in the north shore and south shore adult fish ladders by half duplex PIT tag equipment. The research unit also operated the adult fish trap to radio tag adult steelhead trout and Chinook salmon

NOAA conducted research on juvenile salmonids passing through the spillway and over the removable spillway weir.

The RSW operated 7 April until the end of the spill season 31 August.

TABLE 70
MONTHLY TOTALS OF SALMONIDS, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER ICE HARBOR DAM
2008

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				4,447	45,174	34,258	5,381	3,461	26,145	4,141			123,007
STEELHEAD				2,942	241	702	14,056	20,872	97,545	36,095			172,453
SOCKEYE						113	422	4					539
COHO*									2,049				3,003
PINK										954			0
TOTAL	7,389	45,415	35,073	19,859	24,337	125,739	41,190						299,002
SHAD				5	29,734	86,820	2,753						119,312
LAMPREY					3	55	182	21	3				264
STURGEON				1									1
BULL TROUT													0

*Jacks included

TABLE 71

DISCHARGE AND WATER QUALITY DATA

ICE HARBOR PROJECT 2008

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	22.4	0.0	8.4	40.0
Jan 2	26.8	0.0	8.4	40.0
Jan 3	19.3	0.0	8.4	40.0
Jan 4	21.5	0.0	8.4	40.0
Jan 5	18.1	0.0	8.4	39.0
Jan 6	28.4	0.0	8.4	39.0
Jan 7	21.8	0.0	8.4	39.0
Jan 8	25.4	0.0	8.4	39.0
Jan 9	26.5	0.0	8.4	39.0
Jan 10	26.2	0.0	8.4	39.0
Jan 11	18.1	0.0	8.4	39.0
Jan 12	33.1	0.0	8.4	39.0
Jan 13	22.2	0.0	8.4	39.0
Jan 14	25.1	0.0	8.4	39.0
Jan 15	24.7	0.0	8.4	39.0
Jan 16	26.8	0.0	8.4	39.0
Jan 17	22.8	0.0	8.4	39.0
Jan 18	26.2	0.0	8.4	39.0
Jan 19	24.1	0.0	9.2	39.0
Jan 20	21.5	0.0	9.2	39.0
Jan 21	25.3	0.0	9.2	39.0
Jan 22	25.7	0.0	9.2	38.0
Jan 23	20.4	0.0	9.2	38.0
Jan 24	22.2	0.0	9.2	38.0
Jan 25	24.9	0.0	9.2	37.0
Jan 26	28.1	0.0	9.2	37.0
Jan 27	19.9	0.0	9.2	37.0
Jan 28	31.5	0.0	9.2	37.0
Jan 29	19.2	0.0	9.2	37.0
Jan 30	32.1	0.0	9.2	37.0
Jan 31	29.5	0.0	9.2	37.0

AVG.

24.5	0.0	8.7	38.6
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FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	15.8	0.0	9.2	37.0
Feb 2	25.2	0.0	9.2	37.0
Feb 3	20.6	0.0	9.2	37.0
Feb 4	26.0	0.0	9.2	37.0
Feb 5	22.0	0.0	9.2	37.0
Feb 6	24.9	0.0	9.2	37.0
Feb 7	19.7	0.0	9.2	37.0
Feb 8	27.8	0.0	9.2	37.0
Feb 9	24.3	0.0	9.2	37.0
Feb 10	14.5	0.0	9.2	37.0
Feb 11	27.8	0.0	9.2	37.0
Feb 12	28.1	0.0	9.2	37.0
Feb 13	32.9	0.0	8.9	37.0
Feb 14	30.1	0.0	8.9	37.0
Feb 15	36.8	0.0	8.9	37.0
Feb 16	22.5	0.0	8.9	37.0
Feb 17	19.9	0.0	8.9	37.0
Feb 18	27.6	0.0	8.9	37.0
Feb 19	27.4	0.0	8.9	37.0
Feb 20	26.7	0.0	8.9	37.0
Feb 21	25.0	0.0	8.9	37.0
Feb 22	36.1	0.0	8.9	37.0
Feb 23	23.1	0.0	8.9	37.0
Feb 24	25.6	0.0	8.9	37.0
Feb 25	25.0	0.0	8.9	38.0
Feb 26	26.2	0.0	6.8	38.0
Feb 27	27.3	0.0	6.8	38.0
Feb 28	32.9	0.0	5.2	38.0
Feb 29	34.1	0.0	5.2	38.0

AVG.

26.1	0.0	8.6	37.2
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MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	26.8	0.0	5.2	38.0
Mar 2	35.4	0.0	5.2	39.0
Mar 3	35.8	0.0	5.2	39.0
Mar 4	39.9	0.0	5.2	39.0
Mar 5	46.7	0.0	5.2	39.0
Mar 6	34.2	0.0	5.2	39.0
Mar 7	32.4	0.0	5.2	40.0
Mar 8	29.2	0.0	5.2	40.0
Mar 9	30.6	0.0	5.2	40.0
Mar 10	35.6	0.0	5.2	41.0
Mar 11	35.1	0.0	5.2	41.0
Mar 12	41.0	0.0	5.2	41.0
Mar 13	43.0	0.0	5.2	41.0
Mar 14	44.7	0.0	5.2	41.0
Mar 15	32.7	0.0	5.2	41.0
Mar 16	38.3	0.0	5.2	42.0
Mar 17	43.7	0.0	5.2	42.0
Mar 18	44.0	0.0	5.6	43.0
Mar 19	41.1	0.0	5.6	43.0
Mar 20	42.0	0.0	5.6	43.0
Mar 21	35.2	0.0	5.6	43.0
Mar 22	37.2	0.0	5.6	43.0
Mar 23	29.6	0.0	5.6	43.0
Mar 24	34.5	0.0	5.6	43.0
Mar 25	45.8	0.0	5.6	43.0
Mar 26	41.3	0.0	5.6	43.0
Mar 27	33.2	0.0	5.6	43.0
Mar 28	49.1	0.0	5.6	43.0
Mar 29	44.9	0.0	5.6	43.0
Mar 30	49.5	0.0	5.6	43.0
Mar 31	44.7	0.0	5.6	43.0

AVG.

38.6	0.0	5.4	41.5
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TABLE 72

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT

APRIL 2008

DATE	FISH COUNTS										RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL SOCKEYE	WILD STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	-2			0				80	31			55.0	0.0	5.6	43.0
Apr 2	5			0				89	26			41.4	0.0	5.6	43.0
Apr 3	-1			0				94	19			48.4	38.6	5.6	43.0
Apr 4	4			0				127	21			42.1	32.5	5.6	43.0
Apr 5	2			0				158	44			46.8	37.2	5.6	43.0
Apr 6	0			0				126	28			46.6	37.0	5.6	43.0
Apr 7	3			0				178	46			46.1	26.3	6.2	44.0
Apr 8	8			0				184	91			49.3	29.0	6.2	44.0
Apr 9	4			0				165	53			47.2	26.1	6.2	44.0
Apr 10	4			0				145	61			46.2	24.1	6.2	44.0
Apr 11	6			0				177	106			45.8	36.0	6.2	44.0
Apr 12	7			0				115	55			50.3	40.4	6.2	44.0
Apr 13	7			0				145	72			38.2	28.2	6.2	45.0
Apr 14	24			0				179	55			61.0	46.6	6.2	46.0
Apr 15	18			1				88	30			65.6	49.2	6.2	46.0
Apr 16	39			0				140	32			66.7	46.4	6.2	46.0
Apr 17	76			0				165	43			63.7	44.2	6.2	46.0
Apr 18	210			0				136	57			64.5	43.5	6.2	46.0
Apr 19	259			1				87	48			66.3	46.0	6.2	46.0
Apr 20	227			1				63	27			67.1	47.8	6.2	46.0
Apr 21	252			1				55	27			71.9	53.9	6.2	48.0
Apr 22	296			2				61	14			57.2	42.2	6.2	48.0
Apr 23	305			0				40	11			52.5	40.4	6.2	48.0
Apr 24	238			2				24	16			57.2	41.4	6.2	48.0
Apr 25	377			0				31	8			63.1	49.0	6.2	48.0
Apr 26	206			2				21	7			56.3	44.9	6.2	48.0
Apr 27	352			2				13	5			58.7	46.1	6.2	49.0
Apr 28	352			6				8	2			54.8	42.1	6.2	49.0
Apr 29	686			2				20	8			67.7	48.9	6.2	49.0
Apr 30	457			6				28	20			74.3	55.5	6.2	49.0
TOTAL	4,421			26				2,942	1,063						
AVG.	147			1				98	35			55.7	38.1	6.1	45.8

Note: Visual counts occurred April 1 through October 31. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST.

South shore ladder was counted by direct observation while the north shore ladder was by closed circuit TV.

Official Spring Chinook run started April 1.

TABLE 73

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT
MAY 2008

FISH COUNTS											RIVER CONDITIONS					
DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
May 1	550			9				25	13	0		0	73.6	49.8	6.2	49.0
May 2	913			8				29	15	0		0	61.7	22.8	6.2	50.0
May 3	518			15				19	13	0		0	65.2	19.5	6.2	50.0
May 4	678			14				15	8	0		0	64.9	43.7	6.2	50.0
May 5	1,410			16				32	11	0		0	76.9	50.8	6.2	50.0
May 6	2,480			28				13	6	0		0	81.0	30.6	6.2	50.0
May 7	1,359			40				8	6	0		0	88.0	26.2	6.2	50.0
May 8	1,134			40				16	8	0		0	105.3	54.1	6.2	51.0
May 9	1,031			56				18	6	0		0	97.4	59.8	6.2	51.0
May 10	1,654			125				15	9	0		0	95.2	39.3	6.2	51.0
May 11	1,642			168				12	7	0		0	87.0	26.2	6.2	52.0
May 12	1,723			182				7	3	0		0	91.3	28.2	6.2	52.0
May 13	2,142			267				7	5	0		0	85.9	25.8	6.2	53.0
May 14	1,517			241				-1	-1	0		0	75.8	44.3	5.3	54.0
May 15	2,472			364				0	0	0		0	81.2	56.4	4.8	53.0
May 16	1,709			187				3	1	0		0	100.4	44.3	4.8	53.0
May 17	1,350			179				2	1	0		0	120.4	53.3	4.8	53.0
May 18	1,742			322				1	1	0		0	149.3	78.7	4.8	53.0
May 19	1,836			373				2	0	0		1	185.1	112.3	4.8	54.0
May 20	2,498			556				1	1	0		0	198.8	129.9	4.8	54.0
May 21	2,061			440				4	0	0		0	199.0	131.3	4.8	54.0
May 22	1,192			312				0	0	0		0	193.4	126.0	4.8	54.0
May 23	557			148				0	0	0		0	163.1	96.2	2.0	54.0
May 24	291			118				2	0	1		0	143.9	94.0	1.0	54.0
May 25	421			77				0	0	1		0	130.7	78.2	1.0	54.0
May 26	198			57				0	0	0		0	127.8	68.3	1.0	54.0
May 27	307			46				-1	-1	0		0	133.3	66.2	1.0	54.0
May 28	546			138				-1	0	0		0	133.2	77.4	1.2	54.0
May 29	766			142				2	0	0		0	147.1	95.3	1.2	52.0
May 30	1,452			455				7	1	3		0	156.6	94.6	1.2	52.0
May 31	1,371			531				4	1	0		0	159.9	91.5	1.2	52.0
TOTAL	39,520			5,654				241	114	5		1				
AVG.	1275			182				8	4	0		0	118.5	65.0	4.4	52.3

RUN YEAR	CHINOOK ADULT	CHINOOK JACK	WILD STEELHEAD	SHAD	STURGEON
TOTALS TO DATE					
SPRING	43,941	5,680	3,183	1,177	5

TABLE 74

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT

JUNE 2008

FISH COUNTS

DATE	CHINOOK ADULT			COHO JACK	COHO JACK	TOTAL		WILD STEELHEAD		SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL			SOCKEYE	STEELHEAD	STEELHEAD	STEELHEAD							
Jun 1	1,526			612		0	6	0	0	0	0		160.4	98.8	1.2	54.0
Jun 2	831			269		0	1	0	0	0	1		165.6	97.3	1.2	54.0
Jun 3	474			160		0	0	0	0	0	0		162.8	99.3	1.2	54.0
Jun 4	400			54		0	0	0	0	1	0		162.1	99.6	1.2	54.0
Jun 5	479			63		0	6	1	2	0			153.6	88.6	1.2	54.0
Jun 6	674			75		0	1	0	2	0			143.9	82.3	1.2	54.0
Jun 7	647			79		0	1	0	1	0			141.9	76.6	1.2	54.0
Jun 8	902			122		0	-1	-1	0	0			130.2	63.1	1.2	54.0
Jun 9	1,083			171		0	1	-1	0	0			124.6	66.1	1.2	54.0
Jun 10	782			192		0	8	1	0	0			123.1	77.2	1.6	54.0
Jun 11	1,403			280		0	8	1	0	0			124.6	92.2	1.6	54.0
Jun 12		944		214		0	7	0	0	0			125.4	77.5	1.6	54.0
Jun 13		1,396		422		0	9	3	2	0			129.1	66.3	1.6	54.0
Jun 14		1,148		293		0	24	1	6	0			120.5	38.4	1.6	54.0
Jun 15		803		229		0	33	5	22	0			116.5	52.3	1.6	54.0
Jun 16		693		41		0	7	1	29	0			119.9	61.5	4.6	54.0
Jun 17		1,155		190		1	11	1	16	0			128.8	68.6	4.6	55.0
Jun 18		1,237		154		0	20	2	18	0			137.5	75.3	4.6	55.0
Jun 19		1,254		187		0	8	1	12	0			134.2	67.6	4.6	55.0
Jun 20		1,178		336		0	14	2	50	1			131.4	48.5	4.6	55.0
Jun 21		1,255		428		0	30	2	85	0			134.7	58.0	4.6	55.0
Jun 22		1,700		305		2	23	2	229	1			138.0	74.6	4.6	57.0
Jun 23		1,594		432		10	24	4	762	0			143.3	68.1	4.6	57.0
Jun 24		975		236		7	39	20	858	0			135.7	59.2	4.6	58.0
Jun 25		839		234		16	72	2	2,370	0			122.9	68.4	4.6	58.0
Jun 26		745		153		14	68	4	2,546	0			111.9	74.8	4.6	58.0
Jun 27		533		73		13	53	9	2,218	0			104.0	70.9	4.6	58.0
Jun 28		252		72		13	48	4	3,421	0			103.9	69.6	4.6	58.0
Jun 29		471		100		14	88	17	7,909	0			104.2	44.6	4.6	58.0
Jun 30		570		139		23	93	14	9,175	0			105.4	32.5	4.6	58.0
TOTAL	9,201	18,742		6,315		113	702	95	29,734	3						
AVG.	836	986		211		4	23	3	991	0			131.3	70.6	3.0	55.3

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	53,142	7,757
SUMMER	18,742	4,238
TOTAL	71,884	11,995

		WILD				
SOCKEYE	STEELHEAD	STEELHEAD	SHAD	LAMPREY	STURGEON	
113	3,885	1,272	29,739	3	1	

TABLE 75

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT
JULY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL		WILD		SHAD	LAMPREY	STURGEON	RIVER CONDITIONS				
	SPRING	SUMMER	FALL				SOCKEYE	STEELHEAD	STEELHEAD	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F					
Jul 1		718			202		33	130	30	6,695	1			105.7	63.6	4.6	58.0	
Jul 2		400			107		39	112	39	7,294	0			105.4	65.7	4.6	58.0	
Jul 3		427			81		50	132	30	10,828	0			97.1	63.6	4.6	58.0	
Jul 4		304			54		50	137	37	6,220	0			90.3	59.3	4.6	58.0	
Jul 5		279			52		40	174	39	11,107	0			80.6	33.9	4.6	60.0	
Jul 6		283			50		39	186	47	9,878	0			71.7	21.5	4.6	61.0	
Jul 7		221			22		41	239	62	8,358	0			67.9	20.4	4.6	63.0	
Jul 8		165			22		13	142	42	3,277	0			67.9	20.3	4.6	63.0	
Jul 9		142			13		24	138	31	874	1			63.7	45.4	4.6	63.0	
Jul 10		152			10		16	141	39	608	0			63.6	50.0	4.6	63.0	
Jul 11		155			6		21	225	68	1,676	0			56.7	22.9	4.6	63.0	
Jul 12		136			9		13	230	75	2,223	0			51.1	17.1	4.6	63.0	
Jul 13		148			3		9	173	48	987	1			43.5	30.2	4.6	63.0	
Jul 14		159			6		6	233	87	1,137	0			49.6	36.4	4.6	63.0	
Jul 15		112			6		12	244	65	6,922	1			47.6	17.4	4.6	65.0	
Jul 16		82			6		1	310	66	1,329	1			42.1	15.2	4.6	66.0	
Jul 17		82			8		7	393	104	920	0			49.0	33.3	4.6	66.0	
Jul 18		70			2		2	306	72	449	2			48.6	38.2	7.0	66.0	
Jul 19		41			4		2	315	89	1,017	1			46.2	35.5	7.0	67.0	
Jul 20		31			4		0	303	89	658	3			45.8	35.0	7.0	67.0	
Jul 21		34			8		1	307	75	747	2			45.4	34.7	7.0	67.0	
Jul 22		121			7		0	861	285	282	1			42.8	32.2	7.0	67.0	
Jul 23		87			5		0	844	298	361	5			44.2	34.1	7.0	67.0	
Jul 24		48			2		1	804	293	516	3			45.5	35.0	5.8	68.0	
Jul 25		60			2		0	865	316	496	7			44.2	33.5	5.8	68.0	
Jul 26		49			2		2	1,136	400	323	6			41.2	30.6	5.8	68.0	
Jul 27		56			1		0	1,426	514	544	4			41.7	31.1	5.8	68.0	
Jul 28		56			1		0	1,191	384	344	1			42.4	31.7	5.8	68.0	
Jul 29		15			1		0	694	167	459	5			45.3	34.8	5.8	68.0	
Jul 30		19			0		0	847	204	150	4			42.3	31.7	5.8	68.0	
Jul 31		30			3		0	818	187	141	6			44.8	34.2	5.8	68.0	
TOTAL		4,682			699		422	14,056	4,282	86,820	55			57.2	35.1	5.4	64.5	
Avg.		151			23			14	453	138	2,801	2						

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	WILD			SHAD	LAMPREY	STURGEON
	SOCKEYE	STEELHEAD	STEELHEAD					
SPRING	53,142	7,757						
SUMMER	23,424	4,937						
TOTAL	76,566	12,694						

TABLE 76

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT
AUGUST 2008

DATE	FISH COUNTS										RIVER CONDITIONS						
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL SOCKEYE	WILD STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F		
Aug 1	23			1			0	903	277	356	19			5.6	68.0		
Aug 2	19			1			0	1,007	294	94	11			5.6	68.0		
Aug 3	28			0			0	640	146	92	14			5.6	68.0		
Aug 4	27			2			1	854	240	93	11			6.8	68.0		
Aug 5	22			2			0	763	174	339	15			6.8	68.0		
Aug 6	30			1			0	1,049	309	430	7			6.8	68.0		
Aug 7	16			4			1	1,102	283	59	9			6.8	68.0		
Aug 8	7			5			0	945	279	106	6			6.8	68.0		
Aug 9	26			7			1	967	258	55	4			6.8	68.0		
Aug 10	45			2			0	789	149	20	7			6.8	68.0		
Aug 11	26			2			0	703	214	92	6			6.8	68.0		
Aug 12		41		6			0	899	279	118	5			6.8	68.0		
Aug 13		52		9			0	817	212	72	6			6.8	68.0		
Aug 14		61		11			1	797	250	49	7			6.8	68.0		
Aug 15		50		3			0	904	222	86	5			6.8	69.0		
Aug 16		68		6			0	723	207	52	3			6.8	69.0		
Aug 17		84		3			0	679	174	49	3			6.8	69.0		
Aug 18		84		8			0	548	157	49	6			6.8	69.0		
Aug 19		108		5			0	642	186	92	0			6.8	69.0		
Aug 20		20		4			0	465	96	19	1			6.8	69.0		
Aug 21		94		15			0	659	174	84	2			6.8	69.0		
Aug 22		134		25			0	587	160	53	7			6.8	69.0		
Aug 23		105		23			0	543	123	87	8			6.8	69.0		
Aug 24		100		20			0	467	128	8	1			6.8	69.0		
Aug 25		78		13			0	340	95	110	4			6.8	69.0		
Aug 26		94		15			0	368	81	28	3			6.8	69.0		
Aug 27		168		21			0	358	76	14	3			6.8	69.0		
Aug 28		228		21			0	321	72	6	2			6.8	69.0		
Aug 29		251		27			0	334	85	14	3			6.8	69.0		
Aug 30		379		28			0	344	54	14	2			6.8	69.0		
Aug 31		652		51			0	355	68	13	2			6.8	69.0		
TOTAL	269	2,851	341				4	20,872	5,522	2,753	182			35.9	25.7	6.7	68.5
AVG.	24	143	11				0	673	178	89	6						
RUN YEAR	CHINOOK ADULT	CHINOOK JACK															
TOTALS TO DATE																	
SPRING	53,142	7,757															
SUMMER	23,693	4,964															
FALL	2,851	314															
TOTAL	79,686	13,035															
	SOCKEYE	STEELHEAD	STEELHEAD														
	539	38,813	11,076														

TABLE 77

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT
SEPTEMBER 2008
RIVER CONDITIONS

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL													
Sep 1		756		82	0	0		429	82		6		24.7	0.1	6.8	69.0
Sep 2		1,437		193	0	0		947	203		3		31.7	0.0	6.8	69.0
Sep 3		1,014		107	4	0		1,284	290		2		32.5	0.0	6.8	69.0
Sep 4		1,232		144	11	0		2,022	481		1		28.0	0.0	6.8	69.0
Sep 5		890		128	22	1		3,056	656		0		36.9	0.0	6.8	69.0
Sep 6		873		81	35	0		2,986	783		0		31.1	0.0	6.8	69.0
Sep 7		554		70	22	0		2,125	524		0		30.8	0.0	6.8	69.0
Sep 8		742		124	55	1		2,904	600		1		23.3	0.0	6.8	69.0
Sep 9		932		132	49	1		3,905	794		1		26.3	0.0	6.8	69.0
Sep 10		996		115	44	1		3,612	726		0		25.0	0.0	6.8	69.0
Sep 11		1,021		162	91	6		4,689	1,063		0		16.5	0.0	6.8	69.0
Sep 12		575		243	165	18		4,515	1,079		0		17.6	0.0	6.8	69.0
Sep 13		500		223	188	10		3,527	845		0		17.3	0.0	6.8	69.0
Sep 14		818		354	178	14		4,023	941		0		17.7	0.0	6.8	69.0
Sep 15		756		300	139	10		3,725	851		0		14.3	0.0	6.8	69.0
Sep 16		563		260	162	7		3,830	933		1		16.3	0.0	6.8	69.0
Sep 17		659		192	107	5		3,893	932		0		18.6	0.0	6.8	69.0
Sep 18		474		160	89	4		3,834	1,158		0		25.9	0.0	6.8	65.0
Sep 19		450		228	53	5		3,013	728		0		20.0	0.0	6.8	65.0
Sep 20		378		287	84	6		2,730	609		1		11.8	0.0	6.8	65.0
Sep 21		180		218	16	0		2,110	453		0		12.9	0.0	6.8	65.0
Sep 22		334		805	42	4		2,845	580		1		13.3	0.0	6.8	64.0
Sep 23		380		425	71	2		4,117	978		0		15.9	0.0	6.8	64.0
Sep 24		249		466	53	2		5,117	1,187		0		16.8	0.0	6.8	64.0
Sep 25		169		392	59	1		5,147	1,163		0		24.8	0.0	6.8	64.0
Sep 26		214		423	86	1		5,654	1,374		1		19.9	0.0	6.8	64.0
Sep 27		168		433	38	0		3,242	854		0		26.2	0.0	6.8	64.0
Sep 28		238		740	39	1		2,656	572		1		16.6	0.0	6.8	64.0
Sep 29		132		348	31	0		3,016	669		0		14.2	0.0	6.8	64.0
Sep 30		124		502	12	4		2,592	590		2		26.5	0.0	6.9	64.0
TOTAL		17,808		8,337	1,945	104		97,545	22,698		21		21.8	0.0	6.8	67.0
Avg.		594		278	65	3		3,252	757		1					
RUN YEAR	CHINOOK ADULT	CHINOOK JACK		COHO ADULT	COHO JACK		SOCKEYE	STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	STURGEON				
TOTALS TO DATE	53,142	7,757		1,945	104		539	136,358	33,774	119,312	261	1				
SPRING	23,693	4,964														
SUMMER	20,659	8,651														
FALL																
TOTAL	97,494	21,372														

TABLE 78

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT

OCTOBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F*	
	SPRING	SUMMER	FALL						STEELHEAD	STEELHEAD							
Oct 1				132	438	24	1		2,659	634		0		23.4	0.0	7.2	63.0
Oct 2				85	510	12	0		2,371	444		0		26.6	0.0	7.2	63.0
Oct 3				105	266	66	1		3,561	854		0		23.5	0.0	7.2	63.0
Oct 4				102	229	40	0		2,536	569		0		14.2	0.0	7.2	63.0
Oct 5				98	202	40	2		2,430	554		1		20.7	0.0	7.2	63.0
Oct 6				54	151	26	1		1,401	304		1		18.6	0.0	7.2	64.0
Oct 7				49	172	27	1		1,433	369		2		22.0	0.0	7.2	63.0
Oct 8				61	241	48	2		2,488	644		0		18.7	0.0	7.2	63.0
Oct 9				33	95	33	-1		1,156	266		0		24.2	0.0	7.2	63.0
Oct 10				78	89	104	1		1,758	392		0		25.8	0.0	7.2	63.0
Oct 11				50	42	63	0		1,282	295		0		20.1	0.0	7.2	63.0
Oct 12				44	44	61	0		1,216	214		-1		21.1	0.0	7.2	62.0
Oct 13				30	74	33	0		803	173		0		25.8	0.0	7.2	62.0
Oct 14				35	46	27	0		986	202		0		20.6	0.0	7.2	61.0
Oct 15				39	43	22	0		896	201		0		15.6	0.0	7.4	61.0
Oct 16				26	26	54	0		826	172		0		15.6	0.0	7.4	61.0
Oct 17				35	30	41	1		1,143	283		0		18.1	0.0	7.4	61.0
Oct 18				29	23	45	0		808	176		0		11.9	0.0	7.4	60.0
Oct 19				22	20	36	1		785	196		0		22.3	0.0	7.4	60.0
Oct 20				25	34	26	0		740	190		0		21.4	0.0	7.4	60.0
Oct 21				12	10	43	0		1,115	245		0		28.9	0.0	7.4	60.0
Oct 22				14	20	18	0		590	116		0		26.8	0.0	7.4	60.0
Oct 23				9	9	8	0		453	105		0		21.2	0.0	7.2	60.0
Oct 24				14	11	6	0		530	125		0		20.9	0.0	7.2	60.0
Oct 25				13	18	4	0		452	102		0		15.3	0.0	7.2	59.0
Oct 26				11	12	6	0		332	80		0		14.0	0.0	7.2	59.0
Oct 27				12	15	8	0		220	65		0		15.5	0.0	7.2	59.0
Oct 28				20	10	8	0		333	86		0		18.5	0.0	7.2	59.0
Oct 29				7	2	6	0		327	89		0		14.8	0.0	7.2	59.0
Oct 30				2	5	8	0		308	69		0		14.5	0.0	7.2	59.0
Oct 31				2	6	1	0		157	27		0		12.4	0.0	7.2	57.0
TOTAL				1,248	2,893	944	10		36,095	8,241		3					
AVG.				40	93	30	0		1,164	266		0		19.8	0.0	7.3	61.1

RUN YEAR	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	STURGEON
TOTALS TO DATE										
SPRING	53,142	7,757	2,889	114	539	172,453	42,015	119,312	264	1
SUMMER	23,693	4,964								
FALL	21,907	11,544								
TOTAL	98,742	24,265								

Note: Visual counts occurred April 1 through October 31. The counts are 16-hour counts and occurred between the hours of 0400-2000 PST.
 South shore ladder was counted by direct observation while the north shore ladder was by closed circuit TV.

TABLE 79

**DISCHARGE AND WATER QUALITY DATA
ICE HARBOR PROJECT - 2008**

NOVEMBER				DECEMBER					
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI		
Nov 1	13.7	0.0	7.2	56.0	Dec 1	16.9	0.0	7.2	49.0
Nov 2	13.8	0.0	7.2	56.0	Dec 2	25.4	0.0	7.2	49.0
Nov 3	13.9	0.0	7.2	56.0	Dec 3	24.8	0.0	8.5	49.0
Nov 4	17.7	0.0	7.2	56.0	Dec 4	26.7	0.0	8.5	49.0
Nov 5	24.8	0.0	7.2	55.0	Dec 5	17.6	0.0	8.5	48.0
Nov 6	22.5	0.0	7.2	55.0	Dec 6	20.3	0.0	8.5	48.0
Nov 7	21.0	0.0	7.2	55.0	Dec 7	21.1	0.0	8.5	48.0
Nov 8	13.4	0.0	7.2	55.0	Dec 8	26.8	0.0	8.5	48.0
Nov 9	27.0	0.0	7.2	55.0	Dec 9	17.7	0.0	8.9	48.0
Nov 10	21.8	0.0	7.2	55.0	Dec 10	18.4	0.0	8.9	46.0
Nov 11	21.7	0.0	8.1	55.0	Dec 11	20.4	0.0	8.9	46.0
Nov 12	25.1	0.0	8.1	55.0	Dec 12	20.2	0.0	8.9	46.0
Nov 13	28.2	0.0	8.4	55.0	Dec 13	23.4	0.0	8.9	45.0
Nov 14	44.1	0.0	8.4	54.0	Dec 14	21.2	0.0	8.9	45.0
Nov 15	34.6	0.0	8.4	54.0	Dec 15	18.5	0.0	8.9	45.0
Nov 16	28.6	0.0	8.4	53.0	Dec 16	21.7	0.0	8.9	45.0
Nov 17	31.5	0.0	8.4	53.0	Dec 17	21.8	0.0	8.9	44.0
Nov 18	23.9	0.0	8.4	53.0	Dec 18	16.0	0.0	8.9	44.0
Nov 19	29.4	0.0	8.4	53.0	Dec 19	21.2	0.0	8.9	44.0
Nov 20	23.9	0.0	8.4	51.0	Dec 20	25.4	0.0	8.9	43.0
Nov 21	16.8	0.0	8.4	51.0	Dec 21	22.7	0.0	8.9	42.0
Nov 22	22.2	0.0	8.4	51.0	Dec 22	20.7	0.0	8.9	40.0
Nov 23	21.5	0.0	8.4	51.0	Dec 23	28.5	0.0	8.9	40.0
Nov 24	25.8	0.0	8.4	51.0	Dec 24	22.8	0.0	8.9	40.0
Nov 25	18.3	0.0	8.4	51.0	Dec 25	11.2	0.0	8.9	40.0
Nov 26	20.6	0.0	8.4	50.0	Dec 26	22.2	0.0	8.9	39.0
Nov 27	15.7	0.0	8.4	50.0	Dec 27	15.7	0.0	8.9	38.0
Nov 28	18.0	0.0	8.4	50.0	Dec 28	20.3	0.0	8.9	38.0
Nov 29	22.5	0.0	8.4	49.0	Dec 29	20.2	0.0	7.8	38.0
Nov 30	22.9	0.0	8.4	49.0	Dec 30	23.1	0.0	7.8	37.0
	Avg.	22.8	0.0	8.0		21.1	0.0	8.6	43.8

TABLE 80

**YEARLY TOTALS OF SALMONIDS COUNTED OVER
ICE HARBOR DAM
1962 - 2008**

YEAR	CHINOOK*	STEELHEAD	Sockeye	Coho*	TOTALS*
1962	94,301	115,796	38	3,207	213,342
1963	61,190	74,539	1,118	1,933	138,780
1964	60,097	58,860	1,276	2,071	122,304
1965	39,233	62,873	317	320	102,743
1966	75,882	65,798	278	878	142,836
1967	84,930	44,205	717	3,770	133,622
1968	98,681	82,383	1,165	6,227	188,456
1969	100,514	63,889	745	5,316	170,464
1970	77,698	53,870	797	3,636	136,001
1971	70,248	67,029	532	2,969	140,778
1972	82,632	63,593	363	2,522	149,110
1973	81,821	38,311	233	2,443	122,808
1974	32,444	12,528	204	1,334	46,510
1975	31,686	16,218	243	1,559	49,706
1976	36,556	23,885	771	1,991	63,203
1977	56,514	54,820	582	1,561	113,477
1978	61,352	27,142	86	652	89,232
1979	13,929	23,117	30	398	37,474
1980	14,717	50,221	36	58	65,032
1981	22,092	41,290	142	82	63,606
1982	22,646	73,405	174	348	96,573
1983	20,259	88,475	216	465	109,415
1984	17,757	94,030	105	22	111,914
1985	47,981	128,481	24	10	176,496
1986	52,615	144,292	20	0	196,927
1987	47,477	74,491	13	0	121,981
1988	48,066	99,714	22	0	147,802
1989	27,234	151,101	4	0	178,339
1990	31,841	54,758	1	1	86,601
1991	23,175	123,762	9	1	146,947
1992	36,021	160,614	33	0	196,668
1993	34,991	73,107	17	0	108,115
1994	7,577	51,704	0	1	59,282
1995	7,990	92,026	5	4	100,025
1996	16,419	100,805	1	0	117,225
1997	55,412	103,830	15	128	159,385
1998	26,117	85,122	3	15	111,257
1999	23,331	84,163	8	144	107,646
2000	72,154	126,424	215	1,224	200,017
2001	215,697	283,694	38	1,595	501,024
2002	137,507	211,762	61	289	349,619
2003	143,197	186,474	37	1,431	331,139
2004	130,218	171,380	91	3,519	305,208
2005	58,361	156,920	18	1,621	216,920
2006	52,501	124,812	48	971	178,332
2007	69,106	157,620	55	2,147	228,928
2008	123,007	172,453	539	3,003	299,002
Totals	2,745,174	4,415,786	11,445	59,866	7,232,271
10-Year Average	102,508	167,570	111	1,594	271,784

*Jacks included

These counts include the extended season videotaped counts that were made between 0600 and 1600 hours in November and December for the count seasons, 1996-2002.

TABLE 81

MONTHLY COUNT OF CHINOOK SALMON
ICE HARBOR DAM
1962 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	SPRING 1 APR- 11 JUN	SUMMER 12 JUN- 11 AUG	FALL 12 AUG- 31 OCT		
1962					2,579	28,951	23,250	8,315	3,547	20,578	7,081		94,301	33,613	30,639	30,049		
1963					3,434	21,790	14,001	7,591	1,415	9,342	2,918	677	22	61,190	26,778	20,875	13,537	
1964				1	4,048	19,611	5,409	18,832	2,161	8,159	1,701	156	17	60,097	24,304	24,696	11,097	
1965				4	1,677	9,649	5,072	10,209	803	9,318	2,152	349		39,233	12,178	14,701	12,354	
1966					23,382	19,294	10,611	7,166	1,933	10,756	2,740			75,882	43,881	16,983	15,018	
1967					15,973	18,137	9,020	22,218	820	11,947	6,815			84,930	35,593	30,315	19,022	
1968					1,595	41,398	12,119	17,751	3,433	16,588	5,275	493	29		98,681	44,773	29,531	24,377
1969				195	697	43,181	24,918	12,861	2,369	12,027	3,555	708	3		100,514	52,090	30,917	17,507
1970					12,167	33,881	12,338	8,185	1,747	7,702	1,456	219	3		77,698	47,931	19,382	10,385
1971					1,104	25,089	19,265	13,364	873	8,960	1,593			70,248	32,638	26,606	11,004	
1972					14,535	34,734	7,544	15,177	1,869	6,089	2,684			82,632	50,350	22,846	9,436	
1973					34,277	23,627	10,925	4,254	840	6,657	1,241			81,821	60,639	12,829	8,353	
1974					842	16,670	5,315	6,494	483	2,066	574			32,444	19,361	10,269	2,814	
1975					1,314	17,796	5,817	3,972	506	1,875	406			31,686	21,401	7,727	2,558	
1976					3,146	19,269	8,544	3,921	349	1,123	204			36,556	25,056	10,026	1,474	
1977					24,003	17,626	9,328	3,606	297	1,370	284			56,514	44,421	10,337	1,756	
1978					14,891	29,333	9,999	4,888	892	1,064	269	16		61,352	49,303	10,440	1,609	
1979					1,731	6,528	2,234	1,216	379	1,489	333	19		13,929	9,247	2,608	2,074	
1980					1,678	7,321	2,285	1,569	301	1,034	504	25		14,717	9,668	3,305	1,744	
1981			1	6,744	8,542	2,884	1,751	161	1,530	470	9			22,092	16,167	3,814	2,111	
1982		3		656	11,543	4,522	2,347	283	2,601	691				22,646	14,600	4,527	3,519	
1983				1,925	9,418	4,132	1,921	316	1,945	602				20,259	12,602	4,922	2,735	
1984				823	7,292	5,353	1,943	223	1,762	361				17,757	9,183	6,307	2,267	
1985				12,245	18,334	6,885	1,294	546	5,414	3,263				47,981	33,527	5,290	9,164	
1986		1	14,764	22,025	8,299	1,672	169	3,664	2,021					52,615	39,087	7,745	5,783	
1987			11,141	18,821	6,550	2,437	329	6,089	2,110					47,477	32,083	6,982	8,412	
1988			14,274	17,196	8,609	1,904	702	3,621	1,760					48,066	34,394	7,790	5,882	
1989			3,307	11,724	4,946	1,143	776	3,917	1,421					27,234	17,029	4,215	5,990	
1990			7,578	12,166	5,353	1,337	320	3,315	1,773					31,842	20,730	5,794	5,317	
1991			1,639	7,953	5,367	2,101	155	4,053	1,907					23,175	11,288	5,861	6,026	
1992			11,462	12,001	5,791	1,189	228	3,716	1,634					36,021	26,114	4,377	5,530	
1993			5,776	15,879	8,705	1,405	338	2,087	801					34,991	24,935	6,919	3,137	
1994			717	2,268	1,183	289	170	1,693	1,257					7,577	3,472	1,003	3,102	
1995			256	1,253	928	315	387	2,920	1,931					7,990	1,873	915	5,202	
1996			97	6,254	3,954	1,367	792	2,983	928	44	0			16,419	7,671	4,086	4,662	
1997			3,442	30,332	14,678	2,224	411	2,502	1,680	143	0			55,412	41,473	9,318	4,621	
1998			3,850	7,285	6,001	1,165	421	4,324	3,006	64	1			26,117	12,564	5,777	7,776	
1999			260	5,717	5,659	1,461	917	6,283	2,943	89	2			23,331	8,008	5,211	10,112	
2000			13,749	29,916	9,877	2,076	1,928	9,763	4,738	105	2			72,154	48,278	7,420	16,456	
2001			104,883	55,788	26,709	4,268	1,327	18,315	4,262	140	5			215,697	174,199	17,667	23,831	
2002			5,016	71,511	33,555	5,750	2,752	15,874	2,946	100	3			137,507	87,033	29,044	21,327	
2003		132	42,343	34,581	28,636	5,732	1,286	23,445	7,174					143,329	86,190	25,344	31,663	
2004		5	36,168	37,934	19,580	4,094	908	26,998	4,531					130,218	81,752	16,185	32,276	
2005			1,763	20,798	14,089	2,323	1,389	14,672	3,327					58,361	29,306	9,817	19,238	
2006			29	21,660	11,042	2,438	1,534	11,976	3,822					52,501	26,309	9,085	17,107	
2007		1	3,277	27,506	11,597	3,167	1,984	17,456	4,118					69,106	35,355	10,599	23,151	
2008			4,447	45,174	34,258	5,381	3,461	26,145	4,141					123,007	60,899	28,657	33,451	
TOTAL			1	344	475,704	1,004,756	497,136	236,083	49,230	367,207	111,403	3,356	87		2,745,307	1,639,346	589,703	516,016
10-Year Average					21,194	35,059	19,500	3,669	1,749	17,093	4,200				102,521	63,733	15,903	22,861

*Jacks included

The 1996 through 2002 count seasons were extended to include video counts made between 0600 and 1600 hours daily from November 1 through December 15.

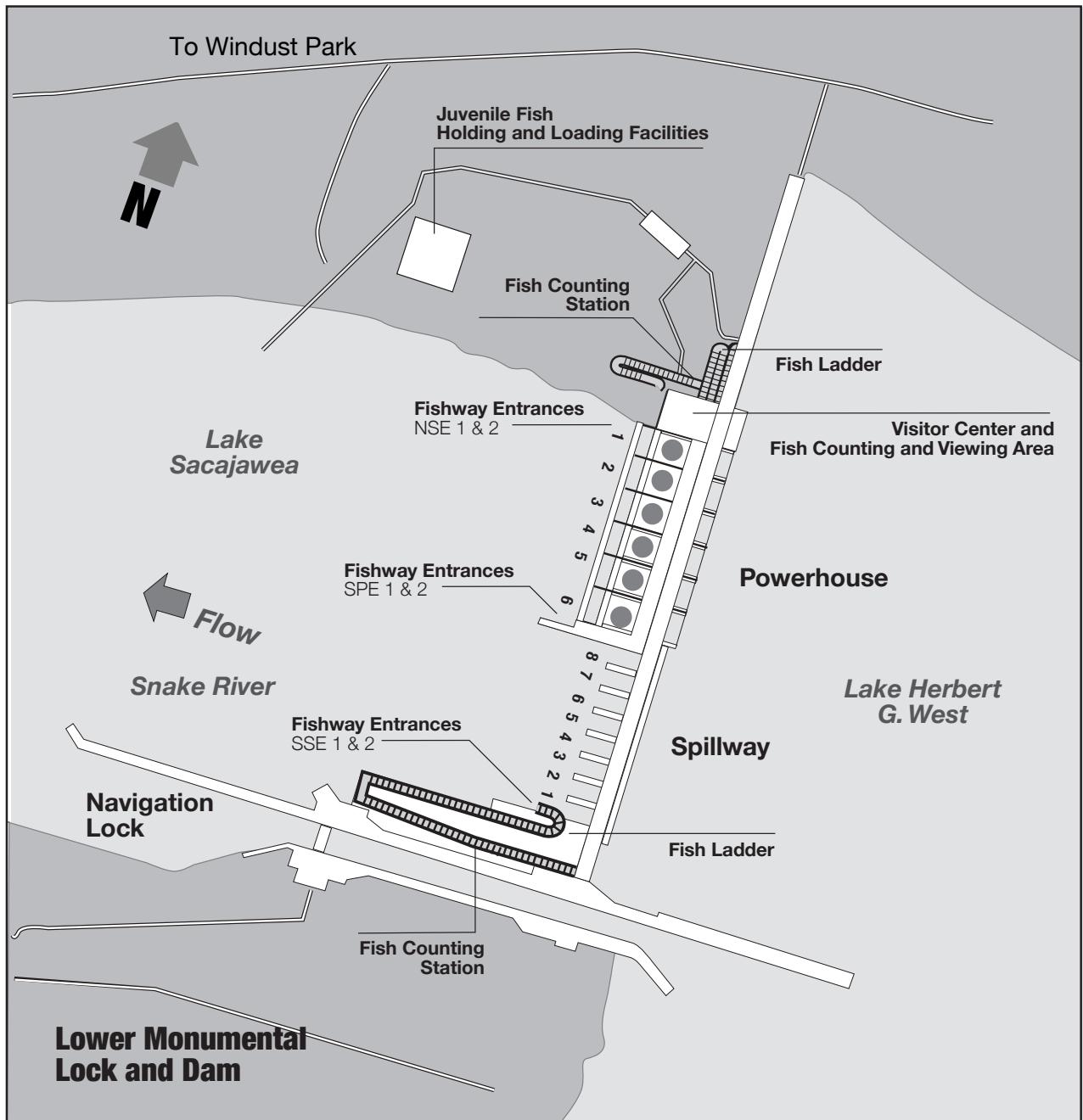
TABLE 82
MONTHLY COUNT OF STEELHEAD
ICE HARBOR DAM
1962 -2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS	
1962				8,758	716	261	2,384	7,450	75,924	20,303			115,796	
1963				969	895	163	2,157	6,514	35,382	24,070	4,042	347	74,539	
1964	105	136	796	2,269	807	153	1,596	9,462	34,435	7,357	1,347	397	58,860	
1965	31	110	673	1,976	488	439	3,739	4,497	33,595	13,522	3,803		62,873	
1966				2,161	810	413	1,383	2,517	40,185	18,329			65,798	
1967				1,266	894	345	972	953	18,914	20,861			44,205	
1968				2,558	2,933	357	952	8,107	45,552	17,270	3,692	962	82,383	
1969	132	41	807	4,971	2,430	321	3,348	5,715	27,219	14,953	3,874	78	63,889	
1970				1,597	1,067	389	2,620	7,611	30,101	8,290	1,891	304	53,870	
1971		458		1,938	843	215	3,064	2,996	42,481	15,034			67,029	
1972				1,853	553	152	3,062	6,503	34,134	17,336			63,593	
1973				1,570	827	254	1,785	2,699	22,021	9,155			38,311	
1974				972	359	104	1,482	2,202	3,661	3,748			12,528	
1975				564	409	76	1,223	3,878	6,816	3,252			16,218	
1976				508	142	165	1,714	5,138	11,141	5,077			23,885	
1977				685	220	308	3,654	3,017	30,610	16,326			54,820	
1978				908	88	43	1,308	2,907	15,094	6,092	702		27,142	
1979		454		538	114	60	1,995	1,778	6,136	9,717	2,325		23,117	
1980				1,420	2,796	563	39	1,303	4,333	22,064	15,424	2,279	50,221	
1981				797	1,106	433	137	2,305	1,431	16,563	16,669	1,849		41,290
1982				1,471	1,931	918	45	2,564	8,895	30,574	27,007			73,405
1983				1,001	150	36	3,773	9,875	48,519	25,121			88,475	
1984				2,218	488	49	4,103	4,554	50,638	31,980			94,030	
1985				1,892	7,353	439	306	3,070	14,468	75,378	25,575		128,481	
1986		2,561		1,642	187	174	6,600	8,679	63,598	60,851			144,292	
1987				2,136	235	262	3,292	4,972	28,491	35,103			74,491	
1988				4,865	580	671	3,251	5,955	46,838	37,554			99,714	
1989				4,326	355	487	7,399	8,916	80,799	48,819			151,101	
1990				2,793	148	252	2,631	2,000	18,728	28,206			54,758	
1991				2,297	256	166	3,254	1,275	55,447	61,067			123,762	
1992				1,433	232	742	4,190	8,137	89,281	56,599			160,614	
1993				7,418	287	745	5,896	8,086	21,614	29,061			73,107	
1994				3,040	126	394	3,295	3,162	16,702	24,985			51,704	
1995				828	84	193	4,699	14,521	39,494	32,207			92,026	
1996				743	81	229	3,427	15,391	48,722	28,657	2,303	1,252	100,805	
1997				1,187	216	280	4,323	11,522	40,238	37,036	8,484	544	103,830	
1998				1,719	74	259	3,226	3,114	25,408	43,844	5,400	2,078	85,122	
1999				713	93	246	3,784	16,120	40,424	18,887	2,809	1,087	84,163	
2000				805	91	870	7,202	11,684	65,713	33,899	5,510	650	126,424	
2001				1,322	139	3,682	17,607	27,925	136,208	68,837	22,449	5,525		283,694
2002				4,507	134	943	12,760	30,321	87,357	66,151	8,770	819		211,762
2003		5,201		1,548	74	1,128	11,558	12,267	109,101	50,798				191,675
2004				2,483	1,690	118	1,467	9,875	6,593	111,826	37,328			171,380
2005				1,379	1,205	124	1,364	4,619	11,902	76,394	59,933			156,920
2006				1,181	2,628	78	490	2,797	7,265	67,556	42,817			124,812
2007				4,001	2,183	107	903	4,743	11,723	83,713	50,247			157,620
2008					2,942	241	702	14,056	20,872	97,545	36,095			172,453
Totals	268	287	25,574	106,436	21,646	21,479	200,040	379,902	2,208,334	1,361,449	81,529	14,043	4,420,987	
10-Year Average				1,954	120	1,180	8,900	15,667	87,584	46,499			168,090	

The 1996 through 2002 count seasons were extended to include video counts made between 0600 and 1600 hours daily, November 1 to December 15.

Plate 7 Lower Monumental Lock and Dam

0 200 400 600 800
approximate scale in feet



LOWER MONUMENTAL DAM

FISH COUNTING SCHEDULE

1 January – 31 March	No counting
1 April – 31 October	Visual counting daily from 0400-2000 hours PST
1 November – 31 December	No counting

FISH LADDER OPERATING SCHEDULE

North Ladder

1 January – 8 January	Ladder in service.
9 January – 9 February	Ladder dewatered for annual maintenance.
10 February – 31 December	Ladder in service.

South Ladder

1 January – 10 February	Ladder in service.
11 February – 28 February	Ladder dewatered for annual maintenance.
29 February – 31 December	Ladder in service.

FISHWAY ACTIVITIES

Water temperatures were recorded hourly from fish ladder exit pools and the downstream end of the primary dewaterer. Hourly readings were taken from 21 May to 7 August. The purpose is to determine if summer spill has any effects on exit pool temperatures.

Fish pumps were out of service from 4 January through 13 March as evaluating their condition and rebuilding FP 3 was going on. Two fish pump operation occurred for all of the adult fish passage season while pump 3 was out of service for repair. Fish ladder operating criteria was met for the most part throughout the season with only two pumps in operation.

The juvenile fish facility was operated for juvenile fish transport/bypass and adult fallbacks from 1 April to 18 December.

First year of RSW operation and testing from 3 April to the end of spill season 31 August.

TABLE 83

**MONTHLY TOTALS OF SALMONIDS, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER LOWER MONUMENTAL DAM
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				2,468	43,772	37,105	7,801	3,334	24,325	4,213			123,018
STEELHEAD				3,520	510	552	12,664	21,947	97,562	49,303			186,058
SOCKEYE						97	619	6	0				722
COHO*								0	2,772	1,741			4,513
PINK													0
TOTAL	5,988	44,282	37,754	21,084	25,287	124,659	55,257						314,311
LAMPREY				1	6	35	93	9	1				145
STURGEON													0
BULL TROUT				1	1								2

*Jacks included

TABLE 84

**DISCHARGE AND WATER QUALITY DATA
LOWER MONUMENTAL PROJECT 2008**

JANUARY				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	21.4	0.0	4.0	38.0
Jan 2	26.1	0.0	4.0	38.0
Jan 3	18.9	0.0	4.0	38.0
Jan 4	23.7	0.0	4.0	38.0
Jan 5	19.5	0.0	4.0	38.0
Jan 6	28.7	0.0	4.0	38.0
Jan 7	21.5	0.0	4.0	38.0
Jan 8	27.8	0.0	3.0	38.0
Jan 9	26.2	0.0	3.0	38.0
Jan 10	25.5	0.0	3.0	38.0
Jan 11	21.6	0.0	3.0	38.0
Jan 12	32.2	0.0	3.0	38.0
Jan 13	23.5	0.0	4.0	38.0
Jan 14	24.7	0.0	4.0	38.0
Jan 15	23.9	0.0	4.0	38.0
Jan 16	27.1	0.0	4.0	38.0
Jan 17	24.3	0.0	4.0	38.0
Jan 18	28.1	0.0	4.0	38.0
Jan 19	22.9	0.0	4.0	38.0
Jan 20	21.1	0.0	4.0	38.0
Jan 21	25.5	0.0	4.0	38.0
Jan 22	26.4	0.0	4.0	36.0
Jan 23	19.4	0.0	4.0	36.0
Jan 24	24.0	0.0	4.0	36.0
Jan 25	25.1	0.0	4.0	35.0
Jan 26	27.2	0.0	4.0	35.0
Jan 27	21.4	0.0	4.0	35.0
Jan 28	30.8	0.0	4.0	35.0
Jan 29	20.7	0.0	4.0	35.0
Jan 30	32.6	0.0	4.0	35.0
Jan 31	30.4	0.0	4.0	35.0

Avg 24.9 0.0 3.8 37.1

FEBRUARY				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	15.0	0.0	4.0	35.0
Feb 2	23.4	0.0	4.0	35.0
Feb 3	19.3	0.0	4.0	35.0
Feb 4	28.2	0.0	4.0	35.0
Feb 5	23.6	0.0	4.0	36.0
Feb 6	25.1	0.0	4.0	36.0
Feb 7	20.1	0.0	4.0	36.0
Feb 8	26.0	0.0	4.0	36.0
Feb 9	26.0	0.0	4.0	36.0
Feb 10	16.7	0.0	4.0	36.0
Feb 11	29.4	0.0	4.0	36.0
Feb 12	27.6	0.0	4.0	36.0
Feb 13	32.7	0.0	4.0	36.0
Feb 14	31.6	0.0	4.0	36.0
Feb 15	34.2	0.0	3.5	37.0
Feb 16	24.4	0.0	3.5	37.0
Feb 17	19.9	0.0	3.5	37.0
Feb 18	29.6	0.0	3.5	37.0
Feb 19	29.0	0.0	3.5	37.0
Feb 20	27.3	0.0	3.5	37.0
Feb 21	25.4	0.0	3.5	37.0
Feb 22	34.8	0.0	3.5	37.0
Feb 23	24.0	0.0	3.5	38.0
Feb 24	25.8	0.0	3.5	38.0
Feb 25	26.2	0.0	3.5	38.0
Feb 26	24.5	0.0	3.5	38.0
Feb 27	30.4	0.0	3.5	38.0
Feb 28	32.8	0.0	3.5	38.0
Feb 29	35.2	0.0	3.5	38.0

Avg 26.5 0.0 3.7 36.6

MARCH				
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	28.0	0.0	3.5	38.0
Mar 2	35.0	0.0	3.5	39.0
Mar 3	*	0.0	4.0	39.0
Mar 4	41.4	0.0	4.0	39.0
Mar 5	47.9	0.0	4.0	40.0
Mar 6	34.3	0.0	4.0	40.0
Mar 7	33.4	0.0	4.0	40.0
Mar 8	31.0	0.0	4.0	40.0
Mar 9	31.5	0.0	4.0	40.0
Mar 10	33.7	0.0	4.0	40.0
Mar 11	35.9	0.0	4.0	40.0
Mar 12	41.9	0.0	4.0	41.0
Mar 13	44.9	0.0	4.0	41.0
Mar 14	44.7	0.0	4.0	41.0
Mar 15	33.3	0.0	4.0	41.0
Mar 16	41.2	0.0	4.0	41.0
Mar 17	44.2	0.0	4.0	42.0
Mar 18	43.1	1.5	4.0	42.0
Mar 19	40.8	0.0	4.0	42.0
Mar 20	43.9	0.0	4.0	42.0
Mar 21	37.5	0.1	4.0	42.0
Mar 22	38.1	0.0	4.0	43.0
Mar 23	30.9	0.0	4.0	42.0
Mar 24	36.3	0.8	4.0	42.0
Mar 25	44.3	1.7	4.0	42.0
Mar 26	44.1	1.6	4.0	42.0
Mar 27	34.8	1.9	4.0	43.0
Mar 28	48.5	2.2	4.0	43.0
Mar 29	45.6	1.6	4.0	43.0
Mar 30	53.6	1.6	4.0	43.0
Mar 31	44.2	0.8	4.0	43.0

Avg 39.6 0.4 4.0 41.2

*Data unavailable

TABLE 85

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT

APRIL 2008

DATE	FISH COUNTS										RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	1			0				120	42			50.8	0.0	4.0	43.0
Apr 2	0			0				114	38			41.1	0.0	4.0	43.0
Apr 3	0			0				43	21			45.0	26.5	4.0	43.0
Apr 4	1			0				50	17			39.6	26.5	4.0	43.0
Apr 5	1			0				113	37			43.5	27.0	4.0	43.0
Apr 6	0			0				95	26			43.0	29.6	4.0	44.0
Apr 7	-1			0				43	24			43.5	29.8	4.0	44.0
Apr 8	0			0				101	42			44.1	27.8	4.0	44.0
Apr 9	0			0				134	48			43.2	28.8	4.0	44.0
Apr 10	0			0				105	32			42.7	28.9	4.0	44.0
Apr 11	0			0				101	32			42.3	30.1	4.0	44.0
Apr 12	4			0				235	99			43.0	30.7	4.0	45.0
Apr 13	7			0				229	78			38.7	26.6	4.0	45.0
Apr 14	4			0				327	128			54.7	26.1	4.0	46.0
Apr 15	4			0				309	125			61.8	23.8	3.5	46.0
Apr 16	10			0				208	86			61.3	23.8	3.5	46.0
Apr 17	10			0				151	68			58.8	24.8	3.5	46.0
Apr 18	48			0				229	110			61.2	25.0	3.5	46.0
Apr 19	110			0				180	87			60.5	25.3	3.5	47.0
Apr 20	163			0				129	52			63.4	27.4	3.5	47.0
Apr 21	71			1				89	46			65.9	27.4	3.5	47.0
Apr 22	155			0				76	39			53.3	26.8	3.5	48.0
Apr 23	50			0				25	12			47.5	25.3	3.5	48.0
Apr 24	230			1				57	24			52.6	23.6	3.5	48.0
Apr 25	336			2				56	30			56.7	24.3	4.0	48.0
Apr 26	288			0				52	34			51.8	25.3	4.0	48.0
Apr 27	124			0				43	22			54.5	25.3	4.0	48.0
Apr 28	63			1				20	8			50.8	24.5	4.0	48.0
Apr 29	233			0				41	19			62.9	22.9	4.0	49.0
Apr 30	550			1				45	21			68.6	21.5	4.0	48.0
TOTAL	2,462			6				3,520	1,447						
AVG.	82			0				117	48			51.6	24.5	3.8	45.8

Note: Official Spring Chinook run started April 1.

TABLE 86

**MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND**

LOWER MONUMENTAL PROJECT

MAY 2008

RIVER CONDUIT

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK		COHO ADULT		COHO JACK		SOCKEYE		TOTAL		WILD STEELHEAD		BULL TROUT		LAMPREY		DISCH KCFS		SPILL KCFS		TURBIDITY SECCHI DEG F		
	SPRING	SUMMER	FALL																							
May 1	564				0								22		19		0		0			66.3	22.5	4.0	48.0	
May 2	483				7								29		24		0		0			60.7	23.8	4.0	48.0	
May 3	372				4								37		20		0		0			61.5	23.8	4.0	49.0	
May 4	920				12								37		21		0		0			61.2	23.8	4.0	49.0	
May 5	721				5								57		36		0		0			71.2	23.1	4.0	49.0	
May 6	615				11								36		21		1		0			79.5	20.6	4.0	50.0	
May 7	1,990				39								48		24		0		0			86.6	19.7	4.0	51.0	
May 8	1,871				36								54		32		0		0			100.8	21.5	4.0	50.0	
May 9	1,608				54								28		17		0		0			94.1	24.5	4.0	51.0	
May 10	1,207				75								29		17		0		0			90.7	26.6	4.0	51.0	
May 11	1,151				83								24		16		0		0			85.1	27.9	4.0	51.0	
May 12	1,454				156								20		13		0		0			87.6	26.2	3.5	51.0	
May 13	1,122				140								22		16		0		0			83.5	22.8	3.0	52.0	
May 14	1,450				126								8		2		0		0			71.9	24.0	3.0	51.0	
May 15	2,162				197								11		10		0		0			77.9	26.7	3.0	51.0	
May 16	2,284				392								9		4		0		0			96.4	27.2	3.0	52.0	
May 17	2,405				366								8		4		0		0			116.7	25.6	2.5	52.0	
May 18	1,997				318								3		1		0		0			147.0	32.4	2.5	52.0	
May 19	1,877				404								9		4		0		0			182.7	68.6	2.5	53.0	
May 20	1,914				391								12		12		0		0			198.8	85.6	2.5	54.0	
May 21	1,427				358								1		1		0		0			197.2	85.7	2.5	54.0	
May 22	811				116								0		0		0		0			189.7	79.2	2.5	53.0	
May 23	540				119								2		0		0		0			154.9	43.7	2.5	53.0	
May 24	312				31								1		0		0		0			137.2	42.9	2.5	50.0	
May 25	241				12								0		0		0		0			124.5	26.7	2.0	50.0	
May 26	479				49								0		0		0		0			122.7	25.2	2.0	50.0	
May 27	954				155								0		0		0		0			125.5	25.3	2.0	51.0	
May 28	917				185								0		0		0		0			127.3	37.9	2.0	52.0	
May 29	1,624				367								1		1		0		0			142.1	40.7	2.0	52.0	
May 30	1,791				292								1		0		0		0			150.2	47.1	2.0	52.0	
May 31	1,703				306								1		0		0		1			154.2	39.1	2.0	53.0	
	TOTAL	38,966			4,806								510		315		1		1							
Avg.	1,257				155								16		10		0		0			114.4	35.2	3.0	51.1	

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	41,428	4,812

	WILD STEELHEAD	BULL TROUT	LAMPREY
STEELHEAD	4,030	1,762	1
			1

TABLE 87

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT

JUNE 2008

DATE	FISH COUNTS										RIVER CONDITIONS						
	CHINOOK ADULT			CHINOOK JACK		COHO ADULT		COHO JACK		TOTAL	WILD STEELHEAD	BULL STEELHEAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	1,711			303		0	2	0	0	0	0	0	0	152.9	57.1	2.0	54.0
Jun 2	1,502			271		0	3	2	0	0	0	0	0	160.8	47.4	1.0	54.0
Jun 3	972			149		0	2	1	0	0	0	0	0	158.9	58.2	1.0	54.0
Jun 4	714			147		0	0	0	0	0	0	0	0	156.1	62.8	1.0	53.0
Jun 5	615			114		0	1	0	0	0	0	0	0	147.2	32.2	1.0	53.0
Jun 6	738			174		0	2	1	0	0	0	0	0	136.4	28.0	1.0	53.0
Jun 7	629			102		0	2	1	0	0	0	0	0	136.4	34.8	1.0	52.0
Jun 8	759			166		0	1	0	0	0	0	0	0	123.7	34.2	1.0	53.0
Jun 9	849			129		0	3	0	0	0	1	0	0	117.5	30.8	1.0	52.0
Jun 10	1,488			174		0	2	0	1	0	0	0	0	119.0	40.2	1.0	52.0
Jun 11	820			81		0	7	0	0	0	0	0	0	119.2	51.7	1.0	52.0
Jun 12	1,345			120		0	3	1	0	0	0	0	0	120.8	46.8	1.0	52.0
Jun 13	942			143		0	5	0	0	0	0	0	0	122.6	39.6	1.0	54.0
Jun 14	1,290			204		0	8	0	0	0	0	0	0	115.1	22.4	1.0	55.0
Jun 15	1,353			186		0	6	2	0	0	0	0	0	110.9	21.7	1.0	55.0
Jun 16	912			240		0	7	3	0	1	0	0	0	115.1	20.7	1.0	55.0
Jun 17	720			87		0	11	2	0	0	0	0	0	124.1	28.4	1.0	54.0
Jun 18	1,068			139		0	12	3	0	0	0	0	0	133.7	43.4	1.0	54.0
Jun 19	1,487			156		0	15	3	0	0	0	0	0	129.2	36.1	1.0	54.0
Jun 20	1,461			124		0	25	1	0	1	0	0	0	126.6	19.4	1.5	56.0
Jun 21	1,449			101		0	19	4	0	0	0	0	0	127.8	17.4	2.0	57.0
Jun 22	1,096			106		0	26	3	0	0	0	0	0	132.3	24.6	1.5	58.0
Jun 23	1,517			104		0	31	4	0	0	0	0	0	136.2	24.3	1.5	58.0
Jun 24	1,423			128		3	26	2	0	2	0	0	0	131.1	22.2	1.5	58.0
Jun 25	1,567			162		3	46	6	0	0	0	0	0	117.2	28.0	2.0	58.0
Jun 26	1,028			148		6	35	6	0	1	0	0	0	109.3	35.4	2.0	58.0
Jun 27	946			103		16	47	4	0	0	0	0	0	97.7	35.7	2.0	58.0
Jun 28	792			73		25	57	11	0	0	0	0	0	98.6	18.2	2.5	58.0
Jun 29	689			110		24	73	14	0	0	0	0	0	101.1	17.3	2.5	59.0
Jun 30	893			86		20	75	16	0	0	0	0	0	103.0	16.1	2.5	60.0
TOTAL	13,084	19,691		4,330		97	552	92	1	6				126.0	33.2	1.4	55.1
AVG.	1,006	1,158		144		3	18	3	0	0							
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK															
SPRING	54,512	6,885															
SUMMER	19,691	2,257															
TOTAL	74,203	9,142															
						SOCKEYE	STEELHEAD	STEELHEAD	WILD TROUT	BULL TROUT	LAMPREY						
						97	4,582	1,854	2	7							

TABLE 88

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT

JULY 2008

RIVER CONDITIONS

DATE	FISH COUNTS				SOCKEYE	TOTAL	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS		
	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK JACK FALL	COHO JACK						KCFS	KCFS	TURBIDITY SECCHI
DATE	SPRING	SUMMER	FALL	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	BULL TROUT	LAMPREY	KCFS	DEG F
Jul 1	838		55			41	80	20		2	102.7	14.8
Jul 2	659		53			52	105	26		0	100.4	14.6
Jul 3	797		20			37	122	28		0	92.4	16.4
Jul 4	461		31			40	116	36		0	85.0	17.4
Jul 5	450		35			59	153	34		0	77.6	17.6
Jul 6	283		27			61	172	46		0	68.3	17.5
Jul 7	345		10			55	221	46		0	64.9	17.4
Jul 8	314		15			53	207	65		0	65.1	17.1
Jul 9	265		8			36	287	71		0	60.8	17.5
Jul 10	246		14			33	178	58		0	60.1	17.5
Jul 11	203		19			32	204	67		0	54.4	17.4
Jul 12	151		24			18	173	49		0	47.6	16.6
Jul 13	143		22			16	252	84		1	40.9	15.4
Jul 14	392		36			13	162	66		0	46.8	16.9
Jul 15	171		24			11	210	70		0	44.2	16.3
Jul 16	143		24			12	270	75		0	40.5	16.8
Jul 17	166		21			12	356	126		0	45.2	17.4
Jul 18	143		10			12	364	130		1	45.1	17.0
Jul 19	144		9			1	417	171		1	43.8	17.4
Jul 20	103		7			4	420	153		0	43.8	16.9
Jul 21	76		3			2	409	164		2	41.8	17.4
Jul 22	59		3			2	336	132		1	40.4	17.1
Jul 23	102		24			2	665	234		1	39.6	17.4
Jul 24	91		18			0	725	257		3	41.8	16.8
Jul 25	75		9			1	756	300		1	40.7	17.4
Jul 26	167		10			6	708	274		6	39.9	17.0
Jul 27	70		1			2	616	199		1	37.9	17.3
Jul 28	51		3			3	1,076	382		2	39.2	16.8
Jul 29	19		0			0	453	156		4	42.7	17.3
Jul 30	70		3			0	1,268	455		1	39.6	16.9
Jul 31	61		5			3	1,183	425		8	41.5	17.3
TOTAL	7,258		543			619	12,664	4,399		35		
AVG.	234		18			20	409	142		1	54.0	16.9
												4.0
												64.5

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	54,512	6,885
SUMMER	26,949	2,800
TOTAL	81,461	9,685

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
716	17,246	6,253	2	42

TABLE 89

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT
AUGUST 2008

DATE	FISH COUNTS								RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL			SOCKEYE	STEELHEAD							
Aug 1	26			6		1	775	248		4	42.9	17.2	4.5	67.0
Aug 2	45			8		0	1,048	344		5	39.8	17.5	4.5	66.0
Aug 3	27			4		1	967	308		6	42.9	17.1	4.5	66.0
Aug 4	29			7		0	731	228		2	37.6	17.4	4.5	66.0
Aug 5	13			4		0	1,052	384		3	37.6	17.2	4.5	66.0
Aug 6	26			5		0	895	295		4	43.2	17.3	4.5	67.0
Aug 7	31			1		0	820	232		2	40.5	16.7	4.5	67.0
Aug 8	32			11		0	1,058	358		10	39.2	17.4	4.5	67.0
Aug 9	20			4		1	871	275		13	32.9	17.0	4.5	67.0
Aug 10	29			6		0	1,229	422		2	35.4	17.4	4.5	67.0
Aug 11	50			10		0	1,185	408		1	32.8	17.0	4.5	68.0
Aug 12	28			10		1	957	305		3	31.6	17.5	4.5	68.0
Aug 13	38			14		1	928	291		6	34.0	17.3	4.5	67.0
Aug 14		27		10		1	685	188		2	29.8	17.4	4.5	67.0
Aug 15		44		10		0	779	251		0	33.8	16.7	4.5	67.0
Aug 16		59		6		0	807	258		3	29.7	17.4	4.5	68.0
Aug 17		54		20		0	548	156		1	29.9	17.5	4.5	68.0
Aug 18		76		14		0	677	215		2	30.2	17.4	4.5	68.0
Aug 19		48		14		0	309	102		1	32.8	17.4	4.5	68.0
Aug 20		54		20		0	357	95		3	33.4	17.4	4.5	69.0
Aug 21		26		15		0	262	88		6	30.2	17.4	4.5	69.0
Aug 22		173		38		0	865	243		1	35.7	17.5	4.5	69.0
Aug 23		163		37		0	706	225		0	32.9	17.4	4.5	68.0
Aug 24		124		47		0	641	206		2	29.6	17.4	4.5	68.0
Aug 25		44		20		0	318	95		3	25.1	13.2	4.5	68.0
Aug 26		156		64		0	629	174		2	29.8	16.4	4.5	68.0
Aug 27		70		32		0	293	87		3	28.0	15.3	4.5	68.0
Aug 28		149		36		0	328	83		1	29.4	17.4	4.5	67.0
Aug 29		264		43		0	420	110		1	30.6	17.2	4.5	67.0
Aug 30		371		61		0	346	114		1	31.9	17.5	4.5	66.0
Aug 31		391		70		0	461	113		0	29.0	17.1	4.5	66.0
TOTAL	394	2,293	647			6	21,947	6,901		93				
AVG.	30	127	21			0	708	223		3	33.6	17.1	4.5	67.4

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	54,512	6,885
SUMMER	27,343	2,890
FALL	2,293	557
TOTAL	84,148	10,332

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
722	39,193	13,154	2	135

TABLE 90

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT
SEPTEMBER 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK		COHO ADULT	COHO JACK	TOTAL	WILD STEELHEAD	BULL STEELHEAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F	
	SPRING	SUMMER	FALL	JACK	ADULT	JACK	SOCKEYE									
Sep 1				831	158	0	0	2,453	563		4	25.1	0.0	4.5	66.0	
Sep 2				630	188	2	1	1,062	244		0	29.8	0.0	4.5	66.0	
Sep 3				731	147	0	0	578	95		0	32.0	0.0	4.5	66.0	
Sep 4				1,098	252	0	2	1,004	233		1	27.8	0.0	4.5	66.0	
Sep 5				1,260	272	14	0	1,731	400		0	36.8	0.0	4.5	66.0	
Sep 6				927	252	22	1	2,458	553		0	30.7	0.0	4.5	66.0	
Sep 7				606	226	20	0	2,921	659		0	30.7	0.0	4.5	65.0	
Sep 8				485	111	33	2	2,681	594		0	23.6	0.0	4.5	64.0	
Sep 9				654	192	61	5	2,563	615		1	26.4	0.0	4.5	64.0	
Sep 10				860	258	98	16	3,835	872		0	25.0	0.0	4.5	64.0	
Sep 11				922	277	114	10	3,971	893		1	21.5	0.0	4.0	64.0	
Sep 12				573	186	36	2	3,339	757		0	19.7	0.0	4.0	64.0	
Sep 13				779	266	107	10	3,237	774		0	17.4	0.0	4.0	63.0	
Sep 14				473	207	100	8	3,124	672		0	16.3	0.0	4.0	63.0	
Sep 15				358	166	49	1	2,918	664		0	15.0	0.0	4.0	63.0	
Sep 16				553	106	72	1	2,227	468		0	16.9	0.0	4.0	63.0	
Sep 17				529	233	126	7	3,500	800		0	17.5	0.0	4.0	63.0	
Sep 18				644	261	177	12	4,024	961		0	24.4	0.0	4.0	63.0	
Sep 19				560	409	96	15	3,535	891		1	20.4	0.0	4.0	63.0	
Sep 20				700	793	254	28	4,977	1,235		0	13.4	0.0	4.0	63.0	
Sep 21				714	454	244	19	7,297	1,823		0	12.3	0.0	4.0	63.0	
Sep 22				451	272	191	30	4,875	1,200		0	14.5	0.0	4.0	63.0	
Sep 23				336	143	127	18	2,671	636		0	13.8	0.0	4.0	63.0	
Sep 24				359	86	95	12	2,920	671		0	17.9	0.0	4.0	63.0	
Sep 25				279	60	121	20	3,494	807		0	22.4	0.0	4.0	63.0	
Sep 26				266	334	132	15	6,681	1,521		1	20.3	0.0	4.0	63.0	
Sep 27				139	260	46	10	3,199	681		0	26.5	0.0	4.0	62.0	
Sep 28				186	272	81	11	4,706	1,050		0	16.9	0.0	4.0	62.0	
Sep 29				138	192	54	6	3,805	811		0	13.8	0.0	4.0	62.0	
Sep 30				75	176	33	5	1,776	456		0	27.1	0.0	4.0	63.0	
TOTAL				17,116	7,209	2,505	267	0	97,562	22,599		9				
Avg.				571	240	84	9		3,252	753		0	21.9	0.0	4.2	63.7

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	54,512	6,885
SUMMER	27,343	2,890
FALL	19,409	7,766
TOTAL	101,264	17,541

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL STEELHEAD	LAMPREY
2,505	267	722	136,755	35,753	2	144

TABLE 91

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT

OCTOBER 2008

DATE	FISH COUNTS					RIVER CONDITIONS							
	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK JACK FALL	COHO ADULT	COHO JACK	TOTAL SOCKEYE	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Oct 1		155	244	68	7		3,798	888	0	23.0	0.0	3.5	63.0
Oct 2		100	173	35	2		2,709	669	0	25.3	0.0	4.0	63.0
Oct 3		142	181	48	4		2,471	580	0	23.0	0.0	4.0	63.0
Oct 4		135	312	107	13		3,114	743	0	16.5	0.0	4.0	63.0
Oct 5		143	437	146	14		7,522	2,020	0	19.5	0.0	4.0	63.0
Oct 6		64	115	52	4		2,325	534	0	17.0	0.0	4.0	63.0
Oct 7		48	114	34	6		1,320	306	1	23.0	0.0	4.0	63.0
Oct 8		56	163	43	4		1,655	405	0	18.3	0.0	4.0	63.0
Oct 9		45	145	40	2		1,690	383	0	23.3	0.0	4.0	62.0
Oct 10		60	180	70	10		2,369	637	0	27.0	0.0	4.0	62.0
Oct 11		110	135	192	12		3,220	890	0	19.2	0.0	4.0	61.0
Oct 12		36	85	113	3		1,937	529	0	21.2	0.0	4.0	61.0
Oct 13		21	52	85	6		1,184	312	0	25.4	0.0	4.0	60.0
Oct 14		45	41	76	1		1,362	347	0	20.5	0.0	4.0	60.0
Oct 15		35	24	40	1		753	171	0	15.8	0.0	4.0	60.0
Oct 16		29	7	44	1		837	222	0	16.3	0.0	4.0	59.0
Oct 17		27	23	45	0		883	205	0	17.8	0.0	4.0	59.0
Oct 18		40	39	41	1		925	215	0	12.4	0.0	4.0	59.0
Oct 19		29	31	55	1		1,014	253	0	21.8	0.0	4.0	59.0
Oct 20		38	23	64	4		1,161	292	0	20.5	0.0	4.0	59.0
Oct 21		24	36	66	1		1,280	343	0	28.5	0.0	4.0	59.0
Oct 22		21	48	39	2		1,121	312	0	25.1	0.0	4.0	59.0
Oct 23		11	27	18	0		922	251	0	21.9	0.0	4.0	58.0
Oct 24		10	15	12	2		1,009	284	0	22.3	0.0	4.0	57.0
Oct 25		5	2	8	1		290	65	0	14.0	5.3	4.0	57.0
Oct 26		14	9	4	0		445	96	0	11.7	6.1	4.0	57.0
Oct 27		13	8	6	0		495	103	0	11.8	6.2	4.0	57.0
Oct 28		30	5	18	0		557	182	0	11.9	6.2	4.0	56.0
Oct 29		2	2	18	0		240	72	0	11.9	6.2	4.0	56.0
Oct 30		17	12	40	1		443	129	0	11.8	6.2	4.0	56.0
Oct 31		9	11	11	0		252	73	0	11.8	6.1	4.0	56.0
TOTAL		1,514	2,699	1,638	103		49,303	12,511	1				
AVG.		49	87	53	3		1,590	404	0	19.0	1.4	4.0	59.8

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
	SPRING	SUMMER							
SPRING	54,512	6,885	4,143	370	722	186,058	48,264	2	145
SUMMER	27,343	2,890							
FALL	20,923	10,465							
TOTAL	102,778	20,240							

TABLE 92

DISCHARGE AND WATER QUALITY DATA

LOWER MONUMENTAL PROJECT 2008

NOVEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Nov 1	11.8	6.2	4.0	56.0
Nov 2	11.9	6.2	4.0	56.0
Nov 3	11.9	6.2	4.0	56.0
Nov 4	16.1	10.4	4.0	55.0
Nov 5	20.3	14.6	4.0	55.0
Nov 6	19.3	13.5	4.0	54.0
Nov 7	17.4	11.7	4.0	54.0
Nov 8	12.8	7.2	4.0	54.0
Nov 9	22.5	3.2	4.0	53.0
Nov 10	21.0	0.0	4.0	53.0
Nov 11	22.6	0.0	4.0	53.0
Nov 12	24.7	0.0	4.0	53.0
Nov 13	28.1	0.0	4.0	52.0
Nov 14	44.0	0.0	4.0	52.0
Nov 15	32.4	0.0	4.0	52.0
Nov 16	29.5	0.0	4.0	52.0
Nov 17	28.1	0.0	4.0	52.0
Nov 18	25.9	0.0	4.0	51.0
Nov 19	27.6	0.0	4.0	50.0
Nov 20	24.0	0.0	4.0	50.0
Nov 21	17.8	0.0	4.0	50.0
Nov 22	22.5	0.0	4.0	50.0
Nov 23	19.5	0.0	4.0	49.0
Nov 24	25.3	0.0	4.0	49.0
Nov 25	17.4	0.0	4.0	49.0
Nov 26	21.1	0.0	4.0	48.0
Nov 27	16.2	0.0	4.0	48.0
Nov 28	18.3	0.0	4.0	48.0
Nov 29	20.5	0.0	4.0	48.0
Nov 30	23.4	0.0	4.0	48.0

AVG.

21.8	2.6	4.0	51.7
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DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Dec 1	18.2	0.0	4.5	48.0
Dec 2	23.4	0.0	4.5	48.0
Dec 3	25.2	0.0	4.5	48.0
Dec 4	26.3	0.0	4.5	47.0
Dec 5	18.2	0.0	4.5	46.0
Dec 6	19.5	0.0	4.5	46.0
Dec 7	20.9	0.0	4.5	46.0
Dec 8	26.2	0.0	4.5	45.0
Dec 9	17.3	0.0	4.5	45.0
Dec 10	18.0	0.0	4.5	45.0
Dec 11	20.1	0.0	4.5	45.0
Dec 12	20.1	0.0	4.5	44.0
Dec 13	23.4	0.0	4.5	43.0
Dec 14	20.2	0.0	4.5	42.0
Dec 15	18.7	0.0	4.5	42.0
Dec 16	21.7	0.0	4.5	41.0
Dec 17	18.3	0.0	4.5	41.0
Dec 18	21.0	0.0	4.5	40.0
Dec 19	22.2	0.0	4.5	40.0
Dec 20	22.1	0.0	4.5	39.0
Dec 21	25.1	0.0	4.5	38.0
Dec 22	20.4	0.0	4.5	38.0
Dec 23	26.7	0.0	4.5	37.0
Dec 24	21.4	0.0	4.5	37.0
Dec 25	12.8	0.0	4.5	37.0
Dec 26	20.5	0.0	4.5	37.0
Dec 27	17.2	0.0	4.5	37.0
Dec 28	20.0	0.0	4.5	37.0
Dec 29	20.2	0.0	4.5	37.0
Dec 30	21.7	0.0	4.5	37.0
Dec 31	21.9	0.0	4.5	37.0

AVG.

20.9	0.0	4.5	41.6
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TABLE 93

**YEARLY TOTALS OF SALMONIDS COUNTED OVER
LOWER MONUMENTAL DAM
1969 - 2008**

YEAR	CHINOOK*	STEELHEAD	Sockeye	Coho*	TOTALS
1969	86,700	71,436	1,127	6,466	165,729
1970	75,310	62,167	240	2,972	140,689
1971	68,885	70,114	808	2,171	141,978
1972	72,220	66,857	415	733	140,225
1973	80,557	39,530	206	1,333	121,626
1974	31,728	15,139	114	812	47,793
1975	33,013	17,363	146	572	51,094
1976	34,395	21,822	364	361	56,942
1977	49,301	47,749	293	122	97,465
1978	56,835	20,540	96	218	77,689
1979	11,288	17,794	31	194	29,307
1980	10,885	34,322	48	73	45,328
1981	19,991	35,923	136	63	56,113
1982	21,965	62,772	154	89	84,980
1983	19,082	80,562	118	110	99,872
1984	17,866	88,655	63	26	106,610
1985	42,437	109,718	68	24	152,247
1986	50,584	120,479	26	9	171,098
1987	42,434	62,586	16	6	105,042
1988	44,262	84,746	35	3	129,046
1989	25,590	129,618	9	17	155,234
1990	28,215	24,238	0	1	52,454
1991	18,210	98,315	6	5	116,536
1992	30,145	130,429	15	0	160,589
1993	34,195	70,992	18	0	105,205
1994	7,219	49,917	7	0	57,143
1995	7,883	90,157	4	4	98,048
1996	15,606	96,609	3	6	112,224
1997	51,556	85,602	16	30	137,204
1998	21,537	66,118	2	0	87,657
1999	20,271	72,842	15	88	93,216
2000	68,961	112,616	291	750	182,618
2001	225,667	285,745	32	1,210	512,654
2002	124,897	232,809	46	158	357,910
2003	122,817	172,596	14	999	296,426
2004	114,030	158,792	80	3,665	276,567
2005	52,281	153,792	18	2,095	208,186
2006	54,482	135,566	17	1,181	191,246
2007	73,333	154,104	44	2,231	229,712
2008	123,018	186,058	722	4,513	314,311
Total	2,089,651	3,637,189	5,863	33,310	5,766,013
10-Year Average	97,976	166,492	128	1,689	266,285

*Jacks included

Includes 2001 extended season counts for November and December 0600-1600 PST.

Includes 2002 extended season counts for February and March 0800-1600 PST and November and December 0600-1600 PST.

Includes 2003 and 2004 extended season counts for January, February, and March 0800-1600 PST and November and December 0600-1600 PST.

TABLE 94

**MONTHLY COUNT OF CHINOOK SALMON
LOWER MONUMENTAL DAM
1969-2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS*
1969			1	67	38,702	25,289	13,832	1,776	5,069	1,619	340	5	86,700
1970	1		1	9,194	32,623	15,818	9,369	1,720	5,178	1,281	122	3	75,310
1971			358	19,340	23,842	14,492	857	8,599	1,397				68,885
1972			6,838	36,448	6,989	15,501	1,835	3,737	872				72,220
1973			27,168	31,973	11,282	4,343	678	4,273	840				80,557
1974			327	15,796	4,904	7,241	602	1,972	886				31,728
1975			704	17,421	6,648	4,884	548	2,428	380				33,013
1976			1,995	19,292	7,731	3,172	175	1,609	421				34,395
1977			19,125	17,093	7,884	3,092	300	1,321	486				49,301
1978			12,324	30,067	8,941	3,853	831	536	283				56,835
1979			1,332	5,637	2,010	922	211	916	260				11,288
1980			1,008	5,198	2,318	1,315	319	405	322				10,885
1981			4,039	9,012	3,349	1,924	97	1,100	470				19,991
1982			372	11,319	5,031	2,773	264	1,631	575				21,965
1983			1,250	10,262	3,841	2,103	220	1,008	398				19,082
1984			513	7,186	6,297	2,549	205	789	327				17,866
1985			7,360	20,572	7,303	1,279	402	2,451	3,070				42,437
1986			10,893	25,454	7,436	1,821	123	2,786	2,071				50,584
1987			8,706	21,166	5,492	2,400	278	2,625	1,767				42,434
1988			11,451	19,823	7,851	1,832	607	1,752	946				44,262
1989			159	14,924	4,858	1,615	476	1,852	706				24,590
1990			6,830	12,127	5,197	1,594	181	1,205	1,081				28,215
1991			925	6,537	5,491	1,936	127	2,177	1,017				18,210
1992			10,529	10,822	5,001	1,220	188	1,729	656				30,145
1993			3,848	16,154	9,720	2,016	313	1,591	509	44			34,195
1994			574	2,448	1,287	322	156	1,308	1,124				7,219
1995			210	1,435	1,092	471	280	2,183	2,212				7,883
1996			62	5,836	4,442	1,407	395	2,547	917				15,606
1997			1,493	26,966	16,833	2,484	309	2,174	1,297				51,556
1998			2,325	6,626	5,095	1,222	272	3,418	2,579				21,537
1999			124	4,551	4,951	1,630	623	5,499	2,893				20,271
2000			10,018	30,132	11,068	2,469	1,367	8,950	4,957				68,961
2001			104,119	60,247	32,422	6,261	1,472	16,390	4,411	334	11		225,667
2002	1	7	3,881	60,767	31,795	6,496	2,367	15,707	3,660	214	2		124,897
2003		50	33,435	31,906	28,381	6,247	951	15,255	6,642	288	3		123,158
2004		1	29,462	36,732	18,114	3,721	566	21,620	3,670	145	-1		114,030
2005			1,174	18,726	13,028	2,942	948	12,215	3,248				52,281
2006			10	17,659	12,916	3,541	1,816	12,534	6,006				54,482
2007			2,143	27,277	13,221	5,238	1,804	17,407	6,243				73,333
2008			2,468	43,772	37,105	7,801	3,334	24,325	4,213				123,018
Total	2	0	60	338,813	830,028	432,273	159,330	29,993	220,271	76,712	1,487	23	2,088,992
10-Year Average				18,683	33,177	20,300	4,635	1,525	14,990	4,594			98,010

*Jacks included

Includes 2001 extended season counts for November and December 0600-1600 PST.

Includes 2002 extended season counts for February and March 0800-1600 PST and November and December 0600-1600 PST.

Includes 2003 and 2004 extended season counts for January, February, and March 0800-1600 PST and November and December 0600-1600 PST.

TABLE 95

MONTHLY COUNT OF STEELHEAD

LOWER MONUMENTAL DAM

1969 - 2008

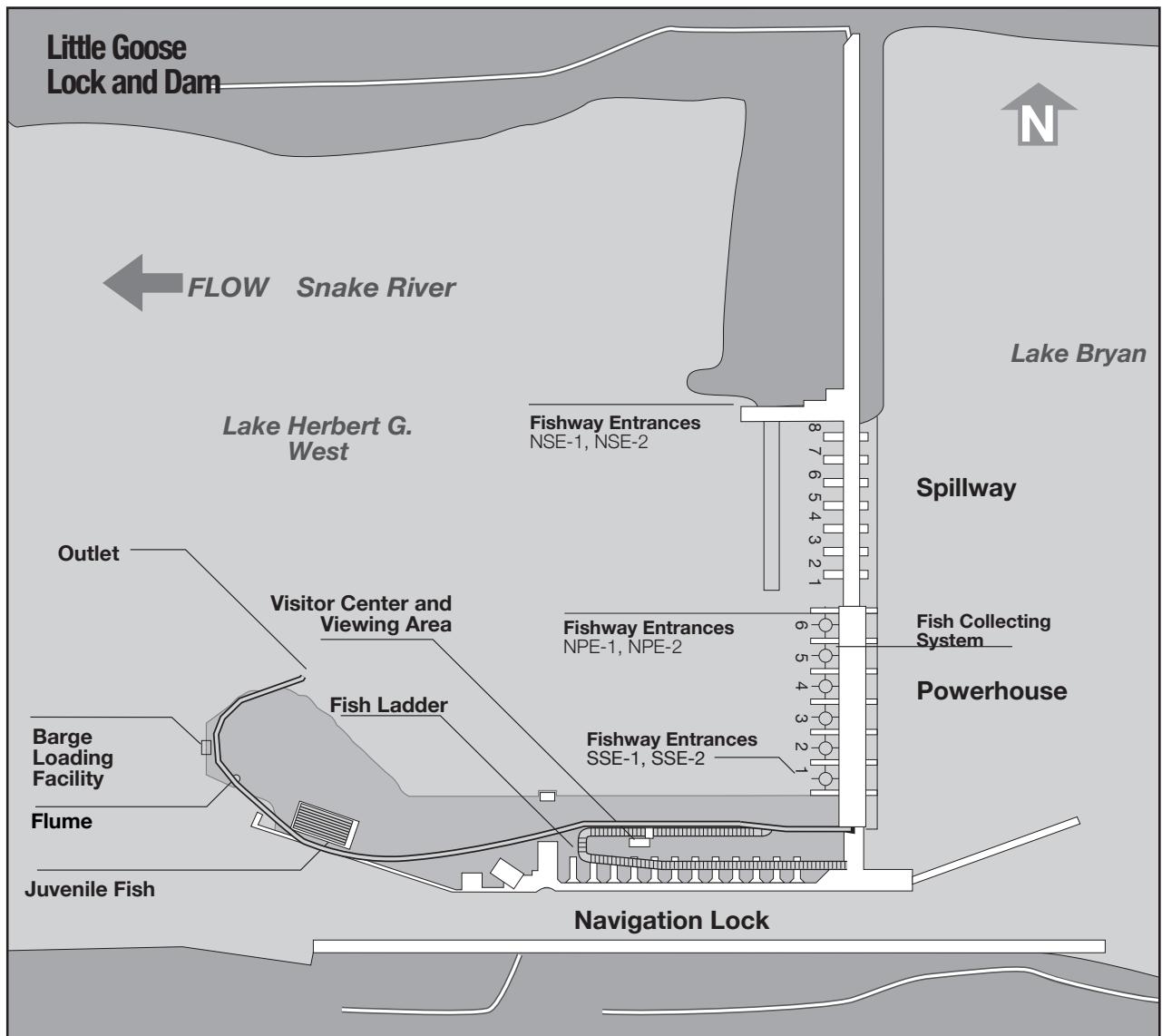
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
1969		5	1,525	9,235	5,475	248	2,141	6,410	26,647	15,195	4,189	366	71,436
1970	252	1,025	1,519	3,143	2,134	232	1,989	7,947	30,701	11,194	1,615	416	62,167
1971		422	2,404	1,510	131	2,199	2,992	42,438		18,018			70,114
1972		2,182	744	86	2,336	7,184	32,417		21,908				66,857
1973		2,061	658	82	2,060	3,505	21,241		9,923				39,530
1974		1,221	256	17	1,237	2,835	4,929		4,644				15,139
1975		745	444	24	873	4,417	7,437		3,423				17,363
1976		806	256	146	1,092	4,409	10,328		4,785				21,822
1977		849	192	127	3,026	2,991	22,494		18,070				47,749
1978		1,324	128	16	719	2,522	10,477		5,354				20,540
1979		643	118	28	1,314	1,937	4,898		8,856				17,794
1980		2,467	573	70	754	3,725	14,078		12,655				34,322
1981		996	321	75	1,783	1,632	12,416		18,700				35,923
1982		2,026	1,123	35	1,851	7,373	22,426		27,938				62,772
1983		1,021	131	14	3,027	10,101	40,004		26,264				80,562
1984		2,663	482	52	3,150	4,820	42,788		34,700				88,655
1985		6,889	548	189	1,888	10,086	63,734		26,384				109,718
1986		1,914	205	89	5,082	7,751	46,876		58,562				120,479
1987		2,483	264	142	2,531	4,692	20,766		31,708				62,586
1988		4,274	604	411	1,903	5,725	35,290		36,539				84,746
1989		1,067	389	304	6,364	8,093	63,026		50,375				129,618
1990		2,691	197	189	1,804	1,579	14,209		24,238				44,907
1991		2,211	288	70	2,275	1,497	41,894		50,080				98,315
1992		1,456	182	285	2,890	7,223	68,606		49,787				130,429
1993		7,752	277	564	5,367	8,197	16,146		30,228	2,461			70,992
1994		2,844	76	186	2,595	2,998	14,901		26,317				49,917
1995		1,072	162	138	4,074	10,424	38,890		35,397				90,157
1996		934	96	137	3,199	12,413	47,234		32,596				96,609
1997		1,044	162	177	3,422	9,326	34,521		36,950				85,602
1998		1,501	62	198	2,361	1,835	19,892		40,269				66,118
1999		559	59	98	2,652	11,170	37,899		20,405				72,842
2000		937	-26	546	5,741	9,045	61,072		35,301				112,616
2001		1,636	113	2,874	19,045	26,264	126,517		76,474	23,900	8,922		285,745
2002	3,687	1,858	3,429	4,876	196	688	10,901	25,998	94,310	75,670	9,028	2,168	232,809
2003	775	3,686	5,325	1,872	45	850	7,704	8,122	93,190	60,813	3,945	1,011	187,338
2004	115	1,036	2,619	1,473	127	1,052	6,477	4,020	90,900	45,380	4,101	1,492	158,792
2005			783	181	1,062	5,193	7,445	70,701		68,427			153,792
2006			2,756	98	454	3,392	7,778	63,849		57,239			135,566
2007			2,174	143	914	5,735	8,657	77,612		58,869			154,104
2008			3,520	510	552	12,664	21,947	97,562		49,303			186,058
Total	4,829	7,610	14,839	92,504	19,503	13,552	154,810	297,085	1,685,316	1,318,938	49,239	14,375	3,672,600
10-Year Average				2,059	145	909	7,950	13,045	81,361	54,788			167,966

Includes 2001 extended season counts for November and December 0600-1600 PST.

Includes 2002, '03, and '04 extended season counts for January through March 0800-1600 PST and November and December 0600-1600 PST.

Plate 8 Little Goose Lock and Dam

0 100 200 300 400
approximate scale in feet



LITTLE GOOSE DAM

FISH COUNTING SCHEDULE

1 January – 31 March	No counting
1 April – 31 October	Visual counting daily from 0400-2000 hours PST
1 November – 31 December	No counting

FISH LADDER OPERATING SCHEDULE

1 January – 2 January	Ladder in service.
3 January – 28 February	Ladder dewatered for annual maintenance.
29 February – 31 December	Ladder in service.

FISHWAY ACTIVITIES

As in previous years water temperature at the ladder exit was recorded on an hourly basis and reported monthly to determine if summer spill had an effect on ladder temperature.

Idaho Cooperative Fisheries Research Unit continued to evaluate adult salmon and steelhead migration past the adult ladder at Little Goose dam. Additionally, the University of Idaho and the United States Geological Survey cooperated on a research project attempting to correlate fish passage to varying spill patterns.

The juvenile fish facility was operated for juvenile fish transport/bypass and adult fallbacks from 1 April to 17 December.

A substrate monitor is in place near the ladder exit to monitor for zebra mussels, no mussels were observed.

TABLE 96

**MONTHLY TOTALS OF SALMONIDS, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER LITTLE GOOSE DAM
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				1,294	39,284	35,674	7,926	2,252	18,892	3,631			108,953
STEELHEAD				2,127	490	179	5,770	15,499	93,240	50,800			168,105
SOCKEYE					50	534		9	1				594
COHO									2,413	1,393			3,806
PINK													0
TOTAL	3,421	39,774	35,903	14,230	17,760	114,546	55,824						281,458
LAMPREY							16	76	9	3			104
STURGEON													0
BULL TROUT					-2	4	6						8

*Jacks included

TABLE 97

**DISCHARGE AND WATER QUALITY DATA
LITTLE GOOSE PROJECT 2008**

JANUARY				
DATE	DISCH	SPILL	*TURBIDITY	
	KCFS	KCFS	SECCHI	*DEG F
Jan 1	19.9	0.0		
Jan 2	23.2	0.0		
Jan 3	18.2	0.0		
Jan 4	20.1	0.0		
Jan 5	19.4	0.0		
Jan 6	24.8	0.0		
Jan 7	19.6	0.0		
Jan 8	25.6	0.0		
Jan 9	21.8	0.0		
Jan 10	24.0	0.0		
Jan 11	20.9	0.0		
Jan 12	27.8	0.0		
Jan 13	22.1	0.0		
Jan 14	21.7	0.0		
Jan 15	22.8	0.0		
Jan 16	24.4	0.0		
Jan 17	21.7	0.0		
Jan 18	26.6	0.0		
Jan 19	20.7	0.0		
Jan 20	19.2	0.0		
Jan 21	22.2	0.0		
Jan 22	25.0	0.0		
Jan 23	15.9	0.0		
Jan 24	23.1	0.0		
Jan 25	24.4	0.0		
Jan 26	23.5	0.0		
Jan 27	19.6	0.0		
Jan 28	27.8	0.0		
Jan 29	19.7	0.0		
Jan 30	30.0	0.0		
Jan 31	27.3	0.0		

AVG.

22.7	0.0
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FEBRUARY				
DATE	DISCH	SPILL	*TURBIDITY	
	KCFS	KCFS	SECCHI	*DEG F
Feb 1	15.0	0.0		
Feb 2	21.2	0.0		
Feb 3	18.0	0.0		
Feb 4	22.6	0.0		
Feb 5	23.9	0.0		
Feb 6	23.0	0.0		
Feb 7	22.5	0.0		
Feb 8	24.3	0.0		
Feb 9	25.7	0.0		
Feb 10	15.8	0.0		
Feb 11	26.9	0.0		
Feb 12	26.3	0.0		
Feb 13	30.9	0.0		
Feb 14	26.8	0.0		
Feb 15	30.3	0.0		
Feb 16	23.6	0.0		
Feb 17	18.6	0.0		
Feb 18	26.6	0.0		
Feb 19	24.6	0.0		
Feb 20	25.5	0.0		
Feb 21	23.8	0.0		
Feb 22	31.9	0.0		
Feb 23	23.5	0.0		
Feb 24	23.4	0.0		
Feb 25	23.8	0.0		
Feb 26	23.0	0.0		
Feb 27	28.4	0.0		
Feb 28	28.4	0.0		
Feb 29	31.8	0.0		

AVG.

24.5	0.0
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MARCH				
DATE	DISCH	SPILL	*TURBIDITY	
	KCFS	KCFS	SECCHI	*DEG F
Mar 1	23.7	0.0		
Mar 2	30.9	0.0		
Mar 3	33.0	0.0		
Mar 4	37.3	0.0		
Mar 5	42.7	0.0		
Mar 6	33.5	0.0		
Mar 7	32.4	0.0		
Mar 8	28.4	0.0		
Mar 9	29.3	0.0		
Mar 10	31.3	0.0		
Mar 11	33.5	0.0		
Mar 12	37.6	0.0		
Mar 13	40.5	0.0		
Mar 14	40.2	0.0		
Mar 15	32.5	0.0		
Mar 16	36.2	0.0		
Mar 17	42.0	0.0		
Mar 18	39.4	0.0		
Mar 19	37.3	0.0		
Mar 20	40.7	0.0		
Mar 21	35.4	0.0		
Mar 22	33.4	0.0		
Mar 23	30.7	0.0		
Mar 24	33.3	0.0		
Mar 25	40.0	0.0		
Mar 26	40.8	0.0		
Mar 27	33.7	0.0		
Mar 28	47.1	0.0		
Mar 29	43.1	0.0		
Mar 30	51.5	0.0		
Mar 31	43.2	0.0		

AVG.

36.6	0.0
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*Data unavailable

TABLE 98

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT

APRIL 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS			
	SPRING	SUMMER	FALL									DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	0			0				62	21	0		42.0	0.0	4.1	43.2
Apr 2	0			0				81	29	0		39.3	0.0	4.5	43.5
Apr 3	0			0				64	18	0		43.9	13.1	4.5	43.5
Apr 4	0			0				88	24	0		40.8	12.2	4.5	43.5
Apr 5	0			0				102	29	0		43.9	13.1	4.5	43.5
Apr 6	1			0				64	17	0		44.7	13.4	4.5	43.5
Apr 7	0			0				38	10	0		45.1	13.2	4.5	43.5
Apr 8	-1			0				41	11	0		47.1	14.0	4.2	44.5
Apr 9	1			0				27	11	0		43.1	12.9	4.0	44.7
Apr 10	1			0				62	22	0		45.2	13.5	4.9	49.8
Apr 11	0			0				99	23	0		44.4	13.4	4.9	49.8
Apr 12	1			0				77	16	0		44.2	13.3	4.9	49.8
Apr 13	1			0				120	46	0		40.5	12.1	4.9	49.8
Apr 14	1			0				75	22	0		56.2	17.0	4.9	49.8
Apr 15	2			0				111	40	0		63.3	18.9	4.7	46.5
Apr 16	4			0				135	55	0		61.4	18.5	4.5	47.2
Apr 17	4			0				76	32	0		59.6	17.9	4.5	47.2
Apr 18	2			0				125	49	0		62.3	18.4	4.5	47.2
Apr 19	18			0				137	49	0		62.9	18.9	4.4	47.4
Apr 20	59			0				120	52	0		66.7	20.1	4.4	47.4
Apr 21	37			0				92	31	0		66.5	19.9	4.4	47.4
Apr 22	65			0				78	32	0		57.5	17.1	4.8	47.2
Apr 23	134			0				62	30	0		49.6	14.9	4.4	47.6
Apr 24	54			0				46	22	0		54.6	16.4	3.9	47.4
Apr 25	106			1				24	10	1		59.7	21.0	3.9	47.4
Apr 26	84			1				17	12	0		53.5	22.9	3.9	47.4
Apr 27	313			0				44	14	0		57.7	23.0	3.9	47.4
Apr 28	113			0				14	6	0		54.9	22.6	4.2	48.6
Apr 29	114			1				25	13	-1		65.6	25.7	4.2	48.6
Apr 30	175			2				21	8	0		71.6	26.6	3.6	48.7
TOTAL	1,289			5				2,127	754	0					
Avg.	43			0				71	25	0		52.9	16.1	4.4	46.8

TABLE 99

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT

MAY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS			
	SPRING	SUMMER	FALL									DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
May 1	232			0				17	10	0		66.1	27.9	4.4	49.5
May 2	139			0				14	7	-1		62.3	28.0	4.4	49.5
May 3	732			2				24	14	-1		62.1	29.1	4.4	49.5
May 4	600			6				37	24	0		63.1	29.0	4.4	49.5
May 5	304			2				25	13	-1		72.0	30.7	4.4	49.5
May 6	650			6				34	20	0		82.0	31.3	4.5	52.2
May 7	1,039			13				66	37	0		84.8	31.1	4.5	52.2
May 8	1,706			43				45	32	0		100.7	34.6	3.7	50.6
May 9	1,573			40				28	18	0		95.2	32.2	3.7	50.6
May 10	1,418			64				23	11	0		91.6	27.4	3.7	51.5
May 11	976			50				29	19	0		86.9	23.8	3.7	51.5
May 12	1,096			68				39	13	2		86.8	23.8	3.7	51.5
May 13	1,259			94				17	16	0		85.2	25.6	3.7	51.5
May 14	1,199			134				14	8	0		74.3	22.1	3.3	50.6
May 15	1,295			126				14	10	0		77.3	23.1	2.9	50.6
May 16	1,378			194				-1	-5	0		97.3	26.1	2.9	50.6
May 17	2,270			416				18	7	0		117.8	35.7	3.3	51.2
May 18	2,273			395				7	5	0		144.8	53.6	3.3	51.2
May 19	1,627			346				7	6	0		172.5	81.1	3.3	51.2
May 20	1,321			260				5	0	0		186.9	96.7	1.7	53.0
May 21	680			126				11	1	0		186.4	96.0	1.7	53.0
May 22	323			62				1	0	0		178.1	86.8	0.9	50.5
May 23	367			61				0	0	0		152.3	62.2	0.9	50.5
May 24	665			182				1	0	0		133.3	52.8	0.9	50.5
May 25	1,211			218				8	2	0		124.8	39.4	1.2	49.0
May 26	1,564			196				1	0	0		122.4	36.1	1.2	49.0
May 27	1,463			316				2	0	0		124.8	36.7	1.2	50.4
May 28	1,086			230				3	1	0		126.2	44.1	1.2	50.4
May 29	1,199			306				-1	-2	0		140.3	53.4	1.7	52.6
May 30	1,451			277				0	-1	-1		146.3	65.4	1.7	52.6
May 31	1,687			268				2	1	0		149.0	58.0	1.7	52.6
TOTAL	34,783			4,501				490	267	-2		112.7	43.3	2.8	50.9
AVG.	1,122			145				16	9	0					

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	36,072	4,506

STEELHEAD	WILD STEELHEAD	BULL TROUT
2,617	1,021	-2

TABLE 100

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT

JUNE 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS			
	SPRING	SUMMER	FALL									DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	1,322			281			0	3	2	0		150.0	59.2	1.7	52.6
Jun 2	1,393			330			0	0	0	0		155.0	65.4	1.7	52.7
Jun 3	1,447			404			0	0	0	0		155.0	66.6	2.2	53.1
Jun 4	1,001			295			0	2	0	0		148.9	66.6	2.2	53.1
Jun 5	756			236			0	1	0	0		143.0	52.0	2.0	53.2
Jun 6	754			266			0	0	0	0		133.6	42.4	2.0	53.2
Jun 7	628			146			0	1	1	0		132.1	40.8	2.0	53.2
Jun 8	540			169			0	0	0	1		119.9	36.0	2.7	50.8
Jun 9	631			164			0	0	0	1		117.4	35.1	2.7	50.8
Jun 10	698			137			0	2	0	1		116.2	40.3	2.7	50.8
Jun 11	1,195			235			0	1	0	-1		116.4	49.6	2.0	52.1
Jun 12	865			176			0	4	2	0		119.4	48.0	2.0	52.1
Jun 13	1,310			169			0	1	0	0		120.0	45.5	3.4	53.7
Jun 14	836			122			0	5	-1	0		113.2	34.2	3.4	53.7
Jun 15	948			169			0	4	0	0		112.3	33.7	4.2	52.5
Jun 16		1,240		196			0	4	0	0		116.0	34.4	4.2	52.5
Jun 17		1,052		176			0	0	-2	0		124.7	40.0	4.2	52.5
Jun 18		575		193			0	4	-2	0		129.7	55.8	4.2	52.5
Jun 19		800		212			0	10	0	0		127.4	44.3	3.5	56.5
Jun 20		1,163		184			0	1	-1	0		124.2	35.4	3.5	56.5
Jun 21		887		230			0	5	1	0		126.6	35.5	4.0	58.0
Jun 22		1,357		372			0	8	1	2		130.2	42.3	4.0	58.0
Jun 23		943		252			4	15	5	0		132.7	41.7	4.0	58.0
Jun 24		1,206		323			2	10	2	0		128.8	39.0	3.6	58.2
Jun 25		1,213		248			1	10	2	0		117.2	30.7	3.6	58.2
Jun 26		1,002		268			2	15	2	0		107.1	41.6	4.6	58.2
Jun 27		730		277			6	11	5	0		97.9	37.7	4.6	58.2
Jun 28		1,054		379			7	23	1	0		97.8	29.5	4.6	58.2
Jun 29		757		175			16	19	7	0		101.7	29.5	4.6	58.7
Jun 30		455		132			12	20	4	0		109.3	37.2	4.6	58.7
TOTAL	14,324	14,434		6,916			50	179	29	4		124.1	43.0	3.3	54.7
AVG.	955	962		231			2	6	1	0					

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	WILD STEELHEAD	BULL TROUT
	SOCKEYE	STEELHEAD		
SPRING	50,396	7,805		
SUMMER	14,434	3,617		
TOTALS	64,830	11,422		

Note: two shad counted

TABLE 101

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT

JULY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK		COHO ADULT		COHO JACK		SOCKEYE	TOTAL	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS			
	SPRING	SUMMER	FALL	JACK		ADULT	JACK								KCFS	KCFS	TURBIDITY SECCHI	DEG F
Jul 1		767			205					20	26	7	1	0	101.3	29.2	4.2	60.9
Jul 2		337			61					35	29	16	2	0	98.5	28.4	4.2	60.9
Jul 3		320			56					37	49	18	1	0	92.9	23.8	4.2	60.9
Jul 4		1366			173					36	80	22	0	0	85.3	25.7	5.3	63.5
Jul 5		590			107					54	78	22	0	0	78.5	23.9	5.3	63.5
Jul 6		440			61					64	91	32	0	0	70.9	21.1	5.6	62.4
Jul 7		337			42					50	86	24	0	0	66.1	19.8	5.6	62.4
Jul 8		283			30					43	60	17	1	-1	67.2	20.9	4.7	66.5
Jul 9		218			38					26	78	30	0	0	63.6	18.9	4.7	66.5
Jul 10		202			37					26	95	31	0	0	61.2	18.4	5.2	64.0
Jul 11		180			36					40	151	62	0	0	56.5	16.8	5.2	64.0
Jul 12		138			30					12	101	40	0	0	49.4	14.8	5.2	64.0
Jul 13		108			34					11	76	29	0	0	43.1	12.9	5.6	68.0
Jul 14		175			34					18	111	37	0	0	49.2	14.8	5.6	68.0
Jul 15		170			11					18	173	71	0	4	48.0	14.4	5.2	68.0
Jul 16		91			26					7	89	41	0	0	42.2	12.6	5.2	68.0
Jul 17		151			14					7	164	60	0	0	46.7	14.0	5.0	67.4
Jul 18		72			25					2	141	44	0	0	47.0	14.3	5.0	67.4
Jul 19		104			12					8	163	60	0	0	45.7	13.8	5.0	67.4
Jul 20		92			11					4	134	55	0	1	45.2	13.7	5.7	67.9
Jul 21		59			16					2	127	50	0	0	44.0	13.1	5.7	67.9
Jul 22		54			12					1	148	52	1	0	41.6	12.5	4.8	66.5
Jul 23		54			12					4	203	89	0	0	41.3	12.3	4.8	66.5
Jul 24		109			40					0	419	175	0	1	44.6	13.3	5.3	67.5
Jul 25		97			11					1	291	95	0	0	43.3	13.0	5.3	67.5
Jul 26		85			2					1	467	187	0	4	45.0	13.4	5.3	67.5
Jul 27		65			2					2	545	180	0	0	40.5	12.1	5.3	67.5
Jul 28		44			1					5	388	138	0	1	41.4	12.4	5.3	67.5
Jul 29		28			2					0	383	133	0	0	45.7	13.5	5.6	67.5
Jul 30		19			2					0	428	150	0	6	40.1	11.9	5.6	66.7
Jul 31		20			8					0	396	144	0	0	42.9	12.9	5.2	67.1
TOTAL		6,775			1,151					534	5,770	2,111	6	16	55.8	16.5	5.2	65.8
AVG.		219			37					17	186	68	0	1				

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE	50,396	7,805
SPRING	21,209	4,768
TOTAL	71,605	12,573

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
584	8,566	3,161	8	16

TABLE 102

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT
AUGUST 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK		COHO ADULT		COHO JACK		SOCKEYE	TOTAL	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS			
	SPRING	SUMMER	FALL	JACK		ADULT	JACK								KCFS	KCFS	TURBIDITY SECCHI	DEG F
Aug 1		25			2					1	667	188		4	45.5	13.5	5.2	67.1
Aug 2		72			2					4	861	260		4	41.7	12.4	5.0	66.3
Aug 3		56			1					0	527	204		2	45.1	13.5	5.0	66.3
Aug 4		24			4					1	550	180		4	39.9	12.0	5.0	66.3
Aug 5		58			1					0	988	316		6	39.6	11.8	4.0	69.7
Aug 6		29			1					1	571	192		0	46.3	13.8	4.0	69.7
Aug 7		46			0					1	615	209		13	42.4	12.6	4.5	68.3
Aug 8		31			1					0	638	194		1	41.9	12.3	4.5	68.3
Aug 9		35			8					0	738	224		1	34.5	10.3	5.1	67.3
Aug 10		22			4					0	551	174		4	37.0	11.0	5.1	67.3
Aug 11		29			7					0	594	170		4	34.3	10.3	5.1	67.3
Aug 12		37			2					1	663	193		0	32.7	9.6	5.0	68.1
Aug 13		20			0					0	750	223		6	37.7	11.2	5.0	68.1
Aug 14		31			5					0	420	149		2	32.7	9.8	4.8	68.7
Aug 15		24			5					0	479	143		1	34.5	10.3	4.8	68.7
Aug 16		25			4					0	404	144		0	32.8	9.7	4.8	68.7
Aug 17		46			5					0	263	71		0	30.3	9.0	4.8	68.7
Aug 18		50			7					0	382	101		4	31.8	9.5	6.0	70.0
Aug 19		74			6					0	447	113		2	35.5	10.6	4.2	68.7
Aug 20		35			10					0	336	94		0	34.9	10.5	4.2	68.7
Aug 21		38			6					0	246	76		1	31.3	9.5	4.8	69.3
Aug 22		36			5					0	271	91		0	36.5	10.9	4.7	69.0
Aug 23		68			6					0	324	101		4	34.7	10.4	4.7	69.0
Aug 24		109			12					0	308	86		5	31.2	9.4	4.7	69.0
Aug 25		77			14					0	355	126		2	25.9	7.7	4.7	69.0
Aug 26		98			16					0	346	89		4	30.0	10.1	5.7	67.4
Aug 27		137			10					0	319	85		0	31.0	11.1	5.7	67.4
Aug 28		82			22					0	373	80		1	28.5	11.1	5.0	66.8
Aug 29		142			30					0	725	162		1	34.5	11.1	5.0	66.8
Aug 30		229			35					0	486	125		0	33.8	11.1	5.0	66.8
Aug 31		204			32					0	302	79		0	28.8	11.0	5.7	65.5
TOTAL		539		1,450		263				9	15,499	4,642		76				
AVG.		36		91		8				0	500	150		2	35.4	10.9	4.9	68.0

RUN YEAR TOTALS TO DATE	CHINOOK	CHINOOK
	ADULT	JACK
SPRING	50,396	7,805
SUMMER	21,748	4,811
FALL	1,450	220
TOTALS	73,594	12,836

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
593	24,065	7,803	8	92

TABLE 103

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT
SEPTEMBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS				
	SPRING	SUMMER	FALL									KCFS	KCFS	URBIDITY SECCHI	DEG F	
Sep 1				314	54	0	0	0	530	115		2	26.7	0.0	5.7	65.5
Sep 2				742	116	0	0	0	1,374	380		1	27.5	0.0	5.2	65.6
Sep 3				666	92	0	0	0	1,344	347		0	31.8	0.0	5.2	65.6
Sep 4				626	60	0	1	0	1,274	292		0	27.7	0.0	5.2	64.3
Sep 5				1140	166	5	0	0	1,421	340		-1	36.8	0.0	5.2	64.3
Sep 6				1043	164	10	1	0	1,541	348		1	31.1	0.0	5.2	64.3
Sep 7				686	52	11	0	0	1,558	342		2	30.8	0.0	5.2	64.3
Sep 8				659	76	8	1	0	2,233	539		0	25.9	0.0	5.2	64.3
Sep 9				481	97	6	4	0	2,454	523		-1	27.9	0.0	5.8	65.6
Sep 10				614	101	20	5	0	2,430	508		2	26.1	0.0	5.8	65.6
Sep 11				616	133	28	4	0	2,643	500		-1	23.0	0.0	6.0	67.0
Sep 12				659	149	44	4	0	3,247	662		0	21.5	0.0	6.0	67.0
Sep 13				511	137	92	1	0	3,718	749		0	23.0	0.0	6.0	67.0
Sep 14				558	109	55	2	0	2,998	576		0	16.8	0.0	6.0	67.0
Sep 15				457	104	67	1	0	2,460	536		0	16.0	0.0	6.0	67.0
Sep 16				245	124	73	16	0	2,726	511		0	19.3	0.0	6.0	64.5
Sep 17				390	120	66	13	0	2,790	629		0	17.7	0.0	6.0	65.7
Sep 18				486	110	76	10	0	3,402	749		0	26.0	0.0	6.0	64.6
Sep 19				505	257	50	4	0	2,712	583		0	20.4	0.0	6.0	64.6
Sep 20				520	241	146	10	0	3,306	727		0	14.7	0.0	6.0	64.3
Sep 21				607	239	162	20	0	5,462	1174		0	13.5	0.0	6.0	64.3
Sep 22				589	247	264	34	0	6,934	1354		0	15.7	0.0	6.0	64.3
Sep 23				422	169	208	26	0	6,037	1271		0	15.1	0.1	5.0	63.3
Sep 24				259	128	146	17	0	3,241	740		0	18.7	0.0	5.0	63.3
Sep 25				299	163	58	12	0	3,028	710		2	21.9	0.0	6.0	63.7
Sep 26				287	88	138	26	0	5,014	1181		-1	21.8	0.0	6.0	63.7
Sep 27				220	102	143	19	0	5,148	1120		2	26.5	0.0	6.0	63.7
Sep 28				109	43	114	11	0	4,436	1002		1	17.8	0.0	6.0	63.5
Sep 29				157	64	79	13	0	4,077	853		0	15.5	0.0	6.0	63.5
Sep 30				157	163	67	22	1	3,702	785		0	26.2	0.0	6.0	63.6
TOTAL		15,024	3,868	2,136	277	1		93,240	20,146		9					
AVG.		501	129	71	9	0		3,108	672		0	22.8	0.0	5.7	64.8	
RUN YEAR	CHINOOK ADULT	CHINOOK JACK		COHO ADULT	COHO JACK		SOCKEYE	STEELHEAD		WILD STEELHEAD	BULL TROUT	LAMPREY				
TOTALS TO DATE	50,396	7,805		2,136	277		594	117,305		27,949	8	101				
SPRING	21,748	4,811														
SUMMER	16,474	4,088														
FALL	88,618	16,704														

TABLE 104

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT
OCTOBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	URBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL												
Oct 1				96	82	31	13		2,819	605	0	22.8	0.0	6.0	63.6
Oct 2				95	116	24	5		2,589	575	0	25.1	0.0	6.0	64.2
Oct 3				124	164	37	5		3,569	835	0	22.6	0.0	6.0	64.2
Oct 4				118	101	41	2		2,370	523	0	16.1	0.0	6.0	64.2
Oct 5				186	215	79	2		4,472	1,105	0	18.8	0.0	6.0	63.8
Oct 6				151	167	77	4		4,072	820	0	17.5	0.0	6.0	63.8
Oct 7				73	84	67	6		3,036	683	0	22.7	0.0	6.0	63.5
Oct 8				53	48	44	1		2,343	503	1	17.7	0.0	6.0	63.5
Oct 9				80	82	47	2		2,033	485	0	22.3	0.0	6.0	62.8
Oct 10				59	31	48	5		2,147	384	0	24.8	0.0	6.0	62.8
Oct 11				94	23	71	6		2,164	460	0	19.4	0.0	6.0	62.8
Oct 12				65	40	107	4		2,118	433	0	22.1	0.0	6.0	62.8
Oct 13				77	38	96	5		2,376	474	0	25.2	0.0	6.0	62.8
Oct 14				42	76	76	1		1,639	407	0	19.6	0.0	6.0	60.6
Oct 15				23	77	50	0		1,110	208	0	14.6	0.0	6.0	60.2
Oct 16				22	91	30	1		1,010	218	0	16.5	0.0	6.0	60.0
Oct 17				40	59	41	5		723	103	0	17.5	0.0	6.0	60.0
Oct 18				42	37	35	1		940	197	0	13.6	0.0	6.0	60.0
Oct 19				32	29	76	6		1,085	263	0	20.7	0.0	5.4	59.7
Oct 20				24	18	30	0		855	206	0	18.8	0.0	5.4	59.7
Oct 21				37	42	56	0		1,405	289	0	27.5	0.0	5.0	58.8
Oct 22				23	25	42	1		782	139	0	26.6	0.0	5.0	58.8
Oct 23				22	42	23	7		736	158	0	16.9	0.0	6.0	59.0
Oct 24				18	54	25	2		1,128	234	1	20.1	0.0	6.0	59.0
Oct 25				24	61	13	0		1,051	247	0	15.6	0.0	6.0	59.0
Oct 26				13	50	7	0		825	197	0	15.8	0.0	6.0	59.0
Oct 27				7	54	6	0		288	65	0	14.0	0.0	6.0	59.0
Oct 28				1	2	4	0		223	43	0	14.8	0.0	6.0	56.5
Oct 29				7	22	6	1		308	73	0	15.4	0.0	6.0	56.3
Oct 30				6	23	5	0		354	73	1	17.2	0.0	6.0	55.6
Oct 31				7	17	10	4		230	43	0	16.9	0.0	6.0	55.6
TOTAL				1,661	1,970	1,304	89		50,800	11,048	3				
AVG.				54	64	42	3		1,639	356	0	19.3	0.0	5.9	60.7

RUN YEAR	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
TOTALS TO DATE									
SPRING	50,396	7,805	3,440	366	594	168,105	38,997	8	104
SUMMER	21,748	4,811							
FALL	18,135	6,058							
TOTALS	90,279	18,674							

TABLE 105
DISCHARGE AND WATER QUALITY DATA
LITTLE GOOSE PROJECT 2008

NOVEMBER				DECEMBER							
DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI				
Nov 1	13.7	0.0	6.0	55.6	Dec 1	18.0	0.0	6.0	47.0		
Nov 2	13.7	0.0	6.0	55.6	Dec 2	22.3	0.0	6.0	47.0		
Nov 3	16.6	0.0	6.0	55.3	Dec 3	24.6	0.0	6.0	46.2		
Nov 4	18.3	0.0	6.0	55.3	Dec 4	25.3	0.0	6.0	45.6		
Nov 5	21.1	0.0	6.0	55.3	Dec 5	18.7	0.0	6.0	45.6		
Nov 6	21.1	0.0	6.0	53.9	Dec 6	17.3	0.0	6.0	45.6		
Nov 7	17.5	0.0	6.0	53.9	Dec 7	20.3	0.0	6.0	45.6		
Nov 8	16.9	0.0	6.0	53.9	Dec 8	23.9	0.0	6.0	44.8		
Nov 9	25.0	0.0	6.0	53.9	Dec 9	18.3	0.0	6.0	44.7		
Nov 10	20.7	0.0	6.0	53.9	Dec 10	18.0	0.0	6.0	44.7		
Nov 11	22.6	0.0	6.0	53.9	Dec 11	18.4	0.0	6.0	44.7		
Nov 12	23.9	0.0	6.0	52.2	Dec 12	19.4	0.0	6.0	44.7		
Nov 13	27.3	0.0	6.0	52.1	Dec 13	22.3	0.0	6.0	44.7		
Nov 14	45.0	0.0	6.0	52.1	Dec 14	18.4	0.0	6.0	44.7		
Nov 15	32.0	0.0	6.0	52.1	Dec 15	19.0	0.0	6.0	44.7		
Nov 16	28.9	0.0	6.0	52.1	Dec 16	19.9	0.0	6.0	41.4		
Nov 17	28.0	0.0	6.0	51.0	Dec 17	15.7	0.0	6.0	41.4		
Nov 18	24.6	0.0	6.0	50.7	Dec 18	20.5	0.0	6.0	41.4		
Nov 19	27.4	0.0	6.0	50.7	Dec 19	20.4	0.0	6.0	41.4		
Nov 20	21.2	0.0	6.0	50.2	Dec 20	21.6	0.0	6.0	41.4		
Nov 21	18.7	0.0	6.0	50.2	Dec 21	21.9	0.0	6.0	41.4		
Nov 22	23.3	0.0	6.0	50.2	Dec 22	18.7	0.0	6.0	38.7		
Nov 23	20.9	0.0	6.0	50.2	Dec 23	26.4	0.0	6.0	38.5		
Nov 24	23.4	0.0	6.0	50.2	Dec 24	18.0	0.0	6.0	38.5		
Nov 25	17.7	0.0	6.0	48.5	Dec 25	13.3	0.0	6.0	38.5		
Nov 26	20.5	0.0	6.0	48.5	Dec 26	18.8	0.0	6.0	38.5		
Nov 27	16.1	0.0	6.0	48.5	Dec 27	17.8	0.0	6.0	38.5		
Nov 28	18.5	0.0	6.0	48.5	Dec 28	19.1	0.0	6.0	38.5		
Nov 29	19.7	0.0	6.0	48.5	Dec 29	18.7	0.0	6.0	38.5		
Nov 30	22.6	0.0	6.0	48.5	Dec 30	19.5	0.0	6.0	37.2		
	Avg.	22.2	0.0	6.0	51.9		Avg.	19.9	0.0	6.0	42.3

TABLE 106

**YEARLY TOTALS OF SALMONIDS COUNTED OVER
LITTLE GOOSE DAM
1970 - 1981, 1991 - 2008**

YEAR	CHINOOK*	STEELHEAD	SOCKEYE	COHO*	TOTALS
1970	72,971	59,640	163	2,480	135,254
1971	61,402	70,013	891	2,701	135,007
1972	64,211	63,638	408	799	129,056
1973	70,605	38,820	192	1,157	110,774
1974	26,787	14,784	124	532	42,227
1975	26,960	15,225	173	697	43,055
1976	32,359	20,894	644	733	54,630
1977	49,176	47,388	574	438	97,576
1978	56,069	24,927	168	307	81,471
1979	12,515	21,049	72	390	34,026
1980	10,605	38,627	88	124	49,444
1981	19,086	38,680	200	120	58,086
**					
1991	13,737	96,830	10	1	110,578
1992	26,746	117,698	12	0	144,456
1993	32,384	59,740	16	0	92,140
1994	5,457	45,815	44	0	51,316
1995	5,061	77,744	17	9	82,831
1996	13,538	82,203	1	0	95,742
1997	49,664	74,219	10	59	123,952
1998	19,798	63,753	5	1	83,557
1999	17,235	65,471	16	89	82,811
2000	62,886	101,030	296	313	164,525
2001	214,726	261,132	72	768	476,698
2002	119,429	215,251	38	133	334,851
2003	114,458	161,026	23	807	276,314
2004	100,998	151,406	81	3,042	255,527
2005	46,553	143,537	13	1,992	192,095
2006	44,695	124,440	26	972	170,133
2007	60,398	135,414	37	2,141	197,990
2008	108,953	168,105	594	3,806	281,458
Total	1,559,462	2,598,499	5,008	24,611	4,187,580
10-Yr Avg	89,033	152,681	120	1,406	243,240

*Jacks included

**1981 was the last year visual counts were made at Little Goose Project until 1991.

Includes 2001 extended season counts for November and December 0600-1600 PST.

Includes 2002 extended season counts for February and March 0800-1600 PST and

November and December 0600-1600 PST.

Includes 2003 and 2004 extended season counts for January, February, and March 0800-

1600 PST and November and December 0600-1600 PST.

TABLE 107

**MONTHLY COUNT OF CHINOOK SALMON
LITTLE GOOSE DAM; 1970-1981, 1991-2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS*				
1970		6,765		32,616		15,204		11,200		1,529		4,508	965	178	6	72,971	
1971		133		16,012		24,096		14,473		707		5,319	606	55	1	61,402	
1972		2,226		37,991		5,585		14,747		1,614		1,445	576	27		64,211	
1973		17,490		34,570		10,661		4,344		520		2,472	528	19	1	70,605	
1974		136		14,224		4,451		6,213		556		749	449	9		26,787	
1975		152		14,161		6,487		4,182		540		1,143	295			26,960	
1976		612		17,403		9,470		3,575		302		642	355			32,359	
1977		16,973		19,936		6,707		4,181		182		842	355			49,176	
1978		8,190		29,195		10,676		6,172		717		621	498			56,069	
1979		947		4,436		4,396		1,391		254		802	289			12,515	
1980		508		5,250		2,560		1,488		191		368	240			10,605	
1981		2,798		9,399		3,214		2,217		108		724	626			19,086	
**																	
1991		469		4,968		5,066		1,949		85		715	394	91		13,737	
1992		8,000		11,108		4,932		1,217		94		959	331	105		26,746	
1993		2,032		16,308		10,018		2,425		241		989	317	54		32,384	
1994		294		2,307		1,281		282		98		540	610	45		5,457	
1995		82		1,117		1,041		481		146		1,179	1,015			5,061	
1996		57		4,872		4,695		1,450		280		1,572	612			13,538	
1997		519		26,980		16,769		3,007		296		1,302	791			49,664	
1998		1,327		6,787		5,655		1,422		207		2,020	2,380			19,798	
1999		73		3,990		4,878		1,937		432		3,787	2,138			17,235	
2000		7,510		31,034		11,091		2,680		749		5,148	4,674			62,886	
2001		96,386		61,247		31,686		6,792		1,082		12,222	4,953	356	2	214,726	
2002	1	1,807		60,391		32,782		6,846		1,493		12,631	3,374	96	8	119,429	
2003	2	32,082		29,615		26,129		5,838		829		14,048	5,917	433	9	114,902	
2004		21,955		34,443		16,941		3,946		473		19,087	3,888	264	1	100,998	
2005		599		16,952		11,484		3,638		679		10,362	2,839			46,553	
2006		10		14,632		10,859		4,432		1,108		9,228	4,426			44,695	
2007		998		21,050		14,741		4,650		1,154		12,109	5,696			60,398	
2008		1,294		39,284		35,674		7,926		2,252		18,892	3,631			108,953	
Total		3		232,424		622,278		349,229		135,101		18,918	146,425	53,768	1,732	28	1,559,906
10-Year Average				16,271		31,264		19,627		4,869		1,025	11,751	4,154		89,078	

**1981 was the last year visual counts were made at Little Goose Project until 1991.

*Jacks included

Includes 2001 extended season counts for November and December 0600-1600 PST.

Includes 2002 extended season counts for February and March 0800-1600 PST and November and December 0600-1600 PST.

Includes 2003 and 2004 extended season counts for January, February, and March 0800-1600 PST and November & December 0600-1600 PST.

TABLE 108

**MONTHLY COUNT OF STEELHEAD
LITTLE GOOSE DAM**

1970 - 1981, 1991 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1970			3,346	4,148	1,762	167	1,485	7,487	27,898	11,931	1,136	280	59,640
1971			586	1,968	1,319	85	1,286	3,337	38,988	19,674	2,161	609	70,013
1972	248	251	943	2,565	720	54	1,209	6,637	25,089	24,323	1,258	341	63,638
1973	133	80	1,029	2,051	829	65	1,249	2,856	16,650	12,420	1,129	319	38,810
1974	191	294	543	1,105	278	5	726	2,203	3,970	4,721	583	165	14,784
1975	96	75	70	732	472	16	390	3,433	6,230	3,711			15,225
1976				1,052	345	133	678	3,556	8,988	6,142			20,894
1977				1,340	272	155	1,951	2,738	18,753	22,179			47,388
1978				1,625	216	20	593	2,617	11,547	8,309			24,927
1979				742	222	16	1,614	2,326	5,278	10,851			21,049
1980				3,063	668	43	821	3,858	15,305	14,869			38,627
1981				1,360	424	119	1,740	2,024	11,559	21,454			38,680
**													
1991				804	266	99	1,637	559	31,818	53,734	7,913		96,830
1992				472	189	141	997	2,652	54,585	48,870	9,792		117,698
1993				1,569	343	322	3,601	5,891	12,770	32,357	2,887		59,740
1994				771	148	162	1,522	2,239	8,828	25,830	6,315		45,815
1995				1,130	232	107	1,644	5,743	31,493	37,395			77,744
1996				936	99	105	1,489	7,560	40,468	31,546			82,203
1997				1,208	197	92	1,919	6,629	25,883	38,291			74,219
1998				1,924	107	139	1,090	912	12,939	46,642			63,753
1999				841	78	61	1,796	7,444	33,818	21,433			65,471
2000				841	112	384	3,355	5,361	54,244	36,733			101,030
2001				1,818	179	1,505	9,814	17,590	111,452	90,311	20,313	8150	261,132
2002		1,387	3,342	5,873	294	455	5,853	21,066	86,596	83,357	5,483	1545	215,251
2003	310	2,067	6,744	2,001	109	586	4,741	6,701	81,173	65,715	5,020	1026	176,193
2004	106	911	2,702	1,814	87	524	3,133	4,118	83,925	48,491	4,326	1269	151,406
2005				896	128	494	2,528	5,165	62,611	71,715			143,537
2006				2,569	120	129	978	3,547	54,727	62,370			124,440
2007				2,096	205	339	2,062	4,560	63,517	62,635			135,414
2008				2,127	490	179	5,770	15,499	93,240	50,800			168,105
Total	1,084	5,065	19,305	51,441	10,910	6,701	67,671	166,308	1,134,342	1,068,809	68,316	13,704	2,613,656
10-Year Average				2,088	180	466	4,003	9,105	72,530	59,356			154,198

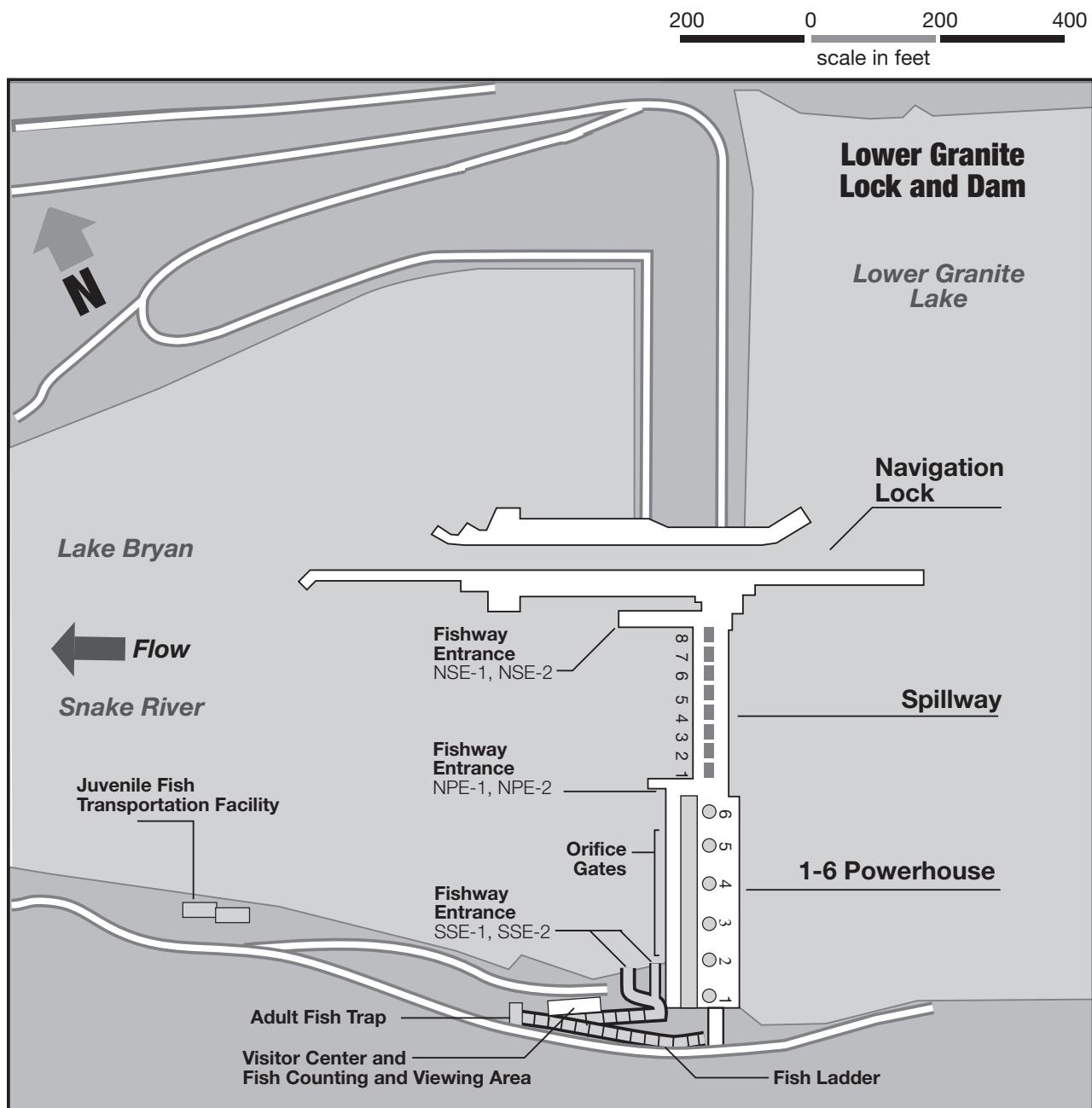
** 1981 was the last year visual counts were made at Little Goose Project until 1991.

Includes 2001 extended season counts for November and December 0600-1600 PST.

Includes 2002 extended season counts for February and March 0800-1600 PST and November and December 0600-1600 PST.

Includes 2003 and 2004 extended season counts for January, February, and March 0800-1600 PST and November and December 0600-1600 PST.

Plate 9 Lower Granite Lock and Dam



LOWER GRANITE DAM

FISH COUNTING SCHEDULE

1 January – 28 February	No counting.
1 March – 31 March	Video counting daily 0600 – 1600 hours PST.
1 April – 31 October	Visual counting daily 0400 – 2000 hours PST.
15 June – 31 August	Video counting daily 2000 – 0400 hours PST.
1 November – 30 December	Video counting daily 0600 – 1600 hours PST.

FISH LADDER OPERATING SCHEDULE

1 January	Ladder in service
2 January – 21 February	Ladder dewatered for annual maintenance.
22 February – 31 December	Ladder in service

FISHWAY ACTIVITIES

Water temperatures were monitored hourly by hobo from the fish ladder exit pool and the downstream end of the juvenile fish collection channel. During 2008, readings were taken from 1 June to 30 September.

During 2008, the adult fish trap was operated continuously from 7 March through 25 November with the exception of a period from 8 August to 23 August when water temperatures were too high for fish handling. The trap remained in operation through 25 November. Trucking of fall Chinook salmon to hatchery facilities ended on 24 November. The trap was dewatered for the winter on 26 November.

Early in the season the trap was operated to monitor for steelhead and also to do some limited radio-tagging of steelhead. Starting in April, the sort by code system was utilized to monitor PIT-tagged spring chinook. Chinook of Lemhi River origin diverted by this operation were radio-tagged for Idaho Fish and Game and released back into the ladder.

Trucking of fall chinook to both Lyons Ferry Hatchery and the Nez Perce Cherry Lane Hatchery facility for run supplementation purposes also took place during the fall operational period and ended on 24 November.

The juvenile fish facility was operated for fish transport/bypass from 25 March to 1 November and for monitoring and bypass of adult fallbacks and juvenile PIT-tagged fish from 25 March to 13 December.

TABLE 109

MONTHLY TOTALS OF SALMONIDS, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER LOWER GRANITE DAM
2008

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				1,019	36,995	40,654	9,513	1,819	20,570	4,725	335	2	115,632
STEELHEAD			3,812	3,412	547	107	4,301	13,596	83,413	56,851	8,322	1,120	175,481
SOCKEYE					41	810		41		9	8		909
COHO*									2,513	2,209	48		4,770
PINK													
TOTAL	3,812	4,431	37,542	40,802	14,624	15,456	106,505	63,793	8,705	1,122			296,792
SHAD					4	2,331	1,233		5				3,573
LAMPREY						10	38	14		-1			61
STURGEON													0
BULL TROUT													0

*Jacks included

These counts include the extended season videotaped counts that were made between 0600 and 1600 hours in November and December.

TABLE 110

**DISCHARGE AND WATER DATA
LOWER GRANITE PROJECT 2008**

	JANUARY		
	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI *DEG F
Jan 1	22.0	0.0	
Jan 2	22.4	0.0	
Jan 3	19.4	0.0	
Jan 4	24.7	0.0	
Jan 5	<u>20.3</u>	0.0	
Jan 6	24.6	0.0	
Jan 7	22.1	0.0	
Jan 8	26.5	0.0	
Jan 9	24.2	0.0	
Jan 10	<u>24.7</u>	0.0	
Jan 11	24.2	0.0	
Jan 12	26.8	0.0	
Jan 13	23.5	0.0	
Jan 14	22.0	0.0	
Jan 15	<u>24.7</u>	0.1	
Jan 16	24.5	0.0	
Jan 17	24.9	0.1	
Jan 18	28.3	0.0	
Jan 19	22.1	0.0	
Jan 20	<u>20.6</u>	0.0	
Jan 21	22.4	0.0	
Jan 22	25.1	0.0	
Jan 23	21.6	0.0	
Jan 24	22.8	0.0	
Jan 25	<u>25.5</u>	0.0	
Jan 26	23.8	0.0	
Jan 27	20.0	0.0	
Jan 28	30.3	0.0	
Jan 29	19.7	0.0	
Jan 30	<u>28.6</u>	0.0	
Jan 31	24.6	0.0	

AVG.

23.8	0.0
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	FEBRUARY		
	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI *DEG F
Feb 1	22.2	0.0	
Feb 2	24.4	0.0	
Feb 3	19.6	0.0	
Feb 4	23.3	0.0	
Feb 5	<u>23.1</u>	0.0	
Feb 6	24.1	0.0	
Feb 7	24.6	0.0	
Feb 8	23.6	0.0	
Feb 9	25.2	0.0	
Feb 10	<u>17.7</u>	0.0	
Feb 11	25.7	0.0	
Feb 12	26.0	0.0	
Feb 13	30.1	0.0	
Feb 14	26.8	0.0	
Feb 15	<u>27.8</u>	0.0	
Feb 16	25.4	0.0	
Feb 17	22.9	0.0	
Feb 18	24.6	0.0	
Feb 19	24.4	0.0	
Feb 20	<u>29.0</u>	0.0	
Feb 21	25.5	0.0	
Feb 22	29.0	0.0	
Feb 23	24.6	0.0	
Feb 24	22.8	0.0	
Feb 25	<u>23.2</u>	0.0	
Feb 26	26.2	0.0	
Feb 27	28.1	0.0	
Feb 28	29.8	0.0	
Feb 29	30.1	0.0	

AVG.

25.2	0.0
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*Data unavailable

TABLE 111

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT
MARCH 2008

DATE	FISH COUNTS							RIVER CONDITIONS								
	CHINOOK ADULT SPRING	CHINOOK SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1								159	35				25.7	0.0	*	*
Mar 2								283	60				32.3	0.0	*	*
Mar 3								59	9				33.3	0.0	5.0	43.2
Mar 4								54	7				38.5	0.0	5.0	43.3
Mar 5								38	4				42.0	0.0	5.0	43.7
Mar 6								56	11				34.4	0.0	5.0	43.9
Mar 7								288	64				35.3	0.0	*	*
Mar 8								80	14				27.6	0.0	*	*
Mar 9								58	9				30.3	0.0	*	*
Mar 10								57	9				31.1	0.0	*	*
Mar 11								74	13				36.1	0.0	4.8	44.0
Mar 12								61	8				37.9	0.0	4.0	44.3
Mar 13								57	13				40.3	0.0	4.5	44.8
Mar 14								52	7				40.9	0.0	*	*
Mar 15								197	38				33.6	0.0	*	*
Mar 16								216	44				37.4	0.0	*	*
Mar 17								119	22				43.8	0.0	*	*
Mar 18								140	28				39.5	0.0	4.4	45.3
Mar 19								124	30				37.3	0.0	4.2	45.2
Mar 20								138	30				43.3	0.0	4.4	45.1
Mar 21								177	38				35.6	0.0	*	*
Mar 22								173	35				33.6	0.0	*	*
Mar 23								223	41				32.7	0.0	*	*
Mar 24								120	24				34.3	0.0	4.0	45.7
Mar 25								74	11				41.6	0.0	3.8	45.7
Mar 26								91	18				42.0	0.0	3.0	46.0
Mar 27								139	32				35.2	0.0	*	*
Mar 28								140	30				48.0	0.0	4.0	46.5
Mar 29								164	35				41.3	0.0	4.0	46.4
Mar 30								99	19				45.8	0.0	3.6	46.4
Mar 31								102	26				37.6	0.0	*	*
TOTAL								3,812	764				37.0	0.0	4.3	46.0
AVG.								123	25							

*Data unavailable

Note: March counts were from video tape. The counts are 10-hour counts and occurred between 0600-1600 PST.

TABLE 112

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT
APRIL 2008

DATE	FISH COUNTS										RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	0			0				89	31				42.7	0.0	*	*
Apr 2	0			0				78	28				38.9	0.0	*	*
Apr 3	0			0				75	19				45.0	20.6	*	*
Apr 4	0			0				191	66				42.5	20.4	3.8	46.9
Apr 5	0			0				191	61				44.7	20.3	3.8	46.8
Apr 6	0			0				160	56				45.3	20.3	4.0	47.9
Apr 7	0			0				153	50				43.5	20.3	4.1	48.0
Apr 8	0			0				92	28				47.8	20.3	*	*
Apr 9	0			0				124	53				46.3	20.4	*	*
Apr 10	4			0				95	42				46.1	20.3	*	*
Apr 11	1			0				131	48				44.2	20.3	4.6	48.7
Apr 12	1			0				112	42				45.5	20.2	4.2	48.9
Apr 13	-1			0				152	42				43.6	20.1	4.0	49.7
Apr 14	0			0				113	40				54.7	20.2	*	*
Apr 15	4			0				155	48				63.6	20.4	*	*
Apr 16	1			0				150	62				62.7	20.3	*	*
Apr 17	2			0				157	68				61.8	20.2	*	*
Apr 18	4			0				167	78				63.0	20.3	*	*
Apr 19	6			0				118	59				65.1	20.6	3.4	49.6
Apr 20	2			0				135	61				66.6	20.5	3.6	49.8
Apr 21	12			0				118	47				65.9	20.5	3.6	51.4
Apr 22	19			0				101	41				57.9	20.5	*	*
Apr 23	36			0				99	53				51.5	20.3	*	*
Apr 24	58			1				89	47				53.9	20.4	*	*
Apr 25	61			4				84	40				60.2	20.4	3.4	50.7
Apr 26	82			0				78	47				56.1	20.4	*	*
Apr 27	144			13				79	44				58.3	20.3	3.6	51.3
Apr 28	58			1				42	18				55.2	20.2	3.8	51.7
Apr 29	170			1				35	16				67.2	20.4	3.7	52.2
Apr 30	329			6				49	19				71.2	20.4	*	*
TOTAL	993			26				3,412	1,354				53.7	19.0	3.8	49.5
AVG.	33			1				114	45							

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	STEELHEAD	WILD STEELHEAD
	993	26	7,224	2,118

Note: Visual counts occurred April 1 through October 31. The counts are 16-hour counts and occurred between 0400-2000 PST.

TABLE 113

**MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND**

LOWER GRANITE PROJECT
MAY 2008

FISH COUNTS

TABLE 114

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT
JUNE 2008

DATE	FISH COUNTS												RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	1,885			463			0	8	6	1			154.3	83.4	1.6	54.0
Jun 2	1,118			377			0	4	4	0			158.9	87.6	*	*
Jun 3	1,283			506			0	0	0	0			160.7	89.0	*	*
Jun 4	966			361			0	0	0	0			152.2	81.9	*	*
Jun 5	912			364			0	2	2	0			149.4	78.9	*	*
Jun 6	1,280			414			0	1	0	0			140.1	69.5	2.5	54.4
Jun 7	1,513			377			0	6	5	0			138.7	68.1	2.1	54.6
Jun 8	1,408			272			0	1	1	0			125.1	55.4	2.5	55.6
Jun 9	480			148			0	0	0	0			121.6	52.2	*	*
Jun 10	743			229			0	2	2	0			120.8	51.1	*	*
Jun 11	553			152			0	0	0	0			122.4	60.0	*	*
Jun 12	1,122			252			0	2	0	0			124.2	55.9	*	*
Jun 13	1,463			325			0	0	0	0			125.2	43.6	3.0	54.8
Jun 14	1,248			229			0	1	0	0			118.0	29.4	3.0	53.4
Jun 15	708			160			0	0	-1	0			116.5	27.5	*	*
Jun 16	522			166			0	-1	-1	0			118.1	37.9	*	*
Jun 17	857			222			0	1	0	0			130.7	60.0	*	*
Jun 18	784			211			0	0	0	0			131.9	67.8	3.6	58.9
Jun 19	802			253			0	1	1	0			133.0	65.6	*	*
Jun 20	1043			232			0	2	1	1			130.9	60.3	3.0	58.1
Jun 21	1094			190			0	1	0	0			130.1	59.2	3.6	58.8
Jun 22	1153			223			0	-2	-1	0			133.9	64.4	3.6	58.9
Jun 23	821			226			0	3	1	0			139.5	69.9	3.1	59.0
Jun 24	917			251			0	8	6	0			132.1	63.7	*	*
Jun 25	1682			378			1	2	1	0			120.0	47.1	*	*
Jun 26	1591			313			2	9	1	0			112.5	40.9	*	*
Jun 27	1555			328			12	9	4	1			101.7	34.6	4.0	60.5
Jun 28	937			185			2	18	6	0			100.2	28.8	4.1	59.7
Jun 29	1290			232			6	14	6	1			103.5	18.3	4.2	60.3
Jun 30	731			154			18	15	2	0			107.0	21.1	*	*
TOTAL	18,061	14,400		8,193			41	107	46	4			128.4	55.8	3.1	57.2
AVG.	1,062	1108		273			1	4	2	0						
RUN YEAR	CHINOOK ADULT	CHINOOK JACK					WILD									
TOTALS TO DATE	50,146	10,946					SOCKEYE	STEELHEAD	STEELHEAD	SHAD						
SPRING	50,146	10,946					41	7,878	2,501	4						
SUMMER	14,400	3,176														
TOTAL	64,546	14,122														

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	50,146	10,946
SUMMER	14,400	3,176
TOTAL	64,546	14,122

TABLE 115

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

FISH COUNTS

LOWER GRANITE PROJECT

JULY 2008

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFs	SPILL KCFs	TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL													
Jul 1	583			118			16	20	6	2	0		104.6	23.5	4.2	62.8
Jul 2	799			226			24	34	8	10	0		102.1	18.3	*	*
Jul 3	592			136			34	28	8	10	0		96.6	18.3	4.5	62.0
Jul 4	312			118			46	32	14	13	0		87.9	18.3	4.4	61.8
Jul 5	890			307			44	43	18	13	0		80.8	18.3	2.5	62.6
Jul 6	538			239			50	79	25	26	0		73.0	18.2	4.5	61.8
Jul 7	497			130			82	69	25	46	0		66.8	18.3	*	*
Jul 8	395			73			73	83	29	54	0		66.9	18.4	*	*
Jul 9	366			41			84	90	34	119	0		63.9	18.4	5.0	63.1
Jul 10	322			31			59	58	28	89	0		62.2	18.2	*	*
Jul 11	227			61			62	105	41	44	0		56.2	18.5	5.0	64.5
Jul 12	317			59			43	98	31	30	0		51.1	18.4	5.0	65.3
Jul 13	169			25			35	112	41	36	0		47.2	18.4	5.0	65.6
Jul 14	102			11			24	51	23	126	0		50.0	18.4	4.1	65.3
Jul 15	144			29			22	69	38	72	0		47.8	18.4	*	*
Jul 16	96			26			18	60	31	136	0		46.3	18.5	*	*
Jul 17	95			25			14	53	24	86	0		49.0	18.5	*	*
Jul 18	181			14			8	151	79	85	0		47.3	18.5	5.0	65.5
Jul 19	121			14			8	108	62	163	0		47.0	18.3	*	*
Jul 20	98			14			8	116	55	76	0		47.3	18.5	5.0	65.7
Jul 21	78			10			8	100	38	52	0		44.3	18.4	*	*
Jul 22	66			22			7	107	54	25	0		43.1	18.6	*	*
Jul 23	72			14			6	152	61	56	0		42.2	18.5	5.0	66.5
Jul 24	98			6			6	177	80	114	2		44.7	18.4	*	*
Jul 25	68			17			4	174	70	191	0		45.4	18.4	5.0	66.5
Jul 26	113			20			6	246	116	158	0		42.7	18.3	5.0	66.7
Jul 27	74			14			2	257	127	96	2		41.1	18.3	5.0	65.6
Jul 28	59			8			6	342	149	67	1		42.5	18.5	5.0	66.1
Jul 29	102			5			5	485	196	146	1		45.3	18.6	*	*
Jul 30	67			5			4	405	169	92	2		40.8	18.5	*	*
Jul 31	49			5			2	397	157	98	2		45.7	18.6	*	*
TOTAL	7,690			1,823			810	4,301	1,837	2,331	10		57.2	18.6	4.7	64.6
AVG.	248			59			26	139	59	75	0					

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	50,146	10,946
SUMMER	22,090	4,999
TOTAL	72,236	15,945

SOCKEYE	STEELHEAD	WILD STEELHEAD		SHAD	LAMPREY
		STEELHEAD	SHAD		
851	12,179	4,338	2,335	10	

TABLE 116

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT
AUGUST 2008

RIVER CONDITIONS

DATE	FISH COUNTS			RIVER CONDITIONS													
	SPRING	SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL SOCKEYE	WILD STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F		
Aug 1		60		8			2	378	146	173	2		45.2	18.5	3.5	*	
Aug 2		37		2			1	424	170	113	0		44.7	18.5	4.6	65.9	
Aug 3		48		4			5	547	193	43	0		45.5	18.6	4.7	66.0	
Aug 4		25		2			2	454	155	76	0		40.4	18.5	*	*	
Aug 5		6		5			0	313	102	112	0		42.6	18.4	*	*	
Aug 6		23		2			2	329	109	104	0		45.4	18.2	*	*	
Aug 7		23		4			0	409	167	62	2		43.1	18.3	*	*	
Aug 8		17		4			1	435	155	41	1		43.7	18.3	5.0	66.6	
Aug 9		37		4			2	494	187	70	0		36.1	18.6	5.0	66.5	
Aug 10		61		6			0	756	290	22	2		38.9	18.6	5.0	67.0	
Aug 11		48		11			5	796	260	74	2		36.2	18.6	*	*	
Aug 12		36		5			5	550	179	16	4		35.3	18.4	*	*	
Aug 13		37		4			1	381	104	43	2		37.6	18.3	*	*	
Aug 14		28		5			1	298	94	29	5		32.7	18.4	5.0	66.6	
Aug 15		10		2			2	186	66	37	2		35.3	18.4	3.4	66.6	
Aug 16		12		1			2	276	110	74	2		35.5	18.4	3.2	66.8	
Aug 17		14		4			0	318	102	23	5		31.8	18.3	*	*	
Aug 18		36		6			1	552	184	25	0		35.1	18.3	4.5	67.3	
Aug 19		44		10			2	416	121	30	1		37.1	18.4	*	*	
Aug 20		25		6			1	257	90	6	0		36.3	18.6	*	*	
Aug 21		67		7			0	480	148	22	7		34.9	18.8	*	*	
Aug 22		61		13			0	626	186	19	-1		38.1	18.7	4.5	66.6	
Aug 23		28		10			0	521	156	2	0		36.9	18.4	*	*	
Aug 24		23		4			0	360	92	5	0		32.1	18.2	*	*	
Aug 25		91		30			4	331	91	1	2		31.5	18.4	4.5	65.2	
Aug 26		109		29			1	443	144	5	1		32.8	18.6	5.0	65.2	
Aug 27		86		12			1	358	98	1	0		32.0	18.5	*	*	
Aug 28		58		30			0	450	137	0	0		31.4	18.4	4.0	*	
Aug 29		37		7			0	360	82	4	0		34.2	18.5	5.0	*	
Aug 30		130		26			0	525	146	1	-1		34.3	18.3	5.0	*	
Aug 31		209		30			0	573	142	0	0		31.4	18.3	*	*	
TOTAL		522		1,004		293		41	13,596	4,406	1,233	38		37.0	18.4	4.5	66.4
AVG		31		72		9		1	439	142	40	1					

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	50,146	10,946
SUMMER	22,612	5,072
FALL	1,004	220
TOTAL	73,762	16,238

SOCKEYE	STEELHEAD	WILD STEELHEAD		
		SHAD	LAMPREY	
892	25,775	8,744	3,568	48

TABLE 117

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT

SEPTEMBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL	WILD	BULL TROUT	DISCH KCFS	SPILL KCFS	RIVER CONDITIONS			
	SPRING	SUMMER	FALL						STEELHEAD	STEELHEAD			SECCHI	DEG F		
Sep 1				313	61	0	0	0	1,129	326	1	1		*		
Sep 2				336	62	0	0	0	491	145	2	4	26.7	*		
Sep 3				474	86	0	0	0	578	158	1	6	32.4	*		
Sep 4				676	131	0	0	0	960	287	0	1	32.8	*		
Sep 5				394	151	0	0	0	844	227	0	0	37.2	5.0	62.9	
Sep 6				814	140	0	0	0	1,005	269	0	0	32.1	5.0	62.9	
Sep 7				895	119	2	1	0	1,307	312	0	-1	30.1	5.0	63.0	
Sep 8				719	110	2	4	0	1,194	289	0	0	27.9	*	*	
Sep 9				696	126	0	1	0	1,733	425	0	1	26.3	4.5	64.4	
Sep 10				979	181	7	6	0	2,528	595	0	1	25.9	*	*	
Sep 11				670	143	11	2	0	2,250	523	1	0	24.1	*	*	
Sep 12				485	186	14	1	0	2,440	546	0	0	25.4	4.2	64.8	
Sep 13				671	224	41	10	0	2,988	647	0	0	22.4	5.0	64.6	
Sep 14				558	154	22	2	0	2,520	572	0	0	21.9	5.0	64.8	
Sep 15				484	235	78	6	0	3,177	710	0	0	20.2	*	*	
Sep 16				514	211	61	12	1	2,738	554	0	0	23.1	*	*	
Sep 17				390	192	64	22	0	2,309	484	0	1	17.5	*	*	
Sep 18				251	149	50	7	0	1,639	372	0	0	23.7	5.0	65.5	
Sep 19				482	349	47	7	2	2,366	482	0	0	20.3	*	*	
Sep 20				377	478	82	10	1	3,191	694	0	0	14.3	5.0	65.3	
Sep 21				479	377	127	46	0	5,712	1,373	0	0	12.5	5.0	64.9	
Sep 22				498	332	152	61	5	5,605	1,267	0	0	16.4	5.0	64.8	
Sep 23				438	383	125	50	1	4,673	1,162	0	0	17.0	*	*	
Sep 24				334	380	181	79	0	4,900	1,170	0	0	20.4	*	*	
Sep 25				157	205	208	88	0	4,260	986	0	0	21.2	*	*	
Sep 26				337	556	190	84	1	5,173	1,250	0	0	21.4	*	*	
Sep 27				216	257	78	37	0	2,764	683	0	0	25.9	5.0	64.9	
Sep 28				126	151	114	31	-2	3,719	791	0	0	18.2	5.0	65.0	
Sep 29				142	163	106	55	0	5,002	1,120	0	0	17.2	5.0	64.5	
Sep 30				146	227	77	52	0	4,218	932	0	0	24.6	5.0	64.5	
TOTAL				14,051	6,519	1,839	674	9	83,413	19,351	5	14				
AVG.				468	217	61	22	0	2,780	645	0	0	23.6	0.0	4.9	64.5

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	50,146	10,946
SUMMER	22,612	5,072
FALL	15,055	6,739
TOTAL	87,813	22,757

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD	SHAD	LAMPREY
1,839	674	901	109,188	28,095	3,573	62

TABLE 118

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT
OCTOBER 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK JACK FALL	COHO JACK	COHO JACK	TOTAL SOCKEYE	WILD STEELHEAD	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Oct 1	137	239	85	82	0	3,309	707	0	23.1	0.0	*	*
Oct 2	92	204	41	37	1	3,551	838	0	26.3	0.0	*	*
Oct 3	76	60	56	25	0	2,913	661	0	24.0	0.0	*	*
Oct 4	86	142	42	32	4	2,849	631	0	20.7	0.0	4.8	64.3
Oct 5	113	180	79	46	2	4,492	1,056	0	19.7	0.0	5.0	63.3
Oct 6	78	143	44	36	0	2,508	588	-1	17.9	0.0	5.0	63.5
Oct 7	106	366	60	26	1	3,158	770	0	23.6	0.0	*	*
Oct 8	47	149	59	12	0	3,355	793	0	18.4	0.0	*	*
Oct 9	54	100	50	14	0	2,906	601	0	24.1	0.0	*	*
Oct 10	50	166	48	20	0	2,601	560	0	24.8	0.0	5.0	63.2
Oct 11	72	164	44	23	0	2,274	487	0	20.3	0.0	*	*
Oct 12	53	106	66	24	0	1,812	402	0	22.9	0.0	5.0	62.8
Oct 13	47	146	91	19	0	2,385	568	0	26.0	0.0	5.0	62.3
Oct 14	32	138	119	20	0	2,132	540	0	20.4	0.0	*	*
Oct 15	20	88	73	11	0	1,350	376	0	14.7	0.0	5.0	*
Oct 16	25	66	44	7	0	1,066	264	0	17.4	0.0	*	*
Oct 17	43	89	74	8	0	1,872	432	0	18.5	0.0	*	*
Oct 18	10	73	31	5	0	661	132	0	17.8	0.0	5.0	59.6
Oct 19	24	76	30	6	0	901	180	0	20.3	0.0	5.0	58.3
Oct 20	26	55	40	8	0	525	131	0	19.6	0.0	5.0	58.2
Oct 21	32	80	131	24	0	1,575	374	0	24.5	0.0	5.0	57.9
Oct 22	20	52	53	22	0	749	190	0	18.6	0.0	*	*
Oct 23	32	66	58	17	0	1,246	304	0	18.8	0.0	*	*
Oct 24	17	84	55	16	0	1,008	242	0	19.2	0.0	5.0	56.7
Oct 25	20	66	30	20	0	605	160	0	17.4	0.0	5.0	56.6
Oct 26	7	37	25	29	0	1,149	281	0	16.5	0.0	5.0	56.5
Oct 27	14	38	12	5	0	738	198	0	16.2	0.0	*	*
Oct 28	19	48	14	1	0	1,136	256	0	15.8	0.0	5.0	56.0
Oct 29	13	37	12	4	0	1,024	266	0	15.5	0.0	*	*
Oct 30	5	48	6	5	0	482	134	0	18.1	0.0	*	*
Oct 31	18	31	7	26	0	519	122	0	22.0	0.0	5.0	55.6
TOTAL	1,388	3,337	1,579	630	8	56,851	13,244	-1	20.1	0.0	5.0	59.7

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	50,146	10,946
SUMMER	22,612	5,072
FALL	16,443	10,076
TOTAL	89,201	26,094

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY
3,418	1,304	909	166,039	41,339	3,573	61

Note: Visual counts ended October 31.

TABLE 119

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT

NOVEMBER 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F	
	SPRING	SUMMER	FALL														
Nov 1				18	22	5	2		398	99				14.3	0.0	5.0	*
Nov 2				16	21	5	0		535	131				14.3	0.0	*	*
Nov 3				8	14	4	2		262	89				16.7	0.0	5.0	*
Nov 4				6	20	1	1		336	92				21.2	0.0	*	*
Nov 5				9	10	7	1		385	86				19.9	0.0	5.0	51.7
Nov 6				10	14	6	1		305	72				20.9	0.0	*	*
Nov 7				16	8	2	1		350	90				17.6	0.0	*	*
Nov 8				23	9	3	0		197	67				18.6	0.0	*	*
Nov 9				13	7	1	0		234	53				23.8	0.0	*	*
Nov 10				7	5	1	0		234	44				20.8	0.0	5.0	*
Nov 11				12	3	1	0		337	71				21.3	0.0	*	*
Nov 12				10	1	1	0		294	63				23.0	0.0	5.0	53.3
Nov 13				11	3	1	0		273	52				29.1	0.0	5.0	*
Nov 14				8	6	1	0		266	46				44.1	0.0	*	*
Nov 15				8	2	0	0		470	81				32.7	0.0	*	*
Nov 16				3	4	0	0		475	103				28.3	0.0	*	*
Nov 17				2	1	0	0		54	20				25.7	0.0	4.0	51.4
Nov 18				1	2	0	0		309	69				25.3	0.0	4.5	51.1
Nov 19				2	-1	0	0		349	82				25.0	0.0	4.0	53.5
Nov 20				0	-1	1	0		230	74				21.0	0.0	4.4	50.6
Nov 21				1	0	0	0		268	62				19.5	0.0	*	*
Nov 22				0	1	0	0		194	60				24.1	0.0	*	*
Nov 23				0	1	0	0		323	75				19.8	0.0	*	*
Nov 24				0	0	0	0		220	47				22.6	0.0	4.4	49.4
Nov 25				-1	0	0	0		122	43				17.5	0.0	4.2	51.0
Nov 26				0	0	0	0		123	28				20.5	0.0	4.1	*
Nov 27				0	0	0	0		272	77				18.5	0.0	*	*
Nov 28				0	0	0	0		157	17				18.6	0.0	*	*
Nov 29				0	0	0	0		194	43				19.2	0.0	*	*
Nov 30				0	0	0	0		156	45				22.2	0.0	*	*
TOTAL				183	152	40	8		8,322	1,981				22.2	0.0	4.6	51.5
AVG.				6	5	1	0		277	66							

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	50,146	10,946
SUMMER	22,612	5,072
FALL	16,626	10,228
TOTAL	89,384	26,246

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY
3,458	1,312	909	174,361	43,320	3,573	61

Note: From November 1 to December 31, counts were from video tape. The counts are 10-hour counts and occurred between 0600-1600 PST.

TABLE 120

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT

DECEMBER 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK JACK FALL	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Dec 1			0					72	22			18.0	0.0	4.3	*
Dec 2			0					70	24			24.3	0.0	5.0	47.9
Dec 3			0					72	24			24.5	0.0	5.0	47.4
Dec 4			2					44	15			25.0	0.0	*	*
Dec 5			0					83	28			20.2	0.0	*	*
Dec 6			0					115	33			18.7	0.0	*	*
Dec 7			0					94	28			19.4	0.0	*	*
Dec 8			0					117	33			23.8	0.0	*	*
Dec 9			0					28	7			18.1	0.0	4.8	52.0
Dec 10			0					37	8			18.0	0.0	4.9	*
Dec 11			0					63	22			21.5	0.0	5.0	50.0
Dec 12			0					73	17			19.2	0.0	*	*
Dec 13			0					64	21			20.6	0.0	*	*
Dec 14			0					54	19			20.9	0.0	*	*
Dec 15			0					55	20			18.9	0.0	*	*
Dec 16			0					19	9			19.6	0.0	5.0	*
Dec 17			0					10	4			18.2	0.0	5.0	44.5
Dec 18			0					4	2			22.4	0.0	5.0	44.4
Dec 19			0					5	4			21.6	0.0	*	*
Dec 20			0					6	2			23.8	0.0	*	*
Dec 21			0					6	2			24.2	0.0	*	*
Dec 22			0					7	3			19.8	0.0	5.0	44.1
Dec 23			0					2	1			23.6	0.0	5.0	41.6
Dec 24			0					2	1			24.4	0.0	*	*
Dec 25			0					3	3			14.9	0.0	*	*
Dec 26			*					*	*			18.6	0.0	*	*
Dec 27			0					2	0			20.8	0.0	*	*
Dec 28			0					1	1			19.9	0.0	*	*
Dec 29			0					2	1			19.5	0.0	5.0	39.0
Dec 30			0					4	2			19.7	0.0	5.0	39.0
Dec 31			0					6	2			25.6	0.0	5.0	40.5
TOTAL			2					1,120	358			20.9	0.0	4.9	44.6

*Data unavailable

RUN YEAR

TOTALS TO DATE

	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	SHAD	LAMPREY
SPRING	50,146	10,946	3,458	1,312	909	175,421	43,650	3,573	61
SUMMER	22,612	5,072							
FALL	16,628	10,228							
TOTAL	89,386	26,246							

Note: From November 1 to December 31, counts were from video tape. The counts are 10-hour counts and occurred between 0600-1600 PST.
 Official Fall Chinook run ended December 15. Video loss occurred on Dec 26.

TABLE 121

**YEARLY TOTALS OF SALMONIDS COUNTED OVER
LOWER GRANITE DAM
1975 - 2008**

YEAR	CHINOOK*	STEELHEAD	SOCKEYE	COHO*	TOTALS
1975	28,460	17,311	209	921	46,901
1976	31,667	23,017	531	900	56,115
1977	49,123	53,037	458	268	102,886
1978	54,246	30,068	123	152	84,589
1979	12,548	25,046	25	158	37,777
1980	10,986	40,454	96	43	51,579
1981	19,198	40,234	218	17	59,667
1982	19,476	72,840	211	59	92,586
1983	16,200	86,234	122	51	102,607
1984	16,517	98,923	49	0	115,489
1985	36,567	118,463	35	2	155,067
1986	43,023	134,519	15	1	177,558
1987	37,677	70,151	29	0	107,857
1988	37,882	87,040	23	0	124,945
1989	19,557	132,579	2	0	152,138
1990	23,345	56,859	0	0	80,204
1991	13,618	100,381	8	0	114,007
1992	26,193	121,459	15	0	147,667
1993	30,446	66,699	12	0	97,157
1994	5,077	47,550	5	0	52,632
1995	3,702	80,853	3	0	84,558
1996	11,129	86,072	3	0	97,204
1997	46,727	85,917	11	92	132,747
1998	18,557	72,017	2	12	90,588
1999	15,884	74,370	14	262	90,530
2000	62,659	113,211	299	925	177,094
2001	210,381	262,568	36	1,087	474,072
2002	119,304	218,718	55	395	338,472
2003	119,676	180,672	11	1,265	301,624
2004	109,061	154,389	113	3,904	267,467
2005	49,530	155,783	18	2,183	207,514
2006	45,992	145,991	17	1,434	193,434
2007	62,530	157,345	52	2,798	222,725
2008	115,632	175,481	909	4,770	296,792
Total	1,522,570	3,386,251	3,729	21,699	4,934,249
10-Year Average	91,065	163,853	152	1,902	256,972
*Jacks included					

TABLE 122
MONTHLY COUNT OF CHINOOK SALMON
LOWER GRANITE DAM
1975 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS*	
1975				1	11,693	8,722	4,854	1,183	1,462	474	71		28,460	
1976				149	14,358	10,438	5,074	428	605	535	80		31,667	
1977				12,824	22,892	6,718	4,622	203	961	776	125	2	49,123	
1978				3,329	29,983	11,464	6,976	1,234	698	519	42	1	54,246	
1979				234	4,461	4,455	1,794	256	1,003	302	43		12,548	
1980				328	5,227	2,558	1,916	241	345	343	28		10,986	
1981				1,380	10,730	2,713	2,561	92	1,008	677	37		19,198	
1982				42	9,121	4,650	3,217	329	1,399	650	62	6	19,476	
1983				113	7,676	3,551	3,167	234	828	552	79		16,200	
1984				134	4,915	5,602	4,274	303	719	522	48		16,517	
1985				1,429	20,384	10,466	1,971	281	1,285	697	53	1	36,567	
1986				3,623	26,434	7,472	2,796	137	1,250	1,136	172	3	43,023	
1987			1	4,836	22,217	5,578	3,532	216	664	508	116	9	37,677	
1988				4,722	20,615	8,771	2,654	212	429	371	104	4	37,882	
1989				577	10,597	5,771	1,511	225	478	338	60		19,557	
1990				2,808	12,925	4,902	2,094	64	248	264	40		23,345	
1991				250	4,698	5,177	2,397	72	524	465	35		13,618	
1992				6,205	12,170	4,783	1,998	110	576	288	63		26,193	
1993				638	15,627	9,728	3,095	281	736	300	41		30,446	
1994				99	2,283	1,180	436	73	422	539	45		5,077	
1995				22	870	936	438	113	757	539	27		3,702	
1996				38	3,415	4,260	1,557	210	1,133	471	45		11,129	
1997				222	22,323	18,376	3,690	274	1,159	631	52		46,727	
1998		1	942	6,330	5,398	1,877	175	1,495	2,200	138	1		18,557	
1999			36	3,358	4,886	2,214	396	3,017	1,832	143	2		15,884	
2000			5,984	30,609	12,074	3,032	564	5,719	4,435	240	2		62,659	
2001			90,165	63,007	31,721	7,392	760	11,596	5,319	414	7		210,381	
2002		1	1,050	56,456	35,129	8,223	1,102	12,774	4,336	229	4		119,304	
2003		10	29,379	30,358	31,808	7,467	817	12,616	6,990	228	3		119,676	
2004		1	20,189	42,777	19,382	3,991	410	17,277	4,512	522	0		109,061	
2005			327	17,557	11,709	5,320	445	11,295	2,767	105	5		49,530	
2006			4	14,325	12,477	3,927	1,053	8,630	5,332	240	4		45,992	
2007		1	531	19,516	16,994	4,921	1,200	12,720	6,428	217	2		62,530	
2008			1,019	36,995	40,654	9,513	1,819	20,570	4,725	335	2		115,632	
Total			15	193,629	616,902	370,503	124,501	15,512	136,398	60,773	4,279	58		1,522,570
10-Year Average				14,868	31,496	21,683	5,600	857	11,621	4,668	267			91,065

*Jacks included

TABLE 123

MONTHLY COUNT OF STEELHEAD

LOWER GRANITE DAM

1975 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1975				1,724	1,065	104	102	3,337	6,396	3,584	703	296	17,311
1976	173	21	181	1,120	575	120	527	3,816	8,720	6,837	860	67	23,017
1977	9	142	1,235	229	59	1,538	2,652	16,296	27,492	2,950	435		53,037
1978	354	716	2,276	2,009	252	9	478	2,721	10,829	9,528	788	108	30,068
1979	12	44	802	962	192	16	1,197	2,602	5,143	11,323	2,487	266	25,046
1980			1,149	3,403	1,172	36	517	3,378	13,291	15,455	2,053		40,454
1981			1,052	1,610	604	98	1,422	1,609	9,391	20,714	3,096	638	40,234
1982			1,778	2,202	1,472	66	817	9,118	20,219	32,850	3,945	373	72,840
1983			3,336	1,416	244	7	1,676	8,899	32,063	34,028	4,425	140	86,234
1984			2,647	3,914	961	40	1,886	3,458	34,709	46,445	4,841	22	98,923
1985			2,474	9,686	856	146	706	5,027	63,074	33,137	3,230	127	118,463
1986			8,179	2,358	163	62	3,031	2,323	39,780	71,426	6,671	526	134,519
1987			2,962	2,951	251	51	783	2,342	16,644	34,235	8,809	1,123	70,151
1988			2,108	4,562	623	173	768	1,806	27,071	43,066	6,307	556	87,040
1989			2,172	4,789	429	99	2,026	4,199	49,256	55,766	13,308	535	132,579
1990			2,728	3,329	174	27	444	364	8,250	26,117	13,872	1,554	56,859
1991			2,422	3,530	285	43	1,009	454	24,610	58,803	7,892	1,333	100,381
1992			1,925	2,789	194	76	725	2,009	47,058	56,284	9,709	690	121,459
1993			3,232	8,118	364	191	2,621	5,298	10,374	32,618	3,702	181	66,699
1994			1,644	3,007	132	97	888	1,693	7,089	25,913	6,772	315	47,550
1995			3,176	1,166	193	33	1,216	3,540	27,585	37,260	5,176	1,508	80,853
1996			1,720	1,017	71	52	1,068	4,218	38,109	34,267	4,607	943	86,072
1997			2,043	1,408	183	65	1,423	5,975	22,424	42,544	9,305	547	85,917
1998			2,390	1,837	107	94	1,001	731	10,295	46,326	7,071	2,165	72,017
1999			2,091	855	92	35	1,333	5,577	35,954	23,694	4,044	695	74,370
2000			1,453	932	94	275	2,907	5,081	57,412	39,501	5,217	339	113,211
2001			3,200	2,365	193	1,087	6,772	11,315	101,289	105,685	24,287	6,375	262,568
2002			4,064	7,992	415	272	4,866	14,234	83,239	93,223	9,360	1,053	218,718
2003			13,038	2,583	182	398	3,169	5,108	71,337	77,100	7,157	600	180,672
2004			4,802	2,662	154	421	2,492	3,227	78,020	55,626	6,480	505	154,389
2005			3,479	1,204	180	433	2,156	3,315	57,231	79,926	6,882	977	155,783
2006			3,467	3,924	200	87	691	2,063	50,958	68,063	14,958	1,580	145,991
2007			6,894	3,477	211	271	1,504	3,792	58,983	71,535	8,269	2,409	157,345
2008			3,812	3,412	547	107	4,301	13,596	83,413	56,851	8,322	1,120	175,481
Total	539	790	98,838	99,548	13,059	5,150	58,060	148,877	1,226,512	1,477,222	227,555	30,101	3,386,251
10-Yr Average			4,630	2,941	227	339	3,019	6,731	67,784	67,120	9,498	1,565	163,853

PRIEST RAPIDS AND WANAPUM DAMS

FISH COUNTING SCHEDULE – PRIEST RAPIDS DAM

Jan 1 – Apr 14	No adult fish counting.
Apr 6 -Apr 14	Fish counter orientation and training.
Apr 15 – Nov 15	Daily fish counting via video fish-counting system.
Nov 16 – Dec 31	No adult fish counting.

FISH COUNTING SCHEDULE – WANAPUM DAM

Jan 1 – Apr 14	No adult fish counting.
Apr 6 -Apr 14	Fish counter orientation and training.
Apr 15 – Nov 15	Daily fish counting via video fish-counting system.
Nov 16 – Dec 31	No adult fish counting.

FISH LADDER OPERATING AND MAINTENANCE SCHEDULE – PRIEST RAPIDS DAM

Left Bank Ladder

01 Jan – 02 Jan	In service.
03 Jan – ?? Mar	Out of criteria for annual inspection, maintenance and repairs.
?? Mar – 24 Nov	In service
25 Nov – 31 Dec	Out of criteria for annual inspection, maintenance and repairs.

Right Bank Ladder

01 Jan – 31 Dec	In service.
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FISH LADDER OPERATING AND MAINTENANCE SCHEDULE – WANAPUM DAM

Left Bank Ladder

01 Jan – 06 Mar	Out of criteria for annual inspection, maintenance and repairs.
07 Mar – 31 Dec	In service.

Right Bank Ladder

01 Jan – 31 Dec	In service.
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Note: Out of criteria dates provided above reflect those periods of time when the adult fishway was out of operational flow and/or head differential criteria. Upstream fish passage is possible for one to several days before and after the indicated dates.

FISHWAY ACTIVITIES

Fish Counting

The video fish-counting system uses digital video cameras installed in the fishways to assist with counting migrating fish at Priest Rapids and Wanapum dams. Digital video data are streamed 24 hours per day to digital video recorders at each dam. Fish counters then playback these data on computers in a fast-forward mode to identify and count passing fish. At the end of each day all counts are tallied and a fish-count report is generated and posted on Grant PUD's Fish, Wildlife, and Water Quality website (<http://www.gcpud.org/resources/resFish/fishCounts.htm>). The fish-counting season for the Priest Rapids Hydroelectric Project runs from April 15 through November 15, annually.

PIT-tag Detection

The PIT-tag detection array at Priest Rapids Dam operated continuously when the fishways were fully operational.

Fish Trapping

Washington Department of Fish and Wildlife operated the Priest Rapids off-ladder adult fish trap (OLAFT) a total of 32 days between 10 July and 16 October, 2008 as part of its steelhead stock assessment. Grant PUD will be making structural and operational modifications to the OLAFT during the winter and spring of 2009. The OLAFT will be ready for use by June 1, 2009.

TABLE 124

**MONTHLY TOTALS OF SALMONIDS, SHAD, AND LAMPREY COUNTED OVER PRIEST RAPIDS DAM
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				761	9,670	12,575	27,499	12,716	31,058	8,758	964		104,001
STEELHEAD				25	100	452	3,572	5,409	6,004	1,038	125		16,725
SOCKEYE					63,167	133,199	0	469					196,835
COHO*							33	2,682	3,115	192			6,022
PINK													
TOTAL	786	9,770	76,194	164,270	18,627	39,744	12,911	1,281					323,583
SHAD						282	44	11	3				340
LAMPREY					28	424	2,528	1,881	222				5,083

*Jacks included

TABLE 125

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

APRIL 2008

DATE	FISH COUNTS				RIVER CONDITIONS							
	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	COHO JACK FALL	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI	DEG F
Apr 1	BEGIN COUNTING APRIL 15								89.4	0.0	*	
Apr 2									79.9	0.0	*	
Apr 3									81.3	0.0	*	
Apr 4									84.0	0.0	*	
Apr 5									102.7	0.0	*	
Apr 6									74.3	0.0	*	
Apr 7									67.3	0.0	*	
Apr 8									75.1	0.0	*	
Apr 9									58.6	0.0	*	
Apr 10									63.8	0.0	*	
Apr 11									103.9	0.0	*	
Apr 12									87.3	0.0	*	
Apr 13									70.7	0.0	*	
Apr 14									73.5	0.0	*	
Apr 15	3		0			2			98.2	0.0	*	
Apr 16	4		0		0				88.9	0.0	*	
Apr 17	2		0		5				78.4	0.0	*	
Apr 18	4		0		5				70.1	0.0	*	
Apr 19	10		0		3				79.5	0.0	45.1	
Apr 20	20		0		2				71.3	0.0	44.7	
Apr 21	68		0		4				85.9	0.0	44.6	
Apr 22	46		1		0				118.4	0.0	45.1	
Apr 23	12		0		0				112.0	0.0	45.3	
Apr 24	127		0		1				125.2	0.0	45.2	
Apr 25	47		0		3				149.7	0.0	*	
Apr 26	48		1		2				122.6	0.0	45.5	
Apr 27	122		3		2				117.9	0.0	45.6	
Apr 28	23		0		1				122.0	0.0	45.9	
Apr 29	90		1		-6				119.2	0.0	46.1	
Apr 30	129		0		1				107.4	0.0	46.0	
TOTAL	755		6		25				92.6	0.0	45.4	
AVG.	47		0		2							

*Data unavailable

TABLE 126

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

MAY 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI	DEG F
	SPRING	SUMMER	FALL											
May 1	110			0				3			117.1	9.1	46.1	
May 2	362			6				1			104.0	20.3	46.8	
May 3	100			1				1			96.2	20.5	47.1	
May 4	142			0				2			96.2	20.1	47.6	
May 5	214			1				2			91.2	20.2	48.4	
May 6	180			2				6			94.8	20.5	48.8	
May 7	237			12				2			128.4	22.2	49.0	
May 8	145			1				1			142.8	21.4	49.0	
May 9	601			1				3			140.5	21.5	49.0	
May 10	276			5				0			148.9	21.6	49.1	
May 11	193			18				2			147.6	22.1	49.3	
May 12	392			17				6			158.1	19.8	49.2	
May 13	263			5				5			158.7	24.4	49.5	
May 14	241			3				3			176.3	20.5	49.6	
May 15	276			2				4			150.7	20.6	50.2	
May 16	465			7				1			124.0	18.7	50.2	
May 17	570			24				8			144.3	22.1	50.8	
May 18	426			10				7			161.5	22.9	51.8	
May 19	410			15				3			181.3	21.3	52.3	
May 20	328			42				8			180.2	20.6	52.1	
May 21	296			26				5			171.3	21.3	51.5	
May 22	443			15				4			176.8	21.6	51.7	
May 23	406			31				5			186.8	46.1	51.8	
May 24	131			19				2			257.2	97.0	51.7	
May 25	108			12				0			232.8	98.2	51.7	
May 26	82			12				1			238.5	93.9	51.7	
May 27	272			29				1			239.0	75.9	52.1	
May 28	278			29				2			236.1	72.8	52.8	
May 29	625			30				2			222.4	61.1	53.5	
May 30	362			44				4			238.9	81.9	53.7	
May 31	288			29				6			227.2	65.6	54.1	
TOTAL	9,222			448				100						
AVG.	297			14							166.8	37.0	50.4	

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	9,977	454

STEELHEAD
125

TABLE 127

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

JUNE 2008

DATE	FISH COUNTS										RIVER CONDITIONS		
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI
Jun 1	266			24			0	5		0	215.4	61.0	54.4
Jun 2	170			18			0	2		0	209.1	51.2	54.6
Jun 3	91			12			0	3		0	259.0	96.9	54.5
Jun 4	165			15			0	1		0	258.4	102.4	54.1
Jun 5	143			15			0	6		0	223.8	68.5	53.8
Jun 6	94			12			0	3		0	220.3	59.2	53.3
Jun 7	194			11			0	8		0	216.1	60.2	53.2
Jun 8	139			5			0	4		0	205.8	43.8	53.4
Jun 9	140			12			0	7		0	218.2	62.9	54.0
Jun 10	108			16			0	4		0	255.4	91.8	54.0
Jun 11	116			4			3	3		0	250.0	88.5	54.1
Jun 12	181			3			13	6		0	230.9	67.8	54.4
Jun 13	394			19			21	6		0	228.0	68.3	54.9
Jun 14		290		33			16	8		0	190.1	33.6	55.3
Jun 15		371		15			37	12		0	178.9	27.3	55.8
Jun 16		167		10			76	8		0	224.0	68.4	56.4
Jun 17		225		6			121	12		3	221.2	73.1	56.7
Jun 18		155		12			252	13		2	223.5	60.6	56.8
Jun 19		180		11			183	9		0	218.7	55.6	57.2
Jun 20		266		17			297	6		0	205.2	44.0	57.4
Jun 21		437		33			616	13		3	192.9	34.1	57.5
Jun 22		416		84			852	11		0	149.9	23.2	57.8
Jun 23		248		11			2,331	15		0	182.7	36.2	57.7
Jun 24		822		110			3,268	23		1	197.8	40.3	57.2
Jun 25		682		16			6,583	24		1	210.6	55.0	57.2
Jun 26		520		38			6,098	27		0	235.6	76.9	57.5
Jun 27		1,038		60			6,912	64		1	243.1	86.0	58.0
Jun 28		1,374		13			11,280	47		3	221.9	60.0	58.2
Jun 29		1,174		44			9,904	52		8	203.1	41.7	58.4
Jun 30		1,314		16			14,304	50		6	208.7	50.7	58.8
TOTAL	2,201	9,679		695			63,167	452		28			
AVG.	569			23			2,106	15		1	216.6	59.6	55.9

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	12,178	620
SUMMER	9,679	529
TOTAL	21,857	1,149

SOCKEYE	STEELHEAD
63,167	577

LAMPREY
28

Note: four bull trout were counted

TABLE 128

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

JULY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	RIVER CONDITIONS		
	SPRING	SUMMER	FALL								DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Jul 1		1,470		49	0	0	18,589	71	0	9	209.4	55.3	59.1
Jul 2		1,633		76	0	0	13,587	146	0	12	205.5	49.2	59.3
Jul 3		1,548		54	0	0	14,180	194	0	3	194.1	39.7	59.6
Jul 4		1,650		53	0	0	13,691	108	0	1	180.3	42.1	59.7
Jul 5		1,610		38	0	0	12,827	81	0	1	177.4	36.4	60.0
Jul 6		1,726		28	0	0	13,356	103	1	3	171.5	31.0	60.5
Jul 7		1,178		19	0	0	8,900	62	5	3	188.7	33.6	60.7
Jul 8		1,308		49	0	0	7,333	78	5	11	191.2	40.4	61.0
Jul 9		1,291		6	0	0	6,358	59	1	8	186.1	32.2	61.2
Jul 10		798		39	0	0	4,830	55	23	7	157.8	24.6	61.4
Jul 11		932		13	0	0	3,200	63	9	4	164.9	21.4	61.1
Jul 12		821		0	0	0	2,646	48	13	1	149.3	20.8	61.5
Jul 13		866		12	0	0	2,415	55	22	5	153.9	21.3	61.9
Jul 14		1,146		27	0	0	2,520	87	28	14	136.0	20.0	62.2
Jul 15		573		16	0	0	1,239	99	21	8	111.1	19.7	62.4
Jul 16		651		19	0	-1	1,189	71	25	15	129.8	22.3	62.8
Jul 17		471		14	0	0	1,064	93	7	21	99.2	23.2	63.1
Jul 18		644		10	0	0	893	76	11	23	120.7	23.0	62.9
Jul 19		457		5	0	0	731	79	14	12	129.4	22.2	*
Jul 20		452		11	0	0	681	94	1	16	121.8	22.5	*
Jul 21		730		3	1	0	543	122	12	14	104.3	20.2	63.6
Jul 22		803		15	0	0	471	145	14	8	99.9	22.2	64.0
Jul 23		639		9	0	0	406	142	9	9	103.1	21.8	64.1
Jul 24		737		28	0	0	359	127	24	22	128.6	20.1	64.2
Jul 25		434		15	0	0	203	124	8	11	146.3	21.8	64.8
Jul 26		367		12	0	0	292	219	10	37	134.7	20.3	64.9
Jul 27		408		8	0	0	359	224	5	23	92.1	19.5	65.0
Jul 28		382		4	0	0	126	161	4	27	105.1	19.1	64.8
Jul 29		413		13	0	0	107	215	3	34	112.5	21.9	64.9
Jul 30		348		32	0	0	54	177	2	36	127.2	20.6	64.7
Jul 31		320		16	0	0	50	194	5	26	113.5	22.2	64.7
TOTAL		26,806		693	1	-1	133,199	3,572	282	424			62.4
Avg.		865		22	0	0	4,297	115	9	14	143.4	26.8	

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	12,178	620
SUMMER	36,485	1,222
TOTAL	48,663	1,842

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
1	-1	196,366	4,149	282	452

TABLE 129

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

AUGUST 2008

DATE	FISH COUNTS						RIVER CONDITIONS					
	CHINOOK ADULT		CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Aug 1	296		22	0	0	109	234	2	60	84.8	21.9	64.7
Aug 2	238		28	0	0	100	197	2	34	73.7	21.5	64.8
Aug 3	235		45	2	0	42	262	1	34	84.3	22.8	65.2
Aug 4	118		83	0	0	48	185	10	87	108.5	20.8	65.6
Aug 5	226		148	0	0	25	179	6	41	81.0	19.3	66.0
Aug 6	154		146	1	0	22	278	3	67	92.4	20.8	66.0
Aug 7	243		193	0	0	59	229	1	64	103.9	19.6	65.8
Aug 8	159		210	0	0	29	236	0	56	58.7	20.2	66.0
Aug 9	124		264	0	0	11	207	1	71	70.8	23.6	66.3
Aug 10	258		232	0	0	3	272	3	74	97.3	23.6	66.3
Aug 11	224		244	0	0	4	213	0	65	99.8	23.3	66.1
Aug 12	156		274	0	0	5	165	1	101	96.0	22.8	66.6
Aug 13	258		331	0	0	0	191	0	66	87.3	22.6	66.6
Aug 14		147	312	0	0	4	120	0	55	91.4	22.8	67.0
Aug 15		227	465	0	0	5	233	0	59	84.8	24.2	67.1
Aug 16		177	492	0	0	0	211	1	80	90.3	23.0	67.3
Aug 17		94	229	0	0	0	158	1	57	93.5	22.8	67.6
Aug 18		191	296	0	0	0	229	-1	85	72.4	9.0	67.9
Aug 19		117	214	0	0	0	237	0	66	66.1	0.6	68.1
Aug 20		121	154	0	0	0	202	1	134	73.3	0.9	67.7
Aug 21		108	145	2	0	0	150	0	128	83.1	1.0	67.6
Aug 22		32	160	0	0	1	104	2	128	110.7	1.2	67.5
Aug 23		96	201	1	0	0	125	1	91	98.6	1.1	67.6
Aug 24		130	366	0	0	0	103	3	144	104.8	1.0	67.8
Aug 25		172	646	1	0	0	114	1	140	101.6	1.0	67.7
Aug 26		99	560	2	0	0	128	1	87	72.5	0.7	67.1
Aug 27		111	392	4	0	0	105	3	96	78.0	1.7	66.8
Aug 28		101	316	1	1	0	97	1	89	99.3	2.5	66.4
Aug 29		70	205	6	1	2	97	0	88	111.5	2.7	66.5
Aug 30		102	231	1	0	0	74	0	100	93.0	2.6	66.1
Aug 31		116	212	5	5	0	74	0	81	55.9	2.6	65.0
TOTAL	2,689	2,211	7,816	26	7	469	5,409	44	2,528			
AVG.	207	123	252	1	0	15	174	1	82	87.7	13.0	66.6

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	12,178	620
SUMMER	39,174	3,442
FALL	2,211	5,596
TOTAL	53,563	9,658

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
27	6	196,835	9,558	326	2,980

TABLE 130

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

SEPTEMBER 2008

FISH COUNTS

RIVER CONDITIONS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY	
	SPRING	SUMMER	FALL										SECCHI	DEG F
Sep 1				184	175	24	4		78	0	105	90.2	1.5	64.6
Sep 2				110	200	10	3		89	0	110	85.5	0.7	64.6
Sep 3				256	257	7	4		123	0	83	81.2	0.6	64.9
Sep 4				509	335	11	2		149	0	91	74.5	0.8	64.9
Sep 5				493	327	8	0		159	3	127	69.1	0.6	65.0
Sep 6				772	357	6	0		281	1	83	50.5	0.8	64.9
Sep 7				926	276	19	5		341	0	111	45.0	0.7	65.7
Sep 8				823	295	28	6		320	2	126	69.0	0.6	66.0
Sep 9				478	301	43	9		378	0	127	70.4	0.3	66.2
Sep 10				694	259	70	18		329	0	69	66.7	0.9	66.1
Sep 11				343	234	86	4		271	0	54	54.4	0.4	65.9
Sep 12				728	337	51	4		288	0	92	65.5	0.6	66.3
Sep 13				1,318	419	136	22		323	0	53	52.9	0.9	66.0
Sep 14				965	352	56	14		315	0	62	52.3	0.8	66.1
Sep 15				1,308	234	151	15		249	0	44	61.9	1.3	66.3
Sep 16				892	312	108	4		200	0	44	98.1	3.6	66.4
Sep 17				1,242	267	199	47		247	0	50	64.8	0.8	66.3
Sep 18				1,220	148	205	2		200	0	28	58.7	0.8	66.3
Sep 19				1,530	217	127	11		216	1	45	47.3	0.7	66.4
Sep 20				1,355	176	101	6		208	0	41	51.4	0.9	66.1
Sep 21				1,481	152	114	25		203	0	25	39.5	0.5	65.3
Sep 22				748	223	63	6		106	0	51	54.3	0.7	64.4
Sep 23				489	210	68	17		103	0	10	80.2	0.9	63.6
Sep 24				998	134	56	12		101	4	32	70.1	1.3	63.6
Sep 25				639	181	51	0		103	0	35	69.3	2.0	64.0
Sep 26				588	159	79	16		153	0	37	72.5	0.8	64.4
Sep 27				752	118	92	9		154	0	35	47.1	0.9	64.4
Sep 28				757	188	129	18		141	0	43	39.4	0.7	64.5
Sep 29				594	123	108	4		89	0	22	70.9	0.5	64.5
Sep 30				716	184	179	10		87	0	46	47.1	0.8	64.4
TOTAL				23,908	7,150	2,385	297		6,004	11	1,881			
AVG.				797	238	80	10		200	0	63	63.3	0.9	65.3

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	12,178	620
SUMMER	39,174	3,442
FALL	26,119	12,746
TOTAL	77,471	16,808

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
2,412	303	196,835	15,562	337	4,861

TABLE 131

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

OCTOBER 2008

DATE	FISH COUNTS								RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI
Oct 1		348	126	67	3			104	0	25	64.1	0.8	64.6
Oct 2		476	139	130	4			87	0	22	71.2	0.8	64.5
Oct 3		553	12	201	12			58	0	18	47.2	1.0	64.3
Oct 4		187	61	90	0			95	0	22	42.0	1.0	64.0
Oct 5		285	37	59	5			87	0	17	42.9	0.9	63.5
Oct 6		170	13	133	16			43	1	6	58.1	0.9	63.2
Oct 7		218	30	145	10			49	0	24	57.4	0.9	62.8
Oct 8		104	66	75	3			34	0	21	67.3	1.0	62.4
Oct 9		142	132	68	4			33	0	18	66.9	1.0	61.9
Oct 10		133	81	48	10			34	0	7	63.1	1.0	61.3
Oct 11		270	118	106	3			12	0	3	54.6	0.9	60.7
Oct 12		179	87	108	4			41	0	3	42.4	0.6	60.3
Oct 13		229	57	123	1			51	0	7	69.9	0.9	60.2
Oct 14		421	42	122	1			32	2	4	89.0	0.7	60.1
Oct 15		121	3	158	0			25	0	1	68.0	0.8	59.6
Oct 16		100	116	80	7			30	0	5	90.0	1.0	59.5
Oct 17		186	146	109	1			27	0	3	96.5	1.0	59.8
Oct 18		196	13	109	4			22	0	1	59.3	0.9	60.0
Oct 19		81	3	102	4			13	0	0	45.8	0.7	59.6
Oct 20		168	5	113	0			18	0	0	74.2	0.5	59.4
Oct 21		317	2	177	1			29	0	2	71.8	0.8	58.9
Oct 22		233	4	115	3			27	0	0	76.0	0.8	58.5
Oct 23		168	4	93	3			14	0	1	67.3	0.5	58.1
Oct 24		325	11	92	9			2	0	0	74.2	0.7	57.8
Oct 25		338	93	75	0			15	0	4	53.3	0.3	57.7
Oct 26		174	28	51	4			6	0	3	53.7	0.8	57.5
Oct 27		124	26	49	2			12	0	1	67.1	0.6	57.3
Oct 28		142	1	65	0			6	0	0	69.4	0.3	57.4
Oct 29		250	9	61	4			4	0	0	74.4	0.6	57.4
Oct 30		246	145	40	1			13	0	4	84.6	0.8	57.2
Oct 31		193	71	32	0			15	0	0	66.4	0.7	57.1
TOTALS		7,077	1,681	2,996	119			1,038	3	222			
AVG.		228	54	97	4			33	7		65.4	0.8	60.2

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	12,178	620
SUMMER	39,174	3,442
FALL	33,196	14,427
TOTAL	84,548	18,489

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
5,408	422	196,835	16,600	340	5,083

TABLE 132

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT

NOVEMBER 2008

DATE	FISH COUNTS						RIVER CONDITIONS							
	SPRING	CHINOOK ADULT SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI	DEG F
Nov 1		164		15	29	0			29		62.6	0.5	57.0	
Nov 2		115		22	28	0			21		64.1	0.9	57.1	
Nov 3		34		0	12	0			4		72.5	0.7	57.0	
Nov 4		50		2	16	0			0		75.5	0.6	56.6	
Nov 5		59		0	17	2			4		92.1	0.6	56.0	
Nov 6		57		0	20	2			10		63.4	0.3	55.7	
Nov 7		35		0	6	0			7		81.0	0.7	55.6	
Nov 8		49		20	12	4			3		80.3	0.6	55.8	
Nov 9		45		52	5	0			13		72.0	0.8	55.9	
Nov 10		36		22	9	0			8		85.5	1.0	55.8	
Nov 11		19		2	5	0			4		81.1	0.6	55.4	
Nov 12		30		2	5	0			3		96.3	0.9	55.3	
Nov 13		64		0	9	0			6		115.2	0.9	55.0	
Nov 14		51		0	5	0			6		67.4	0.7	54.5	
Nov 15		8		11	6	0			7		57.6	0.2	54.3	
Nov 16											53.1	0.0	54.1	
Nov 17											70.0	0.5	54.0	
Nov 18											66.2	0.0	53.9	
Nov 19											103.9	0.0	53.0	
Nov 20											104.0	0.0	52.1	
Nov 21											90.4	0.0	*	
Nov 22											75.4	0.0	*	
Nov 23											80.2	0.0	*	
Nov 24											83.8	0.0	*	
Nov 25											116.5	0.0	*	
Nov 26											109.5	0.0	*	
Nov 27											89.1	0.0	*	
Nov 28											80.1	0.0	*	
Nov 29											66.6	0.0	*	
Nov 30											72.2	0.0	*	
TOTALS		816		148	184	8			125					55.2
AVG.		54		10	12	1			8		80.9	0.3		
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK		COHO ADULT	COHO JACK		SOCKEYE	STEELHEAD	SHAD	LAMPREY				*Data unavailable
SPRING	12,178	620		5,592	430		196,835	16,725	340	5,083				
SUMMER	39,174	3,442												
FALL	34,012	14,575												
TOTAL	85,364	18,637												

TABLE 133
YEARLY TOTALS OF SALMONIDS COUNTED OVER PRIEST RAPIDS DAM
1982 - 2008

YEAR	CHINOOK*	STEELHEAD	SOCKEYE	COHO*	TOTALS
1982	32,051	11,160	40,461	1,810	85,482
1983	31,008	31,809	90,008	502	153,327
1984	41,425	26,213	114,761	173	182,572
1985	62,164	34,589	118,542	219	215,514
1986	68,703	22,401	43,084	83	134,271
1987	73,214	14,011	76,578	108	163,911
1988	53,963	10,208	51,135	68	115,374
1989	49,246	10,730	45,301	32	105,309
1990	36,257	7,830	46,331	31	90,449
1991	31,482	13,939	71,245	22	116,688
1992	37,752	13,733	80,857	1	132,343
1993	54,552	5,460	82,963	0	142,975
1994	32,892	6,706	12,385	0	51,983
1995	30,548	4,358	9,186	3	44,095
1996	27,325	8,324	29,422	5	65,076
1997	33,036	8,948	45,412	26	87,422
1998	29,415	5,837	10,769	18	46,039
1999	57,054	8,277	16,432	55	81,818
2000	91,223	11,331	89,547	378	192,479
2001	139,929	30,090	111,326	11,189	292,534
2002	161,510	15,895	47,883	1,555	226,843
2003	160,433	17,652	36,551	5,216	219,852
2004	134,620	18,727	124,943	5,624	283,914
2005	109,429	12,472	74,563	1,260	197,724
2006	87,086	10,408	26,710	3,813	128,017
2007	65,962	15,183	24,645	12,310	118,100
2008	104,001	16,725	196,835	6,022	323,583
Totals	1,836,280	393,016	1,717,875	50,523	3,997,694
10-Year Average	111,125	15,676	74,944	4,742	206,486

*Jacks included

TABLE 134

**MONTHLY COUNT OF STEELHEAD
PRIEST RAPIDS DAM: 1960 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1960				159	651	25	318	2,255	3,190	1,229			7,827
1961				52	208	43	381	1,480	4,650	1,753			8,567
1962				133	530	74	329	2,027	4,925	1,306			9,324
1963				183	564	109	336	2,922	3,344	1,816			9,274
1964				85	196	44	261	1,986	2,649	770			5,991
1965				129	298	91	649	2,498	3,868	1,508			9,041
1966				189	252	296	1,194	2,775	5,549	2,751			13,006
1967				213	381	62	411	1,686	2,109	2,492			7,354
1968				530	1,112	24	185	1,954	4,950	1,769			10,524
1969				120	670	105	566	1,598	2,544	1,047			6,650
1970				85	195	27	197	1,129	3,053	872			5,558
1971				46	440	61	185	2,043	6,241	2,086			11,102
1972				163	552	42	318	1,992	2,190	1,172			6,429
1973				132	160	56	788	1,738	3,254	871			6,999
1974				45	129	229	504	845	945	392			3,089
1975				3	37	99	214	670	1,187	252			2,462
1976				3	133	246	531	1,873	5,462	1,000			9,248
1977				178	200	209	1,029	1,963	4,519	1,706			9,804
1978				72	134	214	532	1,143	1,869	581			4,545
1979				13	127	30	585	3,082	3,174	1,398			8,409
1980				232	203	17	179	1,815	4,721	1,263	94		8,524
1981				75	144	105	445	2,414	4,127	1,545	133	24	9,012
1982	5	32	70	136	86	46	331	3,126	5,345	1,805	163	15	11,160
1983	5	9	52	40	11	12	599	8,660	18,272	3,534	602	13	31,809
1984	28	4	92	142	145	224	2,534	8,840	11,907	2,030	256	11	26,213
1985	2	11	74	351	326	856	5,319	11,063	14,693	1,659	235		34,589
1986				82	100	262	3,637	10,584	5,647	1,856	233		22,401
1987				42	71	124	1,954	5,741	4,311	1,495	273		14,011
1988				48	108	239	1,234	3,119	4,016	1,176	268		10,208
1989				36	50	133	1,361	3,499	4,581	872	198		10,730
1990				24	52	130	1,282	2,616	3,060	551	115		7,830
1991				31	73	66	1,406	4,041	6,301	1,768	253		13,939
1992				60	152	313	2,328	3,261	6,265	1,227	127		13,733
1993				34	41	125	993	1,733	2,013	471	40		5,450
1994				7	13	78	902	1,286	3,087	1,269	64		6,706
1995				4	20	30	540	1,316	2,062	363	23		4,358
1996				9	14	35	546	3,234	3,810	627	49		8,324
1997				5	17	39	574	2,822	4,176	1,224	91		8,948
1998				7	9	40	806	935	2,976	1,005	59		5,837
1999				6	19	72	588	3,361	3,543	633	55		8,277
2000				2	13	155	1,895	3,786	4,825	598	57		11,331
2001				14	11	326	4,426	10,368	12,136	2,607	202		30,090
2002				22	15	134	3,225	7,442	4,101	874	82		15,895
2003				7	2	95	2,924	5,198	8,009	1,362	55		17,652
2004				7	79	516	3,438	2,687	10,905	1,042	53		18,727
2005				7	7	150	1,691	2,986	5,715	1,805	111		12,472
2006				18	26	87	983	2,934	5,583	723	54		10,408
2007				10	41	51	1,217	5,201	6,581	1,960	122		15,183
2008				25	100	452	3,572	5,409	6,004	1,038	125		16,725
TOTAL	40	56	288	4,016	8,917	6,998	60,442	167,136	248,444	65,153	4,192	63	565,745
10-Year Average				12	31	204	2,396	4,937	6,740	1,264	92		15,676

ROCK ISLAND DAM

FISH COUNTING SCHEDULE

Jan 1 – Apr 13	No video recording or fish counting during this period.
Apr 14 – Nov 15	Video recording 24 hours per day/7 days a week. Video counting daily from 0700 to 1530 hours Pacific Standard Time.
Nov 16 – Dec 31	No video recording or fish counting during this period.

FISH LADDER OPERATING SCHEDULE

Left Bank Ladder

Jan 1 – Jan 28	Fishway in service.
Jan 29 – Feb 10	Fishway out of service for 2007/2008 annual maintenance.
Feb 11 – Nov 30	Fishway in service.
Dec 1 – Dec 30	Fishway out of service for 2008/2009 annual maintenance.

Middle Ladder

Jan 1 – Jan 2	Fishway in service.
Jan 3 – Jan 27	Fishway out of service for 2007/2008 annual maintenance.
Jan 28 – Dec 31	Fishway in service.

Right Bank Ladder

Jan 1 – Feb 27	Fishway out of service for 2007/2008 annual maintenance.
Feb 28 – Dec 2	Fishway in service.
Dec 3 – Dec 31	Fishway out of service for 2008/2009 annual maintenance.

FISH FACILITY ACTIVITIES

The Rock Island Bypass Trap was operated by the Washington Department of Fish and Wildlife from 1 April through 31 August 2008. Juvenile fish were sampled daily during that time period.

The adult fish PIT tag system was operational throughout the 2008 adult fish migration. PIT tag detections from all three fishways were uploaded daily to PTAGIS.

In 2008, the Chelan County PUD monitored passage of radio-tagged adult bull trout at the Rock Island Project, and in the tributaries. The purpose of the bull trout study is to assess the behavior of the fish as they migrate through the dam, associated pool and tributaries. Monitoring will occur through June 2009.

From 17 June to 5 September 2008, the Chelan County PUD operated two to four Northern pikeminnow (*Ptychocheilus oregonensis*) traps in the upper and lower right bank fish ladder. A total of 1,756 pikeminnow were trapped and removed from the river.

TABLE 135

**MONTHLY TOTALS OF SALMONIDS AND LAMPREY COUNTED OVER ROCK ISLAND DAM
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				190	8,827	10,170	30,763	6,926	6,736	3,386	1,077		68,075
STEELHEAD				163	109	292	2,749	5,868	5,819	1,206	82		16,288
SOCKEYE					1	22,878	170,254	592	11	3			193,739
COHO								6	2,651	5,372	364		8,393
PINK													0
TOTAL				353	8,937	33,340	203,766	13,392	15,217	9,967	1,523		286,495
LAMPREY							1	39	435	387	18		880
BULL TROUT						7	16	9	3		1		36

TABLE 136

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

APRIL 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI
Apr 1												72.1	0.0	39.5
Apr 2												81.2	0.0	39.5
Apr 3												96.2	0.0	40.0
Apr 4												98.4	0.0	40.1
Apr 5												56.1	0.0	40.3
Apr 6												38.1	0.0	40.9
Apr 7												86.4	0.0	41.0
Apr 8												59.4	0.0	41.0
Apr 9												60.4	0.0	41.3
Apr 10												92.0	0.0	41.8
Apr 11												97.5	0.0	42.4
Apr 12												73.2	0.0	42.5
Apr 13												56.2	0.0	43.0
Apr 14	3			0				13	6			84.6	0.0	43.3
Apr 15	1			0				14	8			95.3	0.0	43.2
Apr 16	0			0				12	5			72.6	0.0	43.4
Apr 17	0			0				10	7			69.7	9.6	44.0
Apr 18	1			0				12	8			71.6	8.2	44.1
Apr 19	0			0				9	5			71.4	7.3	43.7
Apr 20	4			0				8	2			64.6	7.3	43.7
Apr 21	0			0				5	1			99.9	10.6	44.0
Apr 22	4			0				18	12			102.4	8.3	44.2
Apr 23	4			0				13	7			110.8	10.0	44.0
Apr 24	0			0				13	4			129.8	10.3	43.8
Apr 25	4			0				15	6			119.5	10.2	43.7
Apr 26	8			0				9	4			125.9	9.8	43.8
Apr 27	30			0				3	1			114.1	9.0	44.2
Apr 28	12			0				6	4			114.0	10.5	44.7
Apr 29	55			0				2	1			116.1	12.6	45.2
Apr 30	63			1				1	1			97.1	13.0	45.5
TOTAL	189			1				163	82			87.5	4.5	42.7
AVG.	11			0				10	5					

*Data unavailable

TABLE 137

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

MAY 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFs	SPILL KCFs	*TURBIDITY SECCHI
May 1	18			0			0	4	3	0		97.8	12.4	45.7
May 2	119			0			0	5	3	0		103.8	11.8	45.9
May 3	174			3			0	3	3	0		100.5	11.5	46.1
May 4	153			0			0	1	1	0		92.8	9.8	46.5
May 5	202			0			0	9	4	0		94.3	11.4	47.1
May 6	195			0			0	2	1	0		112.4	11.1	47.4
May 7	199			0			0	2	1	0		131.9	10.5	47.6
May 8	98			0			0	7	2	0		134.8	13.0	47.8
May 9	185			3			0	3	3	0		142.6	13.8	47.8
May 10	206			3			0	3	2	0		138.1	13.2	48.2
May 11	449			2			0	0	0	0		139.6	14.1	48.1
May 12	303			0			0	2	2	0		157.9	14.7	48.0
May 13	140			1			0	3	2	0		172.1	16.0	47.8
May 14	484			4			0	8	4	0		156.0	16.1	48.2
May 15	312			3			0	3	1	0		132.9	16.8	49.2
May 16	248			4			1	2	0	0		137.9	15.9	49.7
May 17	275			3			0	3	0	0		157.6	16.0	49.9
May 18	270			7			0	3	2	0		151.6	16.0	50.2
May 19	441			11			0	5	2	0		173.2	17.1	50.6
May 20	326			12			0	1	0	2		176.1	17.0	50.6
May 21	272			19			0	0	0	0		164.5	17.7	50.3
May 22	139			10			0	1	0	0		179.7	18.1	50.3
May 23	215			13			0	0	0	0		190.1	20.3	50.2
May 24	262			22			0	4	2	0		244.9	37.4	50.0
May 25	500			61			0	5	1	2		235.5	33.1	50.4
May 26	382			52			0	3	2	1		228.8	26.8	51.3
May 27	506			59			0	7	2	0		231.9	27.3	52.1
May 28	370			55			0	1	0	1		230.8	28.0	52.3
May 29	258			48			0	6	3	1		221.2	23.7	52.7
May 30	285			50			0	8	3	0		228.6	23.7	52.8
May 31	308			88			0	5	3	0		216.8	22.3	53.2
TOTAL	8,294			533			1	109	52	7		163.8	17.9	49.3
AVG.	268			17			0	4	2	0				

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	8,483	534

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT
1	272	134	7

TABLE 138

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

JUNE 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI	DEG F
Jun 1	269			46			0	5	2	3	206.3	21.7	53.6	
Jun 2	444			101			0	13	8	1	205.7	26.5	53.7	
Jun 3	328			81			0	9	3	0	239.7	32.9	53.6	
Jun 4	173			40			0	7	2	1	240.8	35.2	53.2	
Jun 5	81			17			1	2	2	1	214.7	24.4	53.1	
Jun 6	90			15			0	2	2	1	211.9	22.7	53.0	
Jun 7	279			36			0	5	0	1	209.5	21.6	53.2	
Jun 8	146			23			0	6	3	1	189.6	34.3	53.6	
Jun 9	164			23			0	4	3	1	218.7	38.1	53.9	
Jun 10	120			13			0	3	1	0	241.2	44.8	53.9	
Jun 11	236			26			1	5	1	1	234.0	39.4	53.9	
Jun 12	173			23			0	1	1	3	219.6	45.3	54.2	
Jun 13	182			31			1	7	1	0	212.5	46.4	54.8	
Jun 14	211			24			1	11	3	0	183.0	41.0	55.3	
Jun 15	347			26			10	10	7	2	178.4	40.3	55.5	
Jun 16	433			36			16	2	1	0	216.0	43.7	56.0	
Jun 17	334			24			12	5	1	0	213.5	43.0	56.2	
Jun 18	223			15			38	7	5	0	213.2	43.7	56.0	
Jun 19	261			22			74	13	8	0	209.0	44.1	56.2	
Jun 20	208			17			127	11	5	0	195.4	42.5	56.4	
Jun 21	193			10			123	7	1	0	177.2	33.6	56.1	
Jun 22	184			13			197	7	2	0	147.9	31.8	55.6	
Jun 23	307			30			324	13	9	0	180.6	39.0	55.8	
Jun 24		424		18			494	17	5	0	188.6	37.7	56.3	
Jun 25		332		20			971	5	4	0	209.5	36.8	56.6	
Jun 26		586		23			2,135	14	9	0	230.3	39.5	56.6	
Jun 27		553		20			3,054	21	8	0	231.1	42.9	56.5	
Jun 28		517		28			4,368	28	17	0	213.5	44.7	56.8	
Jun 29		589		30			5,105	25	14	0	195.6	43.1	57.1	
Jun 30		885		67			5,826	27	18	0	209.3	44.5	57.5	
TOTAL	5,386	3,886		898			22,878	292	146	16	1	207.9	37.5	55.1
Avg.	234	555		30			763	10	5	1	0			

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
TOTALS TO DATE			22,879	564	280	23	1
SPRING	13,869	1,226					
SUMMER	3,886	206					
TOTALS	17,755	1,432					

TABLE 139

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

JULY 2008

DATE	FISH COUNTS										RIVER CONDITIONS				
	SPRING	CHINOOK ADULT	SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Jul 1		970			41			7,661	37	19	0	0	203.2	40.1	57.5
Jul 2		975			44			10,339	28	16	0	0	196.6	40.2	58.2
Jul 3		1,387			79			13,397	53	29	0	0	186.0	39.2	58.8
Jul 4		1,183			94			16,256	61	17	1	0	177.7	33.0	59.2
Jul 5		1,313			77			13,621	55	20	0	0	172.6	32.6	59.5
Jul 6		1,500			61			14,328	61	25	0	0	168.7	32.3	59.3
Jul 7		1,627			88			12,001	50	22	1	0	186.9	43.1	59.3
Jul 8		1,489			145			13,759	51	17	2	0	185.4	39.6	59.6
Jul 9		1,458			101			13,282	84	31	0	0	175.6	33.3	59.9
Jul 10		1,235			90			11,887	62	25	1	0	157.5	33.1	60.2
Jul 11		1,253			105			7,999	67	33	1	1	158.0	30.7	60.2
Jul 12		833			85			6,574	74	27	0	1	142.7	25.7	60.4
Jul 13		873			90			5,351	56	32	0	0	143.3	22.5	60.9
Jul 14		1,029			55			5,162	68	20	1	0	101.4	30.3	61.3
Jul 15		708			52			3,520	55	32	0	2	137.8	25.6	61.3
Jul 16		861			55			2,965	74	31	1	1	125.6	27.2	61.3
Jul 17		1,087			98			2,558	69	35	0	0	121.0	27.1	61.5
Jul 18		808			63			2,003	84	39	0	2	131.1	27.7	62.2
Jul 19		918			70			1,642	109	46	0	2	125.6	25.5	62.3
Jul 20		463			30			959	70	35	0	2	104.7	21.5	62.8
Jul 21		478			28			721	70	30	0	0	104.4	26.1	63.2
Jul 22		710			54			739	89	51	0	3	109.1	22.2	63.3
Jul 23		862			61			915	111	39	0	4	106.1	20.5	63.1
Jul 24		811			50			579	115	43	0	1	119.7	20.8	64.0
Jul 25		663			27			479	102	42	0	4	141.8	22.9	63.9
Jul 26		846			76			473	168	67	0	6	110.3	20.7	63.7
Jul 27		611			70			371	150	77	0	2	78.5	16.9	64.1
Jul 28		425			39			220	140	57	0	1	111.0	22.4	64.7
Jul 29		660			76			213	177	75	0	3	124.2	21.7	63.7
Jul 30		338			66			130	194	81	0	3	118.4	21.3	64.7
Jul 31		272			47			150	165	65	1	1	113.8	21.0	64.8
TOTAL		28,646			2,117			170,254	2,749	1,178	9	39			61.6
AVG.		924			68			5,492	89	38	0	1	140.0	28.0	

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	WILD STEELHEAD	BULL TROUT	LAMPREY
	SOCKEYE	STEELHEAD			
SPRING	13,869	1,226			
SUMMER	32,532	2,323			
TOTALS	46,401	3,549			

TABLE 140

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

AUGUST 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	SPRING	CHINOOK ADULT SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Aug 1		612		47		0	133	159	76	0	5	81.7	19.7	63.9
Aug 2		282		24		0	78	134	55	0	5	70.6	14.2	63.8
Aug 3		303		25		0	56	160	57	0	3	77.8	14.1	63.9
Aug 4		183		35		0	59	180	105	1	5	94.9	16.9	64.5
Aug 5		256		37		0	29	218	100	1	7	90.4	17.6	65.1
Aug 6		289		66		0	55	248	122	0	4	98.7	20.6	65.7
Aug 7		224		24		0	25	200	100	0	12	81.0	21.0	65.8
Aug 8		254		53		0	25	214	83	0	12	88.5	18.8	65.6
Aug 9		188		29		0	29	134	59	0	9	77.7	12.6	65.6
Aug 10		244		38		0	17	176	81	0	8	87.3	14.1	65.1
Aug 11		164		51		0	13	191	100	1	7	85.5	17.6	64.9
Aug 12		216		36		0	11	245	99	0	10	93.7	18.6	65.0
Aug 13		169		21		0	9	266	94	0	6	83.5	18.0	65.2
Aug 14		204		33		0	5	238	101	0	11	95.0	18.8	65.2
Aug 15		225		33		0	7	266	94	0	19	92.1	19.3	65.9
Aug 16		185		44		0	9	241	106	0	25	83.8	15.5	66.8
Aug 17		265		70		0	9	243	107	0	17	56.9	2.8	67.4
Aug 18		126		62		0	12	163	81	0	15	70.3	0.0	67.6
Aug 19		83		31		0	2	175	65	0	22	87.0	0.0	67.2
Aug 20		175		49		0	1	224	88	0	19	79.7	0.0	65.9
Aug 21		93		32		0	0	326	130	0	9	89.3	0.0	67.8
Aug 22		160		43		0	2	213	82	0	22	105.5	0.0	67.3
Aug 23		81		13		0	2	197	69	0	18	100.8	0.0	66.7
Aug 24		80		31		0	1	117	47	0	10	79.4	0.0	66.5
Aug 25		82		32		0	1	132	49	0	14	88.9	0.0	66.3
Aug 26		95		62		2	1	127	46	0	20	83.9	0.0	66.2
Aug 27		101		61		1	0	200	70	0	19	78.0	0.0	66.4
Aug 28		42		98		0	1	111	43	0	16	90.4	0.0	65.9
Aug 29		56		104		0	0	128	38	0	28	106.5	0.0	65.8
Aug 30		66		66		1	0	125	44	0	31	72.7	0.0	65.6
Aug 31		37		36		2	0	117	47	0	27			
TOTAL		5,540		1,386		6	592	5,868	2,438	3	435			
AVG.		179		45		0	19	189	79	0	14	85.7	9.3	65.8

*Data unavailable

RUN YEAR	CHINOOK ADULT	CHINOOK JACK
TOTALS TO DATE		
SPRING	13,869	1,226
SUMMER	38,072	3,709
TOTALS	51,941	4,935

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
0	6	193,725	9,181	3,896	35	475

TABLE 141

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

SEPTEMBER 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	SPRING	SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI
Sep 1	58			38	0	1	0	103	39		23	73.5	0.0	65.7
Sep 2		36		55	1	1	1	87	29		24	84.5	0.0	65.7
Sep 3		44		59	0	2	0	82	33		29	72.2	0.0	65.9
Sep 4		50		63	0	6	1	104	24		17	67.6	0.0	65.9
Sep 5		74		81	0	2	0	75	25		35	51.7	0.0	65.9
Sep 6		85		102	0	0	0	94	34		23	66.7	0.0	65.9
Sep 7		159		94	0	0	2	143	54		26	50.8	0.0	66.4
Sep 8		124		82	1	2	1	231	83		30	69.1	0.0	66.4
Sep 9		136		109	4	0	0	274	107		14	57.7	0.0	66.4
Sep 10		178		85	10	7	0	269	114		21	62.2	0.0	66.2
Sep 11		178		73	11	4	0	253	66		15	69.4	0.0	66.2
Sep 12		143		104	29	11	0	305	85		9	57.2	0.0	66.3
Sep 13		143		89	28	12	0	337	109		11	51.4	0.0	66.4
Sep 14		208		101	38	24	0	354	126		5	44.8	0.0	66.4
Sep 15		147		122	21	13	0	267	90		18	81.1	0.0	66.4
Sep 16		221		163	57	10	0	355	134		6	70.1	0.0	66.3
Sep 17		248		91	87	31	0	387	127		7	63.5	0.0	66.3
Sep 18		164		85	131	70	1	271	71		7	46.9	0.0	66.3
Sep 19		211		105	103	38	0	188	49		10	59.4	0.0	66.5
Sep 20		177		119	155	43	0	171	43		8	41.0	0.0	66.5
Sep 21		132		59	121	30	1	136	40		7	39.3	0.0	65.8
Sep 22		311		138	153	37	0	280	85		6	69.6	0.0	65.6
Sep 23		214		146	168	52	0	258	70		6	72.5	0.0	65.4
Sep 24		146		74	120	30	2	174	64		9	70.3	0.0	65.1
Sep 25		98		49	106	30	1	100	26		6	65.4	0.0	64.8
Sep 26		87		39	113	74	0	114	30		7	48.0	0.0	64.7
Sep 27		89		22	106	71	0	73	29		3	44.4	0.0	64.6
Sep 28		96		29	76	39	1	86	35		2	41.1	0.0	64.3
Sep 29		105		42	107	51	0	98	31		2	55.2	0.0	64.2
Sep 30		200		56	155	59	0	150	41		1	67.2	0.0	64.2
TOTAL	58	4,204	2,474	1,901	750	11	5,819	1,893		387				65.8
AVG.		145	82	63	25	0	194	63		13	60.5	0.0		
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY					*Data unavailable
SPRING	13,869	1,226	1,901	756	193,736	15,000	5,789	35	862					
SUMMER	38,130	3,747												
FALL	4,204	2,436												
TOTALS	56,203	7,409												

TABLE 142

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

OCTOBER 2008

DATE	FISH COUNTS										RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	Sockeye	Steelhead	Wild Steelhead	Bull Trout	Lamprey	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI	DEG F
Oct 1		176	42	194	48	0	115	35	0	3		65.9	0.0		64.4
Oct 2		159	33	138	56	1	101	35	0	3		70.3	0.0		64.2
Oct 3		142	30	152	44	0	105	41	0	2		52.6	0.0		64.0
Oct 4		131	13	130	50	0	65	20	0	2		43.4	0.0		64.0
Oct 5		91	12	106	50	0	41	10	0	2		34.0	0.0		63.7
Oct 6		100	23	144	47	0	67	24	0	1		64.4	0.0		63.6
Oct 7		109	24	169	51	0	67	28	0	1		51.8	0.0		63.5
Oct 8		97	20	157	43	0	80	19	0	0		63.2	0.0		62.9
Oct 9		109	26	161	47	0	91	24	0	1		68.4	0.0		62.2
Oct 10		95	14	152	37	0	44	12	0	0		58.2	0.0		62.2
Oct 11		70	10	129	51	0	56	13	0	0		48.6	0.0		62.2
Oct 12		36	10	89	37	0	38	17	0	0		49.5	0.0		62.2
Oct 13		40	9	91	27	0	21	4	0	1		69.4	0.0		62.2
Oct 14		35	17	117	19	0	25	6	0	0		75.6	0.0		62.2
Oct 15		60	15	181	35	0	47	16	0	2		88.9	0.0		62.2
Oct 16		38	7	224	18	0	31	9	0	0		95.2	0.0		62.2
Oct 17		84	18	239	13	0	27	9	0	0		75.0	0.0		62.2
Oct 18		71	9	271	31	0	14	2	0	0		37.5	0.0		62.2
Oct 19		66	21	260	37	0	16	4	0	0		44.1	0.0		62.2
Oct 20		72	15	136	20	0	15	7	0	0		75.0	0.0		62.2
Oct 21		91	12	203	20	1	18	8	1	0		73.3	0.0		62.2
Oct 22		68	16	190	12	0	11	4	0	0		63.5	0.0		62.2
Oct 23		60	19	151	12	0	11	4	0	0		70.6	0.0		62.2
Oct 24		70	13	153	15	0	12	4	0	0		74.8	0.0		62.2
Oct 25		69	17	154	9	0	11	2	0	0		55.1	0.0		62.2
Oct 26		112	12	123	3	0	12	6	0	0		44.2	0.0		62.2
Oct 27		155	14	87	8	0	19	7	0	0		66.6	0.0		62.2
Oct 28		129	14	69	5	0	10	4	0	0		88.7	0.0		62.2
Oct 29		116	15	43	3	1	9	3	0	0		75.8	0.0		62.2
Oct 30		97	15	50	4	0	17	3	0	0		80.4	0.0	*	*
Oct 31		118	5	54	3	0	10	4	0	0		64.9	0.0	*	*
TOTAL		2,866	520	4,517	855	3	1,206	384	1	18					
AVG.		92	17	146	28	0	39	12	0	1		64.1	0.0		62.6

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
	COHO ADULT	COHO JACK
SPRING	13,869	1,226
SUMMER	38,130	3,747
FALL	7,070	2,956
TOTALS	59,069	7,929

COHO ADULT	COHO JACK	Sockeye	Steelhead	Wild Steelhead	Bull Trout	Lamprey
6,418	1,611	193,739	16,206	6,173	36	880

TABLE 143

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT

NOVEMBER 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	SPRING	CHINOOK ADULT SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI *DEG F
Nov 1		126	8	52	4		4	1				65.3	0.0	
Nov 2		90	11	39	3		7	3				49.8	0.0	
Nov 3		76	4	44	3		3	2				77.4	0.0	
Nov 4		111	11	50	3		7	2				78.1	0.0	
Nov 5		65	4	33	1		10	3				74.3	0.0	
Nov 6		62	8	22	7		6	1				79.7	0.0	
Nov 7		93	7	17	3		8	2				83.6	0.0	
Nov 8		77	8	15	5		6	0				76.7	0.0	
Nov 9		81	3	10	1		2	1				74.5	0.0	
Nov 10		48	7	8	5		2	0				74.8	0.0	
Nov 11		33	6	6	6		8	0				95.9	0.0	
Nov 12		28	6	3	0		7	4				97.1	0.1	
Nov 13		51	5	5	1		4	1				98.0	0.0	
Nov 14		33	1	10	1		2	0				44.4	0.0	
Nov 15		13	1	4	3		6	1				51.2	0.0	
Nov 16												48.9	0.0	
Nov 17												82.0	0.0	
Nov 18												78.0	0.0	
Nov 19												97.7	0.0	
Nov 20												97.4	0.0	
Nov 21												87.1	0.0	
Nov 22												72.1	0.0	
Nov 23												69.5	0.0	
Nov 24												101.4	0.0	
Nov 25												100.8	0.0	
Nov 26												103.6	0.0	
Nov 27												78.1	0.0	
Nov 28												76.3	0.0	
Nov 29												76.7	0.0	
Nov 30												83.4	0.0	
TOTAL		987	90	318	46		82	21				79.1	0.0	
AVG.		66	6	21	3		5	1						
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY					*Data unavailable
SPRING	13,869	1,226	6,736	1,657	193,739	16,288	6,194	36	880					
SUMMER	38,130	3,747												
FALL	8,057	3,046												
TOTALS	60,056	8,019												

TABLE 144

MONTHLY COUNT OF STEELHEAD
ROCK ISLAND DAM 1981 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1981						30	282	1,886	2,338	2,493	347		7,376
1982				118	113	8	157	2,246	4,260	2,785	192		9,879
1983				53	36	18	579	5,811	16,942	5,619	608		29,666
1984				88	220	180	1,962	7,925	10,507	3,687	527		25,096
1985				106	393	729	4,886	6,588	16,089	2,889	319		31,999
1986				145	168	192	3,383	10,036	5,883	2,731	347		22,885
1987				100	94	112	1,242	4,900	4,095	1,842	347		12,732
1988				193	156	173	737	2,813	3,446	1,523	200		9,241
1989				135	73	66	847	2,685	3,999	1,355	191		9,351
1990				55	46	99	953	2,385	2,577	736	93		6,944
1991				30	51	45	916	3,322	4,194	2,165	204		10,927
1992				86	193	315	1,603	2,821	5,714	1,599	145		12,476
1993				97	88	87	1,427	546	1,930	597	57		4,829
1994				29	16	50	631	1,151	2,181	1,437	125		5,620
1995				23	35	44	421	951	2,153	510	38		4,175
1996				17	34	27	303	2,224	3,701	920	79		7,305
1997				19	22	7	300	2,343	3,461	1,466	108		7,726
1998				20	13	29	449	726	2,486	1,141	98		4,962
1999				17	22	37	377	2,429	2,900	540	40		6,362
2000				18	5	74	1,356	3,299	4,974	727	63		10,516
2001				49	23	185	3,094	9,380	12,129	3,461	292		28,613
2002				53	20	85	2,327	6,374	5,144	1,200	79		15,282
2003				17	17	51	1,664	4,233	9,339	2,061	127		17,509
2004				50	108	363	2,518	2,983	11,794	1,658	73		19,547
2005				30	29	135	1,423	3,362	5,925	1,422	83		12,409
2006				44	19	23	693	2,332	5,175	1,032	64		9,382
2007				27	25	33	830	4,378	5,943	1,888	172		13,296
2008				163	109	292	2,749	5,868	5,819	1,206	82		16,288
Total				1,782	2,128	3,489	38,109	105,997	165,098	50,690	5,100		372,393
10-Year Average				47	38	128	1,703	4,464	6,914	1,520	108		14,920

ROCKY REACH DAM

FISH COUNTING SCHEDULE

Jan 1 – Apr 13	No video recording or fish counting during this period.
Apr 14 – Nov 15	Video recording 24 hours per day/7 days a week.
	Video counting daily from 0700 to 1530 hours Pacific Standard Time.
Nov 16 – Dec 31	No video recording or fish counting during this period.

FISH LADDER OPERATING SCHEDULE

Jan 1 – Mar 1	Fishway out of service for 2007/2008 annual maintenance.
Mar 2 – Nov 30	Fishway in service.
Dec 1 – Dec 31	Fishway out of service for 2008/2009 annual maintenance.

FISH FACILITY ACTIVITIES

The adult fish PIT tag system was operational throughout the 2008 adult fish migration. PIT tag detections in the fishway were uploaded daily to PTAGIS.

In 2008, the Chelan County PUD monitored passage of radio-tagged adult bull trout at the Rocky Reach Project, and in the tributaries. The purpose of the bull trout study is to assess the behavior of the fish as they migrate through the dam, associated pool and tributaries. Monitoring will occur through June 2009.

From 2 June to 5 September 2008, the Chelan County PUD operated two Northern pikeminnow (*Ptychocheilus oregonensis*) traps in the upper fish ladder. A total of 3,267 pikeminnow were trapped and removed from the river.

The juvenile fish bypass system was operated for fish passage from 1 April to 3 September 2008. Juvenile fish sampling occurred over the same time frame. The annual bypass (biological) evaluation included an acoustic tag survival study and collection of data on species composition and fish condition.

TABLE 145

**MONTHLY TOTALS OF SALMONIDS AND LAMPREY COUNTED OVER ROCKY REACH DAM
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				13	2,872	3,050	24,665	7,744	5,752	3,213	826		48,135
STEELHEAD				308	201	303	1,882	4,429	4,776	1,406	566		13,871
SOCKEYE				1	14,197	146,285	837	8	17	6			161,343
COHO									745	2,677	296		3,726
PINK													0
TOTAL	321	3,074	17,550	172,832	13,018	11,290	7,302	1,688					227,075
LAMPREY							11	161	188	8			368
BULL TROUT	1	21	41	6	6	2	8	15					100

TABLE 146

MONTHLY FISH PASSAGE SUMMARY REPORT
U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT
APRIL 2008

DATE	FISH COUNTS								RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI
Apr 1	BEGIN COUNTING 14 APRIL											72.1	0.0	38.9
Apr 2												82.0	0.0	39.3
Apr 3												99.3	0.0	39.7
Apr 4												104.7	0.0	39.8
Apr 5												54.3	0.0	40.2
Apr 6												37.3	0.0	40.5
Apr 7												85.6	0.0	40.5
Apr 8												58.8	0.0	40.7
Apr 9												59.2	0.0	41.1
Apr 10												95.8	0.0	41.7
Apr 11												101.0	0.0	41.9
Apr 12												73.7	0.0	42.0
Apr 13												56.1	0.0	42.3
Apr 14	0						26	11	0			85.3	0.0	42.6
Apr 15	0						39	20	0			98.9	0.0	42.9
Apr 16	0						37	20	0			72.7	0.0	43.3
Apr 17	0						23	11	0			69.4	0.0	43.3
Apr 18	0						17	7	0			72.7	0.0	43.3
Apr 19	1						18	11	0			70.7	0.0	43.3
Apr 20	0						9	6	0			59.5	0.0	43.6
Apr 21	0						14	9	0			103.9	0.0	44.0
Apr 22	0						7	6	0			108.1	0.0	43.7
Apr 23	1						24	11	0			111.2	0.1	43.3
Apr 24	0						19	6	0			127.3	0.0	43.4
Apr 25	0						6	0	0			116.6	0.0	43.2
Apr 26	0						20	8	0			121.6	0.0	43.4
Apr 27	0						17	9	0			112.1	0.0	43.9
Apr 28	0						14	10	0			111.7	0.0	44.4
Apr 29	5						9	3	1			111.6	0.0	44.9
Apr 30	6						9	5	0			92.3	0.0	45.2
TOTAL	13						308	153	1			87.5	0.0	42.3
AVG.	1						18	9	0					

*Data unavailable

TABLE 147

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT

MAY 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
May 1	8			0			0	9	1	0		96.0	0.0	45.3
May 2	15			0			0	6	4	1		102.8	0.0	45.5
May 3	8			0			0	12	7	0		97.0	0.0	45.8
May 4	36			0			0	7	4	0		88.8	0.0	46.1
May 5	30			0			0	3	1	0		92.5	0.2	46.6
May 6	37			0			0	12	6	0		108.2	0.0	46.9
May 7	69			0			0	12	8	0		125.9	0.0	47.3
May 8	15			0			0	6	3	0		130.4	0.0	47.4
May 9	47			0			0	7	4	0		139.4	0.0	47.7
May 10	39			1			0	7	5	0		135.4	0.0	47.8
May 11	39			0			0	6	4	0		131.0	0.0	47.7
May 12	69			0			0	2	2	1		155.4	0.0	47.6
May 13	46			0			0	1	0	0		168.4	0.0	47.5
May 14	95			0			0	3	2	0		149.7	0.0	48.1
May 15	159			0			0	8	5	0		125.5	0.0	48.9
May 16	106			2			0	6	3	0		129.9	0.0	49.3
May 17	114			1			1	4	1	0		141.2	0.0	49.9
May 18	94			4			0	10	6	0		131.2	0.0	50.2
May 19	126			3			0	7	6	3		151.3	0.0	50.8
May 20	119			0			0	3	2	1		156.5	0.0	50.8
May 21	132			0			0	3	0	1		144.6	0.0	50.4
May 22	79			1			0	6	4	0		165.0	0.0	50.3
May 23	86			3			0	1	1	0		181.9	6.9	50.0
May 24	108			12			0	3	1	0		253.1	61.4	49.9
May 25	104			1			0	0	0	1		234.2	41.1	50.4
May 26	178			39			0	11	3	4		218.5	47.0	51.4
May 27	146			16			0	17	4	3		227.7	57.4	52.1
May 28	164			12			0	4	3	2		221.4	33.9	52.4
May 29	193			33			0	13	5	2		212.2	24.7	52.6
May 30	125			19			0	7	3	1		223.2	38.1	53.0
May 31	122			17			0	5	2	1		207.2	24.1	53.2
TOTAL	2,708			164			1	201	100	21		156.3	10.8	49.1
AVG.	87			5			0	7	3	1				
RUN YEAR	CHINOOK ADULT	CHINOOK JACK					SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT				
TOTALS TO DATE														
SPRING	2,721	164					1	509	253	22				

*Data unavailable

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT
1	509	253	22

TABLE 148

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT

JUNE 2008

DATE	FISH COUNTS								RIVER CONDITIONS						
	SPRING	CHINOOK ADULT	SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Jun 1	157				29			0	13	4	1		194.4	16.7	53.6
Jun 2	87				17			0	8	5	3		204.0	24.5	53.9
Jun 3	203				27			0	10	2	4		240.3	50.9	53.6
Jun 4	86				23			0	7	1	1		240.3	52.7	53.1
Jun 5	115				26			0	6	3	1		210.5	31.6	52.9
Jun 6	42				7			1	8	2	4		207.2	27.4	53.1
Jun 7	48				11			0	5	2	0		206.4	31.2	53.2
Jun 8	46				8			0	5	3	1		180.7	18.2	53.5
Jun 9	64				2			1	11	5	1		221.4	43.3	53.9
Jun 10	69				7			1	9	2	2		242.1	49.9	53.8
Jun 11	26				2			0	7	1	0		240.1	59.2	53.7
Jun 12	56				10			0	7	1	1		220.7	35.7	54.1
Jun 13	54				4			1	4	2	3		212.7	33.3	54.7
Jun 14	45				6			0	6	5	1		178.3	18.4	55.1
Jun 15	50				6			2	10	5	0		175.9	26.1	55.5
Jun 16	28				6			2	11	5	3		213.1	30.3	55.9
Jun 17	86				10			10	12	4	2		210.8	28.5	55.9
Jun 18	46				4			12	8	3	2		210.8	31.2	55.9
Jun 19	36				2			37	4	2	2		208.8	38.7	56.1
Jun 20	39				3			54	13	7	0		194.8	25.6	56.2
Jun 21	28				1			69	7	3	1		173.5	26.1	55.7
Jun 22	59				4			138	11	5	1		145.3	14.4	55.6
Jun 23	33				2			197	12	5	2		177.4	25.9	55.8
Jun 24	39				6			207	9	2	0		181.9	26.2	56.3
Jun 25	93				3			324	17	6	0		208.8	40.3	56.4
Jun 26		96			2			592	16	7	1		225.4	47.2	56.3
Jun 27		176			4			1,139	10	2	0		224.5	48.1	56.2
Jun 28		248			10			2,452	16	8	0		206.6	35.7	56.6
Jun 29		285			20			3,825	20	9	4		186.5	24.5	56.9
Jun 30		340			8			5,133	21	7	0		202.8	37.7	57.1
TOTAL	1,503	1,277			270			14,197	303	118	41		204.9	33.3	55.0
AVG.	65	182			9			473	10	4	1				
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK						WILD STEELHEAD	BULL TROUT						
SPRING	4,224	381						SOCKEYE	STEELHEAD						
SUMMER	1,277	53						14,198	812	371	63				
TOTALS	5,501	434													

*Data unavailable

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT
14,198	812	371	63

TABLE 149

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT

JULY 2008

DATE	FISH COUNTS						RIVER CONDITIONS							
	SPRING	CHINOOK ADULT	CHINOOK FALL	JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI
Jul 1	386			13			4,846	23	11	1	0	195.2	32.9	57.3
Jul 2	542			20			6,436	20	11	1	0	185.6	34.2	58.0
Jul 3	746			39			9,805	30	9	0	0	178.6	40.6	58.6
Jul 4	909			47			12,063	30	12	0	0	165.2	37.6	59.3
Jul 5	821			56			12,956	44	12	0	0	164.8	33.1	59.4
Jul 6	1,002			61			14,057	62	18	0	0	159.7	13.7	59.2
Jul 7	910			72			9,996	33	13	0	0	182.4	39.9	59.3
Jul 8	1,210			47			10,512	50	15	0	0	179.4	24.1	59.3
Jul 9	1,270			74			10,408	46	14	0	0	170.7	18.7	59.8
Jul 10	1,228			96			11,730	53	15	1	0	150.5	22.1	59.9
Jul 11	847			43			7,939	41	9	0	0	149.8	14.6	60.0
Jul 12	945			48			6,597	61	19	0	0	135.2	11.1	60.1
Jul 13	746			46			4,918	39	13	0	0	132.9	10.9	60.6
Jul 14	753			46			3,965	68	30	0	0	95.7	12.2	60.9
Jul 15	697			57			4,118	51	21	0	0	134.2	9.6	60.8
Jul 16	668			55			2,821	49	14	1	0	123.6	8.4	60.9
Jul 17	560			85			2,460	50	18	0	0	117.8	11.4	61.3
Jul 18	778			79			2,081	61	25	0	0	128.0	12.6	62.0
Jul 19	736			61			1,782	42	22	0	0	121.2	10.7	62.1
Jul 20	776			46			1,485	64	24	0	0	97.9	9.4	62.5
Jul 21	479			46			854	57	25	0	0	103.6	11.2	62.8
Jul 22	494			39			678	69	18	0	1	106.0	10.8	63.0
Jul 23	736			47			623	72	23	1	1	106.4	9.2	63.5
Jul 24	679			44			797	72	23	0	0	120.8	15.2	63.6
Jul 25	625			35			583	75	24	0	0	139.5	9.9	63.5
Jul 26	594			23			433	77	22	0	1	106.2	9.4	63.3
Jul 27	888			44			449	106	55	0	3	76.7	7.4	64.2
Jul 28	647			46			398	115	40	0	1	114.0	10.5	64.3
Jul 29	414			44			160	77	25	0	3	123.2	9.7	61.8
Jul 30	655			51			179	128	48	1	1	115.3	9.5	64.6
Jul 31	381			33			156	117	34	0	0	112.6	9.4	64.3
TOTALS	23,122		1,543				146,285	1,882	662	6	11			61.3
AVG.	746		50				4,719	61	21	0	0	135.2	16.8	
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK												*Data unavailable
SPRING	4,224	381												
SUMMER	24,399	1,596												
TOTAL	28,623	1,977												
	SOCKEYE	STEELHEAD												
	160,483	2,694												
			WILD STEELHEAD											
			1,033											
				BULL TROUT										
				69										
					LAMPREY									
					11									

TABLE 150

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT

AUGUST 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Aug 1	299			38	0	0	129	95	24	0	1	81.8	8.7	64.0
Aug 2	427			35	0	0	99	80	30	0	1	70.4	7.4	63.8
Aug 3	385			22	0	0	94	133	43	0	4	76.1	6.2	64.0
Aug 4	405			9	0	0	99	107	48	0	3	93.7	8.9	64.7
Aug 5	284			12	0	0	64	93	40	0	0	94.2	10.4	65.1
Aug 6	306			32	0	0	62	183	75	1	0	96.7	9.4	65.3
Aug 7	292			32	0	0	36	171	68	0	7	78.9	8.3	65.4
Aug 8	226			22	0	0	27	174	71	1	2	86.1	7.7	65.2
Aug 9	186			27	0	0	25	124	50	1	1	78.6	11.7	64.8
Aug 10	314			22	0	0	29	179	68	1	7	85.0	6.7	64.7
Aug 11	245			16	0	0	46	112	51	0	4	84.9	7.4	64.6
Aug 12	211			25	0	0	13	114	51	0	4	95.9	9.1	64.8
Aug 13	238			46	0	0	13	161	58	0	8	85.2	7.1	65.5
Aug 14	203			22	0	0	8	150	50	0	4	94.4	7.0	65.9
Aug 15	207			25	0	0	19	177	64	1	7	92.0	7.0	66.3
Aug 16	237			21	0	0	11	144	37	0	3	84.5	6.9	66.7
Aug 17	303			42	0	0	22	184	59	1	9	54.1	6.3	66.8
Aug 18	231			46	0	0	12	163	65	0	17	72.8	8.3	67.0
Aug 19	118			27	0	1	3	242	89	0	8	89.5	7.6	67.5
Aug 20	140			54	0	2	8	217	78	0	7	83.0	6.3	67.6
Aug 21	205			44	0	0	3	163	51	0	5	93.7	6.9	67.5
Aug 22	111			20	0	0	0	157	53	0	1	106.7	7.8	66.7
Aug 23	141			41	0	0	0	97	25	0	2	103.8	6.8	66.2
Aug 24	144			21	0	0	1	110	25	0	6	80.9	7.3	66.1
Aug 25	113			42	0	1	6	208	54	0	10	90.4	8.4	66.2
Aug 26	69			44	1	0	0	79	25	0	14	85.7	7.5	65.7
Aug 27	135			72	0	1	3	136	40	0	9	78.2	8.0	65.8
Aug 28	116			102	0	1	2	161	55	0	2	97.0	8.5	65.5
Aug 29	99			112	0	0	1	102	25	0	4	109.3	8.5	65.4
Aug 30	46			100	0	1	2	109	28	0	5	73.4	6.7	65.9
Aug 31	63			72	0	0	0	104	27	0	6	67.9	5.8	65.9
TOTAL	6,499			1,245	1	7	837	4,429	1,527	6	161			
AVG.	210			40	0	0	27	143	49	0	5	86.0	7.8	65.7
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK		COHO ADULT	COHO JACK		SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY			*Data unavailable
SPRING	4,224	381		1	7		161,320	7,123	2,560	75	172			
SUMMER	30,898	2,841												
TOTALS	35,122	3,222												

TABLE 151

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT

SEPTEMBER 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Sep 1	73			49	0	0	0	100	27	0	4	75.5	0.0	65.8
Sep 2		85		62	0	0	1	72	25	0	19	85.6	0.0	65.8
Sep 3	44			61	0	0	1	95	26	0	25	73.4	0.0	65.7
Sep 4	56			65	0	1	0	91	31	0	7	69.2	0.0	65.7
Sep 5	48			52	0	0	0	22	4	0	10	50.7	0.0	65.8
Sep 6		91		93	0	0	2	101	31	1	8	59.7	0.0	65.9
Sep 7	59			79	0	1	0	56	21	0	10	50.7	0.0	66.2
Sep 8	132			110	0	2	1	122	37	0	9	70.5	0.0	66.2
Sep 9	136			120	0	0	0	181	72	0	5	57.1	0.0	66.1
Sep 10	173			99	0	0	1	189	61	0	10	61.7	0.0	66.0
Sep 11		148		89	1	3	0	282	100	0	3	70.1	0.0	66.0
Sep 12	51			74	0	1	0	158	45	0	1	57.3	0.0	66.2
Sep 13	199			133	0	0	0	252	84	0	17	51.2	0.0	66.3
Sep 14	141			129	6	1	0	242	82	0	14	45.0	0.4	66.3
Sep 15	75			92	3	3	0	208	53	0	6	81.3	0.0	66.1
Sep 16		147		121	7	7	2	335	116	0	6	71.1	0.0	66.1
Sep 17	240			121	4	8	0	311	92	0	3	62.6	0.0	66.1
Sep 18	164			130	11	7	1	259	77	0	3	47.5	0.0	66.3
Sep 19	164			114	16	5	0	316	98	0	1	58.8	0.0	66.5
Sep 20	129			77	20	8	0	138	59	0	4	39.8	0.0	66.4
Sep 21		108		71	31	4	0	182	36	0	2	39.8	0.0	66.2
Sep 22	142			81	17	3	0	98	30	0	5	71.6	0.0	63.2
Sep 23	170			97	15	19	2	155	43	0	4	73.2	0.0	64.0
Sep 24	165			83	33	12	1	192	50	1	1	70.4	0.0	64.9
Sep 25	172			50	44	31	2	166	43	0	0	64.9	0.0	64.8
Sep 26	37			33	51	22	0	138	34	0	3	48.5	0.0	64.7
Sep 27	62			42	61	28	2	80	25	0	2	44.2	0.0	64.4
Sep 28	64			18	44	37	1	78	21	0	4	40.7	0.0	64.4
Sep 29	57			22	49	33	0	63	24	0	1	55.2	0.0	64.4
Sep 30	33			20	59	37	0	94	28	0	1	68.5	0.0	64.3
TOTAL	73	3,292	2,387	472	273	17	4,776	1,475	2	188				65.6
AVG.		114	80	16	9	1	159	49	0	6	60.5	0.0		
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY					*Data unavailable
SPRING	4,224	381	473	280	161,337	11,899	4,035	77	360					
SUMMER	30,971	2,890												
FALL	3,292	2,338												
TOTALS	38,487	5,609												

TABLE 152

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT

OCTOBER 2008

DATE	FISH COUNTS										RIVER CONDITIONS			
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI DEG F
Oct 1		193	44	56	31	2	143	44	0	0		66.1	0.0	64.1
Oct 2		103	25	33	33	0	73	18	0	3		69.0	0.0	64.0
Oct 3		212	43	100	56	1	119	33	0	3		53.9	0.0	64.1
Oct 4		146	27	73	36	0	119	46	0	0		41.0	0.0	64.2
Oct 5		138	22	57	29	0	70	20	0	0		33.6	0.0	64.0
Oct 6		83	13	27	18	1	64	25	0	0		63.0	0.0	63.9
Oct 7		89	17	41	25	0	52	5	0	0		51.7	0.0	63.5
Oct 8		91	23	51	18	1	70	28	0	0		62.9	0.0	62.6
Oct 9		81	25	46	8	0	62	17	0	0		68.4	0.0	62.3
Oct 10		112	20	78	9	0	80	12	0	0		55.7	0.0	62.2
Oct 11		87	18	73	4	0	37	14	1	0		47.6	0.0	62.2
Oct 12		74	18	40	21	0	48	18	0	0		48.6	0.0	62.2
Oct 13		51	12	69	26	0	40	16	1	0		67.4	0.0	62.2
Oct 14		32	17	68	19	0	73	22	0	0		74.9	0.0	52.5
Oct 15		40	13	71	11	0	36	8	1	1		90.0	0.0	*
Oct 16		18	13	119	9	0	47	16	0	0		93.3	5.7	*
Oct 17		44	7	93	12	0	35	8	0	0		70.2	0.0	*
Oct 18		41	14	81	15	0	34	11	0	0		37.2	0.0	*
Oct 19		101	21	135	5	0	15	7	0	0		42.1	0.0	*
Oct 20		57	28	123	10	0	24	13	0	0		73.4	0.0	*
Oct 21		61	15	82	10	0	14	6	0	0		74.2	0.0	*
Oct 22		84	13	73	10	1	16	5	0	1		63.3	0.0	*
Oct 23		54	12	104	12	0	23	10	1	0		70.3	0.0	*
Oct 24		60	14	89	12	0	16	9	1	0		73.5	0.0	*
Oct 25		51	11	104	9	0	16	7	1	0		53.9	0.0	*
Oct 26		50	8	91	7	0	10	7	1	0		42.2	0.0	*
Oct 27		132	10	52	6	0	15	5	1	0		67.2	0.0	*
Oct 28		148	16	63	1	0	14	6	0	0		87.5	0.0	*
Oct 29		70	16	40	7	0	15	4	0	0		75.9	0.0	*
Oct 30		75	2	46	2	0	14	5	0	0		77.4	0.0	*
Oct 31		87	11	26	2	0	12	2	0	0		63.9	0.0	*
TOTAL		2,665	548	2,204	473	6	1,406	447	8	8		63.2	0.2	62.4
AVG.		86	18	71	15	0	45	14	0	0				
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY					*Data unavailable
SPRING	4,224	381	2,677	753	161,343	13,305	4,482	85	368					
SUMMER	30,971	2,890												
FALL	5,957	2,886												
TOTALS	41,152	6,157												

TABLE 153

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT

NOVEMBER 2008

DATE	FISH COUNTS										RIVER CONDITIONS				
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*TURBIDITY SECCHI	*DEG F
Nov 1		95	6	41	3			13	4	0		62.9	0.0		
Nov 2		121	4	57	3			25	4	0		51.2	0.0		
Nov 3		72	4	43	2			33	17	0		76.5	0.0		
Nov 4		54	2	42	1			18	9	1		76.2	0.0		
Nov 5		58	7	21	2			26	11	0		72.0	0.0		
Nov 6		63	1	16	0			16	8	0		79.7	1.6		
Nov 7		36	2	12	4			21	6	1		79.8	0.0		
Nov 8		71	3	9	1			66	30	0		71.7	0.1		
Nov 9		62	2	4	3			85	35	1		67.9	0.0		
Nov 10		45	2	6	3			95	38	3		72.5	0.0		
Nov 11		33	2	0	3			51	16	2		92.8	0.1		
Nov 12		14	8	4	0			41	21	2		89.0	1.8		
Nov 13		19	0	5	0			29	16	1		81.9	0.9		
Nov 14		16	2	5	4			19	5	2		33.4	0.0		
Nov 15		22	0	2	0			28	10	2		43.8	0.0		
Nov 16												43.6	0.0		
Nov 17												77.2	0.8		
Nov 18												73.6	0.0		
Nov 19												98.7	0.0		
Nov 20												92.7	0.0		
Nov 21												83.9	0.0		
Nov 22												69.4	0.0		
Nov 23												65.8	0.0		
Nov 24												100.8	0.0		
Nov 25												97.6	0.0		
Nov 26												100.8	0.0		
Nov 27												74.3	0.0		
Nov 28												74.0	0.0		
Nov 29												76.3	0.0		
Nov 30												80.6	0.0		
TOTAL		781	45	267	29			566	230	15					
AVG.		52	3	18	2			38	15	1		75.3	0.2		
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY					*Data unavailable	
SPRING	4,224	381	2,944	782	161,343	13,871	4,712	100	368						
SUMMER	30,971	2,890													
FALL	6,738	2,931													
TOTALS	41,933	6,202													

TABLE 154

MONTHLY COUNT OF STEELHEAD
ROCKY REACH DAM: 1981 - 2008

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1981					14	173	1,309	1,827	1,691	300			5,314
1982				137	116	5	73	1,192	2,863	1,735	120		6,241
1983				31	18	2	334	3,525	11,329	4,048	411		19,698
1984				41	174	127	1,032	5,564	7,263	2,589	438		17,228
1985				63	273	523	3,547	4,152	11,133	2,646	381		22,718
1986				61	178	160	2,003	6,072	4,225	2,222	236		15,157
1987				67	75	80	567	2,574	2,361	1,210	244		7,178
1988				99	108	108	493	1,498	2,439	820	112		5,677
1989				62	41	30	458	1,442	2,721	1,134	151		6,039
1990				24	31	33	534	1,809	1,889	646	67		5,033
1991				19	26	63	584	2,346	2,996	1,473	138		7,645
1992				50	138	203	1,026	1,861	3,051	1,093	94		7,516
1993				49	52	24	346	869	1,066	379	31		2,816
1994				12	11	30	301	578	1,002	821	63		2,818
1995				18	12	9	147	398	827	315	32		1,758
1996				23	26	12	179	1,585	2,868	969	112		5,774
1997				40	15	1	192	1,789	2,901	1,576	208		6,722
1998				71	18	23	281	671	2,025	1,127	226		4,442
1999				35	16	46	198	1,518	2,361	557	84		4,815
2000				62	22	34	679	2,276	4,289	835	78		8,275
2001				83	33	83	1,861	6,843	9,827	3,025	290		22,045
2002				152	33	49	1,441	4,631	4,103	1,332	112		11,853
2003				46	4	40	1,154	3,393	6,649	2,211	153		13,650
2004				177	142	244	1,847	2,571	7,748	1,650	201		14,580
2005				278	85	60	762	2,430	4,589	1,423	83		9,710
2006				117	34	14	401	1,774	4,557	1,028	199		8,124
2007				93	75	46	507	2,777	4,247	2,227	174		10,146
2008				308	201	303	1,882	4,429	4,776	1,406	566		13,871
Total				2,218	1,957	2,366	23,002	71,876	117,932	42,188	5,304		266,843
10-Year Average				135	65	92	1,073	3,264	5,315	1,569	194		11,707

WELLS DAM

FISH COUNTING SCHEDULE

Adult counting schedules at Wells are from May 1 through November 15. Fish passage is assessed by reviewing a videotape record made the previous day. Passage by species and ladder is made for each hour of the day. Counts between 1967 and 1997 were reported for 16 hours (0500 – 2100 PST). Starting in 1998, as per the request of the Wells Coordinating Committee, counts were reported in a 24 hour (0000 – 2400) format. Either format is available upon request from Douglas PUD. Chinook are separated into three populations based upon date of passage through the ladders. Spring Chinook pass from May 1 through June 28, summer Chinook between June 29 and August 28, and fall Chinook from August 29 through November 15.

FISH LADDER OPERATING SCHEDULE

Annual maintenance is performed on the ladders at Wells to clean the ladder of debris and service the attraction flow pumps. During this time the ladders are taken out of service and de-watered. The dates of this work in 2008 were as follows:

East Ladder

December 3, 2008 – January 29, 2009 Inspection and Bi-Annual Maintenance

West Ladder

January 8 – 19, 2008 Inspection and Maintenance

ADULT PASSAGE FACILITIES

The two fish ladders at Wells Dam are conventional staircase type fish ladders with 73 pools. The ladders are located at the east and west endwalls of the dam. The lower 56 pools discharge a constant 48 cfs dropping one foot at each pool into the attraction chamber in the lower ladder. Discharge from pool 73 through pool 57 is through two 30 inch by 16 1/2 inch submerged orifices. Discharge from pool 56 to pool 1 is over a seven foot wide overflow section in the wall between pools with additional flow through two 18 inch by 15 inch submerged orifices. Pools 67 and 68 have adult PIT-tag detection weirs that interrogate passage of all adults just prior to the ladder exit. Information on PIT-tag detection of adults using both east and west ladders is found on the PTAGIS web page (<http://www.pittag.org/>). Pool No. 64 of both fishways contains facilities for counting fish. The main features of this facility are a counting room with an observation window adjacent to the fish ladder and a telescoping gate and light panel used to guide the fish closer to the observation window. At pool 40 are provisions for sorting and trapping various species of fish. The fisheries agencies and tribes develop broodstock collection protocols at the beginning of each season for collection of spring and summer chinook, sockeye and coho salmon and summer steelhead. These plans are submitted for review by the fisheries agencies and tribes that serve on the Wells Habitat Conservation Plan Coordinating Committee.

At the bottom of the fish ladder, projecting downstream from the line of the hydrocombine is the portion of the endwall structure which incorporates the functions of fish attraction and collection. Two-turbine pumps deliver attraction flow to the water supply chamber located adjacent to the ladder. The total flow from the turbine pump(s) plus the 48 cfs coming down the ladder from the reservoir is discharged to the tailwater through a single fish attraction opening per ladder. These openings are eight-foot wide vertical slot openings with vertical miter gates. Originally an additional set of side gates were provided. Ladder entrances were designed to have the side gate be open at 2 – 4' and the end gate would automatically adjust its width to maintain a one foot differential in the collection chamber. Since July 1970, the side gate has been set at a four foot opening with the end gate fixed at six feet. A 1.5 foot differential is maintained as the two-turbine pumps adjust output. On June 29, 2000, the joint fisheries parties agreed to have the side entrances permanently closed. This decision was based upon several years of radio telemetry studies with various species of anadromous fish that showed improved passage times with the side gates closed. The 1.5 foot differential remains in affect for the entrance to the ladder.

In 2008, the differential of 1.5 was relaxed to 1.0 feet from October 3 to 31 to encourage adult lamprey passage. The 1.5 feet of head moving through the Entrance Gallery Openings would produce velocities of just under ten feet per second, which may be excessive for lamprey passage. These steps will be further watched in 2009.

JUVENILE PASSAGE FACILITES

The juvenile bypass at Wells Dam uses the hydrocombine design of the dam by modifying five of the eleven spill bays. The even numbered spill bays are partially constricted with barriers that improve the attraction flow from the forebay into the spill bay area. Up to 11,000 cfs of water is made available for bypass flow during the juvenile migration.

The operation of the bypass in 2008 was coordinated with the Wells Habitat Conservation Plan Coordinating Committee. In the past, hydroacoustics and fyke netting have provided information on real time data of the fish migration. The fixed dates agreed to by the HCP Coordinating Committee were established from 21 years of hydroacoustic and 14 years of species composition information collected on juvenile run patterns at Wells Dam. The spring period ran from April 12 through June 13 for a total of 63 days and a total discharge of 1.24 MAF, or 6.5% of total project discharge. The summer bypass started on June 14 and ran through August 26 for a total of 74 days and a project discharge of 1.65 MAF or 8.5% of the total discharge.

MISCELLANEOUS

In 2008, radio telemetry receivers were located at Wells Dam to monitor bull trout radio-tagged by the USFWS. Antenna and receiving units were installed at Wells Dam as well as in neighboring tributaries.

The 2008 season provided the highest count of salmonids in the history of fish counts at Wells Dam. Sockeye salmon destined for Canada provided the highest counts of sockeye ever seen at Wells (165,334); the summer Chinook count was the seventh highest count (22,435); the fall Chinook were the fourth largest year (6,423); and winter steelhead were the sixth highest count (9,808). The high counts with some days of over 10,000 salmon a day taxed the two fish counters dedicated to each of the two fish ladders. Relief staff came in after hours to assist and work to get back on a one day delay on reporting passage information.

The District completed the second flow guiding structures in the West Fish Collection Gallery. Radio telemetry work done in 2007 demonstrated that a net reduction in passage time was seen by fish that passed the east ladder that had one of these structures in place. The HCP-Coordinating Committee agreed to have the District provide the second flow guiding structure to help reduce time of passage through the collection gallery. This work was completed in February of 2008.

TABLE 155

**MONTHLY TOTALS OF SALMONIDS AND LAMPREY COUNTED OVER WELLS DAM
2008**

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*					1,434	2,014	16,368	6,326	3,415	2,079	356		31,992
STEELHEAD					145	167	861	2,792	3,740	1,580	523		9,808
SOCKEYE						3,632	160,206	1,467	24	5			165,334
COHO									53	806	337		1,196
TOTAL					1,579	5,813	177,435	10,585	7,232	4,470	1,216		208,330
LAMPREY									1	2	2	2	7
BULL TROUT									9	28	6		43

*Jacks included

TABLE 156

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT

MAY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS			
	SPRING	SUMMER	FALL									DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
May 1	0			0				2	1	0		101.0	6.7	10.0	45.0
May 2	0			0				5	3	0		102.9	7.5	10.0	45.4
May 3	0			0				3	3	0		102.8	7.3	10.0	45.4
May 4	0			0				2	2	0		82.4	6.1	12.0	45.6
May 5	1			0				7	5	0		99.2	7.9	12.0	46.2
May 6	2			0				3	1	0		113.9	8.0	10.0	46.5
May 7	0			0				6	4	0		121.7	8.3	11.0	46.9
May 8	2			0				12	8	0		137.7	8.7	10.0	47.2
May 9	21			0				8	5	0		145.1	8.9	10.0	47.1
May 10	11			0				3	2	0		138.0	8.6	9.0	47.1
May 11	10			0				5	3	0		133.1	8.8	12.0	46.9
May 12	23			1				4	3	0		163.4	10.0	12.0	47.1
May 13	3			0				2	2	0		171.2	10.0	12.0	47.9
May 14	25			0				4	4	0		150.9	10.0	9.0	48.1
May 15	11			0				9	9	0		130.5	10.0	9.0	48.7
May 16	14			0				4	3	0		139.4	10.0	5.0	49.1
May 17	62			1				10	9	2		141.5	8.8	4.0	49.8
May 18	32			0				7	5	0		131.4	8.4	2.0	50.2
May 19	6			0				1	2	0		152.4	10.0	2.0	50.2
May 20	61			2				11	7	0		152.8	10.5	2.0	49.8
May 21	12			0				7	2	0		149.3	10.5	2.0	49.7
May 22	11			0				1	1	0		166.7	11.0	3.0	49.6
May 23	55			4				2	2	0		193.9	19.8	3.0	49.7
May 24	187			12				3	2	0		242.8	47.2	3.0	49.9
May 25	18			5				3	2	1		240.4	59.1	3.0	50.9
May 26	62			8				4	3	1		220.2	36.5	4.0	51.6
May 27	230			6				6	5	1		228.4	75.5	4.0	51.9
May 28	82			8				2	1	0		218.5	68.6	1.0	52.1
May 29	167			10				5	1	0		213.0	66.1	2.0	52.4
May 30	183			19				3	2	4		224.9	59.0	2.0	52.8
May 31	57			10				1	1	0		209.2	52.9	2.0	53.1
TOTAL	1,348			86				145	103	9		158.7	21.9	6.5	48.8

AVG. 43 3 5 3 0

RUN YEAR
TOTALS TO DATE
SPRING 1,348 86CHINOOK ADULT CHINOOK JACK
STEELHEAD WILD STEELHEAD BULL TROUT
145 103 9

TABLE 157

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT

JUNE 2008

DATE	FISH COUNTS										RIVER CONDITIONS					
	SPRING	CHINOOK ADULT	SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	161				31			0	6	4	4		191.6	46.0	2.0	53.4
Jun 2	115				40			0	4	0	2		213.4	54.2	2.0	53.4
Jun 3	39				27			0	2	2	0		242.0	90.6	3.0	53.0
Jun 4	102				43			0	5	2	2		241.4	89.6	5.0	52.8
Jun 5	75				36			0	4	2	2		214.7	40.4	5.0	53.1
Jun 6	23				14			0	1	0	1		210.9	42.2	5.0	52.9
Jun 7	106				57			0	4	3	0		205.1	39.9	5.0	53.1
Jun 8	76				13			1	4	0	2		183.0	15.7	5.0	53.4
Jun 9	17				1			0	6	4	1		224.4	60.6	7.0	53.6
Jun 10	46				4			0	5	2	1		238.3	81.9	7.0	53.4
Jun 11	33				0			1	1	0	3		241.8	85.6	7.0	53.6
Jun 12	19				2			1	2	0	0		219.7	66.9	7.0	54.1
Jun 13	35				15			0	2	1	0		209.6	50.2	7.0	54.6
Jun 14	37				12			0	4	3	3		179.8	15.0	7.0	55.0
Jun 15	10				4			0	4	4	0		183.8	22.2	7.0	55.4
Jun 16	28				6			0	10	5	1		217.8	40.2	7.0	55.4
Jun 17	29				2			1	9	6	0		214.2	45.2	7.0	55.3
Jun 18	17				0			2	6	2	0		213.2	41.2	7.0	55.4
Jun 19	56				11			7	10	6	0		211.7	31.4	7.0	56.1
Jun 20	36				3			14	9	7	1		198.3	24.2	8.0	55.7
Jun 21	6				0			15	2	2	0		167.9	16.6	8.0	55.6
Jun 22	46				0			52	9	7	0		147.8	14.8	10.0	55.9
Jun 23	50				3			68	6	2	0		182.0	21.3	10.0	56.4
Jun 24	14				2			100	1	0	0		187.5	21.4	10.0	56.2
Jun 25	9				0			129	6	2	0		212.6	41.6	10.0	56.2
Jun 26	51				8			214	9	6	1		227.0	58.1	10.0	56.0
Jun 27	24				2			195	13	10	2		226.7	55.3	10.0	56.2
Jun 28	100				4			436	4	2	1		206.7	36.5	10.0	56.5
Jun 29		136			1			893	4	2	0		187.3	24.6	10.0	56.7
Jun 30		176			1			1,503	15	10	1		204.7	37.9	10.0	57.2
TOTAL	1,360	312		342				3,632	167	96	28		206.8	43.7	7.2	54.9
AVG.	49	156		11				121	6	3	1					
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK						WILD STEELHEAD	BULL TROUT							
SPRING	2,708	426						SOCKEYE	STEELHEAD							
SUMMER	312	2						3,632	312	199	37					
TOTAL	3,020	428														

TABLE 158

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT

JULY 2008

FISH COUNTS

DATE	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	RIVER CONDITIONS			
	SPRING	SUMMER	FALL									DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jul 1	111			4			2,818	7	4	2	0	197.3	34.4	10.0	57.9
Jul 2	335			8			4,984	11	6	1	0	184.7	25.1	10.0	58.1
Jul 3	328			6			5,717	13	8	0	0	178.7	34.3	10.0	58.6
Jul 4	315			2			5,968	12	7	0	0	162.5	41.9	10.0	58.6
Jul 5	725			3			9,858	19	14	0	0	165.7	24.9	10.0	58.5
Jul 6	708			26			12,169	18	14	0	0	162.0	21.6	10.0	58.7
Jul 7	535			9			11,275	25	17	0	0	183.3	25.9	10.0	58.5
Jul 8	649			20			12,165	25	13	0	0	180.6	35.0	10.0	59.0
Jul 9	714			32			11,583	21	13	1	0	170.1	30.0	10.0	59.3
Jul 10	953			45			12,852	29	18	0	0	150.4	22.6	10.0	59.5
Jul 11	1,237			36			12,457	33	19	0	1	146.7	14.4	10.0	59.7
Jul 12	750			51			10,650	28	10	0	0	139.5	13.8	10.0	59.9
Jul 13	574			24			9,716	26	14	0	0	121.6	12.7	10.0	59.6
Jul 14	329			29			6,029	21	19	0	0	105.3	10.5	10.0	59.9
Jul 15	263			22			5,291	24	14	1	0	134.6	9.8	10.0	60.2
Jul 16	473			23			5,104	23	12	0	0	126.8	9.4	10.0	61.1
Jul 17	765			16			3,467	34	16	0	0	120.4	9.3	12.0	61.1
Jul 18	436			21			4,375	20	7	0	0	124.9	9.7	12.0	61.5
Jul 19	526			26			2,705	20	11	0	0	122.7	9.2	12.0	61.7
Jul 20	496			46			2,149	29	17	0	0	95.1	8.5	12.0	62.0
Jul 21	605			14			1,841	15	7	0	0	106.5	9.1	12.0	62.7
Jul 22	463			21			1,256	45	24	0	0	104.8	8.6	12.0	62.7
Jul 23	202			28			1,079	36	22	1	0	104.0	8.8	12.0	62.7
Jul 24	284			13			1,013	33	13	0	0	126.6	13.1	12.0	62.7
Jul 25	484			28			740	40	20	0	0	136.7	10.2	12.0	63.6
Jul 26	270			21			644	32	22	0	0	102.4	9.1	12.0	63.6
Jul 27	259			15			593	43	17	0	0	72.1	7.7	12.0	64.2
Jul 28	634			21			587	22	9	0	0	125.0	9.9	12.0	64.4
Jul 29	424			18			391	52	22	0	0	121.3	10.0	12.0	64.1
Jul 30	391			23			391	49	19	0	0	111.1	9.4	12.0	63.3
Jul 31	467			12			339	56	27	0	0	111.7	9.4	12.0	63.2
TOTAL	15,705			663			160,206	861	455	6	1				
AVG.	507			21			5168	28	15	0	0	135.3	16.4	11.0	61.0

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	2,708	426
SUMMER	16,017	665
TOTAL	18,725	1,091

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
163,838	1,173	654	43	1

TABLE 159

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT

AUGUST 2008

DATE	FISH COUNTS								RIVER CONDITIONS						
	SPRING	CHINOOK ADULT SUMMER	FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Aug 1		251		18			151	40	19		0	78.2	7.9	12.0	63.8
Aug 2		435		26			240	74	43		0	73.0	8.9	11.0	64.2
Aug 3		184		18			200	71	30		0	71.7	7.4	13.0	64.7
Aug 4		177		8			125	48	16		0	91.2	8.7	13.0	64.2
Aug 5		349		17			91	52	23		0	97.5	11.0	13.0	65.3
Aug 6		214		14			70	37	21		0	95.4	13.6	13.0	64.8
Aug 7		140		21			63	34	21		0	82.5	11.1	13.0	64.7
Aug 8		151		17			72	44	18		0	89.3	12.3	13.0	64.7
Aug 9		66		15			60	44	26		0	83.9	16.7	13.0	64.9
Aug 10		171		15			37	70	28		0	81.9	12.0	12.0	65.3
Aug 11		198		14			32	50	19		0	93.4	10.6	14.0	65.6
Aug 12		102		10			31	50	18		0	92.1	8.4	12.0	65.8
Aug 13		122		34			72	104	48		0	85.3	8.3	12.0	66.1
Aug 14		191		35			42	133	79		0	98.9	8.9	12.0	66.4
Aug 15		158		24			43	73	33		0	92.0	8.5	12.0	66.4
Aug 16		307		30			41	101	46		1	82.9	8.1	12.0	67.1
Aug 17		163		38			24	120	50		0	53.2	6.9	12.0	67.7
Aug 18		198		25			25	64	25		0	70.2	8.1	12.0	67.9
Aug 19		270		31			13	132	58		0	88.8	8.8	12.0	67.8
Aug 20		108		58			4	128	59		0	89.1	8.9	12.0	67.2
Aug 21		114		30			2	123	59		0	97.3	8.8	12.0	66.9
Aug 22		322		41			6	117	47		0	105.5	8.7	12.0	66.4
Aug 23		197		24			2	118	50		0	102.4	8.0	12.0	66.6
Aug 24		50		8			3	97	42		0	79.6	6.6	12.0	66.8
Aug 25		88		31			6	36	10		0	88.8	8.1	12.0	66.4
Aug 26		24		21			2	59	20		0	87.4	7.8	11.0	66.1
Aug 27		17		29			1	65	17		1	77.3	1.3	11.0	66.0
Aug 28		276		58			3	198	59		0	103.6	0.0	11.0	66.5
Aug 29			200	40			2	183	67		0	104.4	0.0	11.0	66.7
Aug 30			153	35			2	156	57		0	73.1	0.0	11.0	66.8
Aug 31			101	44			2	171	59		0	71.3	0.3	11.0	66.6
TOTAL		5,043	454	829			1,467	2,792	1,167		2				
AVG.		180	151	27			47	90	38		0	86.5	7.9	12.1	66.0
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK					SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY				
SPRING	2,708	426					165,305	3,965	1,821	43	3				
SUMMER	21,060	1,375													
FALL	454	119													
TOTAL	24,222	1,920													

TABLE 160

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT

SEPTEMBER 2008

FISH COUNTS

DATE	CHINOOK ADULT				CHINOOK JACK		COHO ADULT		COHO JACK		SOCKEYE		STEELHEAD		WILD STEELHEAD		BULL TROUT		LAMPREY		RIVER CONDITIONS			
	SPRING	SUMMER	FALL																		DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Sep 1					106	85	0				3	152	55							0	71.5	0.0	11.0	66.3
Sep 2					40	26	0				2	29	10							0	84.4	0.0	11.0	66.2
Sep 3					17	8	0				1	43	14							1	77.0	0.0	11.0	66.3
Sep 4					31	21	0				1	76	29							0	65.8	0.0	15.0	66.5
Sep 5					51	21	0				0	140	52							0	52.2	0.0	15.0	66.4
Sep 6					29	41	0				3	85	33							0	75.9	0.0	14.0	66.3
Sep 7					65	55	0				2	91	41							0	50.1	0.0	15.0	66.4
Sep 8					37	51	0				2	35	10							0	70.1	0.0	15.0	66.6
Sep 9					58	29	0				0	69	28							0	61.8	0.0	15.0	66.8
Sep 10					23	21	0				1	38	13							0	59.9	0.0	15.0	66.9
Sep 11					188	75	0				0	182	68							0	70.8	0.0	15.0	66.8
Sep 12					92	49	0				1	210	75							0	60.7	0.0	15.0	66.8
Sep 13					212	105	0				2	188	63						0	49.9	0.0	15.0	66.6	
Sep 14					161	119	0				0	201	76						0	46.5	0.1	15.0	66.6	
Sep 15					77	77	0				0	137	56							0	80.9	0.0	15.0	66.8
Sep 16					31	55	0				1	106	38							0	70.4	0.0	15.0	67.0
Sep 17					31	70	0				1	137	42							0	59.1	0.0	15.0	67.0
Sep 18					64	87	1				0	210	54							0	53.3	0.0	15.0	67.1
Sep 19					118	94	4				0	256	104						0	58.2	0.0	15.0	67.1	
Sep 20					92	88	1				2	252	74							0	39.7	0.0	15.0	67.1
Sep 21					57	61	1				1	172	45							0	41.1	0.0	15.0	66.9
Sep 22					23	35	1				0	72	22							1	70.5	0.0	15.0	66.6
Sep 23					18	59	4				0	78	24							0	73.2	0.0	12.0	66.0
Sep 24					26	73	4				0	87	28							0	70.3	0.0	12.0	65.7
Sep 25					28	48	6				0	134	49							0	63.6	0.0	15.0	65.7
Sep 26					42	33	7				0	185	57							0	48.0	0.0	15.0	65.6
Sep 27					22	21	5				0	114	30							0	44.6	0.0	15.0	65.3
Sep 28					24	13	9				0	137	51							0	41.1	0.0	12.0	64.9
Sep 29					13	35	9				1	70	14							0	54.4	0.0	12.0	64.9
Sep 30					18	66	1				0	54	13							0	68.2	0.0	12.0	65.1
TOTAL					1,794	1,621	53				24	3,740	1,268							2				
AVG.					60	54	2				1	125	42							0	61.1	0.0	14.1	66.3
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK			COHO ADULT						SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY									
SPRING	2,708	426			53						165,329	7,705	3,089	43	5									
SUMMER	21,060	1,375																						
FALL	2,248	1,740																						
TOTAL	26,016	3,541																						

TABLE 161

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT

OCTOBER 2008

RIVER CONDITIONS

DATE	FISH COUNTS								RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI
Oct 1		17	46	9	0	0	114	28		0	68.7	0.0	12.0	65.3
Oct 2		34	77	13	0	0	179	65		0	67.7	0.0	12.0	65.4
Oct 3		30	24	13	0	0	67	24		0	50.1	0.0	15.0	65.3
Oct 4		41	30	11	0	1	80	26		1	40.4	0.0	14.0	65.1
Oct 5		215	54	17	0	0	89	25		1	38.0	0.0	12.0	64.7
Oct 6		36	32	8	0	0	49	21		0	61.9	0.0	12.0	64.4
Oct 7		29	17	4	0	2	63	24		0	48.6	0.0	12.0	64.0
Oct 8		17	8	1	0	0	41	15		0	64.3	0.0	12.0	63.9
Oct 9		17	21	14	0	0	75	18		0	70.5	0.0	12.0	63.7
Oct 10		13	20	12	0	0	75	16		0	53.7	0.0	12.0	63.4
Oct 11		32	36	13	0	0	62	17		0	45.3	0.0	12.0	62.8
Oct 12		86	20	14	0	0	71	26		0	52.4	0.7	13.0	62.3
Oct 13		17	30	16	0	0	23	5		0	65.1	0.0	13.0	61.9
Oct 14		43	24	14	0	0	32	8		0	77.7	0.0	13.0	62.0
Oct 15		49	23	11	0	0	46	19		0	92.0	0.0	13.0	61.9
Oct 16		62	24	19	0	0	68	21		0	92.7	1.4	13.0	61.9
Oct 17		49	13	28	1	0	67	22		0	64.4	0.0	13.0	62.1
Oct 18		25	13	31	0	0	35	7		0	38.6	0.0	13.0	62.3
Oct 19		39	24	40	1	1	42	18		0	44.8	0.0	13.0	62.0
Oct 20		26	12	14	1	0	28	3		0	70.3	0.0	13.0	61.8
Oct 21		33	9	7	1	0	27	10		0	71.7	0.0	12.0	61.4
Oct 22		30	12	28	0	1	34	11		0	69.1	0.0	12.0	61.2
Oct 23		33	9	31	0	0	33	11		0	69.4	0.0	12.0	61.2
Oct 24		50	10	32	0	0	30	16		0	71.7	0.0	12.0	61.1
Oct 25		39	12	45	0	0	19	8		0	47.2	0.0	12.0	60.8
Oct 26		70	19	94	1	0	19	6		0	47.1	0.0	12.0	60.3
Oct 27		44	16	59	0	0	9	4		0	72.0	0.0	12.0	59.9
Oct 28		90	24	31	0	0	24	2		0	86.6	0.0	12.0	59.9
Oct 29		43	16	45	0	0	29	6		0	76.5	0.0	12.0	60.1
Oct 30		47	12	61	0	0	23	5		0	76.1	0.0	12.0	59.8
Oct 31		29	7	66	0	0	27	7		0	59.1	0.0	12.0	59.5
TOTAL		1,385	694	801	5	5	1,580	494		2				
Avg.		45	22	26	0	0	51	16		0	63.0	0.1	12.5	62.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	2,708	426
SUMMER	21,060	1,375
FALL	3,633	2,434
TOTAL	27,401	4,235

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
854	5	165,334	9,285	3,583	43	7

TABLE 162

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT

NOVEMBER 2008

DATE	FISH COUNTS									RIVER CONDITIONS					
	CHINOOK ADULT			CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Nov 1		42	2	69				45	25			67.2	0.0	12.0	59.1
Nov 2		35	4	36				29	8			51.9	0.0	12.0	59.0
Nov 3		26	3	26				26	7			78.9	0.0	12.0	58.7
Nov 4		13	2	24				21	6			74.6	0.0	12.0	58.6
Nov 5		55	2	41				33	9			73.2	0.0	0.0	58.2
Nov 6		44	6	21				56	27			83.0	0.0	12.0	58.0
Nov 7		24	1	35				27	12			74.4	0.0	12.0	57.8
Nov 8		12	1	28				40	22			75.3	0.0	12.0	57.8
Nov 9		15	3	19				19	7			63.9	0.0	12.0	57.5
Nov 10		20	1	14				24	9			77.6	0.0	12.0	57.5
Nov 11		13	0	9				61	24			91.1	0.0	12.0	57.4
Nov 12		9	0	5				34	14			88.6	0.2	12.0	57.2
Nov 13		7	0	6				39	15			70.2	0.0	12.0	56.7
Nov 14		10	0	2				26	12			37.2	0.0	12.0	56.2
Nov 15		5	1	2				43	23			42.5	0.0	12.0	55.5
Nov 16												47.3	0.0	*	*
Nov 17												77.3	0.0	*	*
Nov 18												71.6	0.0	*	*
Nov 19												97.4	0.0	*	*
Nov 20												91.5	0.0	*	*
Nov 21												83.0	0.0	*	*
Nov 22												69.2	0.0	*	*
Nov 23												63.5	0.0	*	*
Nov 24												103.1	0.1	*	*
Nov 25												97.3	0.0	*	*
Nov 26												96.3	0.0	*	*
Nov 27												77.1	0.0	*	*
Nov 28												72.9	0.0	*	*
Nov 29												77.4	0.0	*	*
Nov 30												80.6	0.4	*	*
TOTALS		330	26	337				523	220						
AVG.		22	2	22				35	15			75.2	0.0	11.2	57.7
RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY						*Data unavailable.
SPRING	2,708	426	1,191	5	165,334	9,808	3,803	43	7						
SUMMER	21,060	1,375													
FALL	3,963	2,460													
TOTAL	27,731	4,261													

TABLE 163

**MONTHLY COUNT OF STEELHEAD
WELLS DAM: 1976 - 2008**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1976					44	37	56	530	1964	1856	156		4,643
1977					37	22	38	1,034	818	2,849	526		5,324
1978					177	32	12	399	432	528			1,580
1979					72	2	22	1,212	938	1,040	355		3,641
1980					202	24	15	382	1,032	1,358	413		3,426
1981					139	23	107	212	1,702	1,401	513		4,097
1982					149	7	67	814	2,428	3,733	730		7,928
1983					26	2	145	1,891	10,728	5,294	1,327		19,413
1984					153	32	766	5,024	6,545	3,298	778		16,596
1985					220	401	2,675	3,387	9,822	2,821	541		19,867
1986					65	102	1,515	4,994	3,833	2,391	403		13,303
1987					13	29	413	1,897	1,668	1,236	237		5,493
1988					85	103	357	1,273	1,797	785			4,400
1989					43	11	351	1,168	2,223	804			4,600
1990					20	16	283	1,093	1,630	702	104		3,848
1991					14	8	361	2,054	3,078	1,923	313		7,751
1992					86	168	892	1,448	2,946	1,346	181		7,067
1993					48	10	240	706	883	490	23		2,400
1994					7	8	240	442	670	695	121		2,183
1995					5	6	77	160	509	188	**		945
1996					11	7	79	764	2,099	921	246		4,127
1997					38	6	82	868	1,758	1,199	156		4,107
1998					5	3	161	363	1,031	995	110		2,668
1999					13	33	106	903	1,941	446	62		3,504
2000					23	6	309	1,338	3,661	857	86		6,280
2001					30	34	947	5,404	8,326	3,339	403		18,483
2002					66	33	957	3,630	3,388	1,244	157		9,475
2003					21	10	456	2,346	4,618	2,320	192		9,963
2004					74	56	916	1,709	5,039	1,401	122		9,317
2005					63	14	366	1,590	3,287	1,738	145		7,203
2006					28	16	138	922	4,017	1,248	305		6,674
2007					45	18	250	1,605	3,332	2,033	217		7,500
2008					145	167	861	2,792	3,740	1,580	523		9,808
TOTAL					2,167	1,446	14,260	54,354	101,883	54,059	9,445		237,614
10-Year Average					51	39	531	2,224	4,135	1,621	221		8,821

**Wells Dam did not count in November of 1995.