US Army Corps of Engineers ®
Portland District
Walla Walla District

Annual Fish Passage Report 2010

Columbia and Snake River Projects

2010

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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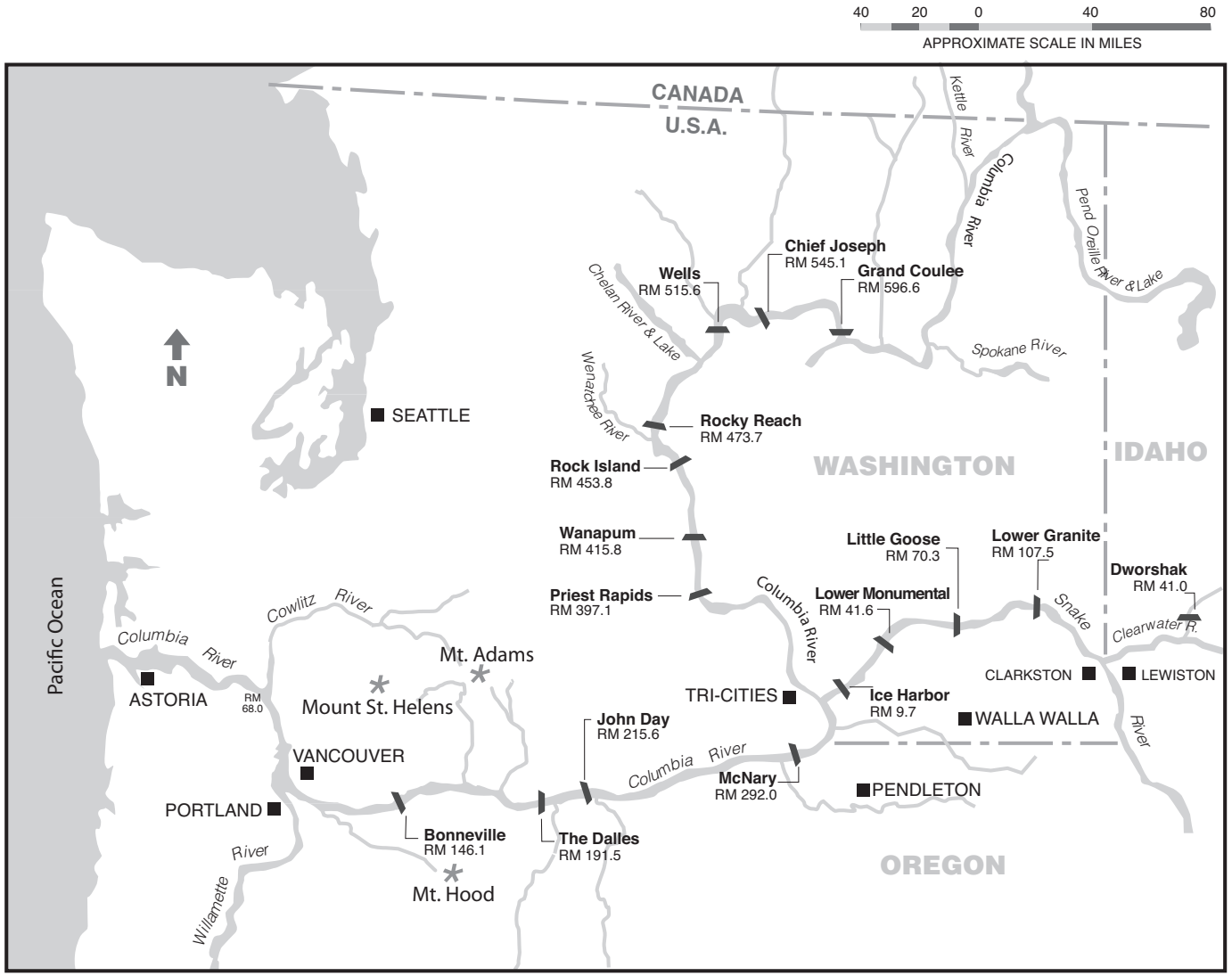


TABLE 1

FISH ESCAPEMENT AT MAIN STEM DAMS ON THE COLUMBIA AND SNAKE RIVERS: 2006-2010

SPECIES	BONNEVILLE	THE DALLES	JOHN DAY	MCNARY	ICE HARBOR	LOWER MONUMENTAL	LITTLE GOOSE	LOWER GRANITE
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*	359671†	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*	214873†	131,952	109,379	85,262	23,151	24,907	18,452	19,979
Jacks	83750†	65,200	61,316	49,740	19,635	17,371	18,120	22,146
STEELHEAD	322341†	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*	100155†	32,749	39,226	22,587	2,147	2,231	2,141	2,798
Adults	95892†	30,661	33,017	20,217	1,994	2,092	1,963	2,532
Jacks	4263†	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
2009								
CHINOOK*	698,993	525,837	451,974	358,505	180,349	183,451	163,562	168,032
Spring*	181,156	147,554	126,539	113,741	83,658	86,940	76,973	80,731
Summer*	119,352	107,794	99,136	78,319	33,256	35,086	31,547	30,849
Fall*	398,485	270,489	226,299	166,445	63,435	61,425	55,042	56,452
Jacks	218,841	175,120	164,110	126,411	76,234	70,983	67,460	88,716
STEELHEAD	603,264	515,111	581,645	408,157	328,105	317,275	305,436	323,527
SOCKEYE	177,823	155,591	157,402	121,672	867	1,162	1,061	1,219
COHO*	234,347	77,492	71,739	37,270	5,436	5,617	5,239	4,912
Adults	224,597	68,940	64,893	33,358	4,947	4,583	4,548	4,629
Jacks	9,750	8,552	6,846	3,912	489	1,034	691	283
SHAD	1,373,738	1,641,362	**	486,725	79,496	**	**	3,457
LAMPREY	8,622	2,318	2,044	676	57	58	34	12
2010								
CHINOOK*	902,121	618,699	534,247	463,000	199,092	200,817	189,451	189,394
Spring*	256,996	201,385	191,240	163,257	107,235	103,232	98,446	100,612
Summer*	113,207	93,820	83,430	74,589	33,086	39,459	36,378	34,072
Fall*	531,918	323,494	259,577	225,154	58,771	58,126	54,627	54,710
Jacks	92,609	75,458	69,502	44,681	21,780	25,668	20,912	24,598
STEELHEAD	412,760	333,033	283,812	262,513	206,959	213,811	193,891	206,333
SOCKEYE	386,524	325,132	324,128	278,799	1,302	1,652	1,658	2,201
COHO*	127,142	31,374	23,269	15,089	1,735	2,003	2,008	1,902
Adults	120,223	29,091	21,506	13,673	1,521	1,707	1,727	1,509
Jacks	6,919	2,283	1,763	1,416	214	296	281	393
SHAD	1,042,471	1,241,769	**	276,673	70,853	**	**	3,279
LAMPREY	6,237	1,726	1,662	833	114	44	29	14

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.

† Changes reflect counts updated on the electronic data base after the 2007 AFPR publication.

TABLE 2

FISH ESCAPEMENT AT MID COLUMBIA RIVER DAMS: 2006 - 2010

SPECIES	PRIEST RAPIDS	ROCK ISLAND	ROCKY REACH	WELLS
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
2009				
CHINOOK*	114,137	87,420	59,348	44,027
Spring*	16,379	24,027	8,707	8,174
Summer*	51,534	50,263	41,298	29,525
Fall*	46,224	13,130	9,343	6,328
Jacks	10,426	17,449	8,951	7,779
STEELHEAD	40,093	37,800	29,547	25,443
SOCKEYE	153,466	162,830	133,106	134,937
COHO*	11,293	21,905	5,937	3,014
Adults	10,884	19,805	5,611	2,985
Jacks	409	2,100	326	29
SHAD	295	**	**	**
LAMPREY	2,714	375	278	9
2010				
CHINOOK*	124,443	96,670	55,883	41,463
Spring*	31,471	33,063	9,489	8,257
Summer*	50,482	51,698	37,239	28,950
Fall*	42,490	11,909	9,155	4,256
Jacks	6,025	8,315	3,860	3,669
STEELHEAD	26,476	22,179	17,871	12,929
SOCKEYE	357,058	338,310	295,638	291,766
COHO*	2,655	7,695	2,691	1,234
Adults	2,389	6,209	2,181	1,224
Jacks	266	1,486	510	10
SHAD	1,815	**	**	**
LAMPREY	1,114	318	268	2

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

SPRING	15 APR - 13 JUN	14 APR - 23 JUN	14 APR - 23 JUN	1 MAY - 28 JUN
SUMMER	14 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 1953-2010

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 - 2010

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 *	83948	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
2008-09	277,551	276,971	221,319	172,330	186,748	170,865	178,491
2009-10	516,214	581,067	408,091	328,107	316,665	303,183	323,378
Total	9,314,078	7,246,401	7,222,495	4,752,154	3,993,985	2,922,216	3,720,410
10-Year Average	315,500	319,150	255,850	192,701	192,729	178,412	189,584

*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

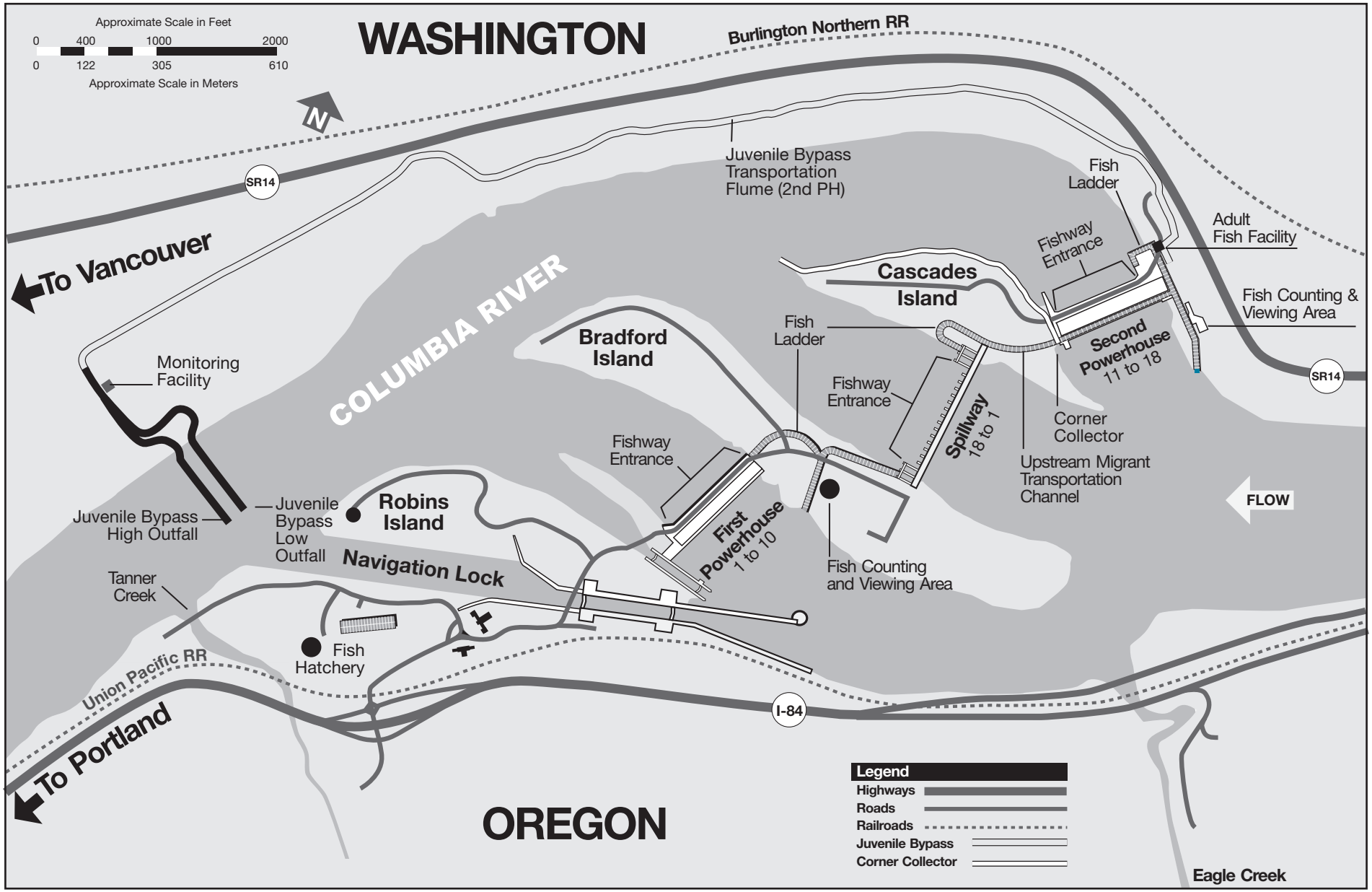
STEELHEAD OVER MID COLUMBIA RIVER DAMS 1959 - 2010

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
2008-09	16,658	16,119	13,798	9,733
2009-10	40,121	37,821	29,481	25,468
Total	605,934	410,319	296,760	263,152
10-Year Average	18,865	18,074	14,209	11,022

*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.
Jun 15 – Sep 30	Video Lamprey counting 2000-0400 hours PST.
Nov 1 – Dec 31	Video counting daily 0400-2000 hours Pacific Standard Time.

FISH FACILITIES OPERATION SCHEDULE

Fish Facility	*Date Out*	*Date In*	*Reason for Outage*
B1 lamprey ramp	26 Oct	18 May	Winter maintenance
WA shore lamprey ramp	26 Oct	19 May	Winter maintenance
CI lamprey ramp	07 Jun	01 Jun	Failed hoist
CI lamprey ramp	11 Sep	14 Jun	Winter maintenance
JMF	01 Jan	01 Mar	System in bypass for winter
JMF	29 Oct	Present	System in bypass for winter
B2CC	01 Jan	14 Mar	Closed for winter maintenance until fish passage season Kelt trigger reached.
B2CC	16 Mar	17 Mar	Opened for Kelts
B2CC	23 Mar	25 Mar	Opened for Kelts
B2CC	29 Mar	30 Mar	Opened for fish passage season
B2CC	20 Apr	22 Apr	BGS repair on 20 April, unable to reopen due to high winds.
B2CC	26 Apr	27 Apr	BGS boat exclusion device repair
B2CC	31 Aug	present	Closed for winter maintenance
Bradfor Island ladder	01 Jan	26 Feb	Winter maintenance
DSM 2	01 Jan	18 Feb	Winter maintenance
AFF	26 Oct	22 Mar	Winter maintenance
ITS	01 Jan	26 Feb	ITS wall removal
ITS	14 Mar	20 Mar	TDG with B2CC open
ITS	21 Mar	27 Mar	TDG with B2CC open
ITS	27 Mar	29 Mar	TDG with B2CC open
ITS	30 Mar	31 Mar	TDG with B2CC open

FISHWAY ACTIVITIES

Sea lion exclusion devices (SLEDS) installed at the fishway entrances to prevent sea lion access to the fish ladder. The following are fishway modifications for the 2009/2010 passage year:

- Removal of the wall separating DSM1 from the ITS completed and old DSM1 outfall pipe removed from the Powerhouse 1 tailrace. All remaining PH1 screens scrapped.
- Perpendicular picket leads at AFF removed.
- Behavioral guidance structure (BGS) removed from the Powerhouse 2 forebay.
- Picket lead spacers installed to allow lamprey passage under leads at the Washington shore auxiliary water supply (AWS).

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.

<u>UMT (12/01/09)</u>: 12 steelhead, one juvenile chinook, one bass, several juvenile shad.

<u>Bradford Island ladder (12/07/09)</u>: One unclipped adult steelhead, 13 clipped adult steelhead, 10 juvenile steelhead, 11 sturgeon, six lamprey, two crayfish, a couple hundred resident fish, 150 juvenile shad.

<u>Bradford Island Junction Pool (12/07/09)</u>: 24 adult steelhead, one salmon, several peamouth, suckers and whitefish, 40 sturgeon, 15 juvenile shad. One dead adult steelhead in A-Branch.

<u>A-branch (01/06/10)</u>: Two steelhead.

<u>B-branch (01/11/10)</u>: Four steelhead and approx. 65 sturgeon.

<u>B-branch (01/12/10)</u>: Approx. 180 sturgeon.

<u>Unit 13 gatewells (05/03/10):</u> Approx. 40 yearling Chinook. One yearling chinook mortality.

<u>Unit 7 tail logs (05/11/10):</u> One decayed adult chinook returned to the river.

Unit 18 gatewells (06/04/10): Several hundred yearling chinook and juvenile sockeye. Six mortalities were also recovered.

Unit 13 draft tube (06/14/10): One sturgeon, one juvenile salmonid.

Unit 0 draft tube (08/02/10): One adult lamprey released to forebay.

Unit 14 tail logs (08/17/10): Five sculpin.

Unit 13 tail logs (08/20/10): Three sculpin.

Unit 18 tail logs (09/02/10): Five sculpin, one peamouth, two bass, and one half of a sturgeon carcass.

Unit 12 gatewells (09/13/10): 75 juvenile shad.

Unit 12 draft tube (09/14/10): 50 sturgeon.

Unit 9 tail logs (09/16/10): One bluegill, one perch, 50 crawdads, and 20 sculpin.

Unit 2 draft tube (10/06/10): Two sturgeon.

Unit 0 tail logs (10/14/10): Five bass, two sculpin, and seven crawdads.

Adult Fish Facility – upper section/holding pool (10/27/10): 25 sturgeon and four steelhead.

Unit 2 tail logs (11/02/10): Four sturgeon and one bass.

Unit 2 tail logs (11/17/10): Five sturgeon, five sculpin, and one crawdad.

Adult Fish Facility – Lower ladder down to entrance bulkhead (11/18/10): Approx. 30 suckers, two peamouth, one common carp

Unit 2 tail logs (11/23/10): Three sturgeon and 10 sculpin.

TABLE 5

MONTHLY TOTALS OF SALMONID, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER BONNEVILLE DAM.
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*	3	2	482	134,447	122,101	82,577	30,630	102,676	395,450	32,845	1,184	42	902,439
STEELHEAD	803	685	2,529	2,567	3,388	23,314	157,387	139,354	75,509	8,898	1,318	851	416,603
SOCKEYE				1	169	297,778	88,415	156	5	0			386,524
COHO*	-11	0					1	7,365	53,947	62,961	3,255	126	127,644
CHUM							1	0	0	39	84		124
PINK									3	1	0		4
TOTAL	795	687	3,011	137,015	125,658	403,669	276,434	249,551	524,914	104,744	5,841	1,019	1,833,338
SHAD					45,038	943,332	53,049	1,052					1,042,471
LAMPREY					11	1,285	2,793	1,646	460	44	-6	1	6,234
STURGEON	2	1	0	1	1	0	5	2	42	18	10	-3	79
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 - FISH COUNTS

JANUARY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	0				-3	-1		34	29					0	115.5	0.6	6.0	39.0
Jan 2	0				0	1		102	69					1	105.9	0.6	6.0	39.0
Jan 3	2				3	1		51	37					0	116.9	0.6	6.0	40.0
Jan 4	0				-3	0		14	12					-1	121.4	0.6	7.0	40.0
Jan 5	0				-4	1		25	21					0	131.3	0.6	7.0	40.0
Jan 6	0				-3	0		46	35					0	147.5	0.5	7.0	40.0
Jan 7	0				-1	0		19	12					0	169.9	0.5	5.0	40.0
Jan 8	1				-1	0		16	12					0	130.3	0.5	5.5	40.0
Jan 9	0				1	0		9	5					0	140.8	0.6	6.0	40.0
Jan 10	0				2	0		27	20					0	118.6	0.5	7.0	40.0
Jan 11	0				-2	0		18	7					0	120.6	0.5	7.0	40.0
Jan 12	0				-1	0		6	6					0	121.0	0.5	7.0	40.0
Jan 13	0				-1	0		20	18					0	123.0	0.5	6.0	40.0
Jan 14	0				2	0		38	27					0	135.2	0.5	7.0	40.0
Jan 15	0				0	0		18	16					0	114.7	0.6	7.0	40.0
Jan 16	0				1	0		55	38					0	117.2	0.5	7.0	41.0
Jan 17	0				1	0		77	57					0	126.4	0.5	6.0	41.0
Jan 18	0				0	0		28	21					0	115.1	0.5	5.0	40.0
Jan 19	0				0	0		31	26					0	114.8	0.5	5.0	41.0
Jan 20	0				0	0		12	9					0	121.1	0.6	5.0	41.0
Jan 21	0				0	0		16	11					1	115.2	0.6	7.0	40.0
Jan 22	0				0	0		16	9					0	114.2	0.6	7.0	41.0
Jan 23	0				0	0		20	17					1	116.7	0.6	7.0	41.0
Jan 24	0				0	0		11	4					0	123.5	0.6	6.0	41.0
Jan 25	0				0	0		8	7					0	133.7	0.6	6.5	41.0
Jan 26	0				-1	0		8	9					0	126.1	0.6	7.0	41.0
Jan 27	0				-1	0		13	10					0	118.0	0.6	7.0	41.0
Jan 28	0				0	0		25	16					0	123.8	1.3	6.0	41.0
Jan 29	0				-1	0		16	13					0	120.3	0.6	7.0	41.0
Jan 30	0				-1	0		12	7					0	116.5	1.1	7.0	41.0
Jan 31	0				0	0		12	6					0	114.7	0.6	7.0	41.0
TOTAL	3				-13	2		803	586					2				
AVG					0			26	19					0	123.5	0.6	6.4	40.4

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 - FISH COUNTS

FEBRUARY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	0				1			31	8					0	119.0	0.6	7.0	42.0
Feb 2	0				0			26	4					0	117.3	0.6	7.0	42.0
Feb 3	0				0			22	8					0	117.9	0.7	7.0	42.0
Feb 4	0				0			31	9					0	120.5	0.6	7.0	42.0
Feb 5	0				-1			27	4					0	119.8	0.6	7.0	42.0
Feb 6	0				0			30	8					0	120.7	0.6	6.0	42.0
Feb 7	0				0			27	7					1	121.3	0.6	7.0	42.0
Feb 8	0				0			28	10					0	124.2	0.6	6.8	42.0
Feb 9	0				0			9	5					0	125.1	0.6	6.0	42.0
Feb 10	0				0			6	3					0	125.0	0.6	6.0	42.0
Feb 11	0				0			15	3					0	123.7	0.6	6.0	42.0
Feb 12	0				0			17	10					0	118.7	0.6	6.0	42.0
Feb 13	0				0			20	4					0	121.1	0.6	6.0	42.0
Feb 14	0				0			19	10					0	119.0	0.6	6.0	42.0
Feb 15	0				0			13	4					0	120.5	0.7	7.0	42.0
Feb 16	0				0			25	6					0	119.7	0.7	6.0	42.0
Feb 17	0				0			28	4					0	121.5	0.6	7.0	43.0
Feb 18	0				0			5	2					0	125.4	0.7	6.0	43.0
Feb 19	0				0			10	4					0	125.1	0.7	7.0	43.0
Feb 20	0				0			7	4					0	125.3	0.7	7.0	43.0
Feb 21	0				0			5	2					0	125.4	0.7	6.0	43.0
Feb 22	0				0			10	6					0	127.3	0.6	6.8	42.0
Feb 23	0				0			6	0					0	127.6	0.3	6.9	42.0
Feb 24	0				0			11	6					0	120.6	0.9	6.8	42.0
Feb 25	0				0			27	8					0	118.5	0.6	7.0	43.0
Feb 26	0				0			60	13					0	117.9	0.8	4.0	43.0
Feb 27	1				0			92	24					0	110.5	1.3	7.0	43.0
Feb 28	1				0			78	19					0	110.2	1.3	7.0	43.0
TOTAL	2				0			685	195					1				
AVG	0				0			24	7						121.0	0.7	6.5	42.3

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 8

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS

MARCH 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	3			0				56	18					0	113.3	1.3	7.0	43.0
Mar 2	0			0				21	7					0	111.0	1.4	7.0	44.0
Mar 3	0			0				34	9					0	111.8	1.5	7.0	43.0
Mar 4	0			0				32	13					0	113.6	1.4	6.0	44.0
Mar 5	0			0				43	18					0	116.8	1.3	7.0	44.0
Mar 6	1			0				17	2					0	120.6	1.4	6.0	44.0
Mar 7	0			0				38	6					0	120.7	1.4	6.0	44.0
Mar 8	1			0				63	13					0	121.2	1.5	6.2	44.0
Mar 9	1			0				55	16					0	126.2	1.4	6.1	44.0
Mar 10	2			0				83	23					0	124.2	1.4	7.0	44.0
Mar 11	4			0				88	27					0	122.7	1.5	6.0	44.0
Mar 12	6			0				91	29					0	116.3	1.4	7.0	44.0
Mar 13	7			0				98	25					0	115.3	1.3	7.0	44.0
Mar 14	9			0				111	39					0	120.0	1.4	6.0	44.0
Mar 15	7			2				142	30					0	120.4	0.0	6.0	44.0
Mar 16	11			0				87	31					0	117.3	0.0	5.0	45.0
Mar 17	6			0				107	42					0	112.7	0.0	6.0	45.0
Mar 18	14			0				72	18					0	116.2	0.0	6.0	45.0
Mar 19	25			3				135	37					0	115.2	0.0	6.0	45.0
Mar 20	11			0				49	24					0	115.6	0.0	5.5	45.0
Mar 21	9			0				54	17					0	110.9	0.0	5.0	45.0
Mar 22	22			1				100	21					0	90.5	0.0	6.0	45.0
Mar 23	16			1				104	27					0	102.1	0.0	5.5	45.0
Mar 24	24			1				96	24					0	103.7	0.6	5.5	46.0
Mar 25	35			2				129	24					0	107.0	0.1	5.0	46.0
Mar 26	32			0				126	46					0	93.9	0.0	5.0	47.0
Mar 27	23			0				106	40					0	115.7	0.0	4.0	47.0
Mar 28	26			1				75	26					0	112.1	0.0	5.0	47.0
Mar 29	45			2				107	44					0	123.5	0.2	6.0	47.0
Mar 30	74			1				99	22					0	143.9	0.3	4.5	46.0
Mar 31	54			0				111	30					0	144.8	0.0	6.0	47.0
TOTAL	468			14				2,529	748					0				
AVG	15			0				82	24					0	116.1	0.7	5.9	44.9

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

BONNEVILLE PROJECT - FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	166			0			0	100	31					0	125.3	1.4	5.0	47.0
Apr 2	227			1			0	58	24					0	112.8	0.2	5.0	47.0
Apr 3	159			1			0	48	18					0	107.6	1.5	5.5	47.0
Apr 4	168			0			0	58	19					0	114.8	1.6	6.0	46.0
Apr 5	88			0			0	58	17					0	120.1	1.5	5.0	46.0
Apr 6	229			1			0	88	31					0	106.4	1.6	4.8	46.0
Apr 7	338			1			0	68	27					0	112.8	1.6	5.5	46.0
Apr 8	687			2			0	113	29					0	98.7	1.5	5.0	47.0
Apr 9	1,068			1			0	91	27					0	95.9	1.6	5.0	47.0
Apr 10	3,545			7			0	135	43					0	116.6	72.3	5.0	47.0
Apr 11	1,136			1			0	105	40					0	123.2	80.2	4.0	47.0
Apr 12	1,470			2			0	88	30					0	110.2	67.3	5.0	48.0
Apr 13	1,839			4			0	43	16					0	109.9	67.0	5.0	48.0
Apr 14	3,794			12			0	69	24					0	111.8	69.0	6.0	48.0
Apr 15	7,719			30			0	130	51					0	114.7	72.0	6.0	48.0
Apr 16	6,528			38			0	122	51					0	115.0	72.2	5.5	49.0
Apr 17	7,833			34			1	138	28					0	115.0	72.2	5.0	49.0
Apr 18	2,492			18			0	110	49					0	116.2	73.3	5.0	50.0
Apr 19	7,762			52			0	97	10					0	123.6	74.2	4.7	50.0
Apr 20	9,014			40			0	102	28					0	141.0	74.3	5.0	50.0
Apr 21	11,697			44			0	81	21					0	161.9	81.0	5.0	51.0
Apr 22	7,407			34			0	70	14					0	166.6	95.6	4.5	50.0
Apr 23	6,619			39			0	58	19					1	205.4	99.6	4.0	50.0
Apr 24	5,773			46			0	67	9					0	187.2	99.5	4.0	51.0
Apr 25	7,284			69			0	61	34					0	195.6	99.2	5.0	51.0
Apr 26	6,469			56			0	84	19					-1	178.4	99.3	4.0	51.0
Apr 27	9,073			82			0	66	13					1	187.2	99.3	3.0	52.0
Apr 28	8,122			82			0	85	29					0	170.5	99.4	3.0	52.0
Apr 29	8,788			107			0	90	24					0	173.3	99.5	4.0	53.0
Apr 30	5,996			153			0	84	21					0	174.5	99.3	4.0	53.0
TOTAL	133,490			957			1	2,567	796					1				
AVG	4,450			32			0	86	27					0	136.4	59.3	4.8	48.9

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	STURGEON
SPRING	133,924	971	1	4,266	1,299	4

TABLE 10

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
May 1	7,764			175			0	78	24			0	0	0	172.4	99.5	4.0	52.0
May 2	7,651			229			0	76	15			0	0	0	181.0	99.7	4.0	52.0
May 3	9,184			278			0	81	17			0	0	0	185.0	99.5	4.0	52.0
May 4	4,808			260			0	102	23			0	0	0	199.1	99.5	4.5	52.0
May 5	4,289			226			0	121	26			0	0	0	191.9	99.6	4.0	53.0
May 6	6,732			426			1	133	28			0	0	0	170.3	99.1	4.0	52.0
May 7	7,549			566			0	119	32			1	0	0	198.0	94.2	4.0	52.0
May 8	5,655			522			0	137	35			14	0	0	170.6	89.1	5.0	53.0
May 9	7,306			797			0	116	26			4	0	0	182.5	82.8	4.0	53.0
May 10	6,614			878			0	148	25			18	0	0	183.9	77.3	5.0	53.0
May 11	2,807			509			0	129	30			30	0	0	159.8	74.4	4.0	54.0
May 12	3,681			792			0	173	32			58	0	0	195.5	81.3	4.0	54.0
May 13	2,482			588			0	131	28			56	0	1	209.1	89.5	4.4	54.0
May 14	2,985			647			1	139	21			132	0	0	199.5	89.4	5.0	55.0
May 15	4,998			930			0	154	32			474	1	0	173.2	87.0	5.0	55.0
May 16	2,814			574			0	106	25			775	0	0	184.9	84.4	5.0	55.0
May 17	2,219			504			1	96	19			2,303	0	0	210.9	80.6	5.5	56.0
May 18	1,256			226			0	92	24			2,112	0	0	214.7	74.6	4.0	56.0
May 19	1,219			231			0	117	25			904	1	0	245.6	80.0	2.5	56.0
May 20	709			170			1	72	15			1,402	4	0	219.8	90.8	5.0	56.0
May 21	761			169			0	91	15			1,506	0	0	270.8	99.2	4.0	56.0
May 22	728			145			0	66	19			2,496	0	0	244.7	99.5	5.0	56.0
May 23	947			137			2	59	18			2,065	1	0	219.2	99.4	3.5	56.0
May 24	1,564			230			2	118	15			3,467	-1	0	239.5	99.5	4.4	56.0
May 25	1,232			170			0	119	24			2,166	0	0	235.4	99.4	3.5	56.0
May 26	1,138			134			1	63	18			4,248	0	0	202.1	99.3	5.5	56.0
May 27	1,829			192			8	91	24			3,958	0	0	217.3	99.4	6.0	56.0
May 28	1,563			152			5	103	19			3,119	1	0	189.0	99.6	5.5	57.0
May 29	2,282			187			19	134	43			1,581	2	0	171.9	99.6	6.0	57.0
May 30	2,625			290			71	74	18			5,280	0	0	218.6	99.6	6.0	56.0
May 31	3,069			307			57	150	38			6,869	2	0	212.5	99.6	5.5	56.0
TOTAL	110,460			11,641			169	3,388	753			45,038	11	1				
AVG	3,563			376			5	109	24			1,453	0	0	202.2	92.5	4.6	54.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON
SPRING	244,384	12,612	170	7,654	2,052	45,038	11	5

TABLE 11

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS — JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1		3,275		251			137	160	48			5,836	0	0	213.3	99.6	5.0	57.0
Jun 2		3,279		346			133	178	50			28,414	0	0	227.1	96.4	4.5	57.0
Jun 3		3,804		381			168	196	50			14,712	8	0	281.7	97.7	4.5	57.0
Jun 4		2,729		252			230	182	41			16,124	16	-1	317.8	95.9	3.0	57.0
Jun 5		1,866		219			291	177	57			26,553	24	0	331.0	105.6	4.5	57.0
Jun 6		1,935		205			292	211	65			71,423	50	0	343.1	124.9	3.5	58.0
Jun 7		2,065		197			358	186	53			81,656	35	0	336.2	122.0	2.5	58.0
Jun 8		1,725		166			367	207	51			11,311	57	0	363.7	153.1	3.0	59.0
Jun 9		1,438		187			499	190	58			60,854	27	0	375.1	169.2	2.0	59.0
Jun 10		1,883		217			563	252	79			35,019	42	0	380.0	178.0	2.5	59.0
Jun 11		1,432		212			1,070	273	78			39,325	18	1	391.7	191.2	3.0	59.0
Jun 12		1,373		233			1,627	300	86			77,810	43	0	397.7	195.1	3.1	59.0
Jun 13		1,960		286			3,041	403	111			88,762	64	0	343.8	145.1	3.0	61.0
Jun 14		2,188		237			4,383	468	135			48,128	75	0	301.3	107.5	3.0	61.0
Jun 15		2,014		257			4,640	509	162			19,192	63	0	315.3	112.3	2.8	60.0
Jun 16		1,890		267			4,629	449	162			14,064	56	0	346.6	151.7	2.5	59.0
Jun 17		2,519		329			6,987	639	163			10,788	35	0	354.2	173.0	2.0	59.0
Jun 18		2,868		461			12,523	720	185			18,636	66	0	348.3	166.8	2.0	59.0
Jun 19		3,211		492			14,938	901	301			38,872	60	0	317.0	139.6	2.0	60.0
Jun 20		3,445		577			25,011	1,037	343			27,173	50	0	281.4	99.5	3.0	60.0
Jun 21		3,464		554			26,873	1,127	377			13,775	48	0	303.2	108.7	2.5	60.0
Jun 22		3,264		523			25,128	1,155	458			24,351	58	0	345.5	151.1	2.0	60.0
Jun 23		2,453		496			30,374	1,155	513			43,985	48	0	341.8	163.9	2.5	60.0
Jun 24		2,535		530			30,690	1,403	548			32,714	59	0	335.0	154.9	3.2	61.0
Jun 25		2,370		491			25,048	1,392	580			25,826	66	0	324.4	145.7	3.0	61.0
Jun 26		2,268		336			19,054	1,509	753			14,978	61	0	316.4	136.5	3.0	62.0
Jun 27		2,660		442			19,601	2,171	1,026			16,762	49	0	324.5	142.8	5.0	62.0
Jun 28		2,371		358			15,958	1,883	1,003			15,642	42	0	299.6	131.8	3.5	62.0
Jun 29		2,214		402			12,093	1,955	1,097			12,556	50	0	308.2	134.0	3.5	63.0
Jun 30		1,824		351			11,072	1,926	1,094			8,091	15	0	321.3	140.4	4.0	63.0
TOTAL		72,322		10,255			297,778	23,314	9,727			943,332	1,285	0				
AVG		2,411		342			9,926	777	324			31,444	43	0	326.2	137.8	3.1	59.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	244,384	12,612
SUMMER	72,322	10,255
TOTAL	316,706	22,867

SOCKEYE	STEELHEAD	unclipped STEELHEAD
297,948	30,968	11,779

SHAD	LAMPREY	STURGEON
988,370	1,296	5

TABLE 12

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS

JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jul 1		2,146		387	0		13,782	2,489	1,361		0	9,764	40	0	275.0	107.5	3.5	63.0
Jul 2		2,011		381	0		10,620	3,153	1,851		0	7,772	52	0	250.6	90.2	4.0	63.0
Jul 3		1,038		258	0		7,230	2,265	1,320		0	6,021	81	0	244.5	99.8	4.0	63.0
Jul 4		1,320		277	0		7,993	2,719	1,589		0	4,728	48	0	202.3	94.6	4.0	63.0
Jul 5		1,507		335	0		8,513	3,262	1,881		0	2,634	134	0	224.4	89.4	4.5	63.0
Jul 6		1,409		299	0		6,958	3,547	2,059		0	4,906	41	0	199.2	94.2	5.0	63.0
Jul 7		1,185		295	0		4,910	3,645	2,125		0	2,658	114	0	210.6	99.6	4.0	63.0
Jul 8		1,098		254	0		6,065	4,298	2,397		0	1,520	123	0	200.6	94.7	6.5	64.0
Jul 9		1,558		330	0		5,983	5,369	2,964		0	1,722	83	0	225.5	89.8	5.5	65.0
Jul 10		860		306	0		3,660	5,342	2,813		0	1,056	158	0	193.2	100.3	5.0	66.0
Jul 11		1,146		248	0		3,471	7,182	4,053		0	728	110	0	213.6	90.5	4.5	66.0
Jul 12		622		166	0		1,509	7,130	4,030		0	1,046	151	1	171.4	100.4	4.5	66.0
Jul 13		687		149	0		1,187	7,298	3,752		0	542	59	0	203.6	90.6	4.6	66.0
Jul 14		678		152	0		1,193	7,238	3,662		0	779	50	0	179.5	99.9	7.0	65.0
Jul 15		605		153	0		1,322	5,196	2,544		1	814	86	0	180.0	89.7	4.1	66.0
Jul 16		530		86	0		997	4,030	1,985		0	970	192	0	194.0	99.7	4.5	67.0
Jul 17		753		117	0		881	5,153	2,471		0	665	77	0	174.8	89.9	4.0	67.0
Jul 18		610		120	0		535	5,367	2,580		0	532	107	0	156.0	94.7	5.0	67.0
Jul 19		539		107	0		313	5,884	2,819		0	522	103	0	179.4	99.9	5.5	67.0
Jul 20		433		83	0		258	6,762	3,207		0	339	64	0	164.4	94.9	5.0	67.0
Jul 21		338		80	0		203	4,672	2,243		0	325	65	0	153.3	82.9	6.0	67.0
Jul 22		434		94	0		190	5,587	2,549		0	730	108	0	140.3	88.5	4.5	67.0
Jul 23		376		77	0		112	5,094	2,238		0	227	175	3	174.8	88.3	5.0	68.0
Jul 24		423		66	0		118	4,929	2,235		0	417	97	0	168.6	88.2	5.2	69.0
Jul 25		391		85	0		121	5,275	2,316		0	305	75	-1	149.8	88.0	6.8	70.0
Jul 26		459		86	0		84	6,055	2,559		0	364	102	1	136.3	86.1	6.0	70.0
Jul 27		582		105	0		54	6,483	2,637		0	279	82	0	130.2	80.9	5.5	70.0
Jul 28		475		72	0		63	7,242	2,895		0	302	81	0	165.3	79.9	6.0	71.0
Jul 29		392		55	0		36	5,188	2,090		0	110	59	0	164.9	82.6	5.0	70.0
Jul 30		334		55	1		23	4,863	1,866		0	127	33	0	143.8	88.6	5.5	70.0
Jul 31		343		70	0		31	4,670	1,801		0	145	43	1	135.2	88.4	4.5	70.0
TOTAL		25,282		5,348	1		88,415	157,387	76,892		1	53,049	2,793	5				
AVG		816		173	0		2,852	5,077	2,480		0	1,711	90	0	184.0	92.0	5.0	66.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	244,384	12,612
SUMMER	97,604	15,603
TOTAL	341,988	28,215

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	CHUM	SHAD	LAMPREY	STURGEON
1	0	386,363	188,355	88,671	1	1,041,419	4,089	10

TABLE 13

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS — AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Aug 1			372	61	0	0	20	5,324	1,963	0		72	36	0	129.1	84.7	6.1	70.0
Aug 2			318	39	0	0	24	5,545	2,161	0		115	85	0	117.5	74.7	5.0	70.0
Aug 3			337	66	0	0	24	5,741	2,124	0		129	53	0	120.9	77.0	5.0	70.0
Aug 4			438	62	4	0	14	6,190	2,102	0		71	66	0	157.2	82.3	7.0	70.0
Aug 5			434	61	9	1	6	5,790	2,035	0		102	112	0	162.1	82.0	5.0	70.0
Aug 6			438	67	7	0	12	7,017	2,318	0		71	116	0	130.3	82.5	5.0	71.0
Aug 7			355	69	7	1	8	8,510	2,508	0		60	119	0	127.0	82.7	4.8	71.0
Aug 8			461	90	9	3	7	9,338	2,690	0		69	72	0	128.9	82.2	5.0	71.0
Aug 9			357	62	5	2	8	7,678	2,172	0		21	75	0	126.9	82.2	6.0	71.0
Aug 10			405	47	7	2	9	5,796	1,510	0		9	76	1	126.7	82.0	4.3	71.0
Aug 11			382	56	14	1	2	4,699	1,316	0		30	66	0	136.0	84.5	7.0	70.0
Aug 12			590	78	21	1	3	4,156	1,192	0		21	64	0	130.9	86.3	4.3	70.0
Aug 13			674	98	41	6	2	4,173	1,317	0		39	45	0	125.4	82.4	5.0	71.0
Aug 14			1,177	166	85	7	1	4,856	1,582	0		42	78	0	132.0	87.3	5.0	71.0
Aug 15			1,273	228	71	14	2	4,662	1,466	0		14	35	1	132.9	88.0	4.5	71.0
Aug 16			1,408	163	61	8	1	4,956	1,565	0		7	52	0	132.5	88.0	7.0	72.0
Aug 17			1,220	159	42	6	0	4,024	1,186	0		17	77	0	128.5	83.6	7.0	72.0
Aug 18			1,005	153	19	2	1	3,559	968	1		6	95	0	131.3	83.7	6.0	72.0
Aug 19			1,114	157	27	1	1	2,425	733	0		11	47	-1	135.5	79.9	5.0	73.0
Aug 20			1,127	183	19	4	2	1,792	570	0		16	51	0	117.9	74.8	6.0	72.0
Aug 21			988	170	20	3	0	1,148	380	0		8	16	0	118.3	75.1	5.2	72.0
Aug 22			3,687	238	43	5	0	1,449	470	0		5	33	0	117.9	74.7	7.0	71.0
Aug 23			4,513	514	109	13	2	1,472	531	0		8	33	0	118.3	74.7	7.0	70.0
Aug 24			4,019	540	211	8	1	2,468	822	0		15	7	0	116.3	72.9	7.0	69.0
Aug 25			5,135	748	423	19	2	2,979	1,015	0		10	20	0	113.4	70.1	7.0	69.0
Aug 26			6,601	949	829	62	1	4,813	1,588	1		14	20	1	112.9	69.9	7.0	70.0
Aug 27			9,126	1,110	959	63	0	5,207	1,558	0		25	20	0	112.6	69.5	7.0	70.0
Aug 28			8,130	995	786	70	0	4,293	1,215	0		25	14	0	111.0	68.1	7.0	70.0
Aug 29			7,565	785	848	84	0	3,250	927	0		10	16	0	108.0	64.9	7.0	70.0
Aug 30			13,578	1,013	950	85	2	3,050	909	0		3	26	0	103.9	60.9	7.0	69.0
Aug 31			14,742	1,580	1,173	95	1	2,994	906	0		7	21	0	96.6	55.3	6.0	69.0
TOTAL			91,969	10,707	6,799	566	156	139,354	43,799	2		1,052	1,646	2				
AVG			2,967	345	219	18	5	4,495	1,413			34	53	0	124.5	77.6	5.9	70.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	244,384	12,612
SUMMER	97,604	15,603
FALL	91,969	10,707
TOTAL	433,957	38,922

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON
6,800	566	386,519	327,709	132,470	2	1	1,042,471	5,735	12

TABLE 14

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS

SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Sep 1			14,242	1,575	1,560	86	0	3,281	993	1			33	-1	87.2	2.1	7.0	69.0
Sep 2			15,268	1,558	1,704	111	1	3,023	873	0			18	1	108.5	1.7	7.0	68.0
Sep 3			15,987	1,428	1,993	82	0	2,888	866	0			24	3	91.2	1.6	7.0	68.0
Sep 4			18,834	1,582	2,571	86	0	3,077	919	0			31	1	80.9	1.5	7.0	68.0
Sep 5			21,612	1,835	2,800	99	0	3,860	1,135	0			40	0	76.8	1.5	6.0	68.0
Sep 6			19,428	2,113	2,201	122	0	3,545	1,025	0			14	1	73.9	1.7	7.0	68.0
Sep 7			16,530	1,840	2,336	217	0	3,354	949	0			41	0	86.5	1.5	7.0	67.0
Sep 8			18,712	2,292	2,749	193	1	3,623	963	0			44	1	98.4	1.5	7.0	67.0
Sep 9			15,534	1,624	2,751	203	1	3,841	933	0			35	3	94.4	1.4	7.0	67.0
Sep 10			12,135	1,422	1,873	114	1	3,431	851	0			10	-1	79.8	1.5	7.0	67.0
Sep 11			11,507	1,278	2,372	165	0	4,062	1,014	0			13	-1	72.9	1.5	7.0	66.0
Sep 12			11,117	1,225	1,493	138	0	3,315	846	0			20	0	72.7	1.5	7.0	66.0
Sep 13			10,699	1,631	1,118	118	0	3,175	758	0			2	5	85.1	1.5	7.0	66.0
Sep 14			11,428	1,322	1,158	97	1	3,084	795	0			-2	3	93.1	1.5	7.0	67.0
Sep 15			13,053	1,774	1,095	100	0	2,877	739	0			14	-1	100.9	1.5	7.0	67.0
Sep 16			10,620	1,471	817	73	0	2,147	551	0			15	0	99.3	1.5	7.0	67.0
Sep 17			9,158	1,438	837	140	0	2,347	579	0			9	-1	104.6	1.4	7.0	67.0
Sep 18			8,332	1,268	936	150	0	2,333	599	0			19	3	82.1	1.4	7.0	67.0
Sep 19			7,809	1,043	833	134	0	1,904	447	0			12	3	77.8	1.4	7.0	67.0
Sep 20			6,795	1,132	778	106	0	1,533	405	0			15	9	77.2	1.4	7.0	67.0
Sep 21			8,388	1,579	782	143	0	1,427	344	0			19	1	93.7	1.3	7.0	67.0
Sep 22			13,186	2,190	940	186	0	1,579	381	0			1	3	95.8	1.5	7.0	67.0
Sep 23			11,920	2,165	1,022	161	0	1,649	396	0			4	0	86.6	1.4	7.0	66.0
Sep 24			14,749	3,128	1,685	250	0	1,689	386	0			5	2	87.3	1.4	7.0	66.0
Sep 25			6,317	1,835	1,241	197	0	1,468	326	1			2	0	90.0	1.3	7.0	66.0
Sep 26			6,978	1,672	1,735	196	0	1,766	432	0			2	1	75.9	1.4	7.0	66.0
Sep 27			5,710	1,597	1,290	203	0	1,594	365	0			1	0	102.0	1.4	7.0	66.0
Sep 28			4,916	1,401	2,171	302	0	1,409	314	1			7	3	103.7	1.4	7.0	66.0
Sep 29			3,546	708	2,433	173	0	1,304	328	0			10	2	103.9	1.4	7.0	67.0
Sep 30			3,002	812	2,134	194	0	924	219	0			2	2	110.7	1.4	7.0	67.0
TOTAL			347,512	47,938	49,408	4,539	5	75,509	19,731	3			460	42				
AVG			11,584	1,598	1,647	151	0	2,517	658				15	1	89.8	1.5	7.0	66.9

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	244,384	12,612
SUMMER	97,604	15,603
FALL	439,481	58,645
TOTAL	781,469	86,860

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON
56,208	5,105	386,524	403,218	152,201	5	1	1,042,471	6,195	54

TABLE 15

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Oct 1			2,779	545	2,130	113		765	176	0	0		11	0	112.5	1.4	7.0	68.0
Oct 2			2,835	663	2,556	150		631	156	0	0		8	0	99.3	1.4	7.0	67.0
Oct 3			2,310	445	2,198	114		782	209	0	0		0	0	86.3	1.4	6.0	67.0
Oct 4			3,799	783	3,568	111		714	173	0	0		2	0	80.7	1.4	7.0	67.0
Oct 5			1,669	383	2,027	81		464	140	0	0		7	2	112.6	1.3	7.0	66.0
Oct 6			1,248	282	2,711	75		442	112	0	0		-1	-1	120.4	1.2	7.0	65.0
Oct 7			1,255	279	2,092	77		421	97	0	0		1	1	107.4	1.3	7.0	65.0
Oct 8			1,569	295	2,995	132		526	117	0	0		2	7	108.9	1.3	7.0	65.0
Oct 9			1,020	217	1,893	49		307	82	1	1		2	2	120.5	1.3	7.0	64.0
Oct 10			1,216	256	4,230	102		287	81	0	0		1	1	108.8	1.3	7.0	64.0
Oct 11			974	220	5,929	127		420	126	0	0		1	3	100.9	1.3	7.0	65.0
Oct 12			721	150	3,961	109		358	109	0	0		0	0	116.9	1.3	7.0	64.0
Oct 13			717	132	3,593	70		378	126	0	0		1	0	122.0	1.5	7.0	64.0
Oct 14			492	86	2,212	50		274	76	0	1		1	0	126.4	1.3	6.5	63.0
Oct 15			496	111	2,578	46		259	82	0	0		0	4	113.4	1.3	6.5	63.0
Oct 16			414	93	1,590	33		176	55	0	0		1	-1	114.4	1.3	6.1	63.0
Oct 17			480	99	1,698	45		232	55	0	1		0	2	101.7	1.3	7.0	62.0
Oct 18			394	91	1,142	28		184	53	0	0		2	0	112.5	1.2	7.0	62.0
Oct 19			372	70	1,328	37		190	44	0	1		0	-2	108.2	1.3	7.0	62.0
Oct 20			291	43	1,234	22		127	37	0	1		2	2	112.4	1.2	7.0	61.0
Oct 21			256	52	1,111	24		112	31	0	1		1	0	92.4	1.3	7.0	61.0
Oct 22			223	44	987	29		119	29	0	4		0	0	87.1	1.2	7.0	61.0
Oct 23			178	32	644	21		74	31	0	0		1	0	85.0	1.3	7.0	61.0
Oct 24			187	34	758	14		65	18	0	5		0	1	80.9	1.3	7.0	61.0
Oct 25			296	32	670	17		72	32	0	3		0	0	83.9	1.3	4.0	61.0
Oct 26			193	36	714	20		82	32	0	1		0	0	107.8	1.3	7.0	60.0
Oct 27			290	37	1,083	24		100	40	0	3		0	0	99.3	1.2	6.0	59.0
Oct 28			201	22	1,175	13		102	41	0	6		0	0	101.9	1.2	7.0	60.0
Oct 29			134	19	918	15		81	33	0	0		0	-1	104.7	1.1	7.0	58.0
Oct 30			104	12	715	6		94	42	0	5		1	0	105.3	1.0	7.0	59.0
Oct 31			151	18	757	10		60	24	0	6		0	-2	101.1	1.2	6.2	58.0
TOTAL			27,264	5,581	61,197	1,764		8,898	2,459	1	39		44	18				
AVG			879	180	1974	57		287	79		1		1	1	104.4	1.3	6.8	62.8

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	244,384	12,612
SUMMER	97,604	15,603
FALL	466,745	64,226
TOTAL	808,733	92,441

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON
117,405	6,869	386,524	412,116	154,660	6	40	1,042,471	6,239	72

TABLE 16

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

BONNEVILLE PROJECT - FISH COUNTS — NOVEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Nov 1			107	20	340	10		59	19		2		1	0	120.0	7.4	6.5	58.0
Nov 2			86	22	295	5		60	15		3		0	2	121.5	1.1	6.8	58.0
Nov 3			71	14	384	10		59	25		7		-1	2	124.9	1.1	5.0	58.0
Nov 4			86	25	350	10		39	13		7		0	1	122.0	1.1	7.0	58.0
Nov 5			50	8	214	6		45	18		4		0	1	117.9	1.2	7.0	57.0
Nov 6			36	5	123	1		45	17		6		0	0	117.0	1.1	7.0	57.0
Nov 7			63	16	308	1		49	14		3		-1	3	113.0	1.0	6.0	57.0
Nov 8			33	4	143	0		25	8		3		0	1	115.5	1.1	6.0	56.0
Nov 9			24	4	95	1		27	10		6		0	0	119.4	1.1	7.0	55.0
Nov 10			58	7	119	1		60	23		5		0	0	117.9	1.4	7.0	55.0
Nov 11			47	14	175	2		34	10		7		0	0	120.4	1.1	7.0	55.0
Nov 12			37	9	99	2		43	14		3		0	1	123.3	1.1	7.0	54.0
Nov 13			26	7	50	0		28	10		1		0	1	126.5	1.1	7.0	54.0
Nov 14			30	6	68	0		32	15		5		-1	-1	125.4	1.1	7.0	53.0
Nov 15			25	7	55	1		39	10		4		0	0	124.1	1.1	6.5	54.0
Nov 16			24	3	49	1		31	14		4		-4	0	120.9	1.2	6.0	54.0
Nov 17			21	3	74	3		35	15		3		0	0	119.7	1.2	5.0	53.0
Nov 18			22	4	57	0		56	31		4		0	0	115.6	1.1	6.0	53.0
Nov 19			14	1	36	0		57	26		4		0	0	123.2	1.1	6.0	53.0
Nov 20			23	3	57	2		69	35		1		0	0	125.6	1.1	7.0	53.0
Nov 21			12	3	23	1		47	17		0		0	0	124.4	1.1	6.0	52.0
Nov 22			16	1	24	0		51	24		0		0	0	136.8	1.2	4.0	52.0
Nov 23			12	4	26	2		45	18		0		0	1	138.1	1.1	6.0	51.0
Nov 24			20	4	13	0		52	17		1		0	0	140.4	1.1	6.5	50.0
Nov 25			7	2	7	0		41	13		0		0	0	139.8	1.1	7.0	50.0
Nov 26			11	0	3	0		33	7		0		0	0	131.9	1.1	6.3	49.0
Nov 27			0	0	3	0		34	12		0		0	0	118.5	1.1	7.0	47.0
Nov 28			5	0	0	0		37	13		1		0	0	134.7	1.1	7.0	47.0
Nov 29			13	1	6	0		55	15		0		0	-1	138.6	1.1	7.0	48.0
Nov 30			8	0	0	0		31	15		0		0	-1	149.4	1.1	5.0	48.0
TOTAL			987	197	3,196	59		1,318	493		84		-6	10				
AVG			33	7	107	2		44	16		3		0	0	125.5	1.3	6.4	53.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	244,384	12,612
SUMMER	97,604	15,603
FALL	467,524	64,394
TOTAL	809,512	92,609

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON
120,223	6,919	386,524	412,760	154,881	6	124	1,042,471	6,237	82

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 - FISH COUNTS — DECEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1			6	0	11	0		39	15				0	-2	134.7	0.6	7.0	47.0
Dec 2			6	0	5	0		37	11				0	0	132.6	0.5	6.2	47.0
Dec 3			3	0	2	0		42	9				0	0	141.1	0.5	5.0	47.0
Dec 4			1	0	11	0		39	11				0	0	143.9	0.5	6.0	46.0
Dec 5			2	0	2	0		24	10				0	0	135.9	0.5	5.0	45.0
Dec 6			1	0	3	0		22	11				0	0	138.5	0.4	7.0	45.0
Dec 7			0	0	0	1		24	4				0	0	134.8	0.6	7.0	44.0
Dec 8			2	0	2	0		32	8				0	0	132.9	0.5	7.0	44.0
Dec 9			4	1	3	0		36	19				0	0	135.3	0.5	7.0	44.0
Dec 10			4	0	18	1		27	7				0	0	136.8	2.0	6.0	43.0
Dec 11			1	0	3	0		28	11				0	0	137.4	3.2	6.5	43.0
Dec 12			3	-2	11	0		30	21				0	-1	137.2	1.3	5.2	43.0
Dec 13			1	0	23	1		24	11				1	0	132.0	2.0	4.0	43.0
Dec 14			1	1	13	0		32	14				0	0	163.2	14.1	4.6	43.0
Dec 15			1	1	3	1		24	3				0	0	204.0	29.9	4.0	43.0
Dec 16			0	0	7	0		28	12				0	0	170.8	22.3	5.0	43.0
Dec 17			1	0	2	0		36	13				0	0	131.4	0.5	5.5	43.0
Dec 18			0	0	0	0		31	11				0	0	152.9	2.8	4.5	43.0
Dec 19			2	0	0	0		34	14				0	0	150.6	1.7	7.0	43.0
Dec 20			0	1	2	0		17	4				0	0	141.4	0.5	5.0	43.0
Dec 21			0	0	0	0		28	13				0	0	132.9	0.5	6.0	42.0
Dec 22			0	0	0	1		25	12				0	0	140.1	0.5	7.0	41.0
Dec 23			0	0	0	-1		27	6				0	0	136.5	0.5	6.9	41.0
Dec 24			0	0	1	0		6	4				0	0	136.2	0.5	6.5	41.0
Dec 25			1	0	-1	0		13	7				0	0	127.9	0.5	7.0	42.0
Dec 26			0	0	0	1		20	9				0	0	122.0	0.5	7.0	42.0
Dec 27			0	0	0	0		20	6				0	0	135.4	0.5	7.0	42.0
Dec 28			0	0	0	0		53	24				0	0	147.7	0.5	6.5	42.0
Dec 29			0	1	0	0		16	7				0	0	173.2	0.6	6.9	42.0
Dec 30			-1	0	0	0		16	9				0	0	176.8	0.5	7.0	42.0
Dec 31			0	0	0	0		21	13				0	0	193.4	0.6	7.0	41.0
TOTAL			39	3	121	5		851	329				1	-3				
AVG			1	0	4	0		27	11				0		145.5	2.9	6.1	43.2

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	244,384	12,612
SUMMER	97,604	15,603
FALL	467,524	64,394
TOTAL	809,512	92,609

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	CHUM	SHAD	LAMPREY	STURGEON
120,223	6,919	386,524	412,760	154,881	6	124	1,042,471	6,237	79

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 18a

YEARLY TOTALS OF SALMONIDS COUNTED OVER BONNEVILLE DAM

1938 - 2010

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 18a
(continued)

YEARLY TOTALS OF SALMONIDS COUNTED OVER BONNEVILLE DAM

1981 - 2010

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	244,320	163,124	13,154	22,794	26	5	443,423
1995	245,250	209,071	9,135	12,572	30	36	476,094
1996	299,962	212,475	31,093	19,077	22	1	562,630
1997	399,784	274,536	48,342	27,919	47	64	750,692
1998	290,292	197,501	13,613	49,488	21	13	550,928
1999	347,486	212,118	18,304	45,805	43	28	623,784
2000	501,012	282,665	97,541	99,660	17	0	980,895
2001	1,037,440	676,793	123,416	277,934	29	-4	2,115,608
2002	965,356	510,680	51,200	100,835	72	0	1,628,143
2003	996,660	365,821	39,291	133,874	411	637	1,536,694
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	526,538	339,301	37,066	110,054	165	6	1,013,130
2007	359,867	325,450	24,376	100,725	142	27	810,587
2008	587,428	357,820	213,607	146,059	75	60	1,305,049
2009	699,121	604,970	177,823	234,669	108	95	1,716,786
2010	902,439	416,603	386,524	127,644	124	4	1,833,338
Total	30,103,122	15,245,109	6,427,056	3,473,838	40,345	3,115	55,292,585
10-Year Average	758,146	422,647	124,957	144,044	135	85	1,450,012

*Jacks included

Note: Totals from 1994 - 2003 include nighttime video and 24-hour video as described in the footnotes of the monthly count tables

2010 - Changes to previous years (2004,2006,2007) reflect updates to fish counts made after publication.

TABLE 18b

YEARLY TOTALS OF SALMONIDS COUNTED OVER BONNEVILLE DAM -- DAYTIME COUNTS

1938 - 2010

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 18b
(continued)

YEARLY TOTALS OF SALMONIDS COUNTED OVER BONNEVILLE DAM -- DAYTIME COUNTS

1938 - 2010

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	924,679	480,309	49,610	94,901	72	0	1,549,571
2003	996,660	365,821	39,291	133,874	411	637	1,536,694
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	526,538	339,301	37,066	110,054	165	6	1,013,130
2007	359,867	325,450	24,376	100,725	142	27	810,587
2008	587,428	357,820	213,607	146,059	75	60	1,305,049
2009	699,121	604,970	177,823	234,669	108	95	1,716,786
2010	902,439	416,603	386,524	127,644	124	4	1,833,338
Total	29,951,266	15,114,312	6,409,007	3,451,915	40,345	3,115	54,969,960
10-Year Average	747,446	415,238	123,949	142,288	135	85	1,429,141

*Jacks included
Note: These totals are for daytime counts and do not include night counting or 24 hour video counts.
2003 AFPR totals have been modified to include the daytime video counts.
Changes in counts (2006, 2007) reflect updates to fish counts post publication.

TABLE 19

MONTHLY COUNT OF CHINOOK SALMON

BONNEVILLE DAM - 1938 - 2010

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	SPRING Jan 1- May 31	SUMMER Jun 1- Jul 31	FALL Aug 1- Dec 31
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	69,597	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)

MONTHLY COUNT OF CHINOOK SALMON

BONNEVILLE DAM - 1938-2010

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*	SPRING Jan 1- May 31	SUMMER Jun 1- Jul 31	FALL Aug 1- Dec 31
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	39,832	24,896	225,564
1999		2	251	19,016	28,831	14,830	16,121	66,546	186,880	14,624	378	7	347,486	48,100	30,951	268,435
2000		4	3,166	130,193	71,222	25,864	19,209	100,658	139,073	11,380	227	16	501,012	204,585	45,073	251,354
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	439,558	99,685	498,197
2002	74	207	4,160	156,379	128,894	91,120	47,111	152,200	358,941	20,509	5,506	255	965,356	289,714	138,231	537,411
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	94	526,538	99,366	101,874	325,298
2007	1	1	75	31,919	51,256	39,619	21,949	53,174	136,977	23,968	893	35	359,867	83,252	61,568	215,047
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
2009	-5	0	164	23,526	157,489	88,523	30,829	148,358	231,702	17,823	697	15	699,121	181,174	119,352	398,595
2010	3	2	482	134,447	122,101	82,577	30,630	102,676	395,450	32,845	1,184	42	902,439	257,035	113,207	532,197
TOTAL	122	403	101,060	4,238,347	3,320,118	2,469,402	1,717,349	3,568,396	13,886,193	753,602	46,510	1,430	30,102,932	7,660,050	4,186,751	18,256,131
10-Year Average			4,166	97,576	94,296	69,816	34,255	99,493	330,502	25,565	2,335		758,146	196,080	104,071	457,995

***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 - 2010 counts include 16 hour video counts between 0400-2000 PST January 1 through March 31
and November 1 through December 31.
2010 -Changes to previous years counts (2002,2006,2007) reflect updates to fish counts made after yearly publication.

TABLE 20

MONTHLY COUNT OF SOCKEYE SALMON

BONNEVILLE DAM 1938 - 2010

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	3			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 - 2010

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	13	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	0				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
2009					57	141,543	36,117	104	2				177,823
2010				1	169	297,778	88,415	156	5				386,524
TOTAL			76	542	8,595	3,093,010	3,277,220	44,744	2,694	137	37	1	6,427,056
10-Year Average					51	98,377	26,381	140	7				124,957

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.

2003-2010 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 - 2010

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		24	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 - 2010

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			7	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	5	49,488	3,630
1999		19				1	3	951	34,901	9,673	252	5	45,805	4,468
2000							3	13,348	55,550	29,698	949	112	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	183	100,835	6,817
2003							10	11,389	86,621	35,516	334	4	133,874	8,127
2004	1						0	11,171	78,512	29,544	622	1	119,851	4,809
2005							0	3,487	64,253	20,414	637	0	88,791	5,486
2006							0	12,771	58,048	35,014	4,192	28	110,053	7,943
2007	-2						6	8,888	55,968	32,607	3,200	58	100,725	12,531
2008	-1						2	8,335	84,639	51,771	1,309	4	146,059	68,486
2009	-4						7	37,438	104,294	89,979	2,936	19	234,669	9,776
2010	-11	0					1	7,365	53,947	62,961	3,255	126	127,644	6,933
TOTAL	19	31	6	1	0	179	5,533	316,798	2,375,180	713,644	61,835	611	3,473,837	676,446
10 Year Average							18	13,970	84,655	43,039	2,320		144,044	13,769

***Jacks included**

Notes:

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.

2003-10 counts include 16 hour video counts between 0400-2000 PST January 1 through March 31 and November 1 through December 31.

2010-Changes to previous years counts reflect updates to fish counts after yearly report publication.

TABLE 22

MONTHLY COUNT OF STEELHEAD
BONNEVILLE DAM 1938 -2010

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					6,622	2,382	19,455	29,231	46,618	2,264	339	92	107,003	49,306	57,697
1939	23	19	570	8,110	1,587	1,490	36,681	38,062	33,891	1,264	216	119	122,032	80,096	41,936
1940	5	96	1,688	4,125	998	4,489	61,188	46,071	64,377	1,786	292	59	185,174	106,724	78,450
1941	37	76	1,641	6,392	1,518	996	21,940	29,600	50,542	3,980	1,063	304	118,089	58,109	59,980
1942	4	37	256	3,642	4,159	1,588	19,905	41,973	77,076	2,412	566	182	151,800	65,219	86,581
1943	14	18	654	3,374	4,698	1,564	7,755	29,894	41,051	2,444	573	94	92,133	41,219	50,914
1944	50	157	1,019	6,142	2,224	1,169	21,868	24,508	35,907	6,129	1,119	226	100,518	51,585	48,933
1945	1,003	1,078	3,008	4,685	1,557	1,109	24,537	40,593	40,194	1,925	302	142	120,133	72,685	47,448
1946	64	551	3,040	9,839	5,482	3,265	20,600	58,466	38,399	2,070	262	769	142,807	93,422	49,385
1947	197	321	1,968	6,889	2,025	1,595	28,134	40,819	50,025	2,905	443	123	135,444	75,035	60,409
1948	154	119	1,631	4,473	1,170	1,895	33,191	53,621	40,609	1,742	381	76	139,062	87,453	51,609
1949	1		1,689	3,293	1,712	1,264	34,314	54,281	20,786	1,161	686	98	119,285	90,762	28,523
1950	13	8	1,156	4,537	1,667	691	25,142	53,904	24,226	1,932	811		114,087	80,191	33,896
1951			375	2,338	1,568	5,187	74,980	39,712	15,357	947	225		140,689	121,100	19,589
1952			278	1,248	1,751	8,202	118,110	79,735	48,293	2,735	638		260,990	190,012	70,978
1953			1,310	5,308	1,456	5,313	106,712	64,006	36,107	2,797	905		223,914	173,135	50,779
1954		6	679	5,511	1,571	6,115	59,443	65,234	34,941	2,209	551		176,260	126,085	50,175
1955			1,006	2,100	1,149	2,418	79,124	84,746	24,239	3,361	268		198,411	161,614	36,797
1956			1,409	2,718	1,582	3,122	48,306	47,148	23,343	2,846	635	7	131,116	99,692	31,424
1957			926	2,081	760	8,434	66,738	34,915	24,029	1,069	231		139,183	105,179	34,004
1958			495	651	1,457	5,645	53,734	22,827	44,478	1,859	291		131,437	79,533	51,904
1959			219	746	1,236	2,562	60,549	38,417	23,579	1,540	178		129,026	98,198	30,828
1960			412	904	1,090	4,314	44,026	33,571	28,058	1,090	211		113,676	77,141	36,535
1961			374	1,161	692	2,246	44,379	41,237	47,409	1,561	660		139,719	79,269	60,450
1962			381	1,957	1,491	3,737	49,789	40,177	64,084	1,798	611		164,025	86,990	77,035
1963			503	1,035	1,385	4,192	51,951	31,441	35,446	2,920	545		129,418	83,858	45,560
1964			490	1,609	769	1,940	50,640	26,892	32,406	1,954	552		117,252	76,135	41,117
1965			211	1,516	1,419	4,265	89,405	29,506	37,529	1,971	631		166,453	120,560	45,893
1966			658	2,682	2,389	13,051	57,975	25,779	37,733	2,657	737		143,661	97,545	46,116
1967			416	1,182	899	3,062	40,881	36,787	35,472	2,701	472		121,872	78,794	43,078
1968			340	861	1,315	3,664	29,773	41,006	27,865	1,645	505		106,974	68,423	38,551
1969			911	2,164	2,897	6,889	63,222	36,077	26,565	1,484	573		140,782	104,051	36,731
1970			244	1,267	1,331	4,208	30,866	46,307	27,073	1,909	305		113,510	78,106	35,404
1971			463	1,377	1,810	4,469	84,877	58,249	38,619	3,739	363		193,966	141,054	52,912
1972			492	2,562	2,137	3,444	59,933	48,223	65,523	3,432	140		185,886	107,227	78,659
1973			830	2,534	1,367	5,360	53,820	46,399	43,275	3,918	320		157,823	100,011	57,812
1974			1,292	4,127	5,547	6,349	57,212	44,266	14,654	3,080	527		137,054	84,402	52,652
1975			1,080	4,284	4,324	6,058	30,823	28,623	9,106	904	338		85,540	71,586	13,954
1976			1,285	3,459	3,677	9,130	38,907	44,204	21,084	1,953	478		124,177	92,370	31,807
1977			1,159	4,121	4,115	11,395	67,554	35,161	66,084	3,298	550		193,437	113,682	79,755
1978			1,750	3,327	4,587	10,883	25,284	25,637	30,461	2,168	334		104,431	64,188	40,243
1979			1,333	1,905	1,785	7,585	33,379	39,399	23,592	4,710	291		113,979	79,472	34,507
1980			1,139	3,378	1,409	7,790	28,448	51,073	32,277	3,233	507		129,254	85,010	44,244

TABLE 22

(Continued)

MONTHLY COUNT OF STEELHEAD
BONNEVILLE DAM 1938 - 2010

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	7,696	57,472	127,882	53,571	18,428	2,234	84	274,536	185,381	89,155
1998	161	239	984	883	1,655	7,236	36,437	60,403	76,293	12,136	489	585	197,501	89,413	108,088
1999	15	287	699	833	1,308	5,157	48,278	101,610	46,200	6,509	637	585	212,118	141,245	70,873
2000	340	420	1,495	1,235	2,006	13,864	80,259	106,918	68,407	7,306	510	175	282,935	189,821	93,114
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	455,422	221,371
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	294,743	215,937
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	1,395	339,301	180,418	158,883
2007	601	387	1,514	1,020	1,666	6,789	58,362	185,281	54,543	13,096	1,433	758	325,450	232,586	92,864
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
2009	167	43	677	1,547	2,395	9,942	119,486	353,478	97,236	17,535	1,620	844	604,970	426,264	178,706
2010	803	685	2,529	2,567	3,388	23,314	157,387	139,354	75,509	8,898	1,318	851	416,603	306,420	110,183
TOTAL	9,260	9,090	76,113	196,574	179,586	535,011	4,362,216	5,513,493	3,897,786	389,859	61,044	15,347	15,245,379	9,878,900	5,369,531
10-Year Average			1,458	1,705	2,314	14,016	107,168	174,096	101,757	15,371	2,661		422,647	272,142	150,505

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 - 2010 counts include 16 hour video counts between 0400-2000 PST January 1 through March 31
and November 1 through December 31.
2010-changes to previous counts (2006,2007) reflect fish count updates made after yearly publication.

TABLE 23

MONTHLY COUNT OF SHAD at BONNEVILLE DAM 1938 - 2010

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 - 2010

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
2009					313,849	1,028,718	30,571	600					1,373,738
2010					45,038	943,332	53,049	1,052					1,042,471
TOTAL			14	457	7,538,049	55,917,235	8,061,510	144,879	4,136	593	36		71,666,909
10 Year - Average					378,463	2,570,812	119,641	3,114					3,072,037

TABLE 24a

MONTHLY COUNT OF LAMPREY at BONNEVILLE DAM 1939[1] - 1969, 1997 – 2010

The counts in the following table represent an approximation of trends, only. Lamprey are difficult to count. They move back and forth in the count window, spend long periods of time resting and are more likely to pass at night than salmonids. 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. 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				0	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				0	444	3,942	6,276	3,159	680	59	2		14,562
2009				0	818	2,740	3,819	1,057	203	-14	2	-3	8,622
2010				0	11	1,285	2,793	1,646	460	44	-6	1	6,234
TOTAL			3	4,085	166,200	772,753	1,777,218	874,236	144,764	12,075	1,260		3,752,611
10-Year Average				1	1,069	15,355	17,548	5,933	2,128				42,156

[1]No data are available for 1938.

[2]Because of changes in the Washington shore counting station, lamprey counts from 1939-1949 cannot be compared with counts from 1950 on.

[3]Because of the heavy shad run, fish counters were not asked to count lamprey from June 1 through July 27.

TABLE 24b

NIGHT COUNT OF LAMPREY - BONNEVILLE DAM

2009

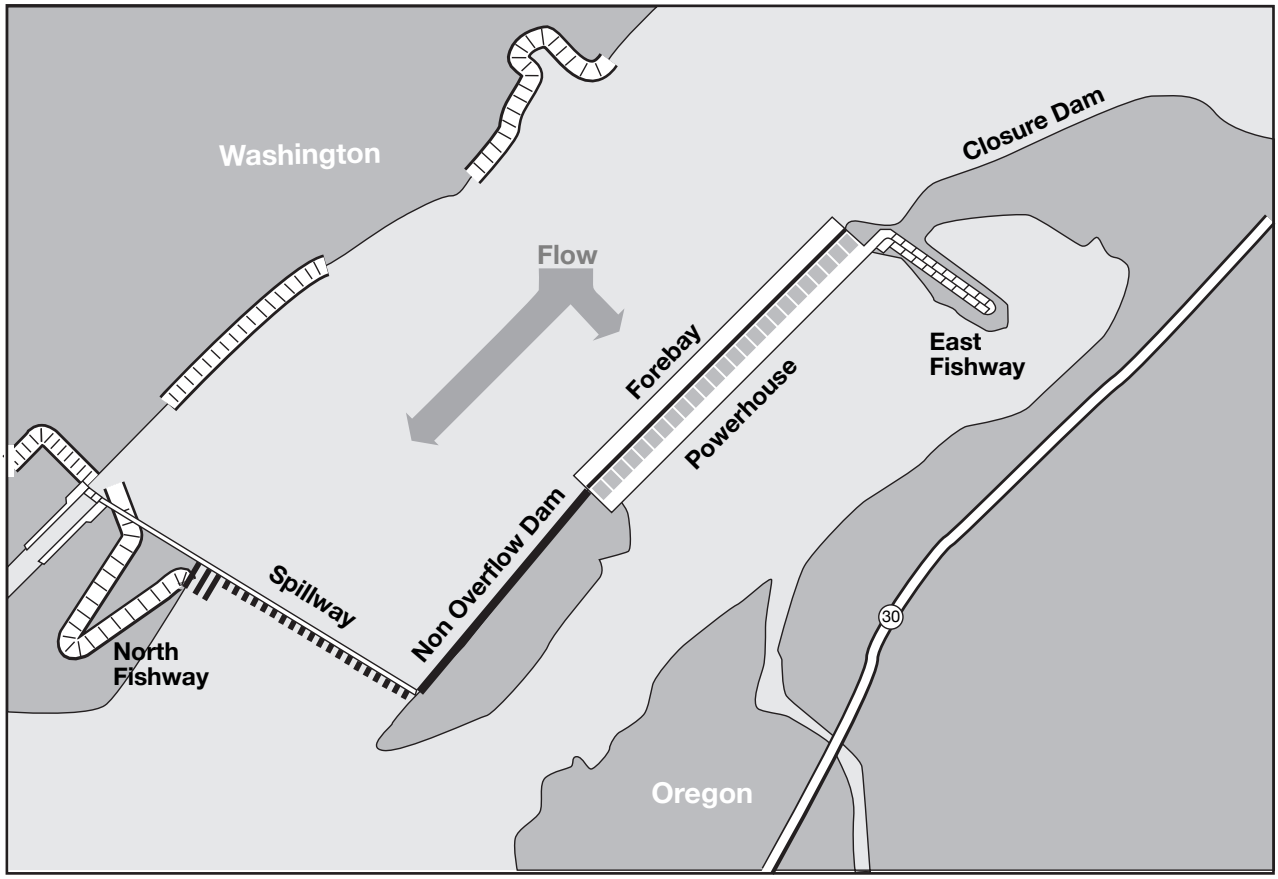
Day	JUN	JUL	AUG	SEP
1		151	-47	15
2		156	11	-26
3		250	6	-32
4		182	-33	-86
5		156	10	-40
6		33	17	-43
7		129	-7	-19
8		139	28	-23
9		200	13	-29
10		229	21	-33
11		179	-5	-13
12		79	19	-14
13		138	41	-25
14		252	46	-14
15	20	228	34	-3
16	-60	287	45	-6
17	126	371	49	-10
18	145	230	67	-23
19	200	188	27	-18
20	-166	212	-32	-14
21	-5	183	-29	-12
22	73	277	-62	-8
23	24	200	-11	-2
24	105	271	-10	-6
25	-1	-15	-13	-11
26	39	73	-21	-11
27	59	48	-9	-1
28	62	153	11	5
29	179	-14	8	-1
30	195	-135	12	3
31		100	38	
TOTALS	995	4,930	224	-500

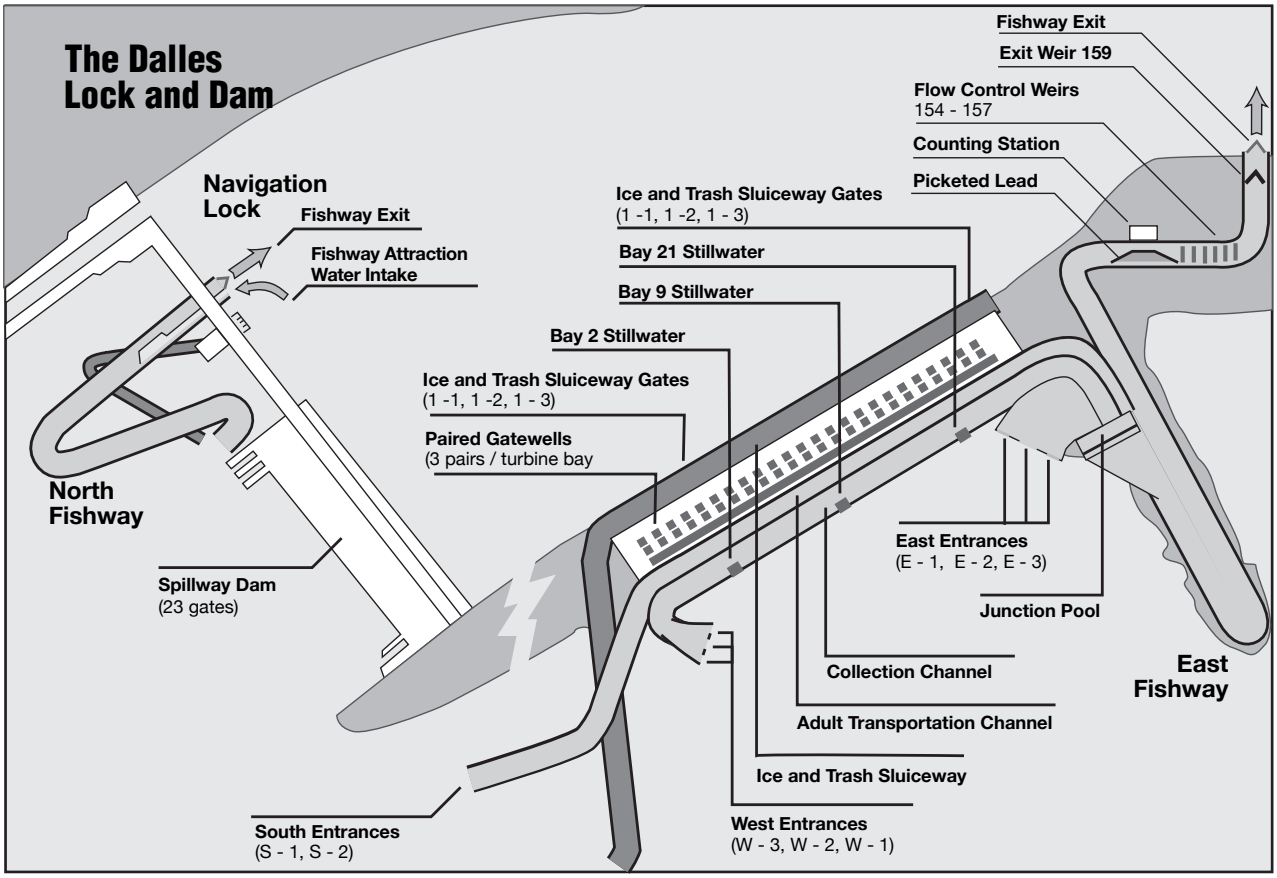
2010

Day	JUN	JUL	AUG	SEP
1		70	49	33
2		49	43	20
3		65	106	27
4		68	65	5
5		104	101	-10
6		279	62	-1
7		189	62	1
8		118	63	4
9		-1	53	2
10		101	23	-2
11		60	16	0
12		-50	39	1
13		-15	36	0
14		31	20	7
15	20	114	19	3
16	12	125	42	1
17	35	119	4	5
18	43	108	11	6
19	7	67	23	7
20	8	17	13	6
21	20	16	7	0
22	48	126	1	3
23	40	89	-4	4
24	87	106	4	2
25	84	52	21	2
26	76	48	23	0
27	63	66	21	0
28	70	40	8	0
29	110	8	11	-1
30	103	29	24	1
31		28	12	
TOTALS	826	2,226	978	126

Note: video counting for night lamprey passage at Bonneville June 15 - September 30
Not included with the Daytime total lamprey counts.
Video is eight hours from 2000 to 0400 Pacific standard time

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 2010. Total length of time for annual fishway outages can be determined by referring to previous years' annual reports.

East Adult Fishway

Jan 1 – Jan 31	Dewatered for winter maintenance
Feb 1 – Dec 2	In full operation with attraction water
Aug 3	Attraction water off half day for required ROV grating inspection
Dec 2 – Dec 31	Dewatered for winter maintenance

North Adult Fishway

Jan 1- Dec 31	In full operation with attraction water
Aug 3	Attraction water off half day for required ROV grating inspection

Ice/Trash Sluiceway (Juvenile)

Jan 1- Mar 8	OOS, end gate closed
Mar 8 – Dec 2	In service with skimmer gates
Dec 2 -Dec 31	OOS, end gate closed

Spillway

Jan 1 – April 10	Closed, all gates on seal
April 10 – Aug 31	Spill 40%, 24/7 for juvenile passage
Sept 1 – Dec 31	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; adult = a, juvenile = j, carp = cp, catfish = ca, sculpin = sp, shad = sh, small mouth bass = smb, crappie = cr, whitefish = wf

Date	Event	Chinook	Steelhead	Coho	Lamprey	Shad	Sturgeon	Other	Comments	Morts
1/11/10	S. ent.	0	7a, 5 j	0	0	0	0	2 sp, 2 wf	1.)	0
2/8/10	N. upper	0	4a, 4 jack	1a	0	0	0	0	None	1a steelhead
2/17/10	N. ent.	0	1a	0	0	0	0	0	2.)	0
2/23/10	N. ent.	4j	0	0	0	0	0	1sp	None	0
12/2/10	E. upper	1j, 4a	10j, 2a	4a	0	0	2a	0	3.)	yes
12/4/10	E. lower	0	2j, 1a	0	9a	6j, 6a	14	1sp	4.)	0

1.) The south entrance dewatered for contractor to grind 2" radius for lamprey passage. All fish released to tail water.
2.) Adult clipped steelhead.
3.) One sculpin, one small mouth bass, one channel catfish, one juvenile bull trout, one sturgeon ~5' released to fore bay. One adult Chinook mortality, ~50 adult shad and 500 juvenile shad mortalities. Fish agencies informed of Chinook mortality.
4.) Seven juvenile salmonids, one whitefish released to tail water. Majority of sturgeon were 2' to 3' in length, the largest were 6' and 8' in length. All released to tail water.

TURBINE DEWATERING PROCEDURES

Turbine dewatering for routine maintenance usually involves low numbers of fish, due in part to operational guidelines. The most important guideline includes immediate tail log installation after unit shut down. If a turbine unit fails, dewatering 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 (sc) and draft tubes (dt) 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. A higher than normal amount of turbine dewaterings were conducted in 2010 due to faulty blade seal replacements.

THE DALLES DAM TURBINE DEWATERING RESULTS

Key; adult = a, juvenile = j, scroll case = sc, draft tube = dt, catfish = ca, sculpin = sp, crappie = cr, small mouth bass = smb

Date	Event	Chinook	Steelhead	Sockeye	Coho	Lamprey	Shad	Sturgeon	Other	Comments	Morts
1/4/10	MU14 sc	0	0	0	0	0	0	0	0	None	0
1/20/10	MU 8 sc	0	0	0	0	0	0	0	0	None	0
2/4/10	MU 4 sc	0	0	0	0	0	0	0	0	None	0
3/23/10	MU 7 sc	0	0	0	0	0	0	0	0	None	0
3/24/10	MU 7 dt	0	0	0	0	0	0	0	0	None	0
4/5/10	MU13 sc	1j	1j	0	25j	0	0	0	0	Fish in rollergates	0
4/6/10	MU13 dt	0	0	0	0	0	0	0	0	None	0
4/21/10	MU 6 sc	0	1j	0	0	0	0	0	0	1j steelhead mort	1
4/21/10	MU 6 dt	0	0	0	0	0	0	0	0	None	0
6/3/10	MU12 sc	0	0	0	0	0	0	0	0	None	0
6/4/10	MU12 dt	0	0	0	0	0	0	52	0	1.)	0
6/22/10	MU 5 sc	0	0	0	0	0	0	0	0	3 shad mort	3
6/22/10	MU 5 dt	0	0	0	0	0	0	1	0	2.)	1
7/13/10	MU11 sc	0	0	0	0	0	0	3	0	3.)	0
7/13/10	MU11 dt	0	0	0	0	0	0	1	0	4.)	0
8/2/10	MU 4 sc	0	0	0	0	0	0	4	0	5.)	5
8/3/10	MU 4 dt	0	0	0	0	0	0	15	0	6.)	4
8/12/10	MU10 sc	0	0	0	0	0	8a	3	0	7.)	9
8/12/10	MU10 dt	1j	0	0	0	0	2	1	3ca	8.)	5
8/24/10	MU 3 sc	0	0	0	0	0	0	0	0	9.)	3
8/24/10	MU 3 dr	0	0	0	4	0	0	1	0	10.)	0
8/31/10	MU 9 sc	0	0	0	0	0	0	1	0	11.)	0
9/1/10	MU 9 dt	0	0	0	0	0	0	2	5ca	12.)	1
9/15/10	MU 2 sc	0	0	0	0	0	1a	1	1sp	13.)	0
9/16/10	MU 2 dt	0	0	0	0	0	0	4	9ca	14.)	0
10/12/10	MU 1 sc	0	0	0	0	0	0	0	0	None	0
10/13/10	MU 1 dt	0	0	0	0	0	0	2	1ca	None	0

1.) Sturgeon ~ 9" to 4' in length; 4 channel catfish ~ 10" in length.
2.) Sturgeon ~ 4' in length; released to forebay. One dead adult shad.
3.) Sturgeon 2', 3', 4' in length; released to tail water.
4.) Sturgeon 2.5' in length; released to tail water.
5.) Sturgeon 10" to 2' in length; released to forebay. Five adult shad mort.
6.) Sturgeon 1' to 4' in length; released to tail water. Four adult shad mort.
7.) Sturgeon 1' to 3' in length: released to tail water; 8 shad released to tail water. Morts: 4 sturgeon and 5 shad.
8.) Morts not related to dewatering event. Sturgeon 4' in length released to tail water in excellent condition.
9.) Three dead shad.
10.) Two 6 ~ 10 pound channel catfish, 2 small channel catfish, and one small sturgeon ~1' in length released to tail water.
11.) Sturgeon 1' in length and released to tail water.
12.) Four channel catfish ~ 1' in length, one ~2' in length, one mort; two sturgeon 2' in

length. All released to tail water.
13.) Sturgeon 2' and sculpin 5" in length. All fish released to tail water.
14.) One sturgeon 5', others ranged from 2.5' - 3.0' in length; eight channel catfish 1' in length, one 2' in length. All released to tail water.

THE DALLES DAM ROV/DIVE INSPECTIONS RESULTS

Key; adult = a, juvenile = j, catfish = ca, sculpin = sp, crappie = cr, small mouth bass = smb

Date	Event	Chinook	Steelhead	Sockeye	Coho	Lamprey	Shad	Sturgeon	Other	Comments	Morts
8/3/10	ROV	0	0	0	0	0	0	0	0	1)	0
8/3/10	ROV	0	0	0	0	0	0	21	9 smb	2.)	0

1.) Project fisheries ROV east ladder exit trash racks and fish lock trash racks.
2.) Project fisheries ROV north entrance (10 sturgeon, 2 small mouth bass), east entrance (1 sturgeon, 2 small mouth bass), junction pool (0 fish), transportation channel (2 small mouth bass), west entrance (4 sturgeon, 3 small mouth bass), and south entrance (6 sturgeon).

THE DALLES DAM NAVLOCK DEWATERING RESULTS

Key; adult = a, juvenile = j, catfish = ca, sculpin = sp, crappie = cr, small mouth bass = smb

Date	Event	Chinook	Steelhead	Sockeye	Coho	Lamprey	Shad	Sturgeon	Other	Comments	Morts
3/7/10	D/S Pool	0	4a	0	0	0	0	0	0	1.)	0
3/9/10	Laterals	0	9a	0	0	0	0	0	0	None	0
3/9/10	T. V. # 3	0	1a	0	0	0	0	0	0	2.)	0

1.) Down stream pools.
2.) Tainter valve #3: one unclipped male adult steelhead ~ 3' in length.

TABLE 25

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

2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				83,785	108,482	72,234	29,689	45,375	246,464	32,670			618,699
STEELHEAD				1,901	580	10,348	104,984	55,209	128,816	31,195			333,033
SOCKEYE				1	45	235,935	88,980	168	3	1			325,133
COHO*							0	1,082	20,090	10,202			31,374
CHUM										0			0
PINK							1	0		0			1
TOTAL				85,687	109,107	318,517	223,654	101,834	395,373	74,068			1,308,240
SHAD					47,055	1,114,960	78,818	936					1,241,769
LAMPREY						105	948	507	156	10			1,726
STURGEON					2	21	88	174	86	11			382
BULL TROUT													0

*Jacks included
Shad are not counted after August 31.

TABLE 26

DISCHARGE AND WATER QUALITY DATA

THE DALLES PROJECT 2010

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jan 1	102.5	0.0	6.0	40.0
Jan 2	91.3	0.0	6.0	40.0
Jan 3	99.2	0.0	6.0	40.0
Jan 4	111.9	0.0	6.0	40.0
Jan 5	115.6	0.0	6.0	39.6
Jan 6	126.3	0.0	6.0	40.0
Jan 7	140.4	0.0	6.0	40.0
Jan 8	128.2	0.0	6.0	40.0
Jan 9	131.3	0.0	6.0	40.0
Jan 10	100.9	0.0	6.0	40.0
Jan 11	112.6	0.0	6.0	40.0
Jan 12	116.2	0.0	6.0	40.0
Jan 13	113.1	0.0	6.0	40.0
Jan 14	120.1	0.0	6.0	39.0
Jan 15	96.4	0.0	6.0	39.0
Jan 16	105.0	0.0	6.0	40.0
Jan 17	107.3	0.0	6.0	40.0
Jan 18	94.0	0.0	6.0	40.0
Jan 19	96.4	0.0	6.0	40.0
Jan 20	107.0	0.0	6.0	40.0
Jan 21	103.5	0.0	6.0	40.0
Jan 22	99.0	0.0	6.0	40.0
Jan 23	101.7	0.0	6.0	40.0
Jan 24	113.1	0.0	6.0	40.0
Jan 25	124.5	0.0	6.0	40.0
Jan 26	111.0	0.0	6.0	40.0
Jan 27	106.4	0.0	6.0	40.0
Jan 28	114.6	0.0	6.0	40.0
Jan 29	108.6	0.0	6.0	40.0
Jan 30	109.2	0.0	6.0	40.0
Jan 31	101.4	0.0	6.0	41.0
AVG.	110.0	0.0	6.0	40.0

FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Feb 1	110.6	0.0	6.0	41.0
Feb 2	103.9	0.0	6.0	41.0
Feb 3	107.5	0.0	6.0	41.0
Feb 4	106.0	0.0	6.0	41.0
Feb 5	108.5	0.0	6.0	41.0
Feb 6	108.0	0.0	5.0	41.0
Feb 7	105.1	0.0	5.0	42.0
Feb 8	121.2	0.0	6.0	42.0
Feb 9	114.4	0.0	5.0	42.0
Feb 10	112.1	0.0	6.0	41.0
Feb 11	110.6	0.0	5.0	41.0
Feb 12	105.2	0.0	5.0	41.0
Feb 13	111.2	0.0	5.5	42.0
Feb 14	105.2	0.0	5.5	42.0
Feb 15	101.8	0.0	5.5	42.0
Feb 16	104.2	0.0	6.0	42.0
Feb 17	109.8	0.0	6.0	41.7
Feb 18	112.5	0.0	6.0	41.6
Feb 19	114.6	0.0	6.0	42.0
Feb 20	113.2	0.0	6.0	42.0
Feb 21	111.9	0.0	6.0	42.0
Feb 22	119.8	0.0	6.0	42.0
Feb 23	122.5	0.0	5.0	41.0
Feb 24	107.1	0.0	6.0	41.7
Feb 25	104.2	0.0	5.0	41.8
Feb 26	107.3	0.0	5.0	42.0
Feb 27	95.5	0.0	5.5	42.0
Feb 28	99.2	0.0	5.5	42.0
AVG.	109.0	0.0	5.6	41.6

MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Mar 1	98.8	0.0	5.5	42.4
Mar 2	97.3	0.0	6.0	42.8
Mar 3	102.0	0.0	6.0	42.8
Mar 4	96.0	0.0	5.5	42.9
Mar 5	107.4	0.0	6.0	43.0
Mar 6	104.5	0.0	4.5	43.0
Mar 7	107.0	0.0	5.5	43.2
Mar 8	108.5	0.0	5.5	43.5
Mar 9	124.3	0.0	5.0	43.3
Mar 10	113.7	0.0	5.0	43.1
Mar 11	112.0	0.0	5.0	43.3
Mar 12	97.4	0.0	5.5	43.4
Mar 13	93.2	0.0	5.0	43.6
Mar 14	112.1	0.0	6.0	45.0
Mar 15	111.2	0.0	6.0	45.0
Mar 16	100.1	0.0	6.0	44.5
Mar 17	92.4	0.0	5.0	44.2
Mar 18	101.9	0.0	4.5	43.7
Mar 19	104.4	0.0	5.0	44.0
Mar 20	104.3	0.0	5.0	44.0
Mar 21	87.4	0.0	5.0	45.0
Mar 22	91.7	0.0	4.5	45.0
Mar 23	99.8	0.0	5.0	45.0
Mar 24	96.3	0.0	6.0	45.0
Mar 25	102.7	0.0	6.0	46.0
Mar 26	82.8	0.0	6.0	46.0
Mar 27	97.9	0.0	5.0	46.0
Mar 28	101.5	0.0	5.0	47.0
Mar 29	109.8	0.0	6.0	46.1
Mar 30	114.4	0.0	4.5	46.0
Mar 31	111.2	0.0	4.5	46.0
AVG.	102.7	0.0	5.3	44.3

TABLE 27

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT - FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Apr 1	42			0			0	123	42					99.3	0.0	4.0	47.0
Apr 2	36			0			0	68	36					95.3	0.0	4.0	47.0
Apr 3	90			0			0	69	32					108.9	0.0	4.0	47.0
Apr 4	131			0			0	56	27					107.7	0.0	5.0	47.0
Apr 5	142			-1			0	55	21					109.4	0.0	4.0	47.0
Apr 6	139			0			0	42	12					89.6	0.0	4.5	47.0
Apr 7	144			1			0	78	41					102.0	0.0	4.5	47.4
Apr 8	143			0			0	80	34					76.2	0.0	4.5	47.5
Apr 9	234			0			0	78	40					89.7	0.0	4.7	47.4
Apr 10	517			1			0	80	46					103.1	40.9	4.5	47.6
Apr 11	1,133			1			0	90	51					97.8	39.2	4.0	47.7
Apr 12	2,126			5			0	94	43					98.6	39.6	4.5	48.0
Apr 13	1,147			3			0	94	50					94.5	37.6	3.5	48.5
Apr 14	1,237			2			0	90	42					96.5	39.3	5.0	49.0
Apr 15	1,508			7			0	79	41					96.1	38.5	5.0	50.0
Apr 16	3,512			3			0	87	58					97.8	39.4	4.0	50.0
Apr 17	5,619			7			0	96	55					97.3	38.8	4.0	50.0
Apr 18	5,888			40			0	89	55					94.5	37.4	4.0	50.0
Apr 19	4,264			14			1	56	35					107.1	42.4	4.5	50.0
Apr 20	2,837			14			0	72	34					128.8	51.6	4.4	50.5
Apr 21	4,218			22			0	56	30					141.7	56.3	3.5	50.5
Apr 22	8,292			24			0	61	30					162.4	64.9	3.5	50.5
Apr 23	6,002			41			0	38	25					194.7	77.6	4.0	51.1
Apr 24	6,254			31			0	40	20					163.4	65.6	3.0	51.6
Apr 25	5,596			84			0	32	25					181.0	72.4	3.0	53.0
Apr 26	4,629			34			0	25	15					168.3	67.2	3.5	53.0
Apr 27	4,667			21			0	20	12					168.5	67.4	3.0	52.0
Apr 28	2,732			41			0	18	10					151.7	60.8	2.5	52.3
Apr 29	4,563			75			0	15	7					155.2	62.2	2.5	52.0
Apr 30	5,388			85			0	20	11					152.9	61.1	3.5	51.6
TOTAL	83,230			555			1	1,901	980								
AVG.	2,774			19			0	63	33					121.0	36.7	4.0	49.4

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 - FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
May 1	7,142			173			0	20	7		0		0	169.5	67.5	3.0	52.0
May 2	5,743			140			0	28	12		0		0	164.2	65.7	3.0	53.0
May 3	5,308			142			1	22	18		0		0	168.4	67.3	3.0	53.0
May 4	6,805			168			0	15	6		0		0	176.3	70.5	3.0	52.4
May 5	5,820			218			0	12	7		0		0	178.3	70.9	2.8	52.4
May 6	3,390			197			0	15	4		0		0	149.9	60.1	3.0	52.4
May 7	4,118			181			0	12	1		0		0	182.8	73.0	3.0	52.2
May 8	5,571			326			0	20	8		1		0	155.0	62.0	3.0	52.2
May 9	5,532			471			0	29	12		0		0	163.6	65.4	4.0	52.2
May 10	5,252			431			0	12	5		1		0	169.2	67.7	3.5	55.0
May 11	4,955			742			0	28	13		0		0	143.0	57.3	3.5	52.0
May 12	3,595			665			0	14	6		6		0	186.6	74.5	3.0	52.0
May 13	1,807			458			0	11	3		9		0	196.1	78.6	3.0	52.0
May 14	2,535			720			0	13	2		2		0	177.7	71.1	3.0	52.0
May 15	2,532			791			0	21	8		2		0	160.5	64.5	3.0	52.0
May 16	3,613			739			0	21	4		25		0	170.6	68.0	3.5	56.0
May 17	3,867			753			1	43	11		52		0	196.7	77.2	3.5	56.0
May 18	2,577			452			0	13	5		53		0	185.8	73.3	4.0	56.0
May 19	1,986			402			0	14	4		58		0	229.3	89.6	4.0	56.0
May 20	1,531			223			-1	9	4		74		0	209.1	83.4	4.5	56.0
May 21	1,050			222			0	8	5		33		0	263.2	102.3	5.0	56.0
May 22	885			150			0	8	2		55		1	226.6	91.3	5.0	56.0
May 23	798			156			0	10	3		53		0	207.5	83.1	4.0	55.3
May 24	666			140			0	10	2		65		0	235.7	92.9	4.0	56.0
May 25	1,190			138			1	7	5		48		0	212.6	85.4	5.0	56.0
May 26	1,596			228			2	12	2		697		0	195.9	78.2	5.0	56.0
May 27	1,355			157			1	18	3		782		1	205.3	81.7	4.0	56.0
May 28	1,553			151			2	23	6		998		0	168.1	67.1	5.0	57.0
May 29	1,271			147			6	25	5		1,626		0	153.4	61.1	5.0	57.0
May 30	1,789			142			7	43	1		16,000		0	214.2	85.6	4.0	57.2
May 31	2,426			201			25	44	5		26,415		0	185.0	74.7	4.0	57.1
TOTAL	98,258			10,224			45	580	179		47,055		2				
AVG.	3,170			330			1	19	6		1,518		0	187.1	74.5	3.8	54.4

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	STURGEON
SPRING	181,488	10,779	45	2,481	1,159	47,055	2

TABLE 29

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT - FISH COUNTS

JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jun 1	2,875			292			34	37	9		15,920	0	0	198.0	79.6	4.0	57.0
Jun 2	2,934			234			90	36	9		17,874	0	0	213.8	85.4	4.0	57.2
Jun 3	2,542			241			101	21	-5		12,964	0	0	281.7	104.5	5.0	57.0
Jun 4		2,707		248			99	59	21		41,932	0	0	299.0	114.8	4.0	57.0
Jun 5		2,792		265			122	102	31		21,809	0	0	318.9	117.5	4.0	57.0
Jun 6		2,544		190			165	72	12		29,073	0	0	334.8	110.9	2.0	58.0
Jun 7		1,826		226			272	68	13		36,228	0	1	343.2	107.1	2.5	58.0
Jun 8		1,975		172			294	51	14		67,942	0	0	343.0	112.0	3.0	58.0
Jun 9		1,913		165			326	107	31		91,370	0	0	368.0	112.8	3.5	58.0
Jun 10		1,890		138			459	68	19		51,854	0	1	371.7	117.7	3.0	58.0
Jun 11		928		144			361	81	26		51,764	0	1	390.8	133.5	2.5	59.0
Jun 12		1,285		191			574	117	37		50,258	1	0	385.3	133.9	3.0	59.0
Jun 13		2,065		206			1,329	116	32		55,861	0	1	317.3	123.5	3.0	59.0
Jun 14		1,597		308			2,022	158	40		65,136	1	1	297.1	118.0	3.0	59.0
Jun 15		1,818		211			2,838	175	45		53,207	4	0	311.8	120.2	2.0	58.5
Jun 16		1,928		266			2,769	103	30		37,807	0	1	340.5	134.2	2.5	58.3
Jun 17		726		120			2,865	128	46		31,589	1	0	340.5	135.7	2.0	58.8
Jun 18		644		137			3,002	127	30		26,455	5	0	341.8	135.6	2.0	59.1
Jun 19		1,917		281			7,896	197	68		33,986	0	0	304.3	122.0	2.0	59.3
Jun 20		3,402		423			13,166	340	110		48,020	3	0	273.3	109.4	3.0	57.0
Jun 21		3,145		254			15,997	444	176		27,954	2	1	290.0	115.6	2.0	57.0
Jun 22		2,163		434			19,510	386	120		33,663	1	1	345.1	137.7	2.0	58.0
Jun 23		1,483		222			14,677	304	105		18,609	5	0	331.7	131.0	2.5	59.0
Jun 24		1,882		456			22,236	481	139		31,281	7	0	327.2	125.9	2.5	59.0
Jun 25		3,661		416			29,109	1,025	432		56,738	7	2	309.0	124.0	2.5	60.0
Jun 26		2,443		511			28,768	1,054	485		29,773	2	4	313.3	125.3	3.0	61.0
Jun 27		2,725		478			24,410	1,133	488		27,136	8	1	309.4	121.2	3.0	61.0
Jun 28		2,124		464			17,052	996	483		20,180	17	3	288.9	115.1	3.0	62.1
Jun 29		2,660		494			17,054	1,484	765		16,974	13	1	292.0	116.9	3.0	62.2
Jun 30		1,291		162			8,338	878	471		11,603	28	2	313.7	125.3	3.0	62.2
TOTAL	8,351	55,534		8,349			235,935	10,348	4,282		1,114,960	105	21				
AVG.	2,784	2057		278			7,865	345	143		37,165	4	1	316.5	118.9	2.9	58.8

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	189,839	11,546
SUMMER	55,534	7,582
TOTAL	245,373	19,128

SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD
235,980	12,829	5,441

SHAD	LAMPREY	STURGEON
1,162,015	105	23

TABLE 30

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT - FISH COUNTS

JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jul 1		1,771		384			9,191	1,121	592	0	10,898	11	0	252.6	101.3	3.0	62.4
Jul 2		2,112		311			12,051	1,562	861	0	8,406	28	0	242.7	97.3	3.5	62.3
Jul 3		2,034		520			10,054	2,082	1,210	0	8,587	10	1	234.6	93.7	3.0	62.1
Jul 4		1,806		233			8,414	2,223	1,293	0	9,104	32	3	191.9	77.0	4.0	64.8
Jul 5		1,074		283			6,998	2,269	1,328	0	6,827	25	2	208.2	83.4	4.0	65.2
Jul 6		1,235		181			5,868	1,739	1,025	0	5,146	18	1	186.4	75.0	4.0	64.9
Jul 7		1,013		300			5,739	1,736	991	0	4,015	22	0	193.5	77.5	4.5	65.6
Jul 8		949		231			4,811	2,136	1,277	0	6,184	39	1	191.5	76.8	4.5	66.4
Jul 9		1,095		222			4,727	3,082	1,756	0	3,811	42	0	197.8	78.9	4.0	66.6
Jul 10		1,300		249			6,219	3,765	2,183	0	3,334	33	3	180.7	72.0	4.5	66.5
Jul 11		1,183		233			4,120	4,022	2,220	0	3,388	48	1	205.8	82.1	4.0	64.8
Jul 12		962		156			3,768	4,392	2,478	0	1,729	62	3	163.4	65.4	4.0	65.2
Jul 13		767		138			1,318	4,756	2,653	0	1,180	34	5	196.2	78.5	4.0	64.9
Jul 14		340		85			657	3,334	1,691	0	1,443	13	1	162.6	65.0	4.5	65.6
Jul 15		378		84			653	3,326	1,774	0	381	54	3	161.8	65.0	4.5	66.4
Jul 16		676		120			907	6,247	3,089	0	409	21	2	170.4	68.5	4.0	66.6
Jul 17		582		109			938	5,083	2,449	0	202	30	2	162.9	64.8	4.5	66.5
Jul 18		597		61			664	3,692	1,679	0	310	34	4	144.9	58.0	3.5	66.4
Jul 19		614		94			497	4,069	2,059	0	181	36	2	179.1	70.7	3.5	67.0
Jul 20		563		79			299	4,448	2,011	0	487	58	6	138.8	55.5	3.0	67.7
Jul 21		366		85			162	4,160	1,993	0	220	26	3	135.3	54.0	3.5	68.0
Jul 22		351		78			220	5,226	2,363	0	470	27	4	134.5	54.0	3.5	68.0
Jul 23		316		86			134	4,350	2,025	0	210	20	5	164.4	65.6	3.0	69.0
Jul 24		367		80			133	4,282	2,039	0	298	27	7	156.3	62.9	3.0	69.0
Jul 25		348		70			121	4,129	1,883	0	379	28	4	129.8	51.8	3.0	69.1
Jul 26		396		62			102	3,956	1,861	0	254	35	3	127.5	51.1	3.5	69.3
Jul 27		360		52			67	2,843	1,213	1	310	25	2	118.5	47.3	5.0	69.2
Jul 28		309		69			52	2,078	912	0	175	30	3	155.9	62.1	3.5	69.3
Jul 29		328		68			35	2,376	1,032	0	180	32	7	145.6	58.1	3.5	69.8
Jul 30		298		40			39	3,015	1,312	0	153	23	5	132.8	52.9	4.3	70.1
Jul 31		390		46			22	3,485	1,534	0	147	25	5	117.8	47.1	3.3	69.7
TOTAL		24,880		4,809			88,980	104,984	52,786	1	78,818	948	88				
AVG		803		155			2,870	3,387	1,703	0	2,543	31	3	170.5	68.2	3.8	66.7

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	189,839	11,546
SUMMER	80,414	12,391
TOTAL	270,253	23,937

SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON
324,960	117,813	58,227	1	1,240,833	1,053	111

TABLE 31

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT - FISH COUNTS

AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Aug 1		306		45	0	0	39	2,902	1,170		168	27	3	110.7	44.3	4.0	69.7
Aug 2		338		52	0	0	21	2,421	1,010		119	21	1	106.7	42.3	4.0	70.5
Aug 3		234		40	2	0	12	1,982	796		110	14	10	115.5	46.2	3.5	70.7
Aug 4			316	54	0	0	18	2,297	890		42	31	6	146.1	58.9	3.5	71.0
Aug 5			231	37	0	0	11	1,407	589		29	16	11	138.4	55.4	3.0	71.0
Aug 6			363	59	0	0	9	1,003	423		39	23	13	116.5	46.5	3.5	71.4
Aug 7			282	55	0	0	5	843	355		59	22	5	117.0	46.7	3.5	71.0
Aug 8			327	48	1	0	14	1,196	449		43	28	4	113.5	45.4	5.0	71.0
Aug 9			334	56	0	0	8	1,341	523		25	25	8	109.9	44.3	4.0	71.1
Aug 10			360	89	0	0	6	1,250	466		31	32	2	110.3	44.3	5.0	70.6
Aug 11			352	77	0	0	5	1,412	490		17	29	4	127.6	51.3	5.0	70.7
Aug 12			274	39	0	0	1	1,034	312		18	29	6	115.1	45.8	6.0	71.2
Aug 13			265	57	0	0	1	693	217		28	24	8	116.9	46.7	5.0	71.4
Aug 14			344	43	0	0	5	640	192		6	13	2	116.5	46.6	6.0	71.6
Aug 15			336	66	1	0	0	632	224		16	22	4	98.5	39.4	5.0	71.9
Aug 16			396	90	4	0	0	599	199		9	14	8	118.8	47.7	4.5	72.2
Aug 17			294	67	0	0	1	473	136		10	28	8	119.2	47.8	4.3	72.4
Aug 18			356	89	5	5	2	220	81		10	20	6	119.5	47.9	3.5	71.1
Aug 19			376	108	0	0	0	296	100		7	17	6	120.0	48.1	4.5	71.0
Aug 20			464	142	1	1	2	350	101		8	7	2	108.8	43.5	4.5	71.0
Aug 21			1,055	186	0	0	0	1,196	354		9	6	4	100.5	40.3	4.5	70.6
Aug 22			1,228	156	5	0	0	2,631	723		12	16	6	99.2	39.7	4.0	71.0
Aug 23			1,446	150	19	4	2	3,739	996		6	6	3	105.9	42.4	4.5	71.0
Aug 24			2,474	251	22	2	0	2,952	830		21	3	6	105.3	41.6	4.5	70.2
Aug 25			1,676	244	8	1	0	1,565	429		41	7	6	111.6	44.2	4.5	70.4
Aug 26			2,010	393	29	7	0	2,488	707		29	6	5	98.0	39.0	4.5	70.4
Aug 27			2,303	476	77	17	4	2,816	747		9	2	3	103.8	41.4	4.5	69.8
Aug 28			4,677	704	179	41	0	4,346	1,237		4	2	5	95.1	37.7	4.4	68.7
Aug 29			5,493	779	242	49	0	4,332	1,272		1	6	7	94.0	37.3	5.5	68.7
Aug 30			5,231	748	182	28	2	3,520	1,055		8	3	10	90.2	34.2	5.5	68.1
Aug 31			4,919	915	133	17	0	2,633	696		2	8	2	88.9	33.5	5.0	67.9
TOTAL		878	38,182	6,315	910	172	168	55,209	17,769		936	507	174				
AVG.		293	1,364	204	29	6	5	1781	573		30	16	6	110.9	44.2	4.5	70.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	189,839	11,546
SUMMER	81,292	12,528
FALL	38,182	6,178
TOTAL	309,313	30,252

COHO ADULTS	COHO JACKS	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON
910	172	325,128	173,022	75,996	1	1,241,769	1,560	285

Note: Shad counts ended August 31.

TABLE 32

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT - FISH COUNTS

SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Sep 1			6,104	642	203	32	0	2,605	751			18	2	83.7	0.0	5.0	67.8
Sep 2			7,472	1,151	458	40	0	5,632	1,650			12	7	100.7	0.0	5.5	68.0
Sep 3			5,659	794	584	65	0	7,264	1,938			9	7	81.9	0.0	5.5	68.4
Sep 4			7,228	1,134	644	60	0	8,022	2,207			9	2	64.5	0.0	5.0	70.0
Sep 5			9,100	956	1,006	61	0	6,925	1,948			14	4	64.9	0.0	4.5	67.9
Sep 6			9,825	1,317	1,022	65	0	7,252	2,079			7	4	70.1	0.0	4.0	66.9
Sep 7			12,102	1,045	1,129	64	1	7,476	2,300			2	5	89.1	0.0	5.0	66.6
Sep 8			8,466	1,360	991	63	0	3,904	1,171			8	3	91.7	0.0	5.0	66.9
Sep 9			10,389	1,416	854	118	1	6,089	1,756			10	4	84.3	0.0	5.5	66.6
Sep 10			8,185	1,054	1,243	66	0	4,184	1,072			6	5	72.5	0.0	5.5	66.1
Sep 11			6,977	1,207	1,294	98	0	5,379	1,521			11	2	68.1	0.0	5.5	65.9
Sep 12			6,314	1,319	1,129	220	0	5,947	1,613			9	4	68.6	0.0	5.5	66.0
Sep 13			5,549	818	908	83	0	4,891	1,272			14	2	77.9	0.0	6.0	66.0
Sep 14			4,165	1,045	642	48	0	3,612	1,013			2	4	85.6	0.0	6.0	66.4
Sep 15			4,589	827	582	54	0	4,815	1,203			1	4	94.2	0.0	6.0	67.0
Sep 16			4,833	1,174	494	46	0	3,417	944			2	4	90.0	0.0	6.0	67.0
Sep 17			6,540	1,369	472	49	0	3,426	852			1	4	94.8	0.0	4.0	67.0
Sep 18			7,325	1,991	753	53	0	3,894	999			2	1	75.5	0.0	6.0	67.0
Sep 19			6,165	1,051	723	36	0	5,089	1,532			3	3	67.8	0.0	6.0	67.0
Sep 20			5,595	1,166	464	32	1	4,448	1,273			-1	1	62.6	0.0	4.0	67.0
Sep 21			5,871	1,059	554	77	0	3,690	1,026			6	2	89.2	0.0	4.0	66.0
Sep 22			5,095	1,006	253	55	0	2,697	756			1	3	89.2	0.0	6.0	67.0
Sep 23			7,473	1,600	219	28	0	2,443	674			3	-1	79.3	0.0	6.0	66.0
Sep 24			8,450	1,618	231	52	0	1,949	526			0	4	77.8	0.0	5.5	66.0
Sep 25			10,894	2,261	337	45	0	2,207	603			1	1	83.5	0.0	6.0	66.0
Sep 26			9,846	2,453	416	45	0	2,802	666			3	1	75.3	0.0	6.0	66.0
Sep 27			4,908	1,601	256	16	0	2,712	782			1	0	93.7	0.0	6.0	66.0
Sep 28			4,532	1,313	164	28	0	2,062	613			-1	4	95.4	0.0	6.0	66.0
Sep 29			4,409	1,774	219	11	0	1,902	500			2	0	97.8	0.0	6.0	66.0
Sep 30			3,800	1,083	122	14	0	2,081	540			1	0	100.9	0.0	6.0	66.0
TOTAL			207,860	38,604	18,366	1,724	3	128,816	35,780			156	86				
AVG.			6,929	1,287	612	57	0	4,294	1,193			5	3	82.4	0.0	5.4	66.8

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	189,839	11,546
SUMMER	81,292	12,528
FALL	246,042	44,782
TOTAL	517,173	68,856

COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON
19,276	1,896	325,131	301,838	111,776	1	1,241,769	1,716	371

TABLE 33

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

THE DALLES PROJECT - FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Oct 1			2,834	1031	181	20	0	1,588	365			0	-1	93.8	0.0	4.0	68.0
Oct 2			2,103	494	53	11	0	1,541	500			4	1	92.4	0.0	4.5	67.0
Oct 3			2,132	605	75	5	0	2,295	767			1	2	76.5	0.0	4.0	67.0
Oct 4			2,013	408	154	12	0	2,289	790			0	1	77.8	0.0	6.0	67.0
Oct 5			2,048	475	189	8	0	2,228	822			0	1	108.1	0.0	6.0	67.0
Oct 6			2,556	708	198	11	0	2,144	714			0	1	113.0	0.0	5.5	66.0
Oct 7			1,396	363	126	11	0	1,320	417			0	2	104.5	0.0	6.0	65.0
Oct 8			1,387	319	131	5	0	1,384	459			1	0	102.9	0.0	6.0	65.0
Oct 9			1,102	298	105	8	0	1,294	445			2	0	107.2	0.0	6.0	65.0
Oct 10			1,247	292	33	1	0	871	284			1	0	94.2	0.0	5.5	67.0
Oct 11			812	241	935	36	-1	1,657	601			0	0	91.2	0.0	5.5	66.0
Oct 12			908	210	2,519	96	0	1,325	405			0	2	109.2	0.0	5.5	65.0
Oct 13			733	121	1,538	40	0	1,493	490			0	3	122.4	0.0	5.5	65.0
Oct 14			490	146	370	8	0	847	256			0	0	128.7	0.0	6.0	66.0
Oct 15			669	100	205	7	0	996	315			0	0	98.8	0.0	6.0	66.0
Oct 16			297	90	102	5	1	824	285			0	0	104.0	0.0	6.0	65.0
Oct 17			354	98	105	1	0	694	256			0	0	91.0	0.0	6.0	66.0
Oct 18			434	74	107	4	0	635	206			0	0	109.9	0.0	6.0	66.0
Oct 19			383	78	88	5	0	583	228			0	0	104.2	0.0	6.0	66.0
Oct 20			394	83	49	2	0	397	118			0	0	105.5	0.0	5.5	66.0
Oct 21			282	52	56	4	0	406	144			0	0	80.7	0.0	6.0	66.0
Oct 22			240	71	111	5	0	485	185			0	-1	81.7	0.0	5.5	66.0
Oct 23			207	44	96	5	0	603	234			0	1	77.3	0.0	5.5	65.0
Oct 24			96	21	51	1	0	322	149			0	0	70.6	0.0	6.0	64.0
Oct 25			166	33	747	13	1	365	154			1	0	73.2	0.0	5.0	64.0
Oct 26			180	48	769	22	0	831	345			0	-1	88.7	0.0	5.5	64.0
Oct 27			98	20	389	25	0	627	300			0	-1	91.1	0.0	5.0	60.0
Oct 28			124	20	189	13	0	433	208			0	0	103.6	0.0	5.0	63.0
Oct 29			179	18	69	0	0	311	160			0	0	92.7	0.0	5.0	63.0
Oct 30			124	29	40	2	0	247	113			0	1	97.0	0.0	5.0	64.0
Oct 31			80	12	35	1	0	160	52			0	0	81.3	0.0	5.0	63.0
TOTAL			26,068	6,602	9,815	387	1	31,195	10,767			10	11				
AVG.			841	213	317	12	0	1,006	347			0	0	95.9	0.0	5.5	65.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	189,839	11,546
SUMMER	81,292	12,528
FALL	272,110	51,384
TOTAL	543,241	75,458

COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	STURGEON
29,091	2,283	325,132	333,033	122,543	1	1,241,769	1,726	382

Note: Visual counts ended October 31.

TABLE 34

DISCHARGE AND WATER QUALITY DATA

THE DALLES PROJECT 2010

N0VEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Nov 1	126.2	0.0	6.0	62.0
Nov 2	103.8	0.0	6.0	62.0
Nov 3	115.3	0.0	6.0	62.0
Nov 4	119.7	0.0	6.0	62.0
Nov 5	112.0	0.0	6.0	62.0
Nov 6	109.4	0.0	6.0	62.0
Nov 7	91.8	0.0	5.5	62.0
Nov 8	109.7	0.0	6.0	62.0
Nov 9	111.6	0.0	6.0	62.0
Nov 10	106.9	0.0	6.0	62.0
Nov 11	111.9	0.0	5.0	61.0
Nov 12	103.5	0.0	6.0	61.0
Nov 13	112.4	0.0	6.0	61.0
Nov 14	113.3	0.0	6.0	60.0
Nov 15	113.9	0.0	6.0	60.0
Nov 16	107.7	0.0	6.0	60.0
Nov 17	114.9	0.0	5.5	60.0
Nov 18	114.5	0.0	5.0	60.0
Nov 19	109.0	0.0	5.5	60.0
Nov 20	111.7	0.0	5.0	60.0
Nov 21	104.9	0.0	5.5	59.0
Nov 22	131.4	0.0	6.0	59.0
Nov 23	129.8	0.0	5.5	58.0
Nov 24	148.6	0.0	6.0	57.0
Nov 25	131.9	0.0	6.0	57.0
Nov 26	112.5	0.0	6.0	57.0
Nov 27	113.9	0.0	6.0	57.0
Nov 28	115.3	0.0	6.0	48.1
Nov 29	138.2	0.0	6.0	47.7
Nov 30	138.8	0.0	6.0	46.9
AVG.	116.2	0.0	5.8	59.0

DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1	130.8	0.0	6.0	46.4
Dec 2	127.1	0.0	6.0	45.9
Dec 3	116.6	0.0	6.0	45.4
Dec 4	130.6	0.0	6.0	44.9
Dec 5	115.6	0.0	6.0	44.0
Dec 6	131.7	0.0	6.0	44.0
Dec 7	125.6	0.0	6.0	44.0
Dec 8	127.1	0.0	6.0	44.0
Dec 9	126.4	0.0	6.0	44.0
Dec 10	110.2	0.0	6.0	44.0
Dec 11	140.1	0.0	6.0	44.0
Dec 12	86.8	0.0	6.0	43.1
Dec 13	111.7	0.0	6.0	43.2
Dec 14	132.6	0.0	6.0	43.3
Dec 15	159.1	0.0	6.0	43.2
Dec 16	136.2	0.0	6.0	43.1
Dec 17	116.8	0.0	6.0	43.1
Dec 18	140.9	0.0	6.0	43.1
Dec 19	131.4	0.0	5.5	43.0
Dec 20	121.4	0.0	6.0	43.0
Dec 21	128.7	0.0	6.0	43.0
Dec 22	145.4	0.0	6.0	44.0
Dec 23	112.9	0.0	6.0	44.0
Dec 24	129.3	0.0	6.0	44.0
Dec 25	110.5	0.0	6.0	44.0
Dec 26	110.9	0.0	5.5	43.4
Dec 27	127.7	0.0	6.0	43.3
Dec 28	130.9	0.0	6.0	43.2
Dec 29	150.3	0.0	6.0	43.1
Dec 30	160.3	0.0	6.0	42.8
Dec 31	172.9	0.0	6.0	42.0
AVG.	129.0	0.0	6.0	43.7

TABLE 35

YEARLY TOTALS OF SALMONIDS COUNTED OVER THE DALLES DAM
1957 - 2010

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
2009	525,837	515,111	155,591	77,492	7	28	1,274,066
2010	618,699	333,033	325,133	31,374	0	1	1,308,240
Totals	15,020,097	9,635,227	3,580,163	911,709	251	397	29,147,844
10-Year Average	491,057	327,172	105,789	41,934			965,977

*Jacks included

TABLE 36

MONTHLY COUNT OF CHINOOK SALMON
THE DALLES DAM 1957 - 2010

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
2009				8,464	132,674	83,688	30,189	74,468	176,655	19,699			525,837	147,554	107,794	270,489	175,120
2010				83,785	108,482	72,234	29,689	45,375	246,464	32,670			618,699	201,385	93,820	323,494	75,458
Total			9,800	2,007,114	2,077,270	1,500,614	1,148,248	1,479,399	6,105,994	689,027	12,780		15,030,416	4,190,899	2,622,781	8,214,374	2,978,019
10-Year Average				60,438	78,610	61,229	31,109	42,453	192,130	24,391			492,089	144,377	88,785	258,713	66,075

*Jacks included

TABLE 37

MONTHLY COUNT OF SOCKEYE SALMON
THE DALLES DAM
1957 - 2010

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	1			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			4	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	0				19,124
2008					6	152,255	25,678	45	0				177,984
2009					27	114,162	41,260	126	16				155,591
2010				1	45	235,935	88,980	168	3	1			325,133
Total				2	1,650	1,804,547	1,749,593	23,276	1,065	29	1		3,580,167
10-Year Average					18	78,934	26,736	98	4				105,789

TABLE 38

MONTHLY COUNT OF COHO SALMON
THE DALLES DAM: 1957-2010

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
2009							4	8,214	29,912	39,362			77,492	8,552
2010							0	1,082	20,090	10,202			31,374	75,458
Total							1,574	40,154	624,030	240,690	5,950	39	912,436	287,034
10-Year Average								1,652	23,582	16,206			42,007	10,543

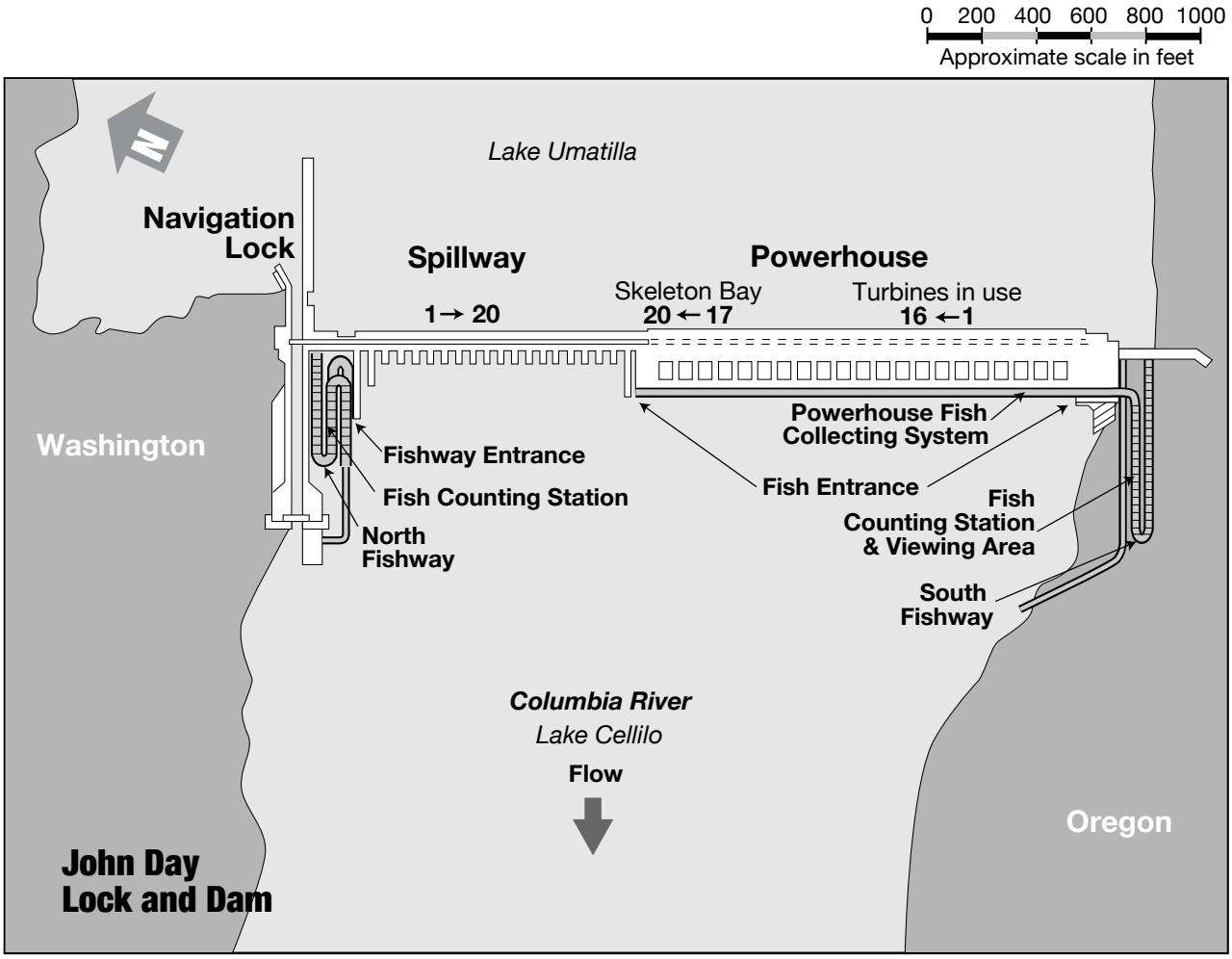
*Includes Jacks

TABLE 39

MONTHLY COUNT OF STEELHEAD
THE DALLES DAM 1957 - 2010

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
2009				986	392	4,181	51,667	165,723	233,187	58,975			515,111
2010				1,901	580	10,348	104,984	55,209	128,816	31,195			333,033
Total			12,149	51,449	34,907	175,159	1,879,835	2,183,652	4,339,562	933,352	32,727		9,644,630
10-Year Average				1,150	445	6,034	52,897	65,740	158,815	39,550			328,112

Plate 4 John Day Lock and Dam



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 2010. Total length of time for annual fishway outages can be determined by referring to previous years' annual reports.

North Adult Fishway

Jan 1 – Apr 9	Dewatered for winter maintenance
Apr 10 – Dec 6	In full operation with attraction water
Aug 9	Attraction water off half day for required ROV grating inspection
Dec 7 – Dec 31	Dewatered for winter maintenance

South Adult Fishway

Jan 1 – Jan 11	In full operation with attraction water
Jan 12 – Jan 21	Dewatered for winter maintenance
Jan 22 – Dec 31	In full operation with attraction water
Aug 9	Attraction water off half day for required ROV grating inspection

Smolt Monitoring Facility

Jan 1-March 30	Dewatered
Mar 31 – Jul 28	In full operation with juvenile sampling
Jul 29 – Aug 28	Water temperature 70˚ F. Condition sampling of 100 fish on Monday and Thursday. System in bypass at switch gate on other days.
Aug 29 – Sep 15	In full operation with juvenile sampling
Sep 16 – Nov 29	System in bypass for full flow PIT tag detection.
Nov 30 – Dec 31	System dewatered for winter maintenance.

Juvenile Bypass System

Jan 1-Mar 31	1/3 gatewell orifice open, rotated twice weekly
Apr 1-Nov 31	Full operation

Spillway

Jan 1 – Apr 9	Closed
Apr 10 – Aug 31	30% /40% according to experimental block design.
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 stranded and /or trapped in shallow pools behind weirs. 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=ca, mountain whitefish=mw, common carp=cc, sucker species=su

Date	Event	Chinook	Steelhead	Shad	Other	Comments	Morts	Cause
1/12/2010	South Ladder	0	3	0			0	0
12/2/2010	North ladder	0	0	0	12 sturgeon		0	0
12/8/2010	North entrance	1	6	16	35 sturgeon	26 ca 2mw 6 cc 5su	0	0

Smolt Monitoring Facility Dewatering Results

Key: catfish=ca, mountain whitefish=mw, common carp=cc, sucker species=su

Date	Event	Steelhead	Coho	Lamprey	Shad	Other	Comments
11/29/2010	SMF/PDS	50	1	33	20	5 sturgeon	15 ca

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=ca, mountain whitefish=mw, common carp=cc, sucker species=su

Date	Event	Chinook	Other	Comments	Morts	Cause
5/25/2010	MU 12 scroll case	0	0	NO FISH	0	0
5/25/2010	MU 12 draft tube	1 CH0	2 Sturgeon	1 small cat	0	0
7/26/2010	MU11 scroll case	0	2crappie, 1 SMB	excellent condition	0	0
7/27/2010	MU11 draft tube	0	1 Sturgeon, 5 ca	excellent condition	0	0
10/12/2010	MU13 scroll case	0	5 ca	excellent condition	0	0
10/13/2010	MU13 draft tube	0	6 ca	excellent condition	0	0

TABLE 40

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

2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*
CHINOOK*				69,747	108,746	64,519	30,528	29,389	197,139	34,179			534,247
STEELHEAD				2,156	442	7,589	73,271	36,206	123,408	40,740			283,812
SOCKEYE					14	226,244	97,705	153	8	4			324,128
COHO*							10	375	14,126	8,761			23,272
CHUM													0
PINK													0
TOTAL				71,903	109,202	298,352	201,514	66,123	334,681	83,684			1,165,459
LAMPREY					17	32	708	805	91	9			1,662
STURGEON							2	27	30	17			76
BULL TROUT							1						1

***Jacks Included**

TABLE 41

DISCHARGE AND WATER QUALITY DATA

JOHN DAY PROJECT 2010

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jan 1	103.7	0.0	6.0	40.0
Jan 2	88.3	0.0	6.0	40.0
Jan 3	97.9	0.0	6.0	40.0
Jan 4	108.6	0.0	6.0	40.0
Jan 5	115.2	0.0	6.0	40.0
Jan 6	123.8	0.0	6.0	40.0
Jan 7	137.7	0.0	6.0	40.0
Jan 8	126.5	0.0	6.0	40.0
Jan 9	131.1	0.0	6.0	40.0
Jan 10	98.8	0.0	6.0	40.0
Jan 11	110.3	0.0	6.0	40.0
Jan 12	116.0	0.0	6.0	39.0
Jan 13	111.5	0.0	6.0	39.0
Jan 14	116.9	0.0	6.0	40.0
Jan 15	94.0	0.0	6.0	40.0
Jan 16	102.0	0.0	6.0	40.0
Jan 17	104.3	0.0	6.0	40.0
Jan 18	93.4	0.0	6.0	40.0
Jan 19	89.7	0.0	6.0	40.0
Jan 20	103.4	0.0	6.0	40.0
Jan 21	101.6	0.0	6.0	40.0
Jan 22	97.1	0.0	6.0	39.0
Jan 23	97.9	0.0	6.0	40.0
Jan 24	110.9	0.0	6.0	40.0
Jan 25	123.0	0.0	6.0	40.0
Jan 26	110.3	0.0	6.0	39.0
Jan 27	104.4	0.0	6.0	41.0
Jan 28	112.6	0.0	6.0	40.0
Jan 29	106.5	0.0	6.0	40.0
Jan 30	108.3	0.0	6.0	41.0
Jan 31	96.0	0.0	6.0	41.0
AVG.	107.8	0.0	6.0	40.0

FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Feb 1	110.9	0.0	6.0	42.0
Feb 2	100.5	0.0	6.0	42.0
Feb 3	103.4	0.0	6.0	41.0
Feb 4	105.1	0.0	6.0	41.0
Feb 5	104.4	0.0	6.0	41.0
Feb 6	108.1	0.0	5.0	42.0
Feb 7	101.2	0.0	3.5	42.0
Feb 8	116.4	0.0	5.0	42.0
Feb 9	111.9	0.0	6.0	41.0
Feb 10	112.5	0.0	6.0	42.0
Feb 11	109.6	0.0	6.0	42.0
Feb 12	104.0	0.0	6.0	42.0
Feb 13	111.0	0.0	6.0	42.0
Feb 14	102.8	0.0	6.0	42.0
Feb 15	100.9	0.0	6.0	42.0
Feb 16	103.1	0.0	6.0	41.0
Feb 17	107.7	0.0	6.0	41.0
Feb 18	111.2	0.0	6.0	41.0
Feb 19	113.7	0.0	6.0	41.0
Feb 20	112.1	0.0	4.0	43.0
Feb 21	112.9	0.0	5.0	41.0
Feb 22	118.1	0.0	6.0	41.0
Feb 23	122.8	0.0	6.0	42.0
Feb 24	105.3	0.0	6.0	41.0
Feb 25	103.2	0.0	6.0	41.0
Feb 26	106.7	0.0	5.5	42.0
Feb 27	95.3	0.0	5.5	42.0
Feb 28	97.1	0.0	5.5	43.0
AVG.	107.6	0.0	5.7	41.6

MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Mar 1	96.5	0.0	5.5	43.0
Mar 2	93.1	0.0	5.5	43.0
Mar 3	102.4	0.0	6.0	43.0
Mar 4	95.9	0.0	6.0	42.0
Mar 5	107.7	0.0	6.0	42.0
Mar 6	103.4	0.0	6.0	42.0
Mar 7	105.4	0.0	6.0	43.0
Mar 8	106.1	0.0	6.0	44.0
Mar 9	123.2	0.0	6.0	43.0
Mar 10	113.4	0.0	6.0	43.0
Mar 11	109.6	0.0	5.5	44.0
Mar 12	95.2	0.0	6.0	43.0
Mar 13	92.4	0.0	5.5	44.0
Mar 14	109.7	0.0	5.5	44.0
Mar 15	111.5	0.0	6.0	44.0
Mar 16	97.7	0.0	5.5	45.0
Mar 17	92.9	0.0	6.0	45.0
Mar 18	99.8	0.0	6.0	44.0
Mar 19	103.2	0.0	6.0	44.0
Mar 20	101.4	0.0	6.0	46.0
Mar 21	87.6	0.0	6.0	46.0
Mar 22	90.5	0.0	6.0	46.0
Mar 23	98.2	0.0	6.0	45.0
Mar 24	95.6	0.0	5.5	46.0
Mar 25	100.2	0.0	5.5	45.0
Mar 26	83.7	0.0	5.5	46.0
Mar 27	93.2	0.0	5.5	46.0
Mar 28	102.9	0.0	5.0	48.0
Mar 29	107.5	0.0	5.5	47.0
Mar 30	115.9	0.0	5.5	47.0
Mar 31	103.0	0.0	5.5	46.0
AVG.	101.3	0.0	5.8	44.5

TABLE 42

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT - FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	STEELHEAD	PINK	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	48			0				126	60				96.9	0.0	5.0	47.0
Apr 2	10			0				61	36				95.5	0.0	5.5	47.0
Apr 3	43			1				138	72				104.7	3.6	6.0	47.0
Apr 4	41			0				84	53				95.8	0.0	5.0	48.0
Apr 5	52			0				62	34				111.0	1.8	5.5	48.0
Apr 6	94			1				73	38				88.7	4.0	5.0	48.0
Apr 7	148			0				55	32				102.3	0.0	5.5	47.0
Apr 8	90			0				74	44				73.1	0.0	5.5	47.0
Apr 9	56			0				32	16				87.1	0.0	5.5	47.0
Apr 10	160			1				66	37				105.2	20.5	5.5	47.0
Apr 11	372			1				53	36				97.9	29.5	5.5	47.0
Apr 12	493			7				86	54				101.0	30.3	5.5	48.0
Apr 13	2,015			5				116	76				98.3	29.6	5.5	48.0
Apr 14	790			0				81	64				100.0	30.1	6.0	48.0
Apr 15	918			7				126	86				100.7	30.2	5.0	50.0
Apr 16	1,375			1				112	55				100.1	30.2	5.0	51.0
Apr 17	2,377			9				106	67				101.0	30.5	6.0	50.0
Apr 18	3,489			30				126	70				102.9	31.1	6.0	51.0
Apr 19	5,908			19				102	63				111.3	33.5	5.0	53.0
Apr 20	4,535			62				78	41				133.2	40.3	5.0	53.0
Apr 21	3,656			35				75	54				149.2	44.8	4.5	52.0
Apr 22	4,364			32				81	33				171.3	51.5	4.0	52.0
Apr 23	6,419			45				59	32				203.9	61.1	4.0	52.0
Apr 24	5,866			55				44	23				171.9	51.6	3.5	53.0
Apr 25	5,774			53				29	20				188.9	56.8	3.5	52.0
Apr 26	5,676			46				38	21				176.5	52.8	3.0	53.0
Apr 27	4,799			57				24	14				175.6	52.8	3.0	53.0
Apr 28	3,681			70				12	14				162.0	48.7	3.0	53.0
Apr 29	2,401			43				13	7				167.0	50.1	3.0	53.0
Apr 30	3,457			60				24	14				161.8	60.7	3.0	53.0
TOTAL	69,107			640				2,156	1,266							
AVG.	2304			21				72	42				124.5	29.2	4.8	49.9

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 - FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
May 1	4,855			109			0	22	14		0		180.2	72.1	3.0	53.0
May 2	7,377			109			0	16	6		0		173.9	69.5	3.0	53.0
May 3	6,144			207			0	16	12		0		177.2	70.8	3.0	53.0
May 4	5,332			143			0	18	8		0		186.5	59.1	4.0	53.0
May 5	6,683			192			0	22	16		0		188.0	56.4	4.0	53.0
May 6	5,548			211			0	21	7		0		162.2	61.4	4.0	52.0
May 7	3,802			231			0	18	12		0		194.3	77.6	4.0	52.0
May 8	4,462			216			0	15	4		0		163.6	52.7	4.0	52.0
May 9	5,456			405			0	7	5		0		175.6	52.7	4.0	52.0
May 10	5,968			510			0	6	3		1		181.0	54.5	4.0	52.0
May 11	4,700			465			0	20	10		2		153.9	46.1	4.0	52.0
May 12	4,180			672			0	22	6		0		198.8	75.9	4.0	59.0
May 13	2,832			681			0	19	10		6		206.0	82.6	4.0	60.0
May 14	1,632			406			0	13	9		2		189.1	75.8	4.0	56.0
May 15	2,572			682			0	18	6		0		173.5	69.4	4.0	59.0
May 16	2,587			900			0	9	4		1		182.0	58.5	4.0	58.0
May 17	3,047			719			0	24	12		1		204.1	61.4	4.0	58.0
May 18	3,678			746			0	24	5		-3		197.8	75.6	4.0	58.0
May 19	2,388			449			0	19	6		1		246.2	98.2	5.0	56.0
May 20	2,089			394			0	6	1		1		221.3	88.4	5.0	56.0
May 21	1,490			245			0	12	4		0		276.1	109.9	5.0	56.0
May 22	1,059			194			0	6	2		0		242.9	79.2	5.0	56.0
May 23	974			194			0	9	2		5		215.8	64.8	5.0	56.0
May 24	731			120			0	5	2		0		248.7	74.7	5.0	55.0
May 25	765			130			0	7	1		0		225.6	67.6	5.0	56.0
May 26	1,223			158			0	10	2		-1		209.4	62.8	5.0	56.0
May 27	1,166			197			0	2	0		0		218.7	65.6	6.0	57.0
May 28	1,421			138			1	7	1		0		181.1	68.5	5.5	56.0
May 29	1,320			118			1	15	6		0		166.5	66.6	5.5	56.0
May 30	1,438			112			6	17	8		1		226.5	72.9	5.5	57.0
May 31	1,655			119			6	17	3		0		197.2	59.3	6.0	57.0
TOTAL	98,574			10,172			14	442	187		17					
AVG.	3180			328			0	14	6		1		198.8	69.4	4.4	55.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	LAMPREY
SPRING	167,681	10,812	14	2,598	1,453	17

TABLE 44

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT - FISH COUNTS

JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jun 1	2,065			150			39	29	7		0		207.3	78.9	6.0	58.0
Jun 2	2,145			189			24	19	10		1		230.5	92.2	5.0	57.0
Jun 3	2,448			153			68	37	11		0		298.2	110.5	5.0	57.0
Jun 4	2,821			266			100	33	8		0		310.6	121.8	4.5	57.0
Jun 5	2,286			224			102	31	9		0		334.5	124.9	4.5	57.0
Jun 6		1,969		206			110	37	7		1		345.2	125.0	4.5	57.0
Jun 7		1,549		165			152	38	10		2		352.5	112.4	4.5	57.0
Jun 8		1,575		192			228	52	16		1		361.6	116.1	4.5	57.0
Jun 9		2,040		186			277	61	12		0		385.2	124.8	3.0	58.0
Jun 10		2,224		148			272	71	26		1		389.4	125.0	3.0	59.0
Jun 11		1,720		111			370	62	19		1		408.4	125.0	2.5	59.0
Jun 12		1,563		123			352	53	18		1		400.9	124.2	2.5	59.0
Jun 13		1,017		96			534	82	28		4		328.2	98.8	2.5	58.0
Jun 14		1,293		206			922	107	35		1		317.6	95.1	2.5	58.0
Jun 15		1,421		244			1,620	135	37		1		329.2	113.6	2.5	59.0
Jun 16		1,433		192			2,296	216	56		1		356.4	127.1	2.5	59.0
Jun 17		1,093		244			2,721	123	37		0		356.9	113.2	2.5	59.0
Jun 18		993		110			2,589	148	28		0		358.5	107.7	2.0	59.0
Jun 19		1,192		156			2,868	111	36		0		318.5	119.0	2.0	60.0
Jun 20		1,703		194			5,696	123	29		0		290.4	116.1	2.5	60.0
Jun 21		2,566		301			9,332	248	62		0		309.9	123.8	2.5	59.0
Jun 22		2,302		326			13,112	400	113		1		362.9	141.9	3.0	59.0
Jun 23		1,885		446			17,448	328	91		1		343.9	112.0	3.0	60.0
Jun 24		1,237		356			16,155	382	115		1		343.9	103.5	3.0	60.0
Jun 25		2,465		449			23,089	495	167		1		325.4	97.5	3.0	61.0
Jun 26		3,024		528			29,360	780	306		4		330.5	99.4	3.5	61.0
Jun 27		2,701		556			32,980	917	356		1		326.6	122.6	4.0	61.0
Jun 28		1,863		347			25,359	825	364		-1		304.7	121.7	3.5	62.0
Jun 29		2,367		379			21,149	811	304		1		305.4	96.2	4.0	62.0
Jun 30		2,020		296			16,920	835	394		8		329.7	99.3	4.0	62.0
TOTAL	11,765	45,215		7,539			226,244	7,589	2,711		32					
AVG.	2353	1,809		251			7,541	253	90		1		332.1	113.0	3.4	59.0

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	179,446	11,794
SUMMER	45,215	6,557
TOTAL	224,661	18,351

SOCKEYE	STEELHEAD	unclipped STEELHEAD
226,258	10,187	4,164

LAMPREY	STURGEON
49	0

TABLE 45

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT - FISH COUNTS

JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	unclipped STEELHEAD	PINK	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jul 1		1,513		296	0	0	9,721	746	321		3	0	268.3	100.2	4.0	62.0
Jul 2		1,342		395	0	0	10,092	742	332		10	0	255.2	102.0	4.0	62.0
Jul 3		1,994		446	0	0	10,745	1,048	417		6	0	252.7	81.1	4.0	62.0
Jul 4		2,207		391	0	0	9,111	1,421	688		6	0	201.4	60.7	4.0	62.0
Jul 5		1,467		294	0	0	8,062	1,258	590		12	0	218.9	82.2	4.5	62.0
Jul 6		1,606		262	0	0	8,204	1,634	939		14	0	203.8	81.4	4.5	62.0
Jul 7		1,122		220	0	0	5,480	1,498	904		8	0	204.4	81.8	4.0	64.0
Jul 8		837		255	0	0	6,218	1,233	747		27	0	203.3	81.3	4.0	64.0
Jul 9		1,145		261	0	0	4,659	1,170	683		18	0	208.1	66.4	4.0	64.0
Jul 10		1,247		323	0	0	4,597	1,906	1,004		24	0	194.9	58.9	4.0	65.0
Jul 11		1,215		309	1	0	5,656	2,216	1,219		21	0	211.5	63.3	4.0	65.0
Jul 12		1,187		300	0	0	3,809	3,734	2,047		12	0	178.6	53.6	4.0	66.0
Jul 13		1,084		217	0	0	3,076	3,583	2,029		10	0	203.9	76.8	4.5	65.0
Jul 14		550		85	0	0	1,380	2,530	1,410		26	0	175.9	70.5	4.5	66.0
Jul 15		400		84	0	0	858	2,128	1,100		15	0	172.8	54.8	5.5	68.0
Jul 16		539		165	0	0	985	3,234	1,648		33	0	181.5	54.5	5.5	67.0
Jul 17		500		199	0	0	900	2,783	1,453		37	0	172.4	65.1	5.5	67.0
Jul 18		564		149	0	0	1,007	3,825	1,841		41	0	157.0	62.7	5.5	67.0
Jul 19		553		143	0	0	897	2,917	1,368		15	0	190.4	76.0	5.5	67.0
Jul 20		430		121	0	0	618	3,217	1,511		23	0	146.4	58.6	5.6	68.0
Jul 21		305		102	0	0	313	2,295	1,063		21	1	144.6	46.8	5.4	68.0
Jul 22		518		101	0	0	274	3,260	1,423		37	0	138.2	41.4	5.4	68.0
Jul 23		324		67	0	0	191	2,630	1,143		30	0	172.1	51.6	5.5	68.0
Jul 24		161		33	0	0	127	2,547	1,120		33	0	162.6	49.0	5.4	70.0
Jul 25		243		97	0	0	194	3,785	1,664		20	0	133.9	40.2	5.5	69.0
Jul 26		263		96	1	0	137	3,740	1,699		41	0	134.4	40.3	5.5	69.0
Jul 27		375		71	1	1	133	3,675	1,643		22	0	125.9	37.9	5.0	70.0
Jul 28		328		74	2	1	102	2,902	1,362		35	0	164.3	49.1	6.0	70.0
Jul 29		161		27	0	0	60	1,476	668		34	0	152.5	45.9	6.0	70.0
Jul 30		364		90	2	1	52	2,256	1,086		38	0	139.0	41.8	6.0	70.0
Jul 31		240		71	0	0	47	1,882	813		36	1	125.1	37.6	6.0	70.0
TOTAL		24,784		5,744	7	3	97,705	73,271	35,935		708	2				
AVG		799		185	0	0	3,152	2,364	1,159		23	0	180.5	61.7	4.9	66.4

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	179,446	11,794
SUMMER	69,999	12,301
TOTAL	249,445	24,095

COHO ADULT
7

SOCKEYE	STEELHEAD	unclipped STEELHEAD
323,963	83,458	40,099

LAMPREY	STURGEON
757	2

Note: 1 bull trout was counted on July 3.

TABLE 46

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT - FISH COUNTS

AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Aug 1		295		37	0	0	23	2,482	1,100		67	0	113.1	34.0	6.0	70.0
Aug 2		231		58	0	0	29	2,185	908		50	0	112.1	33.5	5.5	71.0
Aug 3		146		30	0	0	13	1,356	522		52	0	120.7	36.2	5.5	70.0
Aug 4		180		31	0	0	13	1,081	442		50	0	151.6	45.9	5.5	71.0
Aug 5		104		18	1	0	8	1,060	408		41	0	144.4	43.7	5.0	71.0
Aug 6			281	53	0	0	14	1,499	585		46	0	124.4	37.0	5.0	72.0
Aug 7			312	66	0	0	13	1,023	440		39	2	123.1	36.9	5.0	71.0
Aug 8			221	41	0	0	7	667	278		56	0	121.0	36.4	5.0	71.0
Aug 9			170	45	0	0	8	672	285		33	0	114.7	34.4	5.5	71.0
Aug 10			202	51	0	0	7	644	190		27	0	107.3	32.2	5.5	71.0
Aug 11			190	41	0	0	4	661	221		30	1	139.7	42.0	5.5	71.0
Aug 12			90	42	0	1	3	551	161		20	0	121.5	36.6	5.5	72.0
Aug 13			116	16	0	0	0	623	192		32	1	122.7	36.9	5.5	71.0
Aug 14			194	30	0	0	0	496	160		19	5	117.7	35.2	5.5	71.0
Aug 15			249	64	0	0	2	419	153		25	0	107.2	32.1	5.5	71.0
Aug 16			79	18	0	0	0	288	78		25	0	122.2	36.7	5.5	72.0
Aug 17			57	33	0	0	0	225	85		29	1	130.0	38.9	5.5	72.0
Aug 18			159	42	0	0	0	250	79		44	3	122.6	36.9	5.5	72.0
Aug 19			195	51	0	0	0	198	66		13	1	124.6	37.3	5.5	72.0
Aug 20			228	50	1	0	1	158	58		21	2	116.0	34.7	5.5	71.0
Aug 21			225	76	0	0	1	263	76		16	0	105.5	31.7	6.0	72.0
Aug 22			695	144	0	0	0	601	168		16	4	102.7	30.9	6.0	72.0
Aug 23			338	63	0	1	0	1,123	243		8	0	108.8	32.6	6.0	72.0
Aug 24			787	136	0	0	0	1,186	334		3	0	109.4	32.7	6.0	71.0
Aug 25			1,078	136	-1	0	1	1,343	389		1	0	117.3	35.3	6.0	70.0
Aug 26			1,520	216	11	0	0	1,415	413		11	3	104.0	31.1	6.0	70.0
Aug 27			2,280	430	22	3	4	1,976	585		8	2	109.9	32.9	5.5	70.0
Aug 28			2,324	268	5	5	4	2,324	672		7	0	99.4	29.8	5.5	69.0
Aug 29			4,265	858	77	19	-1	3,460	971		4	0	95.0	28.5	5.5	69.0
Aug 30			4,236	798	124	21	-1	3,619	1,012		9	2	95.3	28.6	5.5	69.0
Aug 31			3,277	723	79	6	0	2,358	689		3	0	88.5	26.6	5.5	69.0
TOTAL		956	23,768	4,665	319	56	153	36,206	11,963		805	27				
AVG.		191	914	150	10	2	5	1,168	386		26	1	115.9	34.8	5.5	70.9

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	179,446	11,794
SUMMER	70,955	12,475
FALL	23,768	4,491
TOTAL	274,169	28,760

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD
326	56	324,116	119,664	52,062

LAMPREY	STURGEON
1,562	29

TABLE 47

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

JOHN DAY PROJECT - FISH COUNTS

SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	unclipped STEELHEAD	unclipped STEELHEAD	PINK	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Sep 1			3,888	851	59	7	0	1,917	517		5	0	81.7	0.9	6.0	69.0
Sep 2			4,560	918	118	29	0	2,515	720		5	1	96.8	0.9	6.0	70.0
Sep 3			5,092	802	185	24	4	3,450	1,055		10	0	80.2	0.9	6.0	70.0
Sep 4			4,437	647	182	25	0	5,859	1,773		5	1	61.5	1.0	6.5	69.0
Sep 5			7,849	721	765	132	0	8,654	2,593		14	2	62.8	0.8	6.5	69.0
Sep 6			5,774	773	363	34	0	5,593	1,475		3	0	65.5	1.0	6.5	69.0
Sep 7			8,399	1,167	840	68	2	6,300	1,865		19	0	87.3	0.7	6.5	68.0
Sep 8			6,668	1,054	382	35	0	4,726	1,363		4	1	89.5	0.9	5.5	68.0
Sep 9			6,968	993	596	72	2	5,188	1,546		4	-2	82.6	0.9	5.5	68.0
Sep 10			6,871	1,434	540	46	0	4,344	1,176		2	-1	69.3	1.0	5.5	67.0
Sep 11			4,029	1,168	566	48	0	3,256	911		6	0	63.8	0.9	5.5	68.0
Sep 12			3,558	823	615	37	0	3,960	1,104		6	1	65.8	0.9	5.5	66.0
Sep 13			4,462	970	698	36	0	5,861	1,681		4	0	75.8	1.1	6.0	66.0
Sep 14			2,154	486	259	12	0	3,268	880		2	1	82.8	0.9	6.0	66.0
Sep 15			2,300	476	258	12	0	3,734	1,011		0	-1	90.7	1.1	6.0	68.0
Sep 16			4,441	1,138	397	7	0	4,044	967		-1	2	88.2	0.9	6.0	68.0
Sep 17			5,215	588	426	25	0	4,501	1,330		3	1	91.5	0.8	6.0	67.0
Sep 18			4,976	1,492	580	52	0	4,186	1,260		3	2	71.9	0.8	6.0	68.0
Sep 19			5,906	762	241	20	0	3,518	1,201		1	1	64.0	0.8	5.5	68.0
Sep 20			5,405	1,759	496	73	0	7,909	2,748		-2	3	60.0	0.9	6.0	68.0
Sep 21			5,700	1,372	669	89	0	6,295	2,055		-1	3	84.1	0.9	5.5	67.0
Sep 22			4,620	857	327	32	0	3,866	1,040		6	1	85.5	0.8	5.5	68.0
Sep 23			5,436	1,189	646	71	0	3,264	913		0	2	76.2	0.8	6.0	66.0
Sep 24			6,523	1,251	570	62	0	2,464	707		2	1	77.8	0.8	6.0	66.0
Sep 25			6,933	1,516	193	16	0	1,536	439		-1	4	78.6	0.8	6.0	66.0
Sep 26			11,240	4,373	801	129	-1	2,925	873		-5	0	73.5	0.8	6.0	66.0
Sep 27			8,066	1,517	209	14	0	2,403	684		0	4	89.4	0.9	6.0	66.0
Sep 28			2,412	1,310	239	49	0	2,335	723		-4	0	90.2	0.7	6.0	66.0
Sep 29			2,142	1,093	196	45	1	2,537	803		1	2	96.4	0.8	5.5	67.0
Sep 30			6,745	870	362	47	0	3,000	952		0	1	98.8	0.7	5.5	68.0
TOTAL			162,769	34,370	12,778	1,348	8	123,408	36,365		91	30				
AVG.			5,426	1,146	426	45	0	4,114	1,212		3	1	79.4	0.9	5.9	67.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	179,446	11,794
SUMMER	70,955	12,475
FALL	186,537	38,861
TOTAL	436,938	63,130

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD
13,104	1,404	324,124	243,072	88,427

LAMPREY	STURGEON
1,653	59

TABLE 48

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT. PORTLAND

JOHN DAY PROJECT - FISH COUNTS

OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Oct 1			2,567	992	127	12	0	1,847	487		1	0	91.8	0.8	5.5	68.0
Oct 2			3,014	707	252	19	0	2,186	629		3	1	89.3	0.8	6.5	67.0
Oct 3			3,351	535	152	9	0	2,145	624		-1	2	71.7	0.7	6.0	68.0
Oct 4			1,959	469	184	17	1	2,535	808		1	1	75.6	0.8	6.0	67.0
Oct 5			1,451	399	119	3	0	2,099	684		1	2	104.8	0.5	5.5	67.0
Oct 6			1,990	234	121	27	0	1,933	725		0	2	110.8	0.8	6.0	66.0
Oct 7			2,641	567	153	13	0	1,914	643		0	1	98.7	0.8	5.5	67.0
Oct 8			1,917	511	202	19	2	1,719	631		2	0	102.9	0.9	5.5	66.0
Oct 9			1,092	253	132	7	0	1,173	456		0	0	104.8	0.7	6.0	65.0
Oct 10			984	214	124	13	0	1,224	439		-1	0	91.1	0.6	6.0	65.0
Oct 11			850	247	108	5	0	1,415	539		-1	0	89.0	0.3	6.0	64.0
Oct 12			99	60	165	9	0	902	339		0	1	105.5	0.8	6.0	64.0
Oct 13			885	180	1,392	46	0	2,741	1,169		0	1	120.3	0.8	6.0	64.0
Oct 14			1,118	216	1,584	70	0	3,428	1,563		0	0	123.6	0.7	6.0	64.0
Oct 15			582	131	892	27	0	2,598	1,113		0	1	97.0	0.7	6.0	64.0
Oct 16			232	59	182	5	0	1,583	707		0	1	101.1	0.8	6.0	64.0
Oct 17			234	52	117	1	0	848	322		0	0	88.0	0.8	6.0	64.0
Oct 18			338	77	110	2	1	834	413		0	1	106.3	1.0	5.5	63.0
Oct 19			198	35	77	0	0	565	235		0	0	100.5	1.0	5.5	63.0
Oct 20			433	88	85	2	0	607	241		1	0	102.1	0.7	5.5	62.0
Oct 21			225	44	68	0	0	491	221		0	1	79.3	0.8	5.5	62.0
Oct 22			393	57	88	0	0	505	181		0	0	76.1	0.7	6.0	61.0
Oct 23			74	28	44	1	0	348	121		0	0	75.9	0.7	6.0	61.0
Oct 24			337	61	135	2	0	511	170		0	0	65.8	0.7	6.0	61.0
Oct 25			225	38	101	2	0	504	233		0	0	68.5	0.7	6.0	60.0
Oct 26			91	17	303	8	0	433	176		0	0	86.0	0.7	5.5	60.0
Oct 27			201	20	579	15	0	966	378		0	0	90.2	0.7	5.5	61.0
Oct 28			49	14	392	10	0	924	403		0	0	98.6	0.6	5.5	60.0
Oct 29			161	31	247	11	0	1,052	562		0	0	88.2	0.8	6.0	60.0
Oct 30			27	16	73	4	0	425	210		0	2	94.4	0.7	6.0	60.0
Oct 31			89	20	94	0	0	285	142		3	0	77.2	0.7	6.0	59.0
TOTAL			27,807	6,372	8,402	359	4	40,740	15,564		9	17				
AVG.			897	206	271	12	0	1,314	502		0	1	92.7	0.7	5.8	63.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	179,446	11,794
SUMMER	70,955	12,475
FALL	214,344	45,233
TOTAL	464,745	69,502

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	PINK	LAMPREY	STURGEON
21,506	1,763	324,128	283,812	103,991	0	1,662	76

Note: Visual counts ended October 31.

TABLE 49

DISCHARGE AND WATER QUALITY DATA

JOHN DAY PROJECT 2010

NOVEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Nov 1	121.5	0.7	6.0	59.0
Nov 2	96.3	0.9	6.0	59.0
Nov 3	114.6	0.8	6.0	57.0
Nov 4	119.5	0.7	6.0	57.0
Nov 5	109.1	0.8	6.0	57.0
Nov 6	103.8	0.7	6.0	56.0
Nov 7	91.3	0.7	6.0	56.0
Nov 8	105.7	0.0	6.0	56.0
Nov 9	109.6	0.7	6.0	56.0
Nov 10	102.8	0.7	6.0	56.0
Nov 11	109.5	0.7	6.0	55.0
Nov 12	98.0	0.7	6.0	54.0
Nov 13	111.4	0.7	6.0	55.0
Nov 14	107.2	0.7	6.0	55.0
Nov 15	111.2	0.7	6.0	54.0
Nov 16	105.4	0.6	6.0	54.0
Nov 17	112.1	0.7	6.0	54.0
Nov 18	113.5	0.6	6.0	54.0
Nov 19	105.1	0.6	6.0	53.0
Nov 20	109.7	0.7	6.0	53.0
Nov 21	102.8	0.6	6.0	52.0
Nov 22	130.2	0.6	6.0	52.0
Nov 23	123.6	0.6	6.0	52.0
Nov 24	145.1	0.6	6.0	51.0
Nov 25	130.4	0.6	6.0	50.0
Nov 26	110.0	0.6	6.5	49.0
Nov 27	109.8	0.6	6.5	49.0
Nov 28	115.3	0.6	6.0	49.0
Nov 29	134.0	0.7	6.0	48.0
Nov 30	134.3	0.7	6.0	48.0
AVG.	113.1	0.7	6.0	53.7

DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1	128.1	0.0	6.0	47.0
Dec 2	125.3	0.0	6.0	46.0
Dec 3	116.4	0.0	6.0	46.0
Dec 4	128.4	0.0	6.0	45.0
Dec 5	110.5	0.0	6.0	45.0
Dec 6	129.6	0.0	6.0	44.0
Dec 7	122.0	0.0	6.0	43.0
Dec 8	125.8	0.0	6.0	43.0
Dec 9	124.8	0.0	6.0	43.0
Dec 10	108.8	0.0	6.0	44.0
Dec 11	134.3	0.0	6.0	43.0
Dec 12	84.7	0.0	6.0	44.0
Dec 13	106.7	0.0	6.0	44.0
Dec 14	125.1	0.0	6.0	44.0
Dec 15	146.2	0.0	6.0	44.0
Dec 16	133.5	0.0	6.0	43.0
Dec 17	109.2	0.0	6.0	43.0
Dec 18	136.2	0.0	6.0	44.0
Dec 19	124.8	0.0	6.0	43.0
Dec 20	117.5	0.0	5.5	44.0
Dec 21	128.0	0.0	6.0	44.0
Dec 22	140.8	0.0	6.0	44.0
Dec 23	111.3	0.0	6.0	44.0
Dec 24	127.6	0.0	6.0	44.0
Dec 25	105.0	0.0	6.0	44.0
Dec 26	108.7	0.0	6.0	44.0
Dec 27	124.3	0.0	6.0	44.0
Dec 28	128.9	0.0	6.0	43.0
Dec 29	142.7	0.0	6.0	43.0
Dec 30	153.0	0.0	6.0	42.0
Dec 31	175.8	0.0	6.0	42.0
AVG.	125.3	0.0	6.0	43.9

TABLE 50

YEARLY TOTALS OF SALMONIDS COUNTED OVER JOHN DAY DAM 1968 - 2010

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
2009	451,974	581,645	157,402	71,739	1,262,760
2010	534,247	283,812	324,128	23,272	1,165,459
TOTALS	10,270,288	7,508,749	2,855,211	684,371	21,318,636
10-Year Average	403,192	323,691	110,307	38,846	876,038

*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 - 2010

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
1968				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
1969			6	4,266	72,966	35,899	31,071	18,523	103,778	9,542			276,051	81,724	64,732	129,595	93,928
1970				35,750	35,248	20,439	21,542	24,784	80,969	3,774			222,506	72,555	43,093	106,858	74,090
1971				13,995	40,620	24,364	25,692	10,403	73,157	5,650			193,881	56,625	50,030	87,226	61,380
1972				28,535	41,882	15,833	27,484	14,208	90,181	7,508			225,631	71,569	44,542	109,520	82,646
1973				67,467	27,091	18,972	15,067	16,995	89,913	13,987			249,492	96,710	34,206	118,576	73,687
1974				5,174	38,058	8,115	18,985	8,112	77,296	12,148			167,888	46,191	25,865	95,832	61,669
1975				7,727	27,989	11,058	21,359	18,250	65,367	7,329			159,079	37,716	32,179	89,184	62,403
1976				10,428	32,985	17,836	18,506	10,114	72,467	13,575			175,911	45,419	36,037	94,455	62,793
1977				55,061	19,422	15,674	13,764	7,853	71,302	11,855			194,931	75,782	29,194	89,955	60,386
1978				34,735	35,206	15,104	16,764	8,149	52,975	11,919			174,852	72,723	30,371	71,758	36,289
1979				8,224	12,568	9,537	13,580	14,128	50,977	8,566	574		118,154	21,981	23,572	72,601	41,364
1980				7,995	18,311	7,125	12,522	9,063	37,023	8,625			100,664	27,202	19,664	53,798	25,877
1981				18,178	18,325	7,292	8,992	8,524	44,626	8,422			114,359	37,677	15,813	60,869	34,547
1982				3,396	30,444	11,031	7,359	10,881	67,271	13,700			144,082	36,530	16,360	91,192	56,966
1983				7,123	25,391	7,990	7,064	8,195	66,078	18,025			139,866	33,480	14,834	91,552	43,440
1984				4,329	26,561	9,706	12,892	15,422	96,399	22,255	809		188,373	32,035	22,795	133,543	69,874
1985				27,539	42,487	15,585	9,663	27,387	178,322	34,192	2,449		337,624	72,389	23,489	241,746	149,281
1986			21	38,075	37,959	13,227	9,703	10,797	194,928	41,990			346,700	77,884	22,051	246,765	133,827
1987				33,985	26,852	13,641	8,948	24,363	196,596	23,367			327,752	62,313	22,244	243,195	53,794
1988				33,323	20,170	14,731	9,648	37,002	147,553	14,824			277,251	55,195	23,569	198,487	51,330
1989				12,510	23,983	12,793	10,124	35,985	101,794	11,065			208,254	37,773	23,868	146,613	25,092
1990				23,689	18,854	11,209	9,199	13,542	71,508	8,312			156,313	43,127	20,532	92,654	22,195
1991				7,419	13,668	8,868	8,390	4,879	64,950	10,747			118,921	21,847	16,872	80,202	28,646
1992				27,538	16,623	9,452	5,263	7,677	58,140	7,332			132,025	45,457	13,910	72,658	22,084
1993				26,309	28,204	13,295	6,311	10,703	51,667	5,216			141,705	56,144	18,364	67,197	9,621
1994				4,436	4,937	6,305	6,397	13,345	79,538	11,687			126,645	9,745	12,935	103,965	18,867
1995				2,034	3,378	4,977	6,273	14,694	61,273	14,648			107,277	5,776	11,476	90,025	24,192
1996				1,860	18,616	7,419	6,356	18,550	68,198	9,603			130,602	21,599	13,148	95,855	12,071
1997				13,579	45,408	16,551	8,328	10,355	81,039	9,980			185,240	62,580	21,769	100,891	1,588
1998				9,279	12,439	10,076	7,535	11,073	62,107	17,519			130,028	22,177	17,780	90,071	13,745
1999				3,008	16,517	10,206	14,226	20,201	86,380	12,744			163,282	20,498	24,714	118,070	19,611
2000				48,176	47,705	19,201	13,579	44,377	86,737	9,596			269,371	98,710	31,056	139,605	56,892
2001				187,104	74,233	46,449	33,904	20,506	128,230	20,561			510,987	270,385	74,235	166,367	57,877
2002				36,677	99,270	69,941	44,890	37,086	143,126	16,739			447,729	142,290	110,969	194,470	37,568
2003			3,951	61,184	45,880	62,159	45,782	22,222	201,192	28,666	1,238	66	472,340	111,642	105,615	249,828	54,680
2004			127	62,999	50,288	55,728	30,998	24,383	192,606	29,301	1,410	51	447,891	118,520	83,060	244,723	47,708
2005			15	13,680	39,563	45,107	28,340	15,637	158,917	21,319	411	2	322,991	58,742	69,439	194,382	37,622
2006				420	49,051	50,206	28,688	14,821	118,233	27,015	1,710	17	290,161	52,406	77,964	158,064	28,507
2007			3	13,080	40,896	30,282	19,378	12,140	81,091	17,462	1,256	288	215,876	57,042	47,908	109,379	61,316
2008				14,050	77,177	58,652	22,929	29,293	126,961	13,890			342,952	96,697	77,329	168,926	60,788
2009				5,282	112,503	75,623	31,549	51,444	155,522	20,051			451,974	126,539	99,136	226,299	164,110
2010				69,747	108,746	64,519	30,528	29,389	197,139	34,179			534,247	191,240	83,430	259,577	69,502
TOTAL			4,123	1,119,338	1,624,746	1,012,879	771,784	782,181	4,296,235	653,736	10,066		10,275,512	2,862,118	1,725,643	5,677,206	2,271,137
10-Year Average				46,422	69,761	55,867	31,699	25,692	150,302	22,918			403,715	122,550	82,909	197,202	61,968

*Jacks included

TABLE 52

MONTHLY COUNT OF SOCKEYE SALMON
JOHN DAY DAM
1968 - 2010

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
2009					3	100,136	57,110	142	8	3			157,402
2010					14	226,244	97,705	153	8	4			324,128
TOTAL					101	1,460,089	1,377,924	16,395	625	76	1		2,855,211
10-Year Average						75,987	34,157	139	17				110,307

TABLE 53

MONTHLY COUNT OF COHO SALMON
JOHN DAY DAM 1968 - 2010

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
2009							1	4,826	29,003	37,909			71,739
2010							10	375	14,126	8,761			23,272
TOTAL				0	2	1	109	17,027	438,497	220,630	8,231		684,559
10-Year Average								820	21,354	15,910			38,865

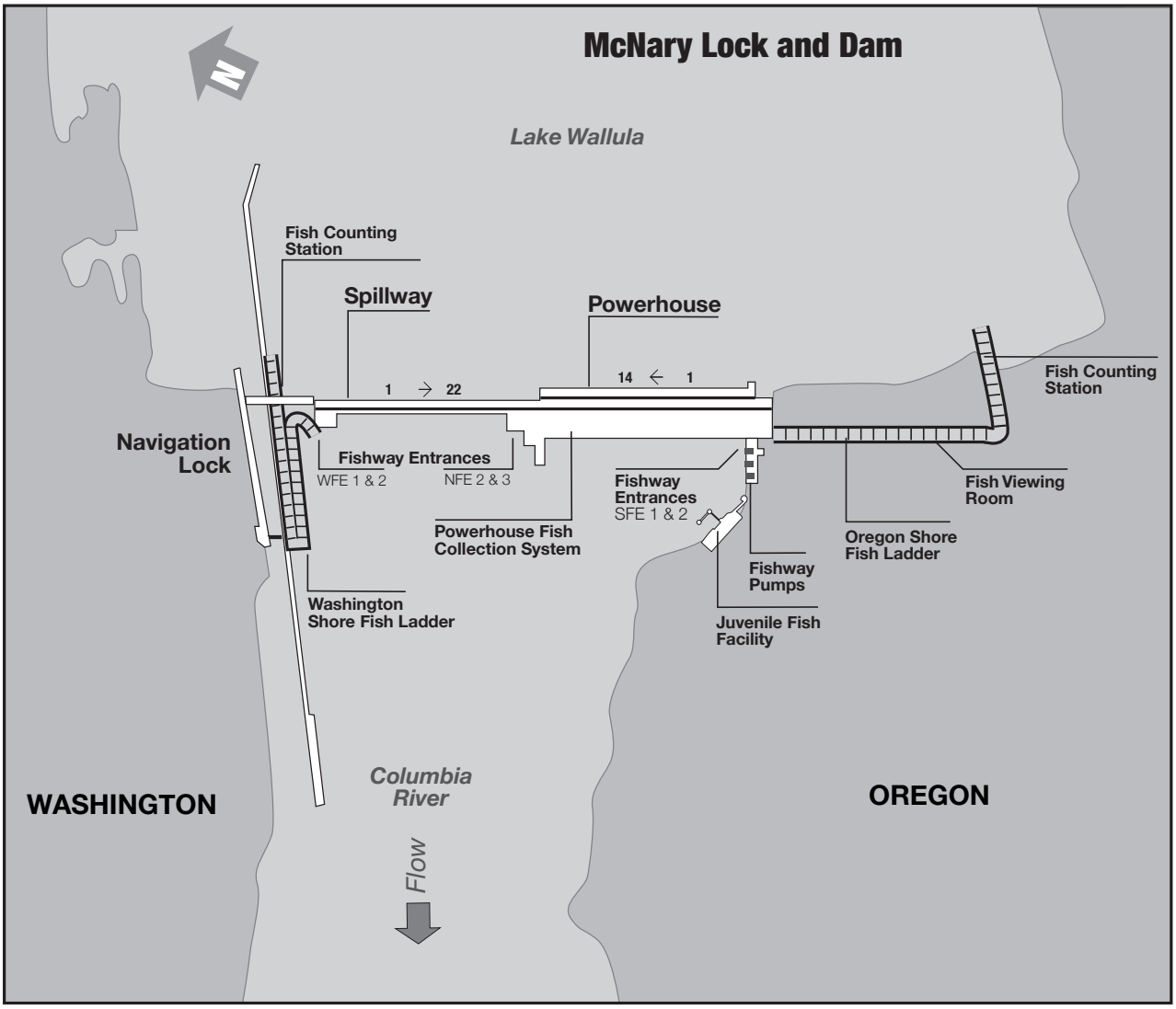
*Jacks included

TABLE 54

MONTHLY COUNT OF STEELHEAD
JOHN DAY DAM 1968 - 2010

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
2009				2,502	674	5,136	43,692	167,086	262,375	100,180			581,645
2010				2,156	442	7,589	73,271	36,206	123,408	40,740			283,812
TOTAL			23,715	112,901	40,920	109,091	811,545	1,204,379	3,680,917	1,492,096	48,905		7,527,615
10-YR Average				2,360	584	5,578	36,284	49,982	161,572	63,360			325,578

Plate 5 McNary Lock and Dam



McNARY DAM

FISH COUNTING SCHEDULE

Washington Ladder Schedule

1 January – 31 March	No counting.
1 April – 31 October	Visual counts daily 0400-2000 hours PST.
1 July – 30 September	Nighttime video lamprey counts.
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 July – 30 September	Nighttime video lamprey counts.
1 November – 31 December	No counting.

FISH LADDER OPERATING SCHEDULE

Washington Ladder

1 January – 31 December	Ladder in service. No outage.

Oregon Ladder

1 January to 12 January	Ladder in service.
12 January – 26 February	Ladder dewatered for annual maintenance and lamprey orifice installation.
26 February to 31 December	Ladder in service.

FISHWAY ACTIVITIES

Washington ladder maintenance activities occurred in December 2009 consisting of camera inspections of diffuser gratings with maintenance performed on all above-water structures and in the ladder to tailwater elevation. The junction pool still cannot be dewatered due to problems with the concrete spillway bulkheads. The Wasco county PUD was also operational all of 2010.

Oregon ladder maintenance activities consist of work to install new exit bulkheads and slots along with orifices' on the stem walls of the tilting weirs for adult lamprey passage improvement. Video, physical and dive inspections of all diffuser gratings were completed, revealing one small section which required repair just upstream of the south junction pool.

Three fish pumps were operated 1 March through 30 June and from 20 to 31 December. From 30 June to 20 December, two pumps were in use due to transformer

replacement and issues with pump 3. The 1000 cfs gravity conduit operated all season except for one short term outage on April 1 to remove exit's north travelling screen bulkheads.

The juvenile bypass channel was operated for both juvenile and adult fallback passage, from 1 April to 29 December except on May 12 when orifices were closed for seven hours for rectangular screen cleaning mechanism repairs. Other brief outages occurred when switching in and out of emergency bypass.

TABLE 55

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

2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL*
CHINOOK*				48,451	98,345	58,192	30,587	18,708	166,173	42,544			463,000
STEELHEAD				1,974	397	3,668	51,028	39,689	122,146	43,611			262,513
SOCKEYE					7	166,127	112,474	194	-4	1			278,799
COHO*								54	9,555	5,480			15,089
CHUM													0
PINK													0
TOTAL				50,425	98,749	227,987	194,089	58,645	297,870	91,636			1,019,401
SHAD					42	168,290	104,822	3,519					276,673
LAMPREY					0	2	232	499	89	11			833
STURGEON													0
BULL TROUT													0

***Jacks Included**

TABLE 56

DISCHARGE AND WATER QUALITY DATA

MCNARY PROJECT 2010

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	115.0	0.0	6.0	40.0
Jan 2	90.1	0.0	6.0	40.0
Jan 3	98.0	0.0	6.0	40.0
Jan 4	108.0	0.0	6.0	40.0
Jan 5	114.0	0.0	6.0	40.0
Jan 6	123.8	0.0	6.0	40.0
Jan 7	127.9	0.0	6.0	40.0
Jan 8	137.9	0.0	6.0	40.0
Jan 9	121.0	0.0	5.8	40.0
Jan 10	93.2	0.0	3.1	39.0
Jan 11	106.5	0.0	3.0	39.0
Jan 12	119.0	0.0	*	39.0
Jan 13	118.5	0.0	5.8	39.0
Jan 14	107.1	0.0	6.0	39.0
Jan 15	91.1	0.0	6.0	39.0
Jan 16	101.2	0.0	6.0	40.0
Jan 17	95.9	0.0	6.0	40.0
Jan 18	99.5	0.0	6.0	40.0
Jan 19	80.0	0.0	6.0	40.0
Jan 20	96.3	0.0	6.0	40.0
Jan 21	98.4	0.0	5.4	40.0
Jan 22	95.9	0.0	4.4	41.0
Jan 23	95.2	0.0	4.5	41.0
Jan 24	104.6	0.0	4.5	41.0
Jan 25	113.1	0.0	3.4	41.0
Jan 26	112.9	0.0	4.2	41.0
Jan 27	102.5	0.0	4.2	40.0
Jan 28	110.1	0.0	3.5	40.0
Jan 29	101.8	0.0	4.4	40.0
Jan 30	109.3	0.0	4.8	40.0
Jan 31	97.4	0.0	5.3	41.0
AVG.	106.0	0.0	5.2	40.0

FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	107.5	0.0	6.0	41.0
Feb 2	96.6	0.0	5.5	41.0
Feb 3	103.8	0.0	5.8	41.0
Feb 4	92.5	0.0	5.4	41.0
Feb 5	94.7	0.0	5.6	41.0
Feb 6	98.7	0.0	5.8	41.0
Feb 7	97.3	0.0	6.0	40.0
Feb 8	103.9	0.0	6.0	40.0
Feb 9	120.6	0.0	6.0	40.0
Feb 10	116.3	0.0	6.0	41.0
Feb 11	107.8	0.0	6.0	41.0
Feb 12	102.0	0.0	6.0	41.0
Feb 13	97.8	0.0	5.7	41.0
Feb 14	91.3	0.0	5.9	41.0
Feb 15	91.0	0.0	6.0	41.0
Feb 16	97.9	0.0	6.0	41.0
Feb 17	109.2	0.0	6.0	41.0
Feb 18	108.3	0.0	6.0	41.0
Feb 19	112.1	0.0	5.7	41.0
Feb 20	105.0	0.0	6.0	41.0
Feb 21	106.3	0.0	6.0	41.0
Feb 22	119.5	0.0	6.0	41.0
Feb 23	125.7	0.0	6.0	41.0
Feb 24	110.0	0.0	6.0	41.0
Feb 25	94.3	0.0	6.0	41.0
Feb 26	105.9	0.0	6.0	41.0
Feb 27	98.7	0.0	*	41.0
Feb 28	85.1	0.0	6.0	41.0
AVG.	103.6	0.0	5.9	40.9

MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	93.9	0.0	6.0	41.0
Mar 2	97.9	0.0	6.0	41.0
Mar 3	102.8	0.0	6.0	41.0
Mar 4	91.6	0.0	6.0	41.0
Mar 5	104.3	0.0	6.0	42.0
Mar 6	103.8	0.0	6.0	42.0
Mar 7	101.9	0.0	6.0	42.0
Mar 8	97.9	0.0	6.0	43.0
Mar 9	118.7	0.0	*	43.0
Mar 10	98.6	0.0	6.0	43.0
Mar 11	106.2	0.0	6.0	43.0
Mar 12	99.6	0.0	6.0	43.0
Mar 13	90.4	0.0	6.0	43.0
Mar 14	109.7	0.0	6.0	43.0
Mar 15	105.2	0.0	6.0	43.0
Mar 16	92.3	0.0	6.0	43.0
Mar 17	95.4	0.0	6.0	43.0
Mar 18	85.0	0.0	6.0	43.0
Mar 19	95.7	0.0	6.0	43.0
Mar 20	94.2	0.0	5.7	43.0
Mar 21	84.5	0.0	6.0	44.0
Mar 22	111.1	0.0	5.8	44.0
Mar 23	86.0	0.0	5.6	44.0
Mar 24	92.1	0.0	5.5	44.0
Mar 25	98.0	0.0	5.6	44.0
Mar 26	83.4	0.0	5.8	45.0
Mar 27	99.0	0.0	6.0	45.0
Mar 28	91.9	0.0	6.0	45.0
Mar 29	112.4	0.0	5.6	46.0
Mar 30	96.2	0.0	5.7	46.0
Mar 31	101.4	0.0	5.2	46.0
AVG.	98.1	0.0	5.9	43.3

* Data unavailable

TABLE 57

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT - FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Apr 1	8			0				105	52				101.5	0.0	5.8	46.0
Apr 2	16			0				155	66				101.4	0.0	5.7	46.0
Apr 3	27			0				98	46				101.2	0.0	5.5	46.0
Apr 4	14			0				4	-24				95.0	0.0	5.0	46.0
Apr 5	19			0				34	21				99.4	0.0	5.3	46.0
Apr 6	24			1				-17	-21				92.5	0.0	5.6	46.0
Apr 7	47			1				81	23				89.4	0.0	5.5	46.0
Apr 8	45			2				58	27				83.3	0.7	5.1	46.0
Apr 9	98			1				67	35				79.6	0.3	4.9	46.0
Apr 10	72			0				87	41				98.3	39.5	4.5	46.0
Apr 11	54			1				48	37				93.0	37.4	3.9	47.0
Apr 12	93			2				79	49				95.8	38.5	3.8	48.0
Apr 13	160			2				91	54				101.0	40.5	4.8	48.0
Apr 14	355			2				121	82				96.7	38.9	4.8	47.0
Apr 15	814			0				63	40				93.9	37.6	4.8	48.0
Apr 16	894			3				82	42				99.4	40.0	5.3	48.0
Apr 17	771			8				96	54				98.9	39.8	5.5	48.0
Apr 18	1,456			11				125	80				104.1	41.9	5.1	49.0
Apr 19	1,380			17				90	48				112.9	45.3	4.9	49.0
Apr 20	1,821			3				51	25				135.4	54.4	5.0	49.0
Apr 21	5,494			46				95	59				141.9	56.8	5.1	49.0
Apr 22	3,659			25				51	36				169.6	68.1	5.0	51.0
Apr 23	2,914			25				60	41				182.2	73.0	4.0	51.0
Apr 24	3,670			46				59	32				173.9	69.7	4.9	52.0
Apr 25	4,826			96				63	46				173.0	69.5	4.8	52.0
Apr 26	2,642			35				35	23				168.8	68.1	5.3	52.0
Apr 27	5,026			71				16	12				177.2	71.2	5.2	52.0
Apr 28	5,401			98				33	22				165.8	66.6	4.8	52.0
Apr 29	3,038			41				25	16				160.2	64.4	4.4	52.0
Apr 30	3,046			30				19	11				155.7	62.6	4.8	52.0
TOTAL	47,884			567				1,974	1,075							
AVG.	1596			19				66	36				121.4	37.5	5.0	48.5

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 - FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
May 1	2,586			27			0	15	9		0	0	182.8	73.8	5.1	52.0
May 2	3,147			48			0	12	6		0	0	154.5	61.9	5.9	51.0
May 3	4,817			85			0	10	5		0	0	180.0	71.9	5.0	51.0
May 4	6,615			128			0	16	9		0	0	174.4	70.3	4.9	51.0
May 5	5,117			95			0	17	7		0	0	189.8	76.1	5.6	51.0
May 6	4,556			121			0	13	10		0	0	153.2	61.6	5.1	52.0
May 7	7,375			122			0	9	4		0	0	190.2	76.3	5.0	51.0
May 8	4,715			150			0	5	3		0	0	159.0	63.8	5.4	51.0
May 9	4,179			196			0	9	8		0	0	175.1	70.3	5.3	53.0
May 10	4,549			196			0	10	6		-6	1	180.8	72.6	5.0	53.0
May 11	4,555			229			0	17	11		0	0	164.2	65.9	6.0	51.0
May 12	4,136			300			0	8	6		0	1	187.9	75.7	6.0	52.0
May 13	3,452			297			0	3	1		0	-1	208.6	84.1	6.0	52.0
May 14	3,184			450			0	10	6		0	0	182.8	73.6	6.0	52.0
May 15	1,697			287			0	17	5		0	-1	172.9	69.5	6.0	53.0
May 16	1,880			372			0	12	6		1	0	174.2	70.0	*	53.0
May 17	1,851			448			0	22	10		0	0	202.4	81.3	6.0	54.0
May 18	2,624			561			0	17	7		0	0	209.4	84.4	5.5	54.0
May 19	3,100			553			0	17	9		0	0	228.7	92.4	6.0	54.0
May 20	2,858			562			0	16	2		0	0	234.5	94.2	6.0	55.0
May 21	2,206			351			0	13	5		1	0	267.8	107.2	6.0	55.0
May 22	2,040			330			0	17	3		1	0	240.8	96.8	6.0	55.0
May 23	1,400			194			0	12	2		0	0	209.8	84.4	6.0	55.0
May 24	655			162			0	10	4		0	0	237.4	95.6	6.0	54.0
May 25	825			148			0	12	8		5	0	219.0	88.3	6.0	54.0
May 26	522			101			0	9	4		8	0	218.4	87.6	6.0	54.0
May 27	1,085			160			0	7	0		5	0	211.1	84.4	6.0	54.0
May 28	1,377			150			1	22	5		8	0	186.1	74.7	6.0	55.0
May 29	1,199			181			1	10	4		1	0	175.1	70.3	6.0	56.0
May 30	1,328			129			1	13	6		6	0	217.5	87.5	6.0	55.0
May 31	1,460			122			4	17	5		12	0	194.5	78.2	6.0	55.0
TOTAL	91,090			7,255			7	397	176		42	0				
AVG.	2,938			234			0	13	6		1	0	196.2	78.9	5.7	53.2

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY
SPRING	138,974	7,822	7	2,371	1,251	42	0

TABLE 59

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT - FISH COUNTS

JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	1,148			109			6	9	0		18	0	202.8	81.3	6.0	55.0
Jun 2	1,426			130			9	18	6		66	0	233.2	93.7	*	56.0
Jun 3	1,377			150			9	9	1		139	0	275.0	116.4	6.0	56.0
Jun 4	2,325			182			10	17	1		61	0	305.4	141.3	6.0	56.0
Jun 5	2,540			203			36	21	6		378	0	320.3	165.9	3.8	56.0
Jun 6	2,217			191			43	28	6		1,185	0	320.6	156.3	4.4	56.0
Jun 7	1,795			177			69	14	6		911	0	321.6	157.7	4.3	56.0
Jun 8	2,270			221			69	35	11		1,315	2	341.2	176.4	4.4	56.0
Jun 9		2,100		176			72	42	5		810	0	364.1	200.0	3.5	58.0
Jun 10		1,490		121			62	20	6		202	0	389.8	226.6	*	57.0
Jun 11		1,713		141			86	44	8		50	0	391.7	229.9	1.7	56.0
Jun 12		1,722		162			109	32	6		90	0	362.9	202.2	1.8	56.0
Jun 13		1,740		135			218	27	3		484	0	319.3	161.4	1.0	57.0
Jun 14		1,567		101			328	35	7		2,589	0	305.8	137.2	1.4	58.0
Jun 15		1,077		135			363	45	17		1,417	0	328.8	155.1	1.5	58.0
Jun 16		1,918		190			572	69	14		1,459	0	350.8	179.7	1.7	56.0
Jun 17		1,758		202			1,449	98	26		921	0	342.1	168.6	1.9	58.0
Jun 18		795		116			1,981	70	19		7,457	0	338.6	162.0	1.5	57.0
Jun 19		768		104			2,002	76	16		11,929	0	309.5	134.5	1.7	58.0
Jun 20		769		134			1,699	109	24		14,512	0	281.2	120.2	2.3	58.0
Jun 21		1,454		137			3,336	82	23		9,384	0	318.6	143.3	2.5	58.0
Jun 22		1,737		219			4,931	100	25		6,062	0	343.2	167.8	2.5	58.0
Jun 23		2,243		269			6,884	97	20		9,851	0	336.4	166.1	3.8	58.0
Jun 24		1,640		169			10,931	167	35		13,566	0	333.6	162.9	3.5	58.0
Jun 25		1,878		170			17,223	231	70		15,223	0	327.4	157.4	5.3	58.0
Jun 26		1,735		215			13,584	311	88		18,194	0	325.2	154.9	3.8	58.0
Jun 27		2,121		185			22,740	320	104		13,241	0	315.1	158.3	3.8	60.0
Jun 28		2,444		287			23,940	357	107		13,995	0	297.4	146.9	3.9	61.0
Jun 29		3,020		285			28,622	551	192		13,021	0	320.3	156.1	4.2	61.0
Jun 30		2,160		229			24,744	634	220		9,760	0	308.9	150.4	4.2	61.0
TOTAL	15,098	37,849		5,245			166,127	3,668	1,072		168,290	2				
AVG.	1,887	1,720		175			5,538	122	36		5,610	0	321.0	157.7	3.3	57.5

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	154,072	9,185
SUMMER	37,849	3,882
TOTAL	191,921	13,067

SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD
166,134	6,039	2,323

SHAD	LAMPREY
168,332	2

TABLE 60

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT - FISH COUNTS

JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jul 1		1,624		169			17,810	519	224		11,249	0	268.3	134.2	4.2	62.0
Jul 2		1,702		376			11,954	590	204		6,305	0	253.9	127.3	4.0	62.0
Jul 3		1,716		145			9,183	631	227		2,833	1	251.9	128.4	*	61.0
Jul 4		1,367		154			7,868	723	269		4,047	0	218.9	109.7	4.0	61.0
Jul 5		1,800		142			7,994	601	231		4,304	0	206.7	103.6	4.0	61.0
Jul 6		1,860		242			7,892	777	339		7,399	0	206.9	103.7	4.0	62.0
Jul 7		1,621		186			7,299	910	356		8,796	0	203.2	102.1	4.0	62.0
Jul 8		1,086		145			5,995	764	317		6,935	1	208.7	104.8	5.3	62.0
Jul 9		1,058		132			5,097	871	395		3,180	0	213.8	107.2	5.3	64.0
Jul 10		1,235		182			5,269	1,036	501		10,610	1	213.0	106.6	5.8	65.0
Jul 11		1,164		165			4,032	1,128	501		2,404	2	206.5	103.6	*	65.0
Jul 12		1,399		269			4,742	1,303	622		4,464	0	207.1	103.8	5.6	65.0
Jul 13		1,340		190			4,066	1,650	810		3,608	9	178.9	89.9	6.0	65.0
Jul 14		1,038		147			3,624	1,686	843		3,480	6	188.1	93.4	6.0	65.0
Jul 15		993		124			2,800	1,679	784		2,038	8	179.8	90.5	6.0	66.0
Jul 16		474		75			1,222	1,342	707		809	7	196.0	98.1	6.0	66.0
Jul 17		398		98			901	1,733	803		922	6	174.9	87.4	6.0	66.0
Jul 18		435		104			809	1,812	850		1,416	5	169.3	83.8	6.0	66.0
Jul 19		534		101			812	2,143	1,055		1,344	2	177.1	88.8	6.0	66.0
Jul 20		500		90			777	2,590	1,152		2,670	13	160.6	80.7	6.0	66.0
Jul 21		559		89			639	2,812	1,290		3,906	8	154.0	77.4	6.0	66.0
Jul 22		368		61			409	2,096	936		3,112	15	154.5	77.0	6.0	66.0
Jul 23		260		62			279	2,265	1,007		1,437	18	175.5	87.6	6.0	66.0
Jul 24		414		70			222	2,427	1,087		2,213	14	160.9	79.7	6.0	66.0
Jul 25		294		66			159	2,757	1,309		894	7	145.7	72.9	6.0	68.0
Jul 26		181		31			136	2,275	1,033		830	8	143.2	70.9	6.0	68.0
Jul 27		225		68			121	1,666	711		899	19	149.7	74.9	6.0	68.0
Jul 28		234		75			113	2,380	1,045		793	15	163.4	81.1	6.0	69.0
Jul 29		246		33			87	2,672	1,136		862	12	159.4	79.8	*	69.0
Jul 30		322		74			99	2,517	1,130		723	30	146.8	72.9	6.0	69.0
Jul 31		236		39			64	2,673	1,100		340	25	137.7	68.8	6.0	69.0
TOTAL		26,683		3,904			112,474	51,028	22,974		104,822	232				
AVG.		861		126			3,628	1,646	741		3,381	7	186.3	93.2	5.5	65.2

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	154,072	9,185
SUMMER	64,532	7,786
TOTAL	218,604	16,971

SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD
278,608	57,067	25,297

SHAD	LAMPREY
273,154	234

TABLE 61

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT - FISH COUNTS

AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Aug 1		413		61	0	0	50	3,354	1,464		364	34	120.4	60.4	6.0	69.0
Aug 2		256		47	0	0	19	3,554	1,599		384	26	111.0	55.7	6.0	70.0
Aug 3		279		43	0	0	10	1,873	819		198	25	142.3	71.0	6.0	70.0
Aug 4		330		31	0	0	14	2,294	1,011		197	16	156.5	78.3	6.0	70.0
Aug 5		181		29	0	0	15	1,910	824		143	25	147.2	73.7	6.0	70.0
Aug 6		149		21	0	0	23	1,818	759		213	26	138.7	69.6	6.0	70.0
Aug 7		156		16	0	0	12	1,645	698		191	24	130.4	64.9	6.0	70.0
Aug 8		230		29	0	0	8	1,723	725		103	26	122.8	61.8	6.0	70.0
Aug 9			311	30	1	0	4	1,646	635		96	34	128.4	63.8	6.0	71.0
Aug 10			206	25	0	0	7	1,371	482		139	25	112.8	56.6	6.0	71.0
Aug 11			171	24	0	0	1	669	261		129	16	146.0	72.7	6.0	71.0
Aug 12			236	43	1	0	9	757	255		109	16	130.5	65.3	6.0	71.0
Aug 13			159	34	0	0	2	775	268		174	12	125.5	62.1	6.0	70.0
Aug 14			145	25	0	0	1	799	264		79	7	125.1	62.7	6.0	70.0
Aug 15			146	23	0	0	1	643	230		86	18	116.8	57.9	6.0	70.0
Aug 16			143	15	0	0	2	561	193		103	14	123.5	62.0	6.0	70.0
Aug 17			162	34	0	0	1	414	138		118	5	143.0	71.5	6.0	70.0
Aug 18			117	29	0	0	1	424	153		63	10	144.7	72.6	6.0	70.0
Aug 19			97	24	0	0	3	463	153		101	16	124.0	62.4	6.0	70.0
Aug 20			216	41	0	0	0	403	151		61	13	117.8	59.1	6.0	70.0
Aug 21			249	34	0	0	0	395	118		76	16	120.6	60.4	6.0	70.0
Aug 22			262	43	1	0	1	382	113		61	10	113.7	57.0	6.0	70.0
Aug 23			284	71	0	0	0	247	80		65	11	109.8	54.9	6.0	70.0
Aug 24			656	85	0	0	1	484	176		56	8	107.2	53.7	6.0	70.0
Aug 25			359	64	0	0	1	475	155		104	15	131.8	65.9	6.0	69.0
Aug 26			453	96	0	0	0	913	248		43	3	111.5	55.9	6.0	69.0
Aug 27			815	105	0	1	4	1,394	380		25	2	120.8	60.7	6.0	69.0
Aug 28			996	154	0	0	1	1,547	406		2	7	106.9	51.3	*	68.0
Aug 29			2,032	204	0	0	1	1,253	369		12	10	99.6	43.5	*	68.0
Aug 30			2,625	331	11	4	2	2,981	811		19	24	93.0	37.3	6.0	68.0
Aug 31			3,749	314	34	1	0	2,522	710		5	5	100.3	45.5	*	68.0
TOTAL		1,994	14,589	2,125	48	6	194	39,689	14,648		3,519	499				
AVG.		249	634	69	2	0	6	1,280	473		114	16	123.3	61.0	6.0	69.7

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	154,072	9,185
SUMMER	66,526	8,063
FALL	14,589	1,848
TOTAL	235,187	19,096

COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD
48	6	278,802	96,756	39,945

SHAD	LAMPREY
276,673	733

TABLE 62

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT - FISH COUNTS

SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Sep 1			1,656	276	36	5	0	2,403	617			8	92.3	0.0	6.0	68.0
Sep 2			2,435	302	66	2	0	2,563	603			5	93.4	0.0	6.0	68.0
Sep 3			2,411	417	50	12	1	1,926	546			2	82.9	0.0	6.0	67.0
Sep 4			3,411	448	111	7	0	1,829	553			6	68.0	0.0	6.0	67.0
Sep 5			5,692	599	119	12	0	3,234	938			9	68.8	0.0	6.0	66.0
Sep 6			4,700	613	229	26	1	5,538	1,650			3	68.0	0.0	6.0	66.0
Sep 7			5,779	576	302	49	2	5,927	1,691			2	88.9	0.0	6.0	66.0
Sep 8			4,330	537	245	34	0	4,892	1,260			3	92.8	0.0	7.0	66.0
Sep 9			2,984	726	293	24	2	5,226	1,417			2	86.9	0.0	7.1	67.0
Sep 10			5,626	666	562	25	-1	6,924	1,921			3	68.0	0.0	6.0	67.0
Sep 11			4,229	620	321	25	0	5,014	1,381			3	70.2	0.0	6.0	66.0
Sep 12			5,039	761	329	20	0	3,694	1,000			1	60.2	0.0	6.0	66.0
Sep 13			7,933	750	382	20	0	4,134	1,129			1	87.2	0.0	6.0	66.0
Sep 14			6,291	429	502	46	0	5,211	1,573			2	87.8	0.0	6.0	66.0
Sep 15			3,299	434	360	23	-7	3,339	860			0	93.2	0.0	6.0	66.0
Sep 16			2,932	310	334	31	0	3,428	966			5	88.3	0.0	6.0	66.0
Sep 17			1,311	326	395	65	0	4,329	1,223			4	87.2	0.0	*	66.0
Sep 18			2,297	599	259	61	0	3,801	1,054			2	76.4	0.0	6.0	66.0
Sep 19			4,302	692	266	39	0	2,566	715			4	60.8	0.0	6.0	67.0
Sep 20			4,650	661	217	40	0	2,541	730			3	63.6	0.0	6.0	66.0
Sep 21			9,060	1,412	506	41	-2	7,478	1,994			2	86.2	0.0	6.0	66.0
Sep 22			7,886	1,467	519	76	0	8,345	2,457			0	87.6	0.0	6.0	66.0
Sep 23			5,813	719	400	72	0	5,461	1,446			1	76.5	0.0	*	66.0
Sep 24			6,342	746	423	53	0	6,795	2,098			9	85.2	0.0	*	66.0
Sep 25			5,298	711	316	61	0	4,922	1,464			5	75.3	0.0	6.0	65.0
Sep 26			5,802	762	220	36	0	2,263	687			0	74.1	0.0	6.0	65.0
Sep 27			6,955	808	197	23	0	1,832	538			2	97.1	0.0	6.0	65.0
Sep 28			9,407	1,245	234	47	0	2,927	817			1	92.7	0.0	5.2	65.0
Sep 29			3,617	984	143	33	0	1,815	536			1	94.6	0.0	6.0	65.0
Sep 30			4,161	929	147	64	0	1,789	531			0	105.9	0.0	6.0	65.0
TOTAL			145,648	20,525	8,483	1,072	-4	122,146	34,395			89				
AVG.			4,855	684	283	36	0	4,072	1,147			3	82.0	0.0	6.0	66.1

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	154,072	9,185
SUMMER	66,526	8,063
FALL	160,237	22,373
TOTAL	380,835	39,621

COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY
8,531	1,078	278,798	218,902	74,340	0	276,673	822

TABLE 63

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

MCNARY PROJECT - FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Oct 1			2,412	408	125	9	1	1,440	477			2	99.8	0.0	*	66.0
Oct 2			5,407	740	207	13	0	2,324	651			1	94.9	0.0	*	66.0
Oct 3			4,421	477	249	9	0	2,515	684			0	78.0	0.0	6.0	66.0
Oct 4			3,398	371	230	19	0	2,712	772			0	89.3	0.0	6.0	66.0
Oct 5			2,610	257	175	38	0	2,313	666			1	106.2	0.0	6.0	66.0
Oct 6			1,945	172	132	27	1	1,768	492			0	113.0	0.0	6.0	65.0
Oct 7			1,595	134	223	25	-1	1,665	523			0	102.3	0.0	*	65.0
Oct 8			1,884	347	102	18	0	2,396	821			0	95.1	0.0	6.0	65.0
Oct 9			2,347	297	146	21	0	2,329	794			0	114.9	0.0	6.0	65.0
Oct 10			1,460	296	87	6	0	1,341	470			1	91.5	0.0	6.0	64.0
Oct 11			2,041	323	233	36	0	1,951	615			0	99.7	0.0	6.0	63.0
Oct 12			1,174	183	84	7	0	1,655	544			0	113.0	0.0	6.0	63.0
Oct 13			562	119	52	1	0	1,047	301			2	133.6	0.0	6.0	63.0
Oct 14			535	131	59	2	0	909	262			0	126.1	0.0	6.0	63.0
Oct 15			735	114	387	7	0	1,563	638			0	94.0	0.0	6.0	63.0
Oct 16			1,116	131	736	19	0	2,832	1,224			0	91.7	0.0	5.5	63.0
Oct 17			467	65	339	11	0	1,797	723			0	82.4	0.0	6.0	63.0
Oct 18			491	67	237	6	0	1,611	689			1	99.0	0.0	6.0	61.0
Oct 19			326	71	102	13	0	1,200	480			0	103.4	0.0	6.0	61.0
Oct 20			319	63	104	10	0	1,237	509			0	84.3	0.0	*	61.0
Oct 21			170	43	63	4	0	736	313			0	83.8	0.0	6.0	60.0
Oct 22			257	42	72	1	0	868	400			1	78.9	0.0	6.0	60.0
Oct 23			297	34	93	2	0	789	296			0	74.8	0.0	6.0	60.0
Oct 24			218	14	52	2	0	564	215			1	69.6	0.0	6.0	59.0
Oct 25			283	26	76	4	0	444	167			0	87.8	0.0	6.0	59.0
Oct 26			380	29	83	6	0	888	340			0	98.1	0.0	*	59.0
Oct 27			203	32	72	2	0	778	307			0	92.5	0.0	6.0	59.0
Oct 28			124	13	123	0	0	460	180			0	99.0	0.0	6.0	59.0
Oct 29			129	29	210	6	0	585	254			0	88.2	0.0	6.0	58.0
Oct 30			102	19	160	6	0	423	165			0	95.8	0.0	6.0	57.0
Oct 31			76	13	129	8	0	471	192			1	81.7	0.0	6.0	56.0
TOTAL			37,484	5,060	5,142	338	1	43,611	15,164			11				
AVG.			1209	163	166	11		1,407	489			0	95.6	0.0	6.0	62.1

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	154,072	9,185
SUMMER	66,526	8,063
FALL	197,721	27,433
TOTAL	418,319	44,681

COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	PINK	SHAD	LAMPREY
13,673	1,416	278,799	262,513	89,504	0	276,673	833

Note: Visual counts ended October 31.

Official Fall Chinook run ended October 31.

TABLE 64

DISCHARGE AND WATER QUALITY DATA

MCNARY PROJECT 2010

NOVEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Nov 1	105.5	0.0	6.0	55.0
Nov 2	94.9	0.0	6.0	55.0
Nov 3	111.0	0.0	6.0	55.0
Nov 4	126.6	0.0	6.0	55.0
Nov 5	128.0	0.0	6.0	57.0
Nov 6	100.4	0.0	6.0	57.0
Nov 7	89.1	0.0	6.0	57.0
Nov 8	108.3	0.0	6.0	57.0
Nov 9	114.0	0.0	6.0	56.0
Nov 10	112.2	0.0	6.0	56.0
Nov 11	106.2	0.0	6.0	56.0
Nov 12	95.3	0.0	6.0	56.0
Nov 13	109.9	0.0	6.0	56.0
Nov 14	98.6	0.0	6.0	54.0
Nov 15	102.0	0.0	6.0	53.0
Nov 16	105.8	0.0	6.0	53.0
Nov 17	107.8	0.0	6.0	53.0
Nov 18	120.8	0.0	6.0	53.0
Nov 19	112.8	0.0	6.0	53.0
Nov 20	125.0	0.0	6.0	53.0
Nov 21	109.1	0.0	6.0	52.0
Nov 22	122.5	0.0	6.0	52.0
Nov 23	126.3	0.0	6.0	52.0
Nov 24	138.3	0.0	*	49.0
Nov 25	122.5	0.0	*	49.0
Nov 26	116.4	0.0	6.0	49.0
Nov 27	97.6	0.0	6.0	49.0
Nov 28	112.1	0.0	*	49.0
Nov 29	126.7	0.0	6.0	49.0
Nov 30	130.6	0.0	*	45.0
AVG.	112.5	0.0	6.0	53.2

DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1	128.3	0.0	6.0	45.0
Dec 2	130.6	0.0	6.0	45.0
Dec 3	118.6	0.0	6.0	45.0
Dec 4	120.4	0.0	6.0	45.0
Dec 5	114.7	0.0	6.0	45.0
Dec 6	120.6	0.0	6.0	45.0
Dec 7	116.3	0.0	6.0	45.0
Dec 8	128.4	0.0	6.0	45.0
Dec 9	130.4	0.0	6.0	45.0
Dec 10	126.8	0.0	6.0	45.0
Dec 11	122.5	0.0	6.0	45.0
Dec 12	90.2	0.0	6.0	45.0
Dec 13	107.7	0.0	6.0	46.0
Dec 14	122.3	0.0	6.0	45.0
Dec 15	111.5	0.0	6.0	45.0
Dec 16	112.7	0.0	6.0	45.0
Dec 17	120.3	0.0	6.0	45.0
Dec 18	134.6	0.0	6.0	45.0
Dec 19	124.7	0.0	6.0	44.0
Dec 20	116.8	0.0	5.5	44.0
Dec 21	136.4	0.0	5.6	44.0
Dec 22	130.3	0.0	*	44.0
Dec 23	116.0	0.0	6.0	43.0
Dec 24	117.3	0.0	6.0	43.0
Dec 25	112.8	0.0	6.0	43.0
Dec 26	106.4	0.0	6.0	42.0
Dec 27	110.4	0.0	6.0	42.0
Dec 28	127.2	0.0	6.0	42.0
Dec 29	149.5	0.0	6.0	42.0
Dec 30	132.5	0.0	6.0	43.0
Dec 31	172.2	0.0	6.0	42.0
AVG.	122.9	0.0	6.0	44.2

*Data unavailable

TABLE 65

YEARLY TOTALS OF SALMONIDS COUNTED OVER McNARY DAM
1954 - 2010

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
2009	358,505	408,157	121,672	37,270	925,604
2010	463,000	262,513	278,799	15,089	1,019,401
Totals	11,213,767	7,549,835	3,592,134	618,430	22,974,166
10-Year Average	347,140	267,265	91,676	19,984	726,065

*Jacks included

TABLE 66

MONTHLY COUNT OF CHINOOK SALMON
McNARY DAM: 1954 - 2010

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
1954			14	919	42,625	28,510	35,993	9,287	8,626	568	13		126,555	52,014	61,065	13,476
1955				86	12,778	26,125	46,021	14,773	7,220	1,648	264		108,915	21,309	71,180	16,426
1956			7	307	10,746	34,360	50,409	11,073	5,636	1,360	444		114,342	12,717	90,335	11,290
1957			6	14,489	67,939	91,473	41,485	25,621	48,685	2,998			292,696	99,511	122,578	70,607
1958				1,864	36,684	61,898	25,140	11,120	82,890	6,496			226,092	54,910	73,654	97,528
1959				3,914	31,923	23,461	51,478	14,929	42,756	3,029			171,490	40,775	74,985	55,730
1960				4,808	44,721	49,506	25,710	13,376	35,329	3,317			176,767	52,490	76,940	47,337
1961				21,669	44,260	19,722	23,192	10,661	31,447	4,045			154,996	68,539	45,257	41,200
1962				10,527	44,053	28,621	21,008	11,751	33,541	3,255			152,756	55,884	52,756	44,116
1963				7,765	42,804	22,454	18,659	13,757	43,731	5,289			154,459	52,336	44,760	57,363
1964				19,856	33,310	10,893	39,334	14,930	45,514	4,097			167,934	54,279	55,062	58,593
1965				6,114	20,559	14,094	28,599	12,856	60,185	8,500			150,907	29,206	45,375	76,326
1966				53,484	32,282	21,161	35,895	13,811	58,275	8,233			223,141	87,195	60,827	75,119
1967				32,790	28,174	13,244	44,612	10,788	54,314	11,731			195,653	62,591	59,975	73,087
1968				13,328	51,443	20,456	37,127	15,713	53,597	8,824			200,488	67,092	60,639	72,757
1969				809	60,241	39,074	30,556	12,200	59,889	10,638			213,407	70,079	63,953	79,375
1970				28,015	34,027	18,661	23,132	13,773	44,635	6,649			168,892	63,982	43,356	61,554
1971				5,642	32,688	24,007	35,152	9,680	55,297	8,982			171,448	42,601	59,129	69,718
1972				25,911	41,609	12,553	35,322	10,154	37,131	6,141			168,821	69,023	50,491	49,307
1973				44,878	31,727	16,836	14,520	10,400	57,716	8,035			184,112	79,047	31,812	73,253
1974				1,918	34,767	7,976	18,181	6,251	45,845	12,920			127,858	40,037	25,812	62,009
1975				4,694	24,752	11,590	20,497	12,485	53,125	6,007			133,150	32,718	31,713	68,719
1976				4,868	30,435	16,714	19,821	9,143	64,863	17,470			163,314	38,505	36,818	87,991
1977				40,692	23,895	16,768	16,256	7,348	64,785	13,837			183,581	66,934	32,277	84,370
1978				27,191	37,613	14,505	18,095	7,799	30,273	7,296	1,376		144,148	68,414	31,589	44,145
1979			6	5,424	13,696	9,763	14,601	8,030	34,702	8,171	882		95,275	21,153	24,161	49,961
1980			3	3,481	18,108	6,705	12,166	7,001	24,409	8,284	616		80,773	23,001	18,862	38,910
1981			3	12,923	16,904	8,288	8,243	5,584	23,323	4,926	425		80,619	32,330	15,141	33,148
1982			3	1,638	23,487	10,357	8,749	5,091	44,276	8,624			102,225	28,352	16,574	57,299
1983				4,481	25,074	9,202	7,882	5,217	54,339	15,441			121,636	31,636	16,199	73,801
1984				1,772	23,806	9,235	12,256	8,845	79,004	23,391	767		159,076	27,474	21,201	110,401
1985			18	18,267	41,962	14,117	9,912	17,222	140,034	46,951			288,483	63,265	22,029	203,189

TABLE 66

(Continued)

MONTHLY COUNT OF CHINOOK SALMON
McNARY DAM: 1954 - 2010

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
2009				1,821	98,882	63,510	26,828	30,161	117,844	19,459			358,505	113,741	78,319	166,445
2010				48,451	98,345	58,192	30,587	18,708	166,173	42,544			463,000	191,921	74,589	225,154
Total			995	986,537	2,097,574	1,387,328	1,310,490	724,895	3,854,654	839,934	13,443	682	11,216,532	3,370,255	2,611,402	5,255,300
10-Year Average				35,841	67,751	50,573	33,106	16,168	117,249	25,812			347,416	116,177	76,756	156,525

*Jacks included

TABLE 67

MONTHLY COUNT OF SOCKEYE SALMON
McNARY DAM: 1954 - 2010

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 - 2010

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					0	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
2009					5	62,066	59,564	31	9	-3			121,672
2010					7	166,127	112,474	194	-4	1			278,799
Total				1	218	1,012,564	2,479,841	86,279	9,427	3,798	5	1	3,592,134
10-Year Average					3	53,562	37,988	117	5				91,676

TABLE 68

MONTHLY COUNT OF COHO SALMON
McNARY DAM: 1954 - 2010

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	44	2,040	4,493	289			6,917

TABLE 68

(Continued)

MONTHLY COUNT OF COHO SALMON
McNARY DAM; 1954 - 2010

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
2009								1,193	16,626	19,451			37,270
2010								54	9,555	5,480			15,089
TOTAL				1	14	50	515	21,436	437,721	153,250	5,806	38	618,831
10-Year Average								158	11,039	8,578			20,024

*Jacks included

TABLE 69

MONTHLY COUNT OF STEELHEAD
McNARY DAM: 1954-2010

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 - 2010

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
2009				2,144	293	2,108	20,407	85,285	204,948	92,972			408,157
2010				1,974	397	3,668	51,028	39,689	122,146	43,611			262,513
Total	1,059	925	33,723	112,938	41,185	77,903	681,829	1,256,449	3,610,751	1,665,476	69,280	15,067	7,566,585
10-Year Avg.				1,916	323	3,057	25,040	34,340	135,424	61,497			268,913

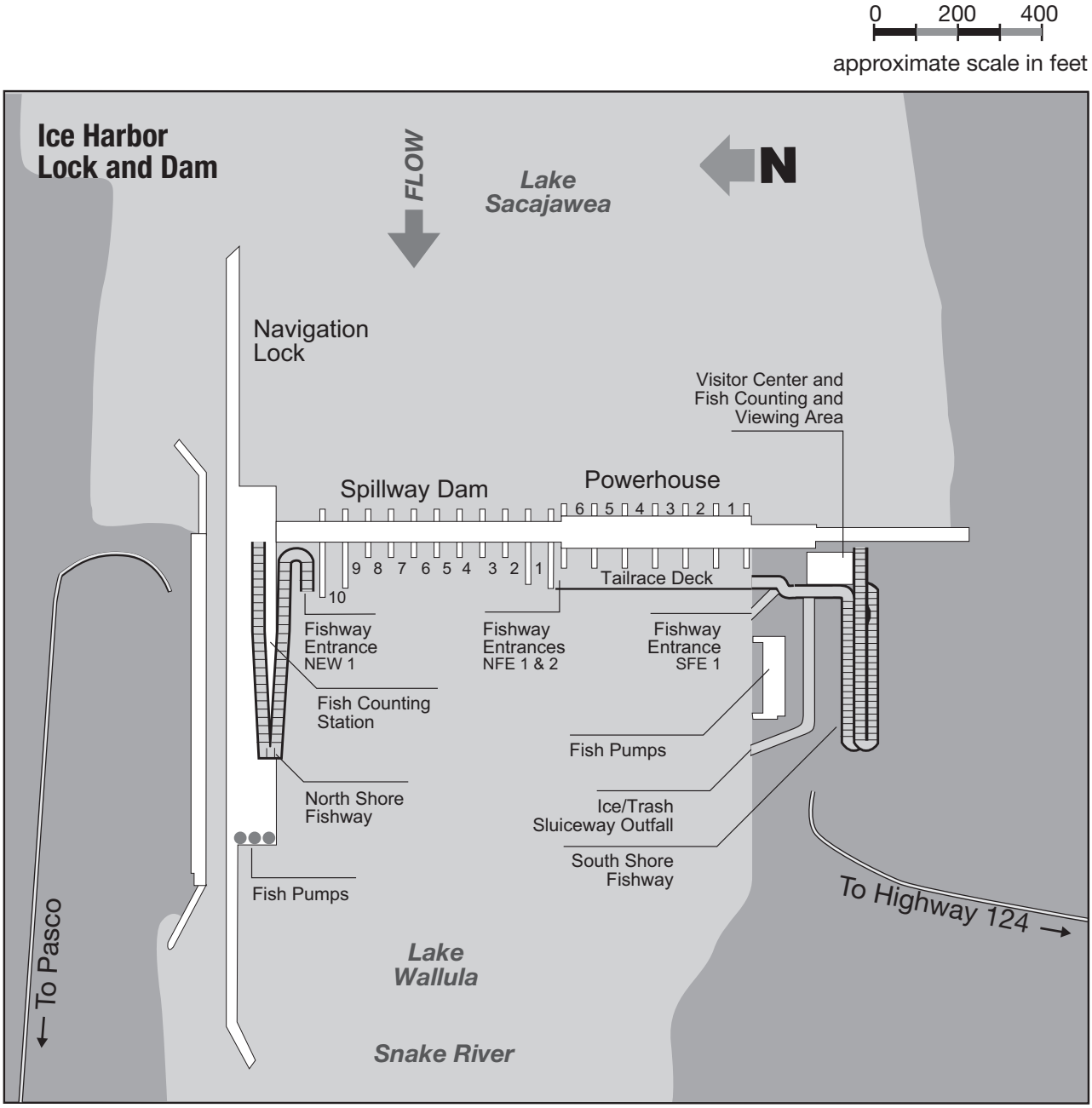
TABLE 70

Night Counts of Lamprey at McNary Dam

	2009				2010		
	JUL	AUG	SEP		JUL	AUG	SEP
Day				Day			
1	1	28	4	1	0	1	3
2	3	30	7	2	0	17	3
3	7	18	2	3	0	11	5
4	7	14	4	4	0	3	2
5	5	6	3	5	0	0	3
6	1	25	4	6	0	16	2
7	6	14	7	7	0	12	1
8	4	13	1	8	0	19	1
9	3	12	5	9	0	9	1
10	2	13	2	10	0	12	1
11	3	25	2	11	0	8	5
12	6	11	2	12	1	17	3
13	13	18	2	13	1	12	6
14	9	23	0	14	0	8	3
15	1	12	3	15	2	12	2
16	9	7	1	16	0	12	1
17	11	23	4	17	0	10	0
18	14	14	3	18	0	7	1
19	8	6	5	19	1	10	2
20	2	11	2	20	0	2	0
21	16	15	1	21	2	9	0
22	16	21	2	22	1	4	1
23	18	28	2	23	3	3	0
24	15	22	2	24	0	7	1
25	24	11	0	25	2	10	0
26	19	8	0	26	2	6	0
27	22	10	1	27	6	8	0
28	28	9	2	28	14	3	0
29	8	4	0	29	5	1	1
30	20	2	1	30	2	2	0
31	24	8		31	0	4	
TOTALS	325	461	74	TOTALS	42	255	48

Note: video counting for night lamprey passage at McNaryDam (July 1 - September 30)
Not included in daytime count totals for lamprey.

Plate 6 Ice Harbor Lock and Dam



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

South Ladder

1 January – 8 January	Ladder in service
1 January – 25 February	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 June to October.

All 8 south shore fish pump motors were replaced this season during the month of September when tailwater elevations permitted reducing the number of south fish pumps operating to meet criteria.

Idaho Cooperative Fisheries Research Unit conducted an evaluation of adult salmon and steelhead migration past the Snake and Columbia River Dams.

Steel plates were installed in the south shore fish ladder covering diffusers that are no longer in use. This installation was completed in an effort to provide a more friendly passage route for migrating lamprey.

The RSW operated 1 April until the end of the spill season 31 August.

The juvenile fish facility was operated for juvenile fish bypass and adult fallbacks from 1 April to 17 December. Juvenile fish were sampled April 6 – July 1 utilizing the new anesthetic recirculation system.

TABLE 71

MONTHLY TOTALS OF SALMONIDS, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER ICE HARBOR DAM
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				32,517	66,010	34,208	6,921	5,381	45,279	8,776			199,092
STEELHEAD				2,773	289	1,431	29,670	25,794	106,546	40,456			206,959
SOCKEYE						274	1,016	12					1,302
COHO*								0	1,056	679			1,735
PINK													0
TOTAL				35,290	66,299	35,913	37,607	31,187	152,881	49,911			409,088
SHAD					7	30,936	39,240	670					70,853
LAMPREY							19	66	29				114
STURGEON								1	1				2
BULL TROUT													0

***Jacks included**

TABLE 72

DISCHARGE AND WATER QUALITY DATA

ICE HARBOR PROJECT 2010

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jan 1	24.4	0.0	8.6	40.0
Jan 2	17.2	0.0	8.6	40.0
Jan 3	21.2	0.0	8.5	40.0
Jan 4	23.5	0.0	8.6	39.0
Jan 5	26.8	0.0	8.6	39.0
Jan 6	32.3	0.0	8.6	39.0
Jan 7	35.6	0.0	8.6	39.0
Jan 8	30.7	0.0	8.6	39.0
Jan 9	30.4	0.0	8.6	39.0
Jan 10	29.4	0.0	8.6	39.0
Jan 11	20.2	0.0	8.6	39.0
Jan 12	27.9	0.0	8.6	39.0
Jan 13	25.5	0.0	8.6	39.0
Jan 14	21.3	0.0	8.6	39.0
Jan 15	26.2	0.0	2.8	39.0
Jan 16	27.4	0.0	1.6	39.0
Jan 17	27.9	0.0	1.5	39.0
Jan 18	26.5	0.0	1.5	39.0
Jan 19	23.7	0.0	1.5	39.0
Jan 20	26.3	0.0	1.5	39.0
Jan 21	25.7	0.2	1.6	39.0
Jan 22	25.7	0.0	1.6	39.0
Jan 23	24.9	0.0	1.6	39.0
Jan 24	27.8	0.0	1.6	39.0
Jan 25	29.7	0.0	1.6	39.0
Jan 26	23.3	0.0	1.6	40.0
Jan 27	27.8	0.0	1.6	40.0
Jan 28	25.2	0.0	2.8	40.0
Jan 29	22.9	0.0	2.8	40.0
Jan 30	26.5	0.0	2.8	40.0
Jan 31	23.2	0.0	2.8	41.0
AVG.	26.0	0.0	4.9	39.3

FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Feb 1	34.9	0.0	3.8	41.0
Feb 2	34.2	0.0	3.8	41.0
Feb 3	28.9	0.0	3.3	41.0
Feb 4	23.2	0.0	3.3	41.0
Feb 5	20.0	0.0	3.7	41.0
Feb 6	27.6	0.0	3.7	41.0
Feb 7	31.7	0.0	3.7	41.0
Feb 8	28.0	0.0	3.7	41.0
Feb 9	38.5	0.0	3.2	41.0
Feb 10	25.3	0.0	3.2	41.0
Feb 11	16.1	0.0	3.2	41.0
Feb 12	21.9	0.0	5.0	41.0
Feb 13	15.4	0.0	5.0	41.0
Feb 14	18.8	0.0	5.0	42.0
Feb 15	21.7	0.0	5.0	42.0
Feb 16	25.5	0.0	5.0	42.0
Feb 17	27.0	0.0	5.4	42.0
Feb 18	25.6	0.0	5.4	42.0
Feb 19	26.3	0.0	5.4	42.0
Feb 20	24.5	0.0	5.4	42.0
Feb 21	31.2	0.0	5.4	42.0
Feb 22	26.6	0.0	5.8	42.0
Feb 23	29.3	0.0	5.8	42.0
Feb 24	19.9	0.0	5.8	42.0
Feb 25	22.4	0.0	5.8	40.0
Feb 26	29.4	0.0	5.8	40.0
Feb 27	18.4	0.0	5.0	40.0
Feb 28	19.9	0.0	4.5	42.0
AVG.	25.4	0.0	4.6	41.3

MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Mar 1	22.6	0.0	4.5	42.0
Mar 2	25.2	0.0	4.5	42.0
Mar 3	21.8	0.0	4.5	41.0
Mar 4	18.9	0.0	4.5	41.0
Mar 5	21.9	0.0	4.5	42.0
Mar 6	30.9	0.0	4.5	42.0
Mar 7	23.3	0.0	4.5	42.0
Mar 8	26.7	0.0	4.5	42.0
Mar 9	32.7	0.0	4.5	42.0
Mar 10	20.8	0.0	4.5	42.0
Mar 11	27.6	0.0	4.6	42.0
Mar 12	24.4	0.0	4.6	42.0
Mar 13	22.3	0.0	4.6	42.0
Mar 14	22.7	0.0	4.6	44.0
Mar 15	26.0	0.0	4.6	44.0
Mar 16	21.3	0.0	4.6	44.0
Mar 17	20.6	0.0	4.6	44.0
Mar 18	20.4	0.0	5.8	44.0
Mar 19	31.2	0.0	5.8	44.0
Mar 20	21.2	0.0	7.5	44.0
Mar 21	24.0	0.0	7.5	44.0
Mar 22	31.7	0.0	7.5	44.0
Mar 23	36.4	0.0	7.5	44.0
Mar 24	37.5	0.0	7.5	44.0
Mar 25	25.9	0.0	7.5	44.0
Mar 26	26.6	0.0	6.8	44.0
Mar 27	34.0	0.0	6.8	44.0
Mar 28	20.1	0.0	6.2	45.0
Mar 29	34.8	0.0	6.2	45.0
Mar 30	33.9	0.0	6.4	45.0
Mar 31	41.0	0.0	6.4	45.0
AVG.	26.7	0.0	5.6	43.2

TABLE 73

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT - FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Apr 1	9			0				135	50				34.2	0.0	6.4	45.0
Apr 2	10			0				167	74				45.0	0.0	6.4	45.0
Apr 3	4			0				108	49				34.9	24.9	6.4	46.0
Apr 4	11			0				162	51				33.1	23.5	6.4	46.0
Apr 5	13			0				84	41				27.0	17.3	6.8	46.0
Apr 6	17			0				139	50				31.3	21.7	6.8	46.0
Apr 7	8			-1				158	58				26.3	16.7	6.8	46.0
Apr 8	49			1				220	68				25.1	15.6	6.8	46.0
Apr 9	57			4				175	51				26.0	16.6	6.8	46.0
Apr 10	65			0				95	18				30.7	21.3	6.8	46.0
Apr 11	61			2				113	32				26.5	17.1	6.8	46.0
Apr 12	53			0				87	26				25.0	15.5	6.8	46.0
Apr 13	39			0				42	27				30.4	20.8	6.8	47.0
Apr 14	101			1				85	47				28.1	18.4	5.2	47.0
Apr 15	264			2				65	32				32.2	22.7	5.8	47.0
Apr 16	250			0				52	25				33.5	23.9	5.8	47.0
Apr 17	716			6				114	46				32.6	22.9	5.8	47.0
Apr 18	981			12				59	27				39.9	30.0	5.8	48.0
Apr 19	808			4				69	38				46.0	36.1	5.8	48.0
Apr 20	650			0				55	17				46.4	36.4	5.7	50.0
Apr 21	735			2				63	26				54.7	42.1	5.7	50.0
Apr 22	2,685			1				63	27				61.1	47.5	5.6	50.0
Apr 23	2,498			6				65	38				75.4	49.1	5.4	50.0
Apr 24	2,130			9				51	39				71.2	49.1	5.4	50.0
Apr 25	1,200			0				46	29				64.6	47.0	4.6	51.0
Apr 26	2,545			4				37	23				55.0	44.1	4.6	51.0
Apr 27	1,322			60				92	36				53.8	43.8	4.5	51.0
Apr 28	7,675			176				89	42				55.3	45.1	4.5	51.0
Apr 29	2,330			72				24	18				59.6	49.4	4.5	51.0
Apr 30	4,738			132				59	27				62.3	26.7	4.5	51.0
TOTAL	32,024			493				2,773	1,132							
AVG.	1067			16				92	38				42.2	28.2	5.9	47.9

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 74

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT - FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
May 1	1,817			39				25	15	0	0		66.3	19.8	4.5	51.0
May 2	1,753			31				11	6	0	0		56.7	39.3	4.5	53.0
May 3	1,637			51				18	8	0	0		62.9	46.0	4.5	53.0
May 4	3,060			60				10	3	0	0		61.4	24.3	4.5	53.0
May 5	4,743			59				9	8	0	0		56.2	16.8	4.5	53.0
May 6	3,082			219				11	5	0	0		54.5	38.4	4.0	53.0
May 7	2,115			100				6	1	0	0		52.3	41.8	4.0	53.0
May 8	5,389			246				24	11	0	0		54.7	20.5	4.0	53.0
May 9	3,007			165				37	17	0	1		45.2	13.5	4.2	53.0
May 10	3,297			291				13	7	1	0		51.1	15.3	4.2	53.0
May 11	2,623			147				13	8	0	0		48.2	14.4	4.2	53.0
May 12	2,827			93				0	1	0	0		48.4	34.0	4.2	53.0
May 13	2,788			159				13	6	0	0		50.9	40.3	4.2	53.0
May 14	2,372			205				10	7	0	0		52.8	21.7	4.2	53.0
May 15	2,178			173				7	3	0	0		57.2	17.0	4.2	53.0
May 16	1,333			135				2	1	0	0		59.0	42.5	4.2	53.0
May 17	780			135				10	3	0	0		64.0	51.3	4.2	54.0
May 18	1,310			316				12	9	0	0		79.4	55.5	4.2	54.0
May 19	1,317			306				2	0	0	0		90.4	62.0	4.2	54.0
May 20	2,620			499				12	6	0	0		105.4	68.0	3.6	54.0
May 21	1,761			226				3	1	0	0		108.3	66.5	3.6	54.0
May 22	1,957			293				14	8	0	0		87.4	37.9	3.6	55.0
May 23	1,607			187				3	3	0	-1		80.5	24.2	3.6	55.0
May 24	920			133				6	0	0	0		73.4	22.0	4.4	55.0
May 25	579			126				1	0	1	0		72.8	21.8	4.4	55.0
May 26	598			116				9	4	0	0		68.6	20.5	4.4	55.0
May 27	477			93				3	2	2	0		68.2	20.5	4.8	55.0
May 28	519			72				2	1	1	0		71.8	45.7	4.8	55.0
May 29	757			88				1	1	0	0		71.4	53.2	4.8	55.0
May 30	876			126				3	1	2	0		77.1	53.4	4.5	55.0
May 31	902			120				-1	-1	0	0		74.8	53.9	4.8	55.0
TOTAL	61,001			5,009				289	145	7	0					
AVG.	1968			162				9	5	0	0		66.8	35.5	4.3	53.7

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY
SPRING	93,025	5,502	3,062	1,277	7	0

TABLE 75

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT - FISH COUNTS

JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jun 1	1,341			86			0	1	1	0			77.3	32.8	4.8	55.0
Jun 2	1,032			46			0	4	0	0			90.2	26.8	4.8	55.0
Jun 3	989			72			0	4	-1	0			124.3	55.2	4.8	55.0
Jun 4	1,106			88			0	1	0	0			162.9	82.9	4.8	55.0
Jun 5	1,468			98			0	7	2	0			195.3	114.0	4.8	55.0
Jun 6	1,400			120			0	5	0	0			216.4	135.8	4.8	55.0
Jun 7	570			23			0	10	2	0			204.9	123.7	4.8	55.0
Jun 8	93			7			0	0	0	6			210.4	127.7	2.3	55.0
Jun 9	56			4			0	-1	-1	1			187.6	105.0	1.8	55.0
Jun 10	55			1			1	-1	-1	6			182.8	99.4	1.6	55.0
Jun 11	53			0			0	-18	-18	0			173.1	93.5	1.6	55.0
Jun 12		111		2			0	-1	-2	1			156.2	77.6	1.6	55.0
Jun 13		1,911		72			0	14	-2	2			139.8	61.2	1.6	55.0
Jun 14		3,360		139			0	34	1	26			132.2	48.8	1.6	56.0
Jun 15		1,052		57			0	19	1	7			128.6	57.0	1.6	56.0
Jun 16		1,470		78			1	26	4	5			135.7	65.9	1.4	56.0
Jun 17		3,064		245			2	41	10	68			118.5	45.1	1.4	56.0
Jun 18		1,800		140			7	50	9	219			113.9	34.4	1.4	56.0
Jun 19		1,337		80			5	77	22	1,812			103.1	52.4	1.4	57.0
Jun 20		726		109			5	66	15	1,356			100.8	65.9	1.8	57.0
Jun 21		566		110			6	44	11	3,634			108.2	45.4	1.8	57.0
Jun 22		590		59			5	52	14	2,387			112.0	38.6	1.8	57.0
Jun 23		886		97			8	65	18	4,470			98.8	29.9	2.4	57.0
Jun 24		1,360		100			9	76	21	1,322			93.8	32.9	2.4	57.0
Jun 25		1,011		106			10	48	16	1,734			100.6	51.2	3.0	58.0
Jun 26		570		120			13	71	19	1,393			90.2	62.8	3.0	58.0
Jun 27		824		135			35	144	40	3,837			86.4	59.6	3.0	58.0
Jun 28		888		161			33	169	56	3,598			80.3	55.8	3.0	58.0
Jun 29		867		170			54	216	54	3,415			81.2	36.1	3.0	59.0
Jun 30		936		191			80	208	45	1,637			79.6	28.5	3.2	60.0
TOTAL	8,163	23,329		2,716			274	1,431	336	30,936						
AVG.	742	1228		91			9	48	11	1,031			129.5	64.9	2.7	56.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	101,188	6,047
SUMMER	23,329	2,171
TOTAL	124,517	8,218

SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY
274	4,493	1,613	30,943	0

TABLE 76

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT. PORTLAND

ICE HARBOR PROJECT - FISH COUNTS

JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jul 1		642		161			94	281	70	6,114	1		75.1	48.3	3.2	60.0
Jul 2		549		69			75	377	115	2,031	0		71.6	52.6	2.8	61.0
Jul 3		418		48			62	382	107	3,906	0		63.3	25.9	2.8	61.0
Jul 4		406		44			47	277	67	2,633	0		58.2	17.3	2.8	61.0
Jul 5		330		39			24	271	70	957	0		58.4	40.6	2.8	62.0
Jul 6		312		78			40	425	116	245	0		56.4	46.5	2.8	63.0
Jul 7		301		64			59	450	174	2,093	0		55.2	24.2	3.6	63.0
Jul 8		246		64			45	474	155	3,330	1		59.4	17.7	3.6	63.0
Jul 9		192		64			63	607	215	1,332	1		49.6	14.8	3.6	64.0
Jul 10		140		55			49	747	246	4,919	0		55.5	16.6	3.6	64.0
Jul 11		168		70			53	617	198	1,632	0		50.9	36.1	3.6	64.0
Jul 12		160		60			56	924	392	950	0		40.7	30.6	3.6	65.0
Jul 13		205		69			61	881	385	1,201	0		51.6	41.6	3.6	65.0
Jul 14		183		63			48	776	302	1,336	0		40.0	30.1	4.2	65.0
Jul 15		160		15			46	823	304	308	0		57.1	45.1	4.2	66.0
Jul 16		181		45			41	994	386	360	0		43.0	32.4	4.2	66.0
Jul 17		128		24			38	1,069	439	1,482	0		48.6	38.4	4.2	66.0
Jul 18		99		34			21	1,167	543	688	0		40.2	30.0	4.8	67.0
Jul 19		61		51			23	1,058	464	1,085	0		46.1	36.1	4.8	67.0
Jul 20		120		45			14	1,524	461	351	1		43.2	33.5	4.8	67.0
Jul 21		80		26			11	1,112	388	441	0		47.0	37.0	6.0	67.0
Jul 22		102		16			6	1,771	589	270	2		36.0	26.0	6.0	67.0
Jul 23		58		2			6	1,119	348	61	1		39.6	29.9	6.0	67.0
Jul 24		69		8			5	1,231	374	83	6		38.2	28.3	6.0	67.0
Jul 25		62		5			1	959	274	237	1		38.4	28.4	6.0	67.0
Jul 26		47		8			6	1,182	378	390	0		39.2	29.3	6.0	67.0
Jul 27		51		6			5	1,605	649	306	1		38.3	28.4	6.2	68.0
Jul 28		52		2			10	1,989	692	217	3		38.4	28.3	6.2	68.0
Jul 29		37		10			1	2,028	754	207	0		36.2	26.4	6.2	69.0
Jul 30		59		6			3	1,122	354	36	1		35.2	25.3	6.2	69.0
Jul 31		46		6			3	1,428	502	39	0		37.8	28.2	6.2	69.0
TOTAL		5,664		1,257			1,016	29,670	10,511	39,240	19					
AVG.		183		41			33	957	339	1,266	1		48.0	31.4	4.5	65.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	101,188	6,047
SUMMER	28,993	3,428
TOTAL	130,181	9,475

SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY
1,290	34,163	12,124	70,183	19

TABLE 77

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT - FISH COUNTS

AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Aug 1		53		5	0		2	2,042	671	10	2	0	36.7	26.8	6.2	69.0
Aug 2		48		14	0		0	1,940	570	68	4	0	37.5	27.7	6.2	69.0
Aug 3		30		3	0		1	1,775	596	6	1	0	40.2	30.2	6.2	70.0
Aug 4		61		6	0		5	1,707	486	80	4	0	40.3	30.2	6.2	70.0
Aug 5		51		11	0		2	1,765	460	45	3	0	38.4	28.4	6.2	70.0
Aug 6		78		8	0		0	1,209	399	27	3	0	32.4	22.4	6.2	70.0
Aug 7		44		3	0		0	964	289	95	5	0	26.7	16.7	6.2	70.0
Aug 8		38		1	0		0	966	301	14	4	0	27.3	17.2	6.2	69.0
Aug 9		48		4	0		0	1,142	331	49	5	0	32.2	22.5	6.2	69.0
Aug 10		84		6	0		0	1,169	353	38	4	0	26.0	16.2	6.2	69.0
Aug 11		55		14	0		0	1,044	300	20	3	0	27.8	17.6	6.2	69.0
Aug 12			48	3	0		0	655	212	37	3	0	32.8	22.8	6.2	69.0
Aug 13			38	9	0		0	503	136	59	2	0	29.9	20.1	6.2	69.0
Aug 14			45	6	0		0	428	119	7	0	0	29.2	19.0	5.4	69.0
Aug 15			45	6	0		0	268	59	6	1	1	26.4	16.4	5.4	69.0
Aug 16			46	6	0		0	317	81	6	1	0	27.2	17.2	5.4	69.0
Aug 17			51	8	0		0	466	120	13	0	0	29.9	20.1	5.4	69.0
Aug 18			62	3	0		0	533	154	18	1	0	32.5	22.2	5.4	69.0
Aug 19			76	7	0		0	530	130	32	6	0	30.0	19.8	5.4	69.0
Aug 20			62	7	0		0	462	112	2	5	0	26.8	16.9	5.4	70.0
Aug 21			76	9	0		0	303	52	15	1	0	33.5	23.7	5.4	70.0
Aug 22			80	17	0		1	344	91	5	1	0	25.8	15.8	5.4	70.0
Aug 23			90	13	0		0	220	42	2	0	0	27.5	17.9	5.4	70.0
Aug 24			168	25	0		0	393	79	0	2	0	26.4	16.5	5.4	70.0
Aug 25			316	57	0		1	284	56	2	2	0	26.0	16.1	5.9	70.0
Aug 26			220	32	0		0	291	66	0	0	0	26.2	16.1	5.9	70.0
Aug 27			209	36	0		0	476	125	2	1	0	24.9	15.3	5.9	70.0
Aug 28			242	47	-1		0	471	117	0	0	0	23.3	13.1	6.4	70.0
Aug 29			449	70	1		0	751	178	0	0	0	21.9	11.9	6.4	70.0
Aug 30			741	85	0		0	952	188	0	0	0	22.0	11.9	6.4	71.0
Aug 31			955	251	0		0	1,424	308	12	2	0	22.7	13.0	6.4	71.0
TOTAL		590	4,019	772	0		12	25,794	7,181	670	66	1				
AVG.		54	201	25			0	832	232	22	2	0	29.4	19.4	5.9	69.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	101,188	6,047
SUMMER	29,583	3,503
FALL	4,019	697
TOTAL	134,790	10,247

COHO ADULT
0

SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON
1,302	59,957	19,305	70,853	85	1

TABLE 78

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT - FISH COUNTS

SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Sep 1			1,639	390	1	0		2,913	742		5	0	23.6	0.0	6.4	71.0
Sep 2			699	157	0	0		1,234	291		6	0	27.5	0.0	6.4	71.0
Sep 3			951	172	4	0		1,583	380		5	0	24.1	0.0	6.4	71.0
Sep 4			1,088	233	25	0		1,968	480		1	0	12.0	0.0	6.7	71.0
Sep 5			1,183	185	9	0		1,456	322		0	0	20.2	0.0	6.7	71.0
Sep 6			2,139	213	30	1		2,202	556		0	0	25.0	0.0	6.7	70.0
Sep 7			1,572	278	5	0		2,620	716		0	0	21.9	0.0	6.7	70.0
Sep 8			2,193	315	12	1		4,370	1,198		0	0	24.7	0.0	6.7	68.0
Sep 9			1,664	256	16	0		4,503	1,140		0	0	12.9	0.0	6.7	68.0
Sep 10			916	243	14	1		4,941	1,219		0	0	28.2	0.0	6.3	68.0
Sep 11			1,005	274	31	1		3,934	1,015		0	0	34.3	0.0	6.3	68.0
Sep 12			1,692	356	38	3		5,469	1,358		4	0	19.1	0.0	6.3	68.0
Sep 13			1,297	200	38	7		3,021	843		0	0	33.3	0.0	6.4	68.0
Sep 14			1,664	302	29	5		3,464	935		0	0	24.2	0.0	6.4	68.0
Sep 15			1,274	338	27	1		3,504	824		0	0	27.8	0.4	6.4	66.0
Sep 16			1,299	258	38	11		5,027	1,295		0	1	28.7	0.1	6.8	66.0
Sep 17			878	363	59	14		4,023	1,053		0	0	29.8	0.0	6.8	65.0
Sep 18			673	263	33	7		4,338	1,151		0	0	20.2	0.0	6.8	64.0
Sep 19			807	330	48	16		4,337	1,138		0	0	23.4	0.0	6.8	64.0
Sep 20			1,311	278	36	7		4,645	1,320		0	0	10.7	0.0	6.8	64.0
Sep 21			1,127	288	44	6		2,717	704		1	0	14.2	0.0	6.8	64.0
Sep 22			1,245	432	55	6		2,334	667		1	0	16.1	0.0	6.2	64.0
Sep 23			1,553	643	71	24		6,507	1,731		1	0	22.5	0.0	6.8	63.0
Sep 24			1,284	264	72	16		8,045	2,184		0	0	24.1	0.0	6.8	63.0
Sep 25			897	151	37	1		3,246	825		2	0	10.9	0.0	6.8	63.0
Sep 26			1,038	238	45	7		5,097	1,369		3	0	10.5	0.0	6.8	63.0
Sep 27			937	176	27	1		2,217	486		0	0	24.9	0.0	6.8	63.0
Sep 28			1,528	250	30	1		2,944	808		0	0	22.1	0.0	6.8	63.0
Sep 29			922	154	21	2		1,714	461		0	0	30.0	0.0	7.0	63.0
Sep 30			647	157	20	2		2,173	538		0	0	22.2	0.0	7.0	63.0
TOTAL			37,122	8,157	915	141		106,546	27,749		29	1				
AVG.			1237	272	31	5		3,552	925		1	0	22.3	0.0	6.6	66.4

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	101,188	6,047
SUMMER	29,583	3,503
FALL	41,141	8,854
TOTAL	171,912	18,404

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON
915	141	1,302	166,503	47,054	70,853	114	2

TABLE 79

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ICE HARBOR PROJECT - FISH COUNTS

OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F*
Oct 1			693	565	33	11		2,878	827				20.8	0.0	7.0	63.0
Oct 2			468	257	18	1		1,912	577				24.8	0.0	5.8	63.0
Oct 3			585	396	24	8		2,281	644				15.2	0.0	5.4	64.0
Oct 4			458	322	10	5		2,401	734				18.2	0.0	5.4	63.0
Oct 5			471	237	11	0		2,377	575				25.7	0.0	5.4	63.0
Oct 6			426	362	12	5		1,924	486				24.2	0.0	5.4	63.0
Oct 7			266	180	17	2		1,983	520				22.2	0.0	5.4	64.0
Oct 8			211	161	10	1		2,504	650				24.2	0.0	5.4	64.0
Oct 9			230	111	13	7		1,559	397				24.2	0.0	5.4	63.0
Oct 10			217	140	21	3		2,283	665				15.1	0.0	5.4	63.0
Oct 11			185	102	10	5		2,086	622				20.2	0.0	5.4	63.0
Oct 12			160	55	13	0		1,044	295				25.5	0.0	5.4	63.0
Oct 13			115	85	18	2		1,413	445				12.5	0.0	6.6	63.0
Oct 14			94	69	13	1		1,444	434				19.2	0.0	6.6	63.0
Oct 15			39	12	8	1		847	215				20.4	0.0	6.6	62.0
Oct 16			76	36	15	0		681	200				13.5	0.0	6.6	62.0
Oct 17			115	46	65	0		1,261	354				14.8	0.0	6.6	62.0
Oct 18			77	17	74	6		983	289				23.4	0.0	6.6	61.0
Oct 19			44	29	24	1		740	254				13.3	0.0	6.6	61.0
Oct 20			58	33	18	6		944	327				20.7	0.0	6.6	61.0
Oct 21			21	20	13	2		780	230				12.1	0.0	6.6	61.0
Oct 22			68	19	12	2		968	292				18.4	0.0	6.6	61.0
Oct 23			61	26	25	2		605	219				18.5	0.0	6.6	60.0
Oct 24			52	10	25	0		612	191				13.9	0.0	6.6	60.0
Oct 25			29	11	14	0		804	238				21.1	0.0	6.6	60.0
Oct 26			54	20	20	0		654	198				18.6	0.0	6.6	60.0
Oct 27			24	9	18	0		507	139				21.2	0.0	6.6	60.0
Oct 28			34	12	21	1		397	104				19.4	0.0	6.6	58.0
Oct 29			26	15	12	1		784	257				18.1	0.0	6.6	58.0
Oct 30			19	10	7	0		415	161				19.3	0.0	6.2	58.0
Oct 31			24	9	12	0		385	150				18.0	0.0	6.2	58.0
TOTAL			5,400	3,376	606	73		40,456	11,689							
AVG.			174	109	20	2		1,305	377				19.2	0.0	6.2	61.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	101,188	6,047
SUMMER	29,583	3,503
FALL	46,541	12,230
TOTAL	177,312	21,780

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	STURGEON
1,521	214	1,302	206,959	58,743	70,853	114	2

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 80

DISCHARGE AND WATER QUALITY DATA

ICE HARBOR PROJECT - 2010

NOVEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Nov 1	25.9	0.0	6.2	58.0
Nov 2	17.9	0.0	6.9	57.0
Nov 3	18.1	0.0	6.9	57.0
Nov 4	24.2	0.0	6.9	57.0
Nov 5	26.2	0.0	7.2	57.0
Nov 6	14.3	0.0	7.2	57.0
Nov 7	11.1	0.0	7.2	57.0
Nov 8	19.2	0.0	7.2	56.0
Nov 9	27.1	0.0	7.2	56.0
Nov 10	18.2	0.0	7.2	56.0
Nov 11	18.5	0.0	6.4	55.0
Nov 12	19.5	0.0	6.4	55.0
Nov 13	20.1	0.0	6.4	55.0
Nov 14	23.7	0.0	6.4	55.0
Nov 15	31.6	0.0	6.4	55.0
Nov 16	31.3	0.0	6.4	55.0
Nov 17	13.8	0.0	6.4	55.0
Nov 18	17.9	0.0	6.8	53.0
Nov 19	15.2	0.0	6.8	53.0
Nov 20	20.2	0.0	6.8	52.0
Nov 21	12.1	0.0	6.8	52.0
Nov 22	17.9	0.0	6.8	52.0
Nov 23	29.0	0.0	6.8	51.0
Nov 24	22.9	0.0	6.8	51.0
Nov 25	21.8	0.0	6.8	49.0
Nov 26	10.7	0.0	6.8	49.0
Nov 27	11.3	0.0	6.8	49.0
Nov 28	12.3	0.0	6.8	48.0
Nov 29	26.2	0.0	6.8	48.0
Nov 30	18.9	0.0	6.8	46.0
AVG.	19.9	0.0	6.8	53.5

DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1	18.1	0.0	6.8	46.0
Dec 2	22.4	0.0	6.8	46.0
Dec 3	16.3	0.0	6.8	45.0
Dec 4	18.1	0.0	6.8	45.0
Dec 5	18.2	0.0	6.8	45.0
Dec 6	25.4	0.0	7.2	45.0
Dec 7	21.8	0.0	8.2	45.0
Dec 8	20.0	0.0	8.2	44.0
Dec 9	22.4	0.0	8.2	44.0
Dec 10	24.7	0.0	8.2	44.0
Dec 11	32.1	0.0	8.2	43.0
Dec 12	7.9	0.0	8.2	43.0
Dec 13	26.6	0.0	8.2	43.0
Dec 14	41.7	0.0	7.9	43.0
Dec 15	31.1	0.0	7.9	44.0
Dec 16	37.5	0.0	7.9	44.0
Dec 17	40.6	0.0	7.9	44.0
Dec 18	23.8	0.0	7.9	43.0
Dec 19	26.4	0.0	7.9	43.0
Dec 20	35.5	0.0	7.9	43.0
Dec 21	33.3	0.0	7.9	42.0
Dec 22	26.2	0.0	7.9	42.0
Dec 23	25.2	0.0	7.9	41.0
Dec 24	22.5	0.0	7.9	41.0
Dec 25	25.0	0.0	7.5	41.0
Dec 26	24.7	0.0	7.5	41.0
Dec 27	32.2	0.0	7.5	40.0
Dec 28	24.4	0.0	7.5	40.0
Dec 29	31.5	0.0	7.5	40.0
Dec 30	36.3	0.0	7.5	40.0
Dec 31	34.6	0.0	7.5	40.0
AVG.	26.7	0.0	7.7	42.9

TABLE 81

YEARLY TOTALS OF SALMONIDS COUNTED OVER ICE HARBOR DAM 1962 - 2010

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
2009	180,349	328,105	867	5,436	514,757
2010	199,092	206,959	1,302	1,735	409,088
Totals	3,124,615	4,950,850	13,614	67,037	8,156,116
10-Year Average	130,904	200,018	306	2,175	333,402

*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 82

MONTHLY COUNT OF CHINOOK SALMON
ICE HARBOR DAM
1962 - 2010

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	2	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
2009				1,173	65,190	40,728	9,465	10,549	49,471	3,773			180,349	83,658	33,256	63,435
2010				32,517	66,010	34,208	6,921	5,381	45,279	8,776			199,092	107,235	33,086	58,771
TOTAL		1	344	509,394	1,135,956	572,072	252,469	65,160	461,957	123,952	3,356	87	3,124,748	1,830,239	656,045	638,222
10-Year Average				23,162	44,615	25,440	4,954	3,057	24,963	4,687			130,917	77,194	21,274	32,425

***Jacks include**

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.

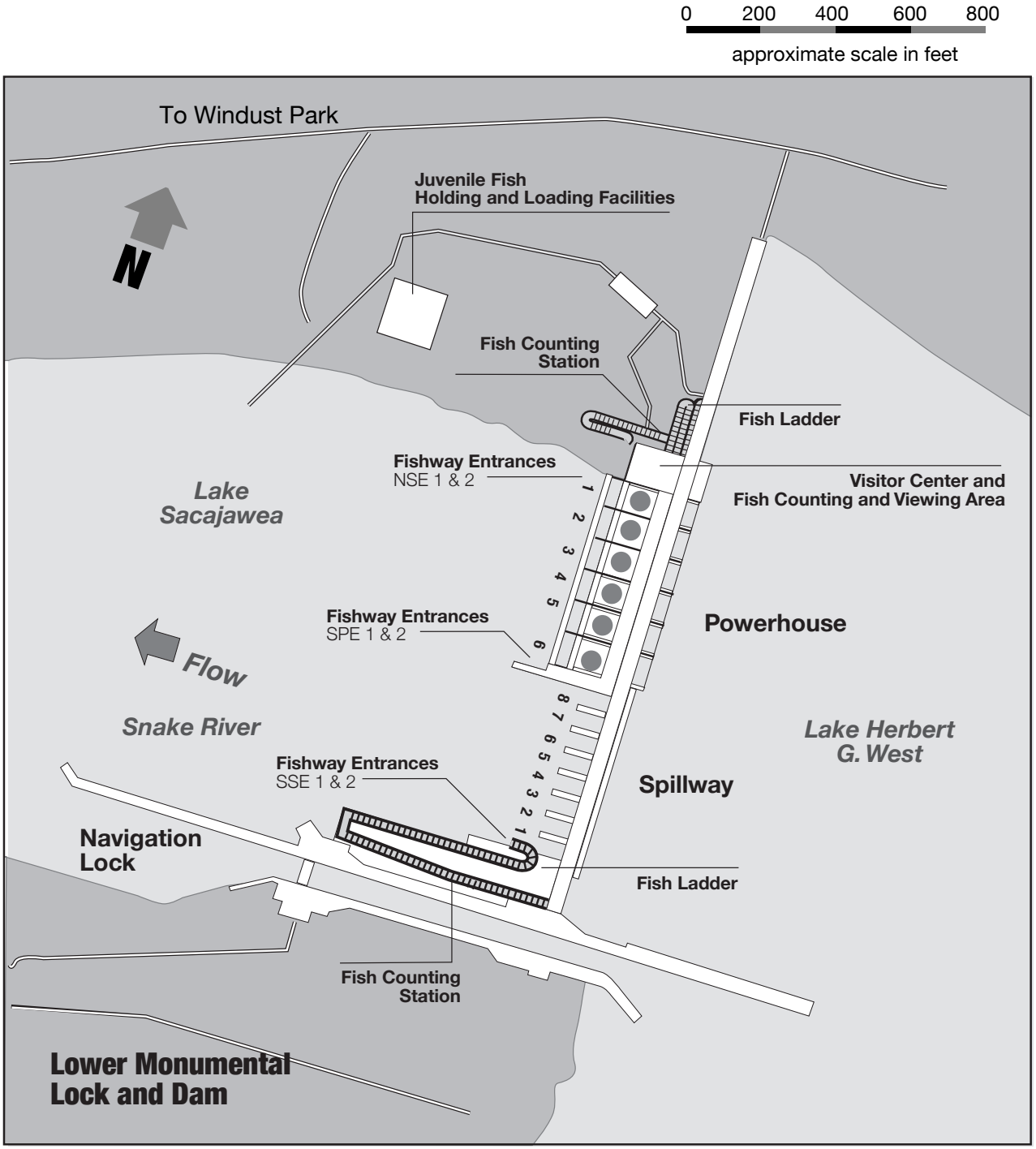
TABLE 83

MONTHLY COUNT OF STEELHEAD
ICE HARBOR DAM
1962 -2010

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
2009				2,906	154	1,218	13,616	43,697	167,918	98,596			328,105
2010				2,773	289	1,431	29,670	25,794	106,546	40,456			206,959
Totals	268	287	25,574	112,115	22,089	24,128	243,326	449,393	2,482,798	1,500,501	81,529	14,043	4,956,051
10-Year Average				2,370	146	1,333	12,130	19,836	104,416	55,126			200,538

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



LOWER MONUMENTAL DAM

FISH COUNTING SCHEDULE

1 January – 31 March	No counting
1 Apr – 31 Oct	Visual counting daily 0400 – 2000 hours PST
1 November – 31 December	No counting

FISH LADDER OPERATING SCHEDULE

North Ladder

1 Jan – 4 Jan	Ladder in service.
5 Jan – 14 Jan	Ladder dewatered for annual maintenance.
15 Jan – 31 Dec	Ladder in service.

South Ladder

1 Jan – 19 Jan	Ladder in service.
20 Jan – 24 Feb	Ladder dewatered for annual maintenance.
25 Feb – 31 Dec	Ladder in service.

FISHWAY ACTIVITIES

Water temperatures were recorded hourly from north and south fish ladder exit pools and the downstream end of the primary dewaterer. Hourly readings were taken from June 15 to August 7. The purpose is to determine if summer spill has any effects on exit pool temperatures.

Fish pumps were out of service from 5 January through 14 January. 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 with few exceptions 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 21 December.

Lower Monumental's RSW was in service throughout the spill season

TABLE 84

MONTHLY TOTALS OF SALMONIDS, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER LOWER MONUMENTAL DAM
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				23,522	70,028	39,285	9,253	2,937	44,326	11,466			200,817
STEELHEAD				3,621	489	1,377	19,765	25,351	109,728	53,480			213,811
SOCKEYE						252	1,373	28	3	-4			1,652
COHO*									991	1,012			2,003
PINK													0
TOTAL				27,143	70,517	40,914	30,391	28,316	155,048	65,954			418,283
LAMPREY					0	0	5	22	9	8			44
STURGEON													0
BULL TROUT				7	3	5		1					16

*Jacks included

TABLE 85

DISCHARGE AND WATER OUALITY DATA

LOWER MONUMENTAL PROJECT 2010

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jan 1	23.4	0.0	5.0	38.0
Jan 2	16.2	0.0	5.0	37.0
Jan 3	20.2	0.0	5.0	37.0
Jan 4	23.2	0.0	5.0	37.0
Jan 5	27.3	0.0	5.0	37.0
Jan 6	32.4	0.0	5.0	37.0
Jan 7	36.0	0.0	5.0	37.0
Jan 8	30.7	0.0	5.0	37.0
Jan 9	29.7	0.0	5.0	37.0
Jan 10	28.2	0.0	5.0	37.0
Jan 11	22.2	0.0	5.0	37.0
Jan 12	26.8	0.0	5.0	36.0
Jan 13	23.3	0.0	5.0	36.0
Jan 14	22.8	0.0	5.0	37.0
Jan 15	27.1	0.0	5.0	37.0
Jan 16	27.2	0.0	3.0	37.0
Jan 17	27.4	0.0	3.0	37.0
Jan 18	27.1	0.0	2.0	38.0
Jan 19	23.9	0.0	2.0	37.0
Jan 20	26.0	0.0	2.0	37.0
Jan 21	25.6	0.0	2.0	37.0
Jan 22	25.4	0.0	2.0	38.0
Jan 23	24.4	0.0	2.0	38.0
Jan 24	28.4	0.0	2.0	38.0
Jan 25	29.6	0.0	2.0	38.0
Jan 26	22.6	0.0	2.0	38.0
Jan 27	28.0	0.0	2.0	38.0
Jan 28	26.5	0.0	2.0	38.0
Jan 29	22.3	0.0	2.0	38.0
Jan 30	26.6	0.0	2.0	38.0
Jan 31	22.9	0.0	2.0	39.0
AVG	25.9	0.0	3.5	37.4

FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Feb 1	30.5	0.0	2.0	38.0
Feb 2	32.7	0.0	2.0	38.0
Feb 3	28.6	0.0	2.5	39.0
Feb 4	23.8	0.0	2.5	39.0
Feb 5	19.7	0.0	2.5	39.0
Feb 6	27.2	0.0	2.5	39.0
Feb 7	32.7	0.0	2.5	39.0
Feb 8	28.3	0.0	2.5	39.0
Feb 9	38.4	0.0	2.5	39.0
Feb 10	24.2	0.0	2.5	39.0
Feb 11	19.2	0.0	2.5	39.0
Feb 12	22.0	0.0	2.5	39.0
Feb 13	18.7	0.0	2.5	39.0
Feb 14	21.0	0.0	2.5	39.0
Feb 15	22.4	0.8	2.5	39.0
Feb 16	24.3	0.0	2.5	39.0
Feb 17	28.2	0.1	2.5	39.0
Feb 18	26.0	0.0	2.5	40.0
Feb 19	25.6	0.0	2.5	40.0
Feb 20	25.0	0.0	3.0	40.0
Feb 21	32.3	0.0	3.0	40.0
Feb 22	25.1	0.0	3.0	41.0
Feb 23	29.7	0.0	3.0	41.0
Feb 24	19.0	0.0	3.0	41.0
Feb 25	23.1	0.0	4.0	41.0
Feb 26	28.8	0.0	4.0	41.0
Feb 27	20.3	0.0	4.0	41.0
Feb 28	19.3	0.0	4.0	41.0
AVG	25.6	0.0	2.8	39.6

MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Mar 1	24.4	0.0	4.0	41.0
Mar 2	22.0	0.0	4.5	41.0
Mar 3	22.1	0.0	4.5	41.0
Mar 4	20.0	0.0	4.0	42.0
Mar 5	23.4	0.0	4.0	42.0
Mar 6	29.1	0.0	4.5	42.0
Mar 7	24.2	0.0	4.5	42.0
Mar 8	24.5	0.0	4.5	42.0
Mar 9	30.9	0.0	4.5	42.0
Mar 10	23.3	0.0	4.5	42.0
Mar 11	27.4	0.0	4.5	43.0
Mar 12	24.9	0.0	4.5	43.0
Mar 13	21.9	0.0	3.5	43.0
Mar 14	22.1	0.0	3.5	43.0
Mar 15	26.3	0.0	4.5	43.0
Mar 16	23.0	0.0	4.5	43.0
Mar 17	19.0	0.0	4.0	43.0
Mar 18	20.1	0.0	4.0	43.0
Mar 19	29.9	0.0	4.0	43.0
Mar 20	23.3	0.0	4.0	43.0
Mar 21	25.5	0.0	4.0	44.0
Mar 22	30.5	0.0	4.0	44.0
Mar 23	38.6	0.0	4.0	44.0
Mar 24	34.0	0.0	4.0	45.0
Mar 25	26.1	0.0	4.0	45.0
Mar 26	25.8	0.0	4.0	45.0
Mar 27	33.7	0.0	4.0	45.0
Mar 28	20.3	0.0	4.0	45.0
Mar 29	32.3	0.0	4.0	45.0
Mar 30	33.5	0.0	4.0	46.0
Mar 31	38.7	0.0	4.0	46.0
AVG	26.5	0.0	4.1	43.3

TABLE 86

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT - FISH COUNTS — APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	STURGEON	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Apr 1	2			0				103	53		0		32.6	0.0	4.0	46.0
Apr 2	7			0				306	170		0		42.5	0.0	4.0	47.0
Apr 3	0			0				121	53		0		34.7	22.5	4.0	47.0
Apr 4	3			0				149	73		1		32.0	20.0	4.0	47.0
Apr 5	2			0				137	74		0		25.9	13.8	4.0	47.0
Apr 6	4			0				81	40		0		29.6	17.6	4.0	46.0
Apr 7	9			0				143	63		0		25.1	13.0	4.0	46.0
Apr 8	10			0				95	48		0		23.7	11.7	4.0	47.0
Apr 9	7			0				138	75		0		25.9	13.8	4.5	47.0
Apr 10	28			0				217	108		0		29.4	17.3	4.5	47.0
Apr 11	26			2				196	119		0		25.0	12.9	4.0	47.0
Apr 12	18			0				122	66		0		24.2	12.1	4.5	47.0
Apr 13	18			0				82	41		0		27.9	15.4	4.5	48.0
Apr 14	12			0				113	62		2		28.1	16.0	4.5	47.0
Apr 15	25			0				125	71		0		32.0	19.9	4.5	47.0
Apr 16	76			0				198	97		0		32.5	20.4	4.5	48.0
Apr 17	190			0				130	63		0		32.0	19.9	4.5	48.0
Apr 18	304			2				121	61		0		38.1	24.3	4.5	49.0
Apr 19	609			4				161	86		2		44.3	22.0	4.5	50.0
Apr 20	612			1				136	81		0		45.3	16.9	4.5	50.0
Apr 21	658			1				114	44		1		50.2	16.9	4.5	50.0
Apr 22	944			6				92	55		0		60.3	19.1	4.5	50.0
Apr 23	1,756			6				114	59		0		73.6	24.0	5.0	51.0
Apr 24	2,498			7				81	39		0		68.5	26.8	5.0	51.0
Apr 25	1,909			10				81	56		0		60.8	26.9	5.0	51.0
Apr 26	1,299			12				53	36		0		54.1	26.8	5.0	51.0
Apr 27	1,366			26				43	20		0		52.7	25.3	5.0	53.0
Apr 28	2,650			102				58	38		0		53.7	23.9	4.5	53.0
Apr 29	3,788			79				64	40		0		58.3	25.1	4.5	54.0
Apr 30	4,415			19				47	31		1		60.2	31.1	4.5	54.0
TOTAL	23,245			277				3,621	1,922		7					
AVG.	775			9				121	64		0		40.8	18.5	4.4	48.9

Note: Official Spring Chinook run started April 1.

TABLE 87

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT - FISH COUNTS — MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	STURGEON	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
May 1	5,223			29				51	36		0		65.3	35.9	3.5	54.0
May 2	1,593			25				34	18		0		53.8	38.4	3.5	53.0
May 3	1,455			27				35	20		0		61.3	39.9	3.5	53.0
May 4	1,173			28				13	10		0		59.3	39.7	3.5	51.0
May 5	1,949			32				19	15		0		54.6	37.5	3.5	51.0
May 6	1,670			32				17	14		0		52.5	37.9	3.5	50.0
May 7	2,205			40				7	3		0		50.8	36.6	3.5	50.0
May 8	2,320			51				18	12		0		51.8	37.2	3.5	50.0
May 9	6,085			134				10	8		0		45.4	32.7	3.5	51.0
May 10	656			24				4	2		0		49.3	33.6	3.5	51.0
May 11	3,696			146				14	11		0		48.2	31.4	3.5	51.0
May 12	1,824			72				22	16		0		47.2	33.4	3.5	50.0
May 13	5,168			174				14	13		0		49.1	30.1	3.5	51.0
May 14	3,615			186				16	10		0		51.8	25.7	3.5	52.0
May 15	4,298			310				16	7		0		56.0	25.1	3.5	52.0
May 16	3,054			214				10	3		0		57.3	21.4	3.5	53.0
May 17	1,748			251				18	12		0		62.9	15.7	3.5	53.0
May 18	1,231			243				19	7		0		76.5	14.4	3.5	54.0
May 19	1,296			311				11	5		0		89.0	17.1	3.5	54.0
May 20	1,489			348				15	6		0		101.3	20.5	3.5	54.0
May 21	2,697			458				22	11		0		105.4	26.8	3.5	55.0
May 22	2,032			338				11	3		0		85.1	25.6	3.5	55.0
May 23	2,230			387				14	6		0		79.9	25.0	3.5	56.0
May 24	1,720			271				8	3		0		72.9	25.7	3.5	56.0
May 25	936			184				12	5		1		72.1	26.0	3.5	56.0
May 26	639			99				10	3		1		66.8	25.7	3.5	56.0
May 27	318			83				3	2		0		67.9	25.8	3.5	55.0
May 28	565			104				14	9		0		70.3	26.1	3.5	55.0
May 29	497			140				7	0		0		70.3	26.9	3.5	53.0
May 30	1,018			112				17	8		0		74.9	25.9	3.5	53.0
May 31	668			107				8	2		1		73.2	26.9	3.5	53.0
TOTAL	65,068			4,960				489	280		3					
AVG.	2,099			160				16	9		0		65.2	28.7	3.5	52.9

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	STEELHEAD	unclipped STEELHEAD	BULL TROUT
SPRING	88,313	5,237	4,110	2,202	10

TABLE 88

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT - FISH COUNTS — JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	STURGEON	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jun 1	1,061			151			0	5	0		0		76.5	26.2	3.5	53.0
Jun 2	1,269			75			0	11	5		0		87.8	27.0	3.5	54.0
Jun 3	1,261			97			0	10	2		0		123.8	31.3	3.5	54.0
Jun 4	1,058			88			0	5	3		0		157.2	41.4	2.5	55.0
Jun 5	969			67			0	4	0		0		197.3	81.3	2.5	55.0
Jun 6	655			46			0	8	0		0		212.8	97.0	2.5	55.0
Jun 7	324			35			0	0	0		0		205.0	90.3	1.5	54.0
Jun 8	60			7			0	4	0		0		207.5	92.1	3.5	54.0
Jun 9	50			8			0	2	2		0		183.2	68.4	1.5	54.0
Jun 10	38			5			0	1	0		2		179.6	64.7	1.0	54.0
Jun 11	104			5			0	5	3		0		167.6	54.3	1.0	54.0
Jun 12	809			30			0	14	0		0		150.7	37.2	1.0	55.0
Jun 13	1,363			47			0	23	8		0		136.9	30.2	1.0	55.0
Jun 14		817		43			0	11	0		0		130.8	26.9	1.0	55.0
Jun 15		3,520		149			0	35	5		0		125.9	26.2	1.0	55.0
Jun 16		3,517		187			0	52	13		0		132.7	26.9	1.0	56.0
Jun 17		2,509		192			5	35	6		1		118.0	26.9	1.0	56.0
Jun 18		3,245		217			1	55	11		0		110.8	26.9	1.5	57.0
Jun 19		2,700		277			2	63	12		0		103.9	26.4	1.5	58.0
Jun 20		1,424		164			5	62	7		0		99.5	26.8	1.5	58.0
Jun 21		1,088		166			2	61	12		0		103.9	17.5	1.5	58.0
Jun 22		621		150			7	89	17		0		110.0	17.5	2.5	58.0
Jun 23		557		77			5	55	13		0		96.6	17.0	1.5	58.0
Jun 24		919		168			12	59	19		1		91.0	17.4	1.5	58.0
Jun 25		1,261		112			9	61	17		0		96.6	17.3	1.5	58.0
Jun 26		1,230		166			25	90	28		1		88.3	17.4	1.5	58.0
Jun 27		829		102			19	76	16		0		83.8	17.1	1.5	58.0
Jun 28		638		81			36	85	22		0		77.6	17.5	1.5	59.0
Jun 29		1,105		152			48	161	27		0		80.3	17.2	1.5	60.0
Jun 30		1,041		179			76	235	47		0		75.5	17.5	2.5	61.0
TOTAL	9,021	27,021		3,243			252	1,377	295		5					
AVG.	694	1,589		108			8	46	10		0		127.0	36.7	1.8	56.2

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	97,334	5,898
SUMMER	27,021	2,582
TOTAL	124,355	8,480

SOCKEYE	STEELHEAD	unclipped STEELHEAD
252	5,487	2,497

BULL TROUT
15

TABLE 89

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT - FISH COUNTS — JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	STURGEON	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jul 1		1,145		177			80	259	58			0	74.5	17.1	2.5	61.0
Jul 2		865		215			106	327	84			0	69.3	17.3	2.5	62.0
Jul 3		658		160			133	374	120			0	61.9	17.5	2.5	63.0
Jul 4		545		150			118	396	123			0	57.0	17.4	2.5	63.0
Jul 5		535		132			82	514	176			0	56.0	17.3	2.5	63.0
Jul 6		360		66			75	387	129			0	54.0	17.4	2.5	63.0
Jul 7		322		62			45	339	114			0	53.1	17.3	2.5	65.0
Jul 8		313		46			54	413	144			0	56.3	17.5	2.5	65.0
Jul 9		296		95			68	535	211			0	48.4	17.1	2.5	65.0
Jul 10		287		77			58	553	198			0	53.5	17.5	2.5	66.0
Jul 11		195		56			51	631	248			0	50.2	17.4	2.5	66.0
Jul 12		184		62			65	632	207			0	40.1	17.5	2.5	65.0
Jul 13		212		96			69	908	376			1	49.2	17.2	2.5	65.0
Jul 14		174		51			49	451	195			0	38.0	17.4	2.5	66.0
Jul 15		203		53			43	738	303			0	53.1	17.1	2.5	65.0
Jul 16		184		26			51	692	320			0	42.6	17.3	3.0	66.0
Jul 17		187		13			52	738	308			0	46.0	16.9	3.0	66.0
Jul 18		146		11			42	676	267			0	40.3	17.4	3.0	66.0
Jul 19		106		11			24	758	312			1	44.0	17.3	3.0	66.0
Jul 20		101		20			15	794	350			0	40.4	17.4	3.0	67.0
Jul 21		96		21			20	1,228	580			0	45.2	17.0	3.0	68.0
Jul 22		105		25			7	988	392			0	36.7	17.4	3.0	69.0
Jul 23		92		25			25	1,375	571			1	36.5	17.0	3.0	68.0
Jul 24		72		5			9	903	400			0	36.9	17.4	3.0	69.0
Jul 25		24		7			2	631	264			0	37.0	17.1	3.0	69.0
Jul 26		25		8			7	304	100			1	38.2	26.2	3.0	68.0
Jul 27		35		5			2	579	286			0	37.3	21.5	3.5	68.0
Jul 28		22		1			8	615	254			0	39.4	23.0	3.5	68.0
Jul 29		18		2			6	440	180			0	33.9	22.5	3.5	68.0
Jul 30		10		3			3	289	98			0	35.4	24.6	3.5	68.0
Jul 31		41		14			4	1,298	589			1	35.1	17.2	3.5	68.0
TOTAL		7,558		1,695			1,373	19,765	7,957			5				
AVG.		244		55			44	638	257			0	46.4	18.3	2.8	66.0

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	97,334	5,898
SUMMER	34,579	4,277
TOTAL	131,913	10,175

SOCKEYE	STEELHEAD	unclipped STEELHEAD
1,625	25,252	10,454

BULL TROUT	LAMPREY
15	5

TABLE 90

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT - FISH COUNTS — AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	STURGEON	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Aug 1		53		24			4	1,479	566		0	2	35.2	17.5	3.5	68.0
Aug 2		25		1			0	1,736	638		0	1	36.8	17.0	3.5	69.0
Aug 3		26		7			8	1,541	539		0	1	39.5	17.1	3.5	69.0
Aug 4		42		4			6	2,223	845		1	0	39.3	15.1	3.5	69.0
Aug 5		10		0			0	743	314		0	0	37.2	15.9	3.5	69.0
Aug 6		60		4			1	1,866	665		0	2	32.1	12.8	3.5	69.0
Aug 7		53		10			1	1,402	519		0	1	27.0	11.9	3.5	68.0
Aug 8		39		6			1	1,476	516		0	1	26.8	11.4	3.5	68.0
Aug 9		33		5			0	1,002	407		0	0	30.8	15.7	3.5	68.0
Aug 10		44		4			1	1,422	484		0	3	25.4	10.1	3.5	68.0
Aug 11		31		4			0	949	337		0	1	29.5	13.0	3.5	68.0
Aug 12		62		8			1	1,128	366		0	3	30.7	12.7	3.5	68.0
Aug 13		40		8			1	1,122	366		0	0	29.4	16.0	3.5	68.0
Aug 14			42	9			2	1,255	435		0	0	28.2	15.9	3.5	68.0
Aug 15			66	8			0	1,208	449		0	1	26.1	13.8	3.5	68.0
Aug 16			26	9			1	447	138		0	0	28.2	16.0	3.5	68.0
Aug 17			25	4			0	264	82		0	1	29.9	17.5	3.5	68.0
Aug 18			16	3			0	219	70		0	1	30.5	17.4	3.5	68.0
Aug 19			47	10			0	248	83		0	0	30.0	17.4	3.5	68.0
Aug 20			66	2			1	356	116		0	0	26.8	14.6	3.5	68.0
Aug 21			41	1			0	416	121		0	2	32.3	17.4	4.0	68.0
Aug 22			39	4			0	328	88		0	0	24.6	12.3	3.5	69.0
Aug 23			85	16			0	326	105		0	0	26.7	14.6	3.5	69.0
Aug 24			102	16			0	319	91		0	0	27.0	14.6	4.0	68.0
Aug 25			64	13			0	274	90		0	0	25.3	13.0	4.0	68.0
Aug 26			145	34			0	202	59		0	0	26.1	14.0	4.0	68.0
Aug 27			245	40			0	232	54		0	0	24.2	12.1	4.0	68.0
Aug 28			78	13			0	100	33		0	0	22.2	9.9	4.0	68.0
Aug 29			286	55			0	308	71		0	1	22.2	9.9	4.0	68.0
Aug 30			353	73			0	442	98		0	1	22.1	10.0	4.0	68.0
Aug 31			251	47			0	318	75		0	0	23.3	10.9	4.0	68.0
TOTAL		518	1,977	442			28	25,351	8,820		1	22				
AVG.		40	110	14			1	818	285		0	1	28.9	14.1	3.6	68.2

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	97,334	5,898
SUMMER	35,097	4,362
FALL	1,977	357
TOTAL	134,408	10,617

SOCKEYE	STEELHEAD	unclipped STEELHEAD
1,653	50,603	19,274

BULL TROUT	LAMPREY
16	27

TABLE 91

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER MONUMENTAL PROJECT - FISH COUNTS — SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	STURGEON	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Sep 1			1,448	281	0	0	1	2,718	612			0	25.5	0.0	4.0	68.0
Sep 2			1,168	209	0	0	0	1,808	396			-1	26.6	0.0	4.0	68.0
Sep 3			978	274	0	0	0	2,719	691			1	23.8	0.0	4.0	67.0
Sep 4			746	188	0	0	0	1,370	339			2	15.5	0.0	4.0	66.0
Sep 5			800	285	0	0	0	2,245	583			1	22.3	0.0	4.0	66.0
Sep 6			1,353	387	0	0	0	2,995	765			0	23.6	0.0	4.0	65.0
Sep 7			1,215	226	0	0	0	1,337	318			1	25.0	0.0	4.0	65.0
Sep 8			1,377	400	6	0	0	2,388	706			0	24.0	0.0	4.0	65.0
Sep 9			1,627	575	12	3	0	3,274	874			1	13.6	0.0	4.0	65.0
Sep 10			1,315	594	60	14	1	4,766	1,289			0	28.4	0.0	4.0	65.0
Sep 11			794	366	44	8	0	5,359	1,394			-1	32.2	0.0	4.0	65.0
Sep 12			1,460	335	31	1	0	4,524	1,188			1	20.5	0.0	4.0	65.0
Sep 13			1,155	365	31	4	0	3,788	1,042			1	34.6	0.0	4.0	65.0
Sep 14			1,005	507	43	4	0	4,372	1,080			0	24.5	0.0	4.0	65.0
Sep 15			1,311	606	35	7	0	3,128	848			3	27.2	0.0	4.0	65.0
Sep 16			1,740	782	47	7	0	4,535	1,159			0	29.6	0.0	4.0	65.0
Sep 17			1,593	294	37	9	0	3,922	1,063			0	25.4	0.0	4.0	64.0
Sep 18			1,260	322	45	6	0	5,264	1,376			0	21.9	0.0	4.0	64.0
Sep 19			606	187	18	7	0	3,406	921			1	22.6	0.0	4.0	64.0
Sep 20			977	324	65	12	0	4,978	1,386			0	15.6	0.0	4.0	64.0
Sep 21			974	421	37	11	0	6,562	1,725			0	15.0	0.0	4.0	63.0
Sep 22			517	130	21	4	0	2,017	515			0	14.9	0.0	4.0	63.0
Sep 23			1,497	394	36	3	1	3,324	930			-1	22.0	0.0	4.0	63.0
Sep 24			1,317	480	38	13	0	4,570	1,230			0	22.4	0.0	4.0	63.0
Sep 25			551	377	26	16	0	3,816	1,072			0	12.7	0.0	4.0	63.0
Sep 26			892	558	45	8	0	4,942	1,359			0	13.1	0.0	4.0	63.0
Sep 27			589	167	38	7	0	3,300	896			0	24.2	0.0	4.0	63.0
Sep 28			732	411	46	12	0	4,889	1,280			0	22.1	0.0	4.0	63.0
Sep 29			1,135	278	31	6	0	3,904	1,033			0	29.3	0.0	4.0	63.0
Sep 30			1,190	281	30	7	0	3,508	799			0	19.6	0.0	4.0	63.0
TOTAL			33,322	11,004	822	169	3	109,728	28,869			9				
AVG.			1,111	367	27	6		3,658	962			0	22.6	0.0	4.0	64.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	97,334	5,898
SUMMER	35,097	4,362
FALL	35,299	11,361
TOTAL	167,730	21,621

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD
822	169	1,656	160,331	48,143

BULL TROUT	LAMPREY
16	36

TABLE 92

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT. PORTLAND

LOWER MONUMENTAL PROJECT - FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	STURGEON	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Oct 1			1,081	365	44	7	0	3,127	781			0	22.9	0.0	4.0	63.0
Oct 2			863	383	26	4	0	2,961	777			0	26.8	0.0	4.0	63.0
Oct 3			636	315	16	9	0	2,199	542			0	15.4	0.0	4.0	65.0
Oct 4			699	326	44	6	0	2,796	720			0	18.8	0.0	4.0	65.0
Oct 5			441	529	14	8	0	3,000	854			0	23.2	0.0	4.0	64.0
Oct 6			861	561	33	1	0	3,131	903			0	23.9	0.0	4.0	64.0
Oct 7			258	245	9	1	0	2,569	736			0	23.2	0.0	4.0	64.0
Oct 8			405	186	31	9	0	2,776	767			0	23.6	0.0	4.0	64.0
Oct 9			553	216	41	13	0	3,133	838			0	21.7	0.0	4.0	64.0
Oct 10			150	94	17	7	0	1,901	475			0	18.6	0.0	4.0	63.0
Oct 11			288	102	18	12	0	3,096	812			0	21.7	0.0	4.0	63.0
Oct 12			157	77	28	6	0	2,817	753			0	23.5	0.0	4.0	63.0
Oct 13			142	71	20	2	0	2,230	577			1	14.8	0.0	4.0	63.0
Oct 14			117	75	10	0	0	1,311	343			1	18.0	0.0	4.0	63.0
Oct 15			78	65	23	1	-1	1,711	499			0	22.2	0.0	4.3	63.0
Oct 16			75	48	21	0	0	1,578	504			0	13.1	0.0	4.5	63.0
Oct 17			64	54	33	5	-1	1,184	358			0	14.8	0.0	4.5	63.0
Oct 18			100	68	49	6	-1	1,377	468			6	22.1	0.0	4.5	63.0
Oct 19			78	32	97	2	0	1,585	486			0	14.8	0.0	4.0	62.0
Oct 20			33	32	48	5	0	1,055	387			0	18.9	0.0	4.0	62.0
Oct 21			59	25	50	7	0	1,173	451			0	13.2	0.0	4.0	61.0
Oct 22			29	14	35	2	0	1,207	374			0	18.9	0.0	4.0	61.0
Oct 23			76	41	32	1	-1	1,074	401			0	17.2	0.0	4.0	61.0
Oct 24			23	17	17	0	0	333	109			0	15.4	0.0	4.0	61.0
Oct 25			29	31	30	5	0	957	315			0	20.2	0.0	4.0	60.0
Oct 26			31	32	23	4	0	930	366			0	20.2	0.0	4.0	60.0
Oct 27			23	5	28	2	0	753	252			0	20.7	0.0	4.0	59.0
Oct 28			19	9	12	1	0	554	208			0	19.4	0.0	4.0	59.0
Oct 29			15	7	14	0	0	325	94			0	17.5	0.0	4.0	59.0
Oct 30			24	11	16	0	0	347	110			0	19.1	0.0	4.0	59.0
Oct 31			12	11	6	1	0	290	96			0	17.9	0.0	4.0	59.0
TOTAL			7,419	4,047	885	127	-4	53,480	15,356			8				
AVG.			239	131	29	4	0	1,725	495			0	19.4	0.0	4.1	62.1

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	97,334	5,898
SUMMER	35,097	4,362
FALL	42,718	15,408
TOTAL	175,149	25,668

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD
1,707	296	1,652	213,811	63,499

BULL TROUT	LAMPREY
16	44

TABLE 93

DISCHARGE AND WATER QUALITY DATA

LOWER MONUMENTAL PROJECT 2010

NOVEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Nov 1	24.3	0.0	4.0	59.0
Nov 2	19.9	0.0	4.2	58.0
Nov 3	18.0	0.0	4.2	58.0
Nov 4	23.3	0.0	4.2	58.0
Nov 5	26.4	0.0	4.2	58.0
Nov 6	14.1	0.0	4.2	58.0
Nov 7	12.3	0.0	4.2	58.0
Nov 8	19.9	0.0	4.2	57.0
Nov 9	25.2	0.0	4.2	57.0
Nov 10	18.9	0.0	3.5	56.0
Nov 11	19.4	0.0	3.5	55.0
Nov 12	19.2	0.0	3.5	55.0
Nov 13	20.4	0.0	3.8	55.0
Nov 14	17.5	0.0	3.8	54.0
Nov 15	31.6	0.0	3.8	54.0
Nov 16	31.9	0.0	3.8	54.0
Nov 17	15.4	0.0	3.8	53.0
Nov 18	15.1	0.0	3.8	53.0
Nov 19	16.0	0.0	3.8	53.0
Nov 20	20.0	0.0	3.8	53.0
Nov 21	11.7	0.0	3.8	52.0
Nov 22	17.3	0.0	3.8	52.0
Nov 23	25.1	0.0	3.8	52.0
Nov 24	23.3	0.0	3.8	50.0
Nov 25	19.3	0.0	3.8	49.0
Nov 26	11.7	0.0	3.8	49.0
Nov 27	11.4	0.0	3.5	48.0
Nov 28	13.2	0.0	3.5	47.0
Nov 29	22.9	0.0	3.5	47.0
Nov 30	17.2	0.0	3.5	46.0
AVG.	19.4	0.0	3.8	53.6

DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1	16.1	0.0	3.5	46.0
Dec 2	21.6	0.0	3.5	45.0
Dec 3	17.6	0.0	3.5	45.0
Dec 4	16.1	0.0	3.8	45.0
Dec 5	17.4	0.0	3.5	45.0
Dec 6	23.1	0.0	3.5	45.0
Dec 7	21.0	0.0	3.5	45.0
Dec 8	18.5	0.0	3.5	45.0
Dec 9	18.2	0.0	3.5	46.0
Dec 10	27.9	0.0	3.5	44.0
Dec 11	28.2	0.0	3.5	44.0
Dec 12	8.8	0.0	3.5	43.0
Dec 13	25.7	0.0	3.5	43.0
Dec 14	38.8	0.0	3.5	43.0
Dec 15	31.1	0.0	3.5	43.0
Dec 16	38.6	0.0	3.5	42.0
Dec 17	39.0	0.0	3.5	42.0
Dec 18	23.6	0.0	3.5	42.0
Dec 19	25.9	0.0	3.5	42.0
Dec 20	33.6	0.0	3.5	41.0
Dec 21	32.6	0.0	3.5	41.0
Dec 22	26.0	0.0	3.5	41.0
Dec 23	25.0	0.0	3.5	41.0
Dec 24	21.8	0.0	3.5	40.0
Dec 25	24.1	0.0	3.5	40.0
Dec 26	24.8	0.0	3.5	40.0
Dec 27	30.0	0.0	3.5	40.0
Dec 28	24.4	0.0	3.5	40.0
Dec 29	28.2	0.0	3.5	40.0
Dec 30	35.6	0.0	3.5	40.0
Dec 31	34.7	0.0	4.0	40.0
AVG.	25.7	0.0	3.5	42.5

TABLE 94

YEARLY TOTALS OF SALMONIDS COUNTED OVER
LOWER MONUMENTAL DAM
1969 - 2010

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
2009	183,451	317,275	1,162	5,617	507,505
2010	200,817	213,811	1,652	2,003	418,283
Total	2,473,919	4,168,275	8,677	40,930	6,691,801
10-Year Average	127,479	201,055	379	2,367	331,280

*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 CHINOOK SALMON

LOWER MONUMENTAL DAM

1969-2010

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
2009				483	64,754	45,527	10,839	7,310	49,587	4,951			183,451
2010				23,522	70,028	39,285	9,253	2,937	44,326	11,466			200,817
Total	2	0	60	362,818	964,810	517,085	179,422	40,240	314,184	93,129	1,487	23	2,473,260
10-Year Average				20,070	43,187	27,179	6,234	2,351	22,937	5,451			127,513

*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 96

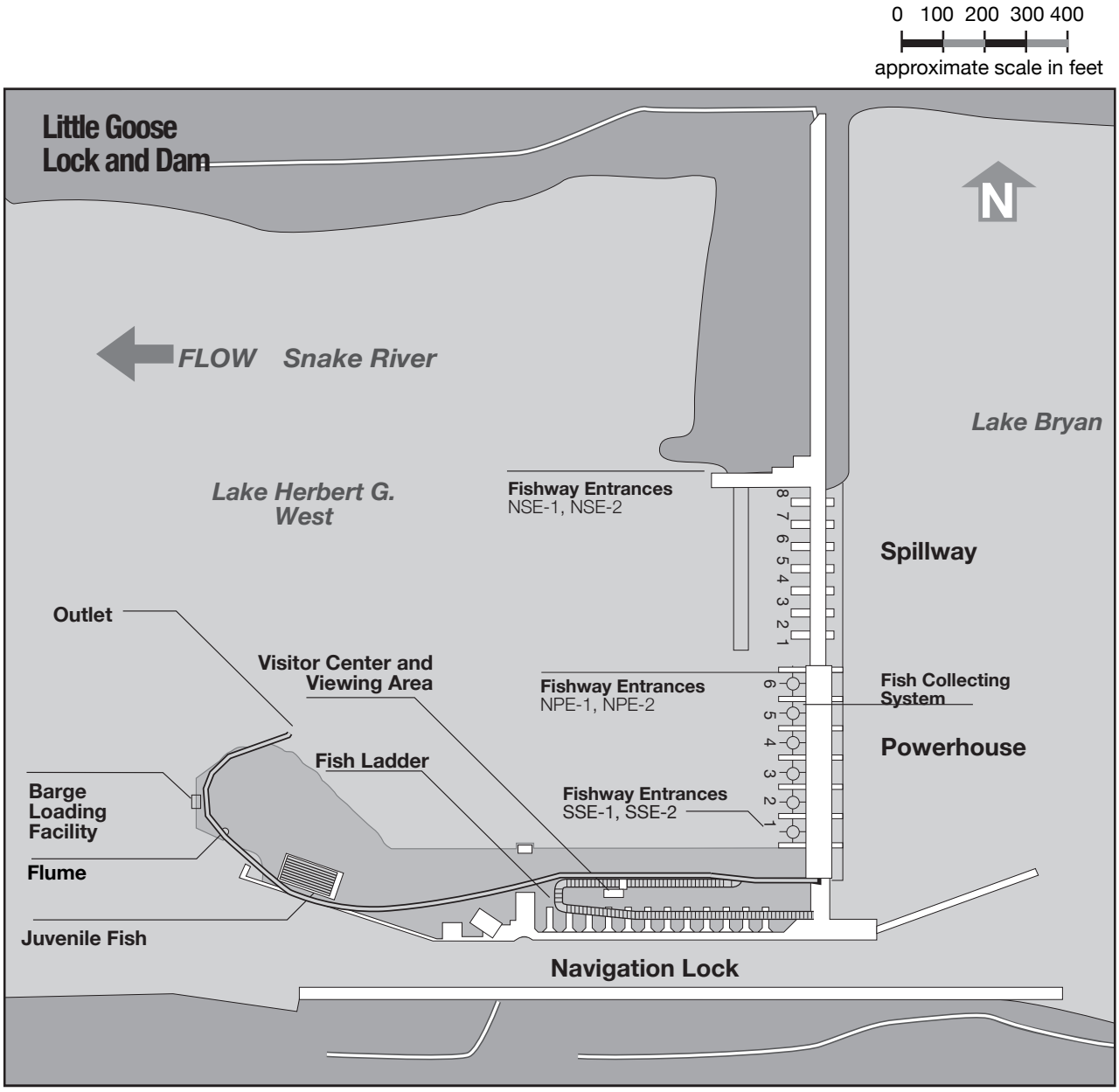
MONTHLY COUNT OF STEELHEAD

LOWER MONUMENTAL DAM
1969 - 2010

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
2009				4,294	426	1,358	12,112	23,920	167,680	107,485			317,275
2010				3,621	489	1,377	19,765	25,351	109,728	53,480			213,811
Total	4,829	7,610	14,839	100,419	20,418	16,287	186,687	346,356	1,962,724	1,479,903	49,239	14,375	4,203,686
10-Year Average				2,701	233	1,118	10,299	15,950	99,205	65,314			202,529

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



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 – 4 January	Ladder in service.
5 January – 24 February	Ladder dewatered for annual maintenance.
25 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.

Using substrate monitors located near the ladder exit, the COE continued to monitor for invasive species with particular attention to Zebra Mussels and Quagga Mussels. Reports are submitted monthly to district.

NSE 1 and NSE 2 operator failed during the year. The weirs were fixed at approximately 631.5 to 632 feet and adjusted to maintain adult fish criteria throughout the year as needed.

TABLE 97

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

2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				14,935	72,430	37,156	9,058	2,761	39,443	13,668			189,451
STEELHEAD				2,755	369	632	9,165	19,891	103,207	57,872			193,891
SOCKEYE						125	1,428	101	5	-1			1,658
COHO								0	1,013	995			2,008
PINK													0
TOTAL				17,690	72,799	37,913	19,651	22,753	143,668	72,534			387,008
LAMPREY					0	0	5	15	5	4			29
STURGEON													0
BULL TROUT				7	13	26	21						67

*Jacks included

TABLE 98

DISCHARGE AND WATER QUALITY DATA

LITTLE GOOSE PROJECT 2010

JANUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jan 1	20.5	0.0		39.8
Jan 2	15.9	0.0		37.2
Jan 3	18.2	0.0		37.1
Jan 4	21.9	0.0		37.3
Jan 5	23.8	0.0		37.5
Jan 6	28.5	0.0		37.7
Jan 7	29.9	0.0		37.8
Jan 8	28.7	0.0		37.9
Jan 9	26.9	0.0		37.8
Jan 10	26.4	0.0		37.8
Jan 11	19.5	0.0		37.6
Jan 12	23.8	0.0		37.4
Jan 13	21.5	0.0		37.3
Jan 14	21.6	0.0		37.3
Jan 15	23.1	0.0		37.4
Jan 16	23.8	0.0		37.6
Jan 17	24.3	0.0		37.9
Jan 18	25.3	0.0		38.2
Jan 19	20.3	0.0		38.6
Jan 20	22.6	0.0		38.6
Jan 21	24.2	0.0		38.7
Jan 22	22.7	0.0		38.7
Jan 23	22.7	0.0		38.6
Jan 24	25.7	0.0		38.7
Jan 25	23.0	0.0		38.6
Jan 26	21.8	0.0		38.8
Jan 27	26.0	0.0		38.9
Jan 28	24.9	0.0		39.0
Jan 29	21.2	0.0		39.0
Jan 30	23.2	0.0		39.0
Jan 31	21.7	0.0		39
AVG.	23.3	0.0		38.2

FEBRUARY

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Feb 1	28.1	0.0		39.1
Feb 2	30.5	0.0		39.1
Feb 3	25.5	0.0		39.1
Feb 4	21.0	0.0		39.1
Feb 5	16.1	0.0		39.1
Feb 6	25.7	0.0		39.0
Feb 7	29.1	0.0		38.9
Feb 8	25.5	0.0		38.9
Feb 9	33.4	0.0		39.1
Feb 10	22.8	0.0		39.2
Feb 11	18.1	0.0		39.4
Feb 12	19.9	0.0		39.5
Feb 13	18.3	0.0		39.7
Feb 14	17.0	0.0		39.8
Feb 15	21.7	0.0		39.8
Feb 16	22.1	0.0		39.9
Feb 17	24.7	0.0		40.0
Feb 18	22.5	0.0		40.0
Feb 19	25.0	0.0		40.1
Feb 20	23.7	0.0		40.2
Feb 21	28.2	0.0		40.3
Feb 22	23.1	0.0		40.3
Feb 23	27.2	0.0		40.4
Feb 24	17.9	0.0		40.4
Feb 25	20.7	0.0		40.5
Feb 26	24.3	0.0		40.6
Feb 27	18.8	0.0		40.9
Feb 28	18.5	0.0		41.3
AVG.	23.2	0.0		39.8

MARCH

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	20.9	0.0		41.7
Mar 2	20.2	0.0		41.8
Mar 3	21.9	1.0	6.0+	41.9
Mar 4	20.3	0.0	6.0+	42.0
Mar 5	23.6	0.0		42.0
Mar 6	26.9	0.0		42.2
Mar 7	23.0	0.0		41.7
Mar 8	22.6	0.0		41.8
Mar 9	29.9	0.0	6.0+	42.0
Mar 10	22.1	0.0	6.0+	41.8
Mar 11	25.2	0.0	6.0+	41.9
Mar 12	24.4	0.0		41.9
Mar 13	20.3	0.0		42.1
Mar 14	20.0	0.0		42.5
Mar 15	25.3	0.0	6.0	42.9
Mar 16	23.2	0.0	6.0	42.8
Mar 17	16.3	0.0		43.0
Mar 18	20.6	0.0	6.0	43.3
Mar 19	27.6	0.0		43.9
Mar 20	23.1	0.0		44.2
Mar 21	24.5	0.0		44.3
Mar 22	29.8	0.0	6.0	44.7
Mar 23	34.2	0.0		45.3
Mar 24	33.4	0.0	6.0	45.4
Mar 25	25.9	0.0	6.0	45.3
Mar 26	28.0	0.0		45.6
Mar 27	28.2	0.0		46.0
Mar 28	21.8	0.0		46.0
Mar 29	30.5	0.0	6.0	46.1
Mar 30	34.2	0.0	5.9	46.5
Mar 31	34.2	0.0		46.7
AVG.	25.2	0.0	6.0	43.5

*All water temps from Columbia River DART

TABLE 99

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT - FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Apr 1	1			0				190	66	0		32.2	0.0	5.2	46.9
Apr 2	0			0				124	56	1		39.1	0.0		46.9
Apr 3	1			0				114	46	0		34.5	10.4		47.0
Apr 4	2			0				100	47	0		32.4	9.8		47.1
Apr 5	0			0				30	14	0		25.7	7.6	5.2	47.0
Apr 6	0			0				62	25	0		29.0	8.7	5.6	47.0
Apr 7	2			0				97	36	0		24.1	7.2	5.0	46.9
Apr 8	0			0				104	52	0		24.1	7.2		46.9
Apr 9	5			0				83	30	0		26.8	7.9	5.2	47.2
Apr 10	5			0				113	59	0		28.6	8.5		47.7
Apr 11	2			0				93	44	0		24.1	7.2		47.8
Apr 12	0			0				61	25	0		24.2	7.1	5.6	47.8
Apr 13	1			0				67	26	0		27.0	8.1		47.9
Apr 14	7			0				110	50	0		27.5	8.2	5.5	48.2
Apr 15	32			1				188	84	0		32.2	9.6		47.7
Apr 16	30			0				124	59	0		31.9	9.6	5.8	47.7
Apr 17	22			0				72	34	1		32.8	10.1		49.0
Apr 18	62			0				85	59	0		37.6	11.6		50.1
Apr 19	211			10				87	55	0		43.6	13.0	5.4	50.5
Apr 20	362			7				74	43	0		46.0	13.8		49.9
Apr 21	250			18				75	43	0		50.0	15.0		50.8
Apr 22	700			67				109	61	0		62.8	18.8	5.2	52.0
Apr 23	1,267			30				168	91	0		74.1	22.3	4.0	52.7
Apr 24	972			13				112	62	2		66.8	20.1		53.4
Apr 25	2,200			20				75	34	1		60.3	18.1		54.3
Apr 26	858			2				48	24	1		53.2	15.9	5.0	54.3
Apr 27	1,195			5				39	26	0		51.6	15.4		53.6
Apr 28	1,763			14				44	25	0		55.2	16.6	4.4	52.4
Apr 29	2,045			8				51	26	0		58.1	17.3		51.3
Apr 30	2,584			161				56	37	1		58.9	17.6	3.8	50.7
TOTAL	14,579			356				2,755	1,339	7					
AVG.	486			12				92	45	0		40.5	11.4	5.1	49.4

*Water temps from DART

TABLE 100

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT - FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
May 1	4,058			200				38	25	1		65.3	19.5		50.4
May 2	916			7				35	24	0		54.9	16.6		50.5
May 3	3,272			96				27	17	0		59.9	18.0	4.2	50.5
May 4	2,202			30				35	16	1		59.9	18.0		50.4
May 5	984			20				16	11	0		53.6	16.0	4.1	50.1
May 6	635			10				20	12	0		51.7	15.4		49.7
May 7	797			19				10	8	1		50.6	15.1	4.8	49.7
May 8	1,164			37				2	1	0		51.5	15.4		49.7
May 9	1,330			55				13	11	0		46.3	13.9		49.8
May 10	754			32				11	10	0		48.8	14.6	5.5	50.1
May 11	2,406			61				3	2	0		49.4	14.8		50.2
May 12	1,622			30				17	12	1		46.0	13.8	4.9	50.8
May 13	9,572			107				9	5	0		49.4	14.8		51.4
May 14	1,285			61				11	6	0		51.1	15.3	5.0	52.2
May 15	664			88				18	16	0		55.9	16.6		53.3
May 16	1,546			78				8	8	0		57.4	17.2		53.9
May 17	1,831			188				6	4	0		64.6	19.4	6.0	54.5
May 18	9,863			390				15	10	0		76.3	22.8		55.7
May 19	5,090			251				9	5	0		90.1	27.0		56.0
May 20	2,490			227				7	5	1		100.4	30.1	4.8	56.1
May 21	1,738			256				5	5	1		102.4	30.6	3.8	55.8
May 22	3,644			419				3	2	1		86.1	26.0		54.6
May 23	2,326			272				8	4	0		78.6	23.6		53.6
May 24	955			232				8	6	0		72.2	21.5	5.3	53.3
May 25	2,425			338				6	2	0		71.8	21.4	5.1	52.6
May 26	1,158			128				6	4	0		68.4	20.5		51.9
May 27	468			80				1	0	0		68.6	20.4		51.9
May 28	755			126				0	0	1		70.0	20.9	4.0	52.0
May 29	640			110				6	4	2		71.6	21.5		52.6
May 30	679			150				8	6	2		75.4	22.6		53.3
May 31	961			102				8	4	1		72.7	21.7	4.4	53.9
TOTAL	68,230			4,200				369	245	13					
AVG.	2,201			135				12	8	0		65.2	19.5	4.8	52.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	82,809	4,556

STEELHEAD	unclipped STEELHEAD	BULL TROUT
3,124	1,584	20

TABLE 101

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT - FISH COUNTS

JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jun 1	683			116			0	10	2	0		77.0	23.0		54.8
Jun 2	950			114			0	3	1	0		86.6	25.9		55.3
Jun 3	1,175			98			0	5	4	2		122.5	35.4	5.3	55.4
Jun 4	1,204			68			0	9	2	2		148.6	39.2	4.2	55.2
Jun 5	697			59			0	1	0	1		187.0	78.9		53.8
Jun 6	94			12			0	-1	-1	0		198.6	88.9		53.1
Jun 7	19			14			0	0	-1	0		192.9	83.8	1.2	53.4
Jun 8	31			17			0	2	0	0		195.3	86.5		54.1
Jun 9	37			20			0	1	0	0		174.9	63.8		54.4
Jun 10	37			19			0	1	0	0		173.6	62.1		54.7
Jun 11	517			67			0	1	0	0		162.3	51.0	0.9	55.1
Jun 12	1,074			55			0	0	0	0		147.0	42.0		55.3
Jun 13	551			66			0	0	0	0		134.5	42.6		55.5
Jun 14	1,559			100			0	4	0	0		129.1	37.4	1.8	56.0
Jun 15	1,548			80			0	12	4	0		124.7	34.2		56.6
Jun 16		3,876		187			0	12	-1	0		129.1	31.1		57.0
Jun 17		3,149		184			0	18	5	3		116.7	31.2	2.1	57.3
Jun 18		2,186		226			0	26	7	1		110.4	31.8	2.6	57.3
Jun 19		2,602		216			1	26	4	0		102.5	31.0		57.1
Jun 20		2,182		218			1	25	11	1		100.1	30.0		56.2
Jun 21		1,388		145			6	21	4	0		105.0	31.5	2.6	56.0
Jun 22		924		115			2	24	6	0		111.7	33.4		56.7
Jun 23		652		112			2	29	6	1		97.1	29.1	2.5	57.7
Jun 24		972		131			0	28	2	0		94.9	28.4		57.8
Jun 25		774		68			1	34	4	0		98.3	29.5	2.4	58.1
Jun 26		1,571		175			1	38	6	0		90.7	27.2		58.9
Jun 27		1,081		92			14	56	14	1		87.2	26.2		60.3
Jun 28		826		66			25	79	20	6		81.2	24.3	3.0	61.1
Jun 29		726		142			28	60	18	3		81.8	24.6		61.9
Jun 30		887		202			44	108	36	5		78.8	23.7	3.3	62.1
TOTAL	10,176	23,796		3,184			125	632	153	26					
AVG.	678	1586		106			4	21	5	1		124.7	40.9	2.7	56.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	92,985	5,461
SUMMER	23,796	2,279
TOTALS	116,781	7,740

SOCKEYE	STEELHEAD	unclipped STEELHEAD	BULL TROUT
125	3,756	1,737	46

TABLE 102

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT - FISH COUNTS — JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jul 1		1,092		137			80	126	30	3	0	76.3	22.9		62.0
Jul 2		992		130			61	134	54	1	0	72.7	21.9	2.5	62.5
Jul 3		706		186			86	149	40	1	0	64.5	19.4		63.1
Jul 4		551		157			97	204	55	0	0	60.3	18.1		63.1
Jul 5		539		95			96	253	89	1	0	58.4	17.4	3.8	63.5
Jul 6		356		37			72	228	76	1	2	56.4	16.9		64.1
Jul 7		360		31			77	254	84	2	1	56.2	16.9	4.6	64.6
Jul 8		394		35			53	243	86	1	0	57.9	17.4		64.4
Jul 9		312		110			86	269	114	1	0	50.9	15.3	5.3	64.0
Jul 10		323		73			70	306	128	1	0	56.4	16.8		63.9
Jul 11		197		68			74	321	142	1	0	53.1	15.8		64.5
Jul 12		223		80			66	394	148	1	0	44.6	13.4	4.6	64.3
Jul 13		242		84			61	411	160	3	0	49.9	14.9		65.3
Jul 14		205		80			54	369	158	1	0	40.9	12.2	5.1	65.8
Jul 15		160		46			56	331	122	2	0	55.4	16.6		65.9
Jul 16		125		23			53	361	150	0	0	45.7	13.7	5.0	65.4
Jul 17		92		17			40	279	110	0	0	47.3	14.1		65.6
Jul 18		96		8			40	412	166	0	0	43.1	12.9		66.5
Jul 19		83		8			38	394	155	0	0	44.0	13.2	5.4	66.7
Jul 20		58		16			44	312	119	0	0	43.9	13.1		67.1
Jul 21		37		8			14	372	149	0	0	45.8	13.7	6.0	66.9
Jul 22		77		14			22	426	176	0	0	40.5	12.2		66.3
Jul 23		79		11			22	299	78	0	0	37.3	11.2	5.7	66.7
Jul 24		46		19			20	521	209	0	0	38.2	11.5		67.6
Jul 25		59		14			12	363	119	0	0	38.9	11.6		67.5
Jul 26		29		12			7	277	114	0	0	39.2	11.8	5.6	67.3
Jul 27		11		0			4	159	56	0	0	39.3	11.8	6.0	67.5
Jul 28		22		4			4	280	136	0	0	40.8	12.2		67.9
Jul 29		23		8			1	233	100	0	0	36.3	10.8		67.8
Jul 30		29		4			12	217	103	1	1	36.3	10.9	5.8	67.9
Jul 31		20		5			6	268	94	0	1	36.4	10.9		67.6
TOTAL		7,538		1,520			1,428	9,165	3,520	21	5				
AVG.		243		49			46	296	114	1	0	48.6	14.6	5.0	65.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	92,985	5,461
SUMMER	31,334	3,799
TOTAL	124,319	9,260

SOCKEYE	STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY
1,553	12,921	5,257	67	5

TABLE 103

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT - FISH COUNTS

AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Aug 1		68		18			13	546	240		0	36.7	10.9		67.4
Aug 2		53		22			8	433	194		0	37.2	11.3	5.8	67.8
Aug 3		34		2			1	214	92		0	37.8	12.2		67.8
Aug 4		74		0			14	439	140		0	40.8	12.3		67.5
Aug 5		140		8			38	1,241	515		1	34.0	10.2	6.0	67.4
Aug 6		151		11			8	1,737	743		1	31.9	9.6	6.0	67.2
Aug 7		86		10			8	1,393	587		0	26.7	8.0		66.8
Aug 8		103		30			2	1,447	594		0	26.5	7.9		67.5
Aug 9		70		19			0	1,122	456		2	30.4	9.1	6.0+	68.1
Aug 10		34		4			1	1,059	362		0	24.8	7.4		67.8
Aug 11		22		4			2	630	252		0	29.0	8.6		68.3
Aug 12		35		1			0	587	217		1	30.2	9.1		68.5
Aug 13		64		11			2	924	386		0	30.2	9.7	5.8	68.8
Aug 14		88		19			1	1,314	602		1	28.6	8.4		69.8
Aug 15		54		10			1	960	344		0	28.1	8.2		69.4
Aug 16			35	10			0	463	167		0	29.4	8.6		68.8
Aug 17			36	2			0	582	193		0	29.5	8.8		68.7
Aug 18			38	14			0	572	174		0	30.9	9.3	6.0	68.1
Aug 19			48	13			0	394	118		0	31.8	9.5	6.0+	67.8
Aug 20			48	11			0	482	160		0	29.2	9.3	5.9	68.3
Aug 21			53	7			1	383	150		2	33.4	11.2		68.6
Aug 22			59	2			0	316	98		0	25.9	11.1		67.8
Aug 23			36	10			0	297	76		1	28.5	10.2		67.4
Aug 24			42	1			0	334	108		1	27.7	9.3	5.8	67.5
Aug 25			79	10			0	176	48		1	27.3	9.3		67.1
Aug 26			55	16			0	267	68		0	26.9	9.3	5.4	66.6
Aug 27			132	25			0	385	156		1	25.3	9.3	5.1	66.0
Aug 28			118	8			0	257	84		2	23.7	8.4		66.5
Aug 29			85	22			1	286	72		0	23.7	7.5		66.4
Aug 30			227	17			0	330	88		0	24.8	7.5	5.0	66.2
Aug 31			217	40			0	321	77		1	24.6	7.5		66.1
TOTAL		1,076	1,308	377			101	19,891	7,561		15				
AVG.		72	82	12			3	642	244		0	29.5	9.3	5.7	67.7

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	92,985	5,461
SUMMER	32,410	3,968
FALL	1,308	208
TOTALS	126,703	9,637

SOCKEYE	STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY
1,654	32,812	12,818	67	20

TABLE 104

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT - FISH COUNTS — SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Sep 1			190	41	0	0	1	476	132		0	25.5	0.0	4.3	65.4
Sep 2			1,088	197	2	1	0	1,501	468		0	26.3	0.0		65.4
Sep 3			1,091	164	0	0	0	2,194	584		0	26.0	0.0	5.8	65.2
Sep 4			779	114	0	0	0	1,809	485		0	18.3	0.0		64.4
Sep 5			746	174	0	0	0	2,173	541		0	22.2	0.0		63.7
Sep 6			865	240	0	0	0	2,032	508		0	22.9	0.0	5.4	63.9
Sep 7			966	158	7	0	0	1,584	437		1	27.9	0.0		64.1
Sep 8			1,432	241	11	1	0	2,479	649		0	22.6	0.0	4.8	64.1
Sep 9			1,716	271	20	2	0	2,787	769		1	14.7	0.0		63.9
Sep 10			1,655	300	16	2	1	3,435	934		1	25.6	0.0	4.2	63.3
Sep 11			1,609	266	40	7	1	4,323	1,159		-1	32.2	0.0		63.3
Sep 12			904	126	36	1	1	4,296	1,140		0	20.6	0.0		63.3
Sep 13			1,088	192	37	2	1	3,865	971		-1	32.9	0.0	5.2	63.2
Sep 14			1,159	217	37	12	0	3,774	926		0	24.7	0.0		62.9
Sep 15			1,018	236	20	7	0	3,781	989		1	27.3	0.0		62.8
Sep 16			1,355	301	34	5	0	3,666	911		0	22.5	0.0	5.8	62.6
Sep 17			1,576	244	59	4	0	4,205	1,068		0	25.6	0.0		62.9
Sep 18			1,363	197	77	10	0	3,613	931		0	22.3	0.0	5.0	63.1
Sep 19			926	146	29	4	0	2,489	671		0	22.7	0.0		62.9
Sep 20			1,112	281	50	10	0	5,033	1,330		1	15.9	0.0	6.0	62.5
Sep 21			936	260	67	13	0	5,823	1,420		1	21.3	0.0		62.6
Sep 22			821	278	47	2	0	4,464	1,207		0	14.9	0.0		63.2
Sep 23			749	173	55	10	0	4,921	1,268		0	21.5	0.0	6.0+	63.1
Sep 24			1,386	378	35	10	0	3,542	886		0	22.3	0.0	6.0+	63.2
Sep 25			1,163	415	20	11	0	3,008	751		0	13.2	0.0		63.2
Sep 26			844	274	32	5	0	3,661	1,026		1	13.5	0.0		63.1
Sep 27			1,151	379	41	5	0	4,863	1,297		0	23.3	0.0	6.0+	63.2
Sep 28			806	263	25	1	0	4,737	1,235		0	20.5	0.0		63.2
Sep 29			959	276	32	2	0	5,159	1,321		0	28.3	0.0		63.4
Sep 30			952	236	46	11	0	3,514	1,722		0	19.2	0.0	6.0+	63.7
TOTAL			32,405	7,038	875	138	5	103,207	27,736		5				
AVG.			1,080	235	29	5	0	3,440	925		0	22.6	0.0	5.2	63.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	92,985	5,461
SUMMER	32,410	3,968
FALL	33,713	7,246
TOTALS	159,108	16,675

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY
875	138	1,659	136,019	40,554	67	25

TABLE 105

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LITTLE GOOSE PROJECT - FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Oct 1			1,108	407	37	7	0	3,952	983		1	22.2	0.0	6.0	64.2
Oct 2			960	379	26	4	0	2,687	643		0	26.6	0.0		64.4
Oct 3			620	408	12	6	0	2,244	586		0	14.8	0.0		64.2
Oct 4			526	244	16	6	0	2,214	578		0	19.2	0.0		63.9
Oct 5			1,043	524	26	6	-1	4,206	1,052		0	21.4	0.0	6.0+	63.9
Oct 6			481	372	19	4	0	3,073	803		0	24.1	0.0	6.0+	64.3
Oct 7			553	346	14	4	0	1,900	461		0	21.3	0.0		64.3
Oct 8			408	148	18	4	0	2,745	910		0	24.4	0.0	6.0+	64.2
Oct 9			396	119	40	5	0	3,145	804		0	20.1	0.0		64.2
Oct 10			437	130	30	1	0	3,144	817		2	18.1	0.0		64.2
Oct 11			354	163	38	1	0	3,714	974		0	20.8	0.0	6.0+	63.9
Oct 12			323	79	37	5	0	2,825	781		0	23.3	0.0		63.7
Oct 13			236	79	32	10	0	2,919	772		0	14.8	0.0	6.0+	63.8
Oct 14			130	36	10	1	0	1,939	517		0	16.4	0.0		63.4
Oct 15			280	88	42	7	0	1,983	568		0	22.7	0.0	6.0+	63.1
Oct 16			248	76	35	11	0	1,511	430		0	12.8	0.0		62.9
Oct 17			228	83	24	8	0	1,319	353		0	13.8	0.0		62.7
Oct 18			170	82	38	5	0	1,153	311		1	20.7	0.0	6.0+	62.5
Oct 19			163	46	12	4	0	1,255	354		0	14.9	0.0		62.4
Oct 20			65	34	60	1	0	1,161	328		0	17.5	0.0	5.7	62.2
Oct 21			68	29	37	0	0	1,150	336		0	12.8	0.0		62.0
Oct 22			97	55	67	11	0	1,240	354		0	19.0	0.0	6.0+	61.7
Oct 23			52	37	23	4	0	729	244		0	16.9	0.0		61.4
Oct 24			82	47	46	6	0	1,119	340		0	14.2	0.0		61.1
Oct 25			66	44	32	8	0	836	259		0	19.4	0.0	6.0+	60.4
Oct 26			78	54	20	2	0	1,046	324		0	20.5	0.0		59.8
Oct 27			73	49	14	5	0	840	245		0	20.3	0.0	6.0+	59.3
Oct 28			58	32	10	1	0	501	161		0	17.9	0.0		58.8
Oct 29			35	17	19	2	0	495	158		0	16.9	0.0	6.0+	58.4
Oct 30			41	14	10	4	0	381	91		0	18.3	0.0		57.9
Oct 31			52	16	8	0	0	446	151		0	17.2	0.0		57.6
TOTAL			9,431	4,237	852	143	-1	57,872	15,688		4				
AVG.			304	137	27	5	0	1,867	506		0	18.8	0.0	5.9	62.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	92,985	5,461
SUMMER	32,410	3,968
FALL	43,144	11,483
TOTALS	168,539	20,912

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	BULL TROUT	LAMPREY
1,727	281	1,658	193,891	56,242	67	29

TABLE 106

DISCHARGE AND WATER QUALITY DATA

LITTLE GOOSE PROJECT 2010

NOVEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Nov 1	22.8	0.0		57.0
Nov 2	19.3	0.0	6.0+	56.7
Nov 3	17.0	0.0	6.0+	56.4
Nov 4	22.9	0.0		56.2
Nov 5	24.0	0.0		55.8
Nov 6	13.5	0.0	6.0	55.6
Nov 7	13.7	0.0		55.4
Nov 8	19.6	0.0	6.0+	55.0
Nov 9	24.2	0.0		54.7
Nov 10	18.5	0.0	6.0+	54.4
Nov 11	19.4	0.0		54.0
Nov 12	17.8	0.0		53.7
Nov 13	19.7	0.0		53.2
Nov 14	16.8	0.0		53.0
Nov 15	28.3	0.0		52.5
Nov 16	32.5	0.0	5.0	52.1
Nov 17	17.4	0.0	5.0	51.6
Nov 18	16.6	0.0	6.0	51.2
Nov 19	17.3	0.0		50.8
Nov 20	19.5	0.0		50.5
Nov 21	14.4	0.0		50.1
Nov 22	17.7	0.0	6.0	49.6
Nov 23	22.1	0.0	6.0	48.8
Nov 24	24.6	0.0		48.3
Nov 25	17.7	0.0		
Nov 26	12.8	0.0		
Nov 27	12.6	0.0		47.0
Nov 28	12.6	0.0		46.6
Nov 29	23.1	0.0	6.0	46.0
Nov 30	18.6	0.0	6.0	45.5
AVG.	19.2	0.0	5.8	52.2

DECEMBER

DATE	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1	16.8	0.0		45.3
Dec 2	20.3	0.0	6.0	44.9
Dec 3	18.9	0.0		44.3
Dec 4	15.5	0.0		44.0
Dec 5	17.3	0.0		43.8
Dec 6	22.2	0.0	6.0	43.5
Dec 7	20.4	0.0		43.3
Dec 8	19.1	0.0	6.0	43.4
Dec 9	19.0	0.0	6.0	43.6
Dec 10	28.9	0.0		43.3
Dec 11	21.5	0.0		42.9
Dec 12	9.5	0.0		42.8
Dec 13	27.8	0.0	6.0+	42.5
Dec 14	37.6	0.0	6.0	42.0
Dec 15	31.3	0.0	6.0	41.4
Dec 16	35.9	0.0		41.0
Dec 17	37.0	0.0		40.8
Dec 18	21.6	0.0		40.7
Dec 19	24.8	0.0		40.7
Dec 20	31.6	0.0	6.0	40.6
Dec 21	30.8	0.0	6.0	40.5
Dec 22	23.9	0.0	6.0	40.3
Dec 23	24.1	0.0		40.3
Dec 24	21.3	0.0		40.4
Dec 25	21.9	0.0		40.4
Dec 26	25.0	0.0		40.5
Dec 27	28.8	0.0	6.0	40.6
Dec 28	24.4	0.0	6.0	40.9
Dec 29	27.2	0.0		40.9
Dec 30	32.9	0.0		40.6
Dec 31	33.4	0.0		40.2
AVG.	24.9	0.0	6.0	41.9

TABLE 107

YEARLY TOTALS OF SALMONIDS COUNTED OVER
LITTLE GOOSE DAM
1970 - 1981, 1991 - 2010

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
2009	163,562	305,436	1,061	5,239	475,298
2010	189,451	193,891	1,658	2,008	387,008
Total	1,912,475	3,097,826	7,727	31,858	5,049,886
10-Yr Avg	116,322	185,964	360	2,091	304,737

*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 108

MONTHLY COUNT OF CHINOOK SALMON
LITTLE GOOSE DAM; 1970-1981, 1991-2010

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
2009				173	52,369	43,467	11,800	4,289	44,304	7,160			163,562
2010				14,935	72,430	37,156	9,058	2,761	39,443	13,668			189,451
Total			3	247,532	747,077	429,852	155,959	25,968	230,172	74,596	1,732	28	1,912,919
10-Year Average				17,024	40,241	26,092	6,493	1,612	19,233	5,555			116,367

****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 109

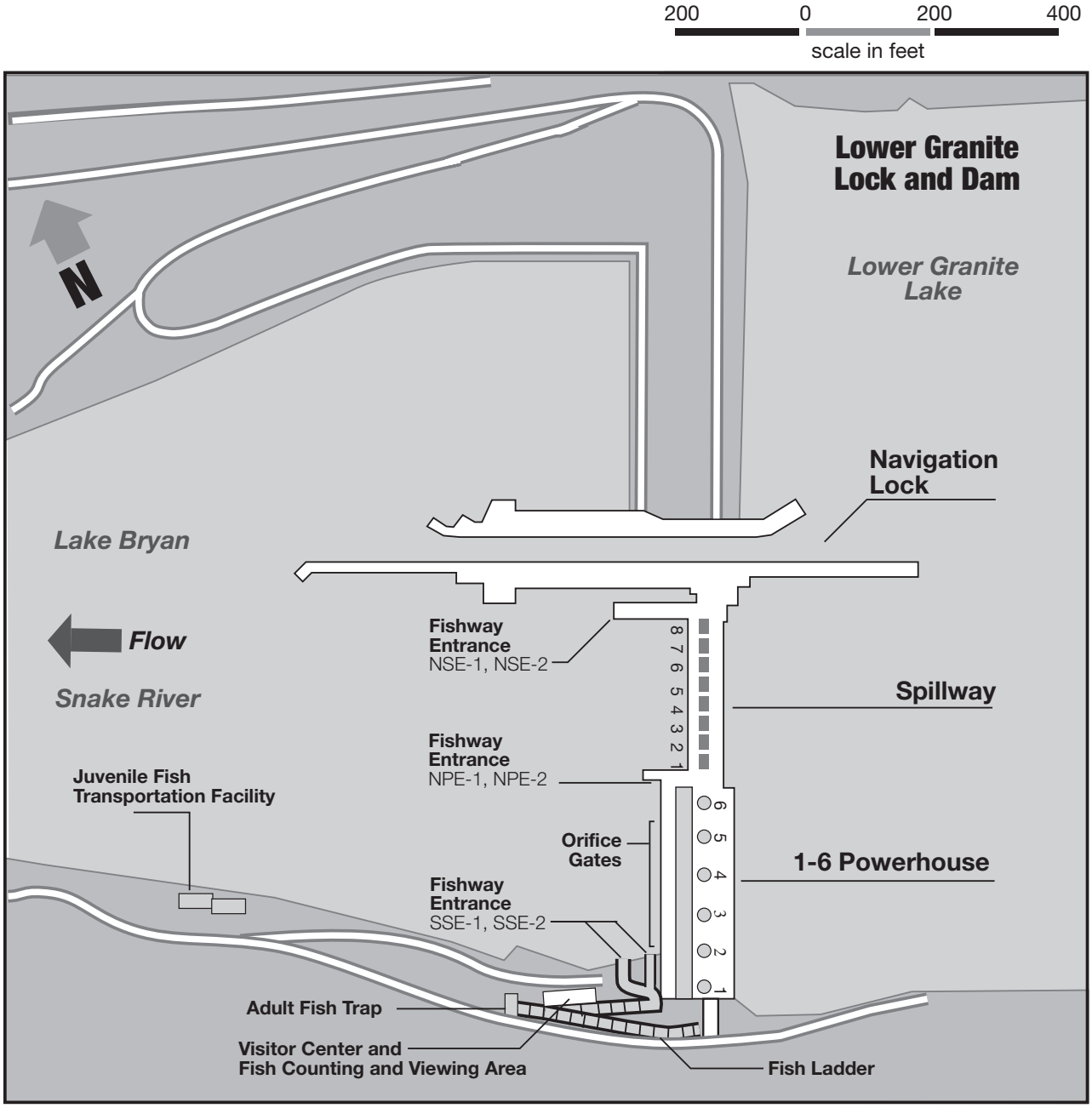
MONTHLY COUNT OF STEELHEAD
LITTLE GOOSE DAM

1970 - 1981, 1991 - 2010

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
2009				4,839	538	595	5,655	13,821	160,927	119,061			305,436
2010				2,755	369	632	9,165	19,891	103,207	57,872			193,891
Total	1,084	5,065	19,305	59,035	11,817	7,928	82,491	200,020	1,398,476	1,245,742	68,316	13,704	3,112,983
10-Year Average				2,679	252	544	4,970	11,196	90,138	71,233			187,481

** 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	Night video counts for sockeye 2000 – 0400 hours PST.
1 July – 30 September	Night video counts for lamprey 2000 – 0400 PST
1 November – 30 December	Video counting daily 0600 – 1600 hours PST.

FISH LADDER OPERATING SCHEDULE

1 January – 3 January	Ladder in service
4 January – 2 February	Ladder dewatered for annual maintenance.
3 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 2010, hourly readings were taken continuously from June 11 to September 13. In addition, substrate at the ladder exit pool was examined biweekly for zebra and quagga mussels from March 1 through December 31.

Normal maintenance activities on the adult fish ladder complex took place during the January 4 – February 2 fishway outage. A visual inspection was conducted on all diffuser gratings, gate valves were checked and repaired, fish pumps were serviced, adult fish counting machinery was serviced, picketed leads were refurbished, windows were cleaned, the viewing room window cleaning brush was repaired and a grating near the counting window was repaired. In addition, the fish loading hoses and loading gates at the adult fish trap were modified for easier use during fall chinook transport operations.

During 2010, the adult fish trap was operated from March 1 through November 17 with the exception of a single time period when water temperatures in the ladder were in excess of 70° F. The ladder was taken out of service at 0900 hours on August 13 and returned back to normal operation on August 22 at 1105 hours after temperatures had dropped below 70° F and fish could be handled within established criteria.

During the initial phase of trap operation, the trap was operated at a 15% sample rate to examine the last phase of the steelhead run for A and B run composition and for hatchery-wild determination. Wild steelhead were PIT-tagged and genetic and scale samples taken. In addition, scale samples were taken from one out of every 25 hatchery

steelhead. University of Idaho personnel took blood samples on wild adult steelhead at the trap through March 23. The adult trap sample rate was reduced to 4% on April 18. In addition to the previously mentioned work, one of every seven hatchery chinook were PIT-tagged and scale samples and genetic materials taken. Two sort-by-code projects were also initiated: 1) divert up to 15 Lemhi-Origin chinook for radio-tagging, and 2) recover chinook that were acoustic-tagged in the estuary to check the recovery status of the surgery and take reference photos. Beginning in early June, all hatchery coded wire tagged chinook were also scale sampled.

Idaho Fish and Game personnel began the transport of sockeye adults from the adult fish trap to Eagle Hatchery on July 1. This work was continued through July 15 with a total of 19 adult sockeye (11 females, 8 males) transported. There were no sockeye mortalities during transport to Eagle. In addition, University of Idaho personnel collected adult American shad from the trap in July. The goal was to collect 100 adult shad for genetic evaluation to see what component of the shad run that crosses Bonneville Dam makes it upstream to Lower Granite Dam (96 females and 4 males were collected).

Immediately following water-up of the adult trap on August 22 (after a brief closure due to high water temperatures), the trap sample rate was set at 12% (this was later reduced to 10% on September 18). One of every 20 hatchery steelhead and all wild PIT-tagged steelhead were scale-sampled. Scale samples and genetic samples were taken from hatchery PIT-tagged steelhead. Transport of fall chinook to Lyon's Ferry Hatchery and the Nez Perce Hatchery at Cherry Lane began in late August. Seventy percent of the chinook were transported to Lyon's Ferry and the remaining 30% went to Cherry Lane. The Nez Perce hauled fish on Sundays and Mondays and Lyon's Ferry hauled fish Tuesday through Saturday. The Nez Perce met their quota in late September. Transport operations to Lyon's Ferry continued when numbers warranted. This operation ended on November 16. A total of 2,789 fall chinook (2,343 adults and 446 jacks) was hauled to Lyons Ferry Hatchery. The Nez Perce Tribal Hatchery received 1,040 fall chinook (1,026 adults and 14 jacks). A total of 9,873 fall chinook were actually handled for this operation of which 3,829 were transported to the hatcheries and 6,044 released back into the ladder.

The juvenile fish facility was operated for fish transport/bypass from March 25 to October 31 and for monitoring and bypass of adult fallbacks and juvenile PIT-tagged fish from March 25 to December 15.

TABLE 110

MONTHLY TOTALS OF SALMONIDS, SHAD, LAMPREY, STURGEON, AND BULL TROUT COUNTED OVER LOWER GRANITE DAM
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*			1	9,432	75,785	36,788	11,810	2,078	38,806	14,025	668	1	189,394
STEELHEAD			5,934	3,986	542	490	8,939	16,337	98,690	63,325	7,620	1,022	206,885
SOCKEYE						80	1,943	147	31	0			2,201
COHO*									683	1,145	72	2	1,902
PINK													
TOTAL			5,935	13,418	76,327	37,358	22,692	18,562	138,210	78,495	8,360	1,025	400,382
SHAD						166	2,986	127	0				3,279
LAMPREY						0	0	10	4	0			14
STURGEON													0
BULL TROUT					2	1	5						8

*Jacks included

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

TABLE 111

DISCHARGE AND WATER DATA

LOWER GRANITE PROJECT 2010

JANUARY

	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jan 1	20.1	0.0		
Jan 2	16.0	0.0		
Jan 3	19.1	0.0		
Jan 4	22.1	0.0		
Jan 5	25.0	0.0		
Jan 6	30.1	0.0		
Jan 7	30.6	0.0		
Jan 8	30.9	0.0		
Jan 9	27.2	0.0		
Jan 10	26.2	0.0		
Jan 11	22.4	0.0		
Jan 12	26.9	0.0		
Jan 13	25.1	0.0		
Jan 14	22.3	0.0		
Jan 15	23.8	0.0		
Jan 16	25.0	0.0		
Jan 17	26.6	0.0		
Jan 18	28.4	0.0		
Jan 19	22.0	0.0		
Jan 20	23.5	0.0		
Jan 21	26.0	0.1		
Jan 22	24.4	0.0		
Jan 23	24.3	0.0		
Jan 24	26.4	0.0		
Jan 25	24.0	0.0		
Jan 26	24.7	0.1		
Jan 27	27.2	0.0		
Jan 28	27.1	0.0		
Jan 29	21.9	0.0		
Jan 30	23.2	0.0		
Jan 31	24.1	0.0		
AVG.	24.7	0.0		

FEBRUARY

	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Feb 1	27.5	0.0		
Feb 2	30.5	0.0		
Feb 3	25.5	0.0		
Feb 4	23.5	0.0		
Feb 5	20.6	0.0		
Feb 6	28.0	0.0		
Feb 7	32.6	0.0		
Feb 8	25.7	0.0		
Feb 9	33.1	0.0		
Feb 10	22.4	0.0		
Feb 11	19.8	0.0		
Feb 12	22.3	0.0		
Feb 13	21.5	0.0		
Feb 14	20.2	0.0		
Feb 15	20.8	0.0		
Feb 16	23.5	0.0		
Feb 17	25.0	0.0		
Feb 18	24.5	0.0		
Feb 19	27.1	0.0		
Feb 20	25.4	0.0		
Feb 21	28.3	0.0		
Feb 22	26.1	0.0		
Feb 23	27.9	0.0		
Feb 24	20.2	0.0		
Feb 25	23.0	0.0		
Feb 26	23.9	0.0		
Feb 27	20.1	0.0		
Feb 28	20.2	0.0		
AVG.	24.6	0.0		

TABLE 112

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

MARCH 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Mar 1	0							45	14				21.6	0.0	5.0	44.7
Mar 2	0							46	17				21.6	0.0		
Mar 3	0							62	25				22.6	0.0		
Mar 4	0							76	17				22.7	0.0	5.0	45.1
Mar 5	0							122	34				25.9	0.0		
Mar 6	0							55	17				26.9	0.0		
Mar 7	0							213	58				23.9	0.0		
Mar 8	0							151	30				22.4	0.0	5.0	
Mar 9	0							98	31				28.8	0.0	5.0	42.0
Mar 10	0							50	23				24.3	0.0	5.0	42.3
Mar 11	0							78	24				24.9	0.0		
Mar 12	0							69	26				24.5	0.0		
Mar 13	0							119	31				22.5	0.0		
Mar 14	0							100	32				21.7	0.0		
Mar 15	0							83	19				24.6	0.0	5.0	44.0
Mar 16	0							117	37				24.4	0.5		
Mar 17	0							63	26				17.6	0.0	5.0	44.0
Mar 18	0							199	66				22.4	0.0		
Mar 19	0							228	75				25.5	0.0		
Mar 20	0							686	174				25.3	0.0		
Mar 21	0							341	95				27.8	0.0		
Mar 22	0							326	108				28.6	0.0	5.0	44.8
Mar 23	0							224	72				34.6	0.0	5.0	45.0
Mar 24	0							411	130				26.7	0.0	5.0	46.0
Mar 25	0							345	97				26.8	0.0		
Mar 26	0							358	103				28.0	0.0	5.0	48.7
Mar 27	0							333	100				30.7	0.0	5.0	48.9
Mar 28	1							324	106				22.2	0.0		
Mar 29	0							180	70				30.4	0.0	5.0	46.4
Mar 30	0							258	95				35.4	0.0		
Mar 31	0							174	72				33.4	0.2		
TOTAL	1							5,934	1,824							
AVG.	0							191	59				25.8	0.0	5.0	46.6

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

TABLE 113

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Apr 1	0			0				297	101				33.7	0.0		
Apr 2	0			0				192	76				39.4	0.0	5.0	49.4
Apr 3	0			0				158	61				36.2	20.0		
Apr 4	1			0				246	116				31.8	18.8		
Apr 5	4			0				156	66				27.7	15.2		
Apr 6	1			0				117	64				30.4	17.8	4.5	49.1
Apr 7	0			0				112	56				25.2	12.7	4.5	48.9
Apr 8	0			0				84	46				24.9	12.3		
Apr 9	0			0				103	56				26.1	13.5	4.0	48.5
Apr 10	1			0				170	79				30.1	17.5	4.0	48.1
Apr 11	1			0				143	64				24.3	11.7		
Apr 12	1			0				69	35				24.6	11.8	5.0	49.9
Apr 13	0			0				112	68				29.2	16.5		
Apr 14	1			0				150	85				28.0	15.4	4.5	50.0
Apr 15	1			0				133	68				32.1	19.3		
Apr 16	7			0				130	64				34.5	20.3	4.5	51.8
Apr 17	20			2				160	74				33.2	20.3	4.6	51.8
Apr 18	11			1				111	47				39.4	20.5		
Apr 19	28			0				143	72				45.2	20.4	4.0	53.4
Apr 20	67			2				150	84				48.4	20.5		
Apr 21	288			7				124	66				51.4	20.2		
Apr 22	254			6				157	89				62.6	20.3		
Apr 23	378			10				127	71				76.2	20.4	4.5	56.4
Apr 24	1,231			14				130	84				69.3	20.5		
Apr 25	1,126			23				136	92				61.6	20.5	4.1	55.7
Apr 26	854			10				86	44				55.4	20.5		
Apr 27	1,260			4				69	31				53.0	20.6		
Apr 28	698			6				78	47				55.8	20.4	3.4	50.0
Apr 29	1,039			10				72	37				60.3	20.3		
Apr 30	2,042			23				71	40				59.1	20.4		
TOTAL	9,314			118				3,986	1,983							
AVG.	310			4				133	66				41.6	17.0	4.4	51.0

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	STEELHEAD	unclipped STEELHEAD
	9,315	118	9,920	3,807

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

TABLE 114

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT. PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
May 1	3,703			31				75	50			0	65.7	20.5	3.2	52.4
May 2	3,090			40				41	24			0	58.9	20.6	3.0	52.2
May 3	1,804			23				54	42			0	58.8	20.4		
May 4	2,594			29				36	26			0	62.5	20.5	3.8	50.5
May 5	982			11				29	10			0	55.3	20.3		
May 6	1,694			12				18	12			0	52.8	20.6		
May 7	1,158			16				24	14			0	52.5	20.6	3.1	50.9
May 8	1,582			16				27	16			0	51.1	20.5	3.6	51.0
May 9	1,199			20				15	8			0	49.8	20.6		
May 10	1,139			32				13	5			0	50.2	20.5		
May 11	1,507			60				18	11			0	50.5	20.5	4.8	52.4
May 12	1,286			44				13	11			0	47.6	20.5		
May 13	1,663			59				18	14			0	51.4	20.4	5.0	54.8
May 14	6,073			145				18	13			0	52.5	20.3	5.0	55.8
May 15	4,976			113				8	6			0	56.4	20.7		
May 16	972			80				17	11			0	60.5	20.5	5.0	57.2
May 17	1,112			127				15	13			0	65.8	20.6	4.5	57.8
May 18	1,451			140				8	7			0	77.4	19.0		
May 19	9,088			589				15	14			0	93.5	19.0		
May 20	5,665			389				10	6			0	106.0	20.6		
May 21	2,190			326				7	5			0	103.8	20.6	4.5	55.0
May 22	2,377			389				5	4			0	89.7	20.7		
May 23	2,935			444				8	4			0	80.9	20.6	3.4	54.5
May 24	1,597			359				10	10			0	74.1	20.6	3.9	53.3
May 25	1,612			298				11	10			1	73.3	20.6		
May 26	1,939			365				10	6			0	69.1	20.5	4.2	54.4
May 27	1,387			244				-2	-2			0	70.0	20.6		
May 28	1,350			180				8	6			0	71.5	20.6	3.8	54.7
May 29	1,194			170				10	10			0	73.8	20.8		
May 30	734			103				1	1			0	75.9	20.7	4.2	55.8
May 31	738			140				2	1			1	73.8	20.7	4.6	56.4
TOTAL	70,791			4,994				542	368			2				
AVG.	2284			161				17	12			0	66.9	20.5	4.1	54.1

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	80,106	5,112

STEELHEAD	unclipped STEELHEAD	BULL TROUT
10,462	4,175	2

TABLE 115

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS — JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Jun 1	718			127			0	3	1	0		0	78.8	20.7		
Jun 2	626			104			0	3	2	0		0	89.7	20.8		
Jun 3	737			109			0	6	2	0		0	128.6	41.4	5.0	58.0
Jun 4	761			66			0	1	0	0		0	160.9	69.4	4.3	55.6
Jun 5	340			29			0	2	1	0		0	196.5	104.9		
Jun 6	40			12			0	0	0	0		0	207.2	115.6	0.9	54.2
Jun 7	72			7			0	0	0	0		0	200.1	108.9		
Jun 8	34			14			0	0	0	0		0	204.0	112.1		
Jun 9	210			35			0	2	0	0		0	181.5	90.5	0.8	56.2
Jun 10	162			43			0	0	0	0		0	180.2	89.1		
Jun 11	108			25			0	0	0	0		0	168.0	77.9	0.9	56.2
Jun 12	280			50			0	3	1	0		0	151.1	61.8	1.5	56.3
Jun 13	481			58			0	1	0	0		0	137.6	48.8	1.9	57.2
Jun 14	1,171			96			0	2	1	0		0	131.0	40.9		
Jun 15	2,090			140			0	7	1	0		0	130.0	39.9		
Jun 16	1,553			94			0	7	1	0		0	131.0	41.3	2.0	
Jun 17	4,714			288			0	8	1	0		0	122.3	32.6	2.0	58.1
Jun 18		3041		227			0	9	2	0		0	113.4	30.2	2.1	57.3
Jun 19		2174		205			0	24	4	0		0	104.2	20.6	2.8	
Jun 20		2768		217			1	31	2	0		0	100.6	20.2		
Jun 21		1969		230			2	37	13	1		0	107.8	21.8	2.2	57.8
Jun 22		1193		144			2	20	7	0		0	112.8	24.9	1.2	58.7
Jun 23		1162		138			4	22	10	1		0	98.6	18.7		
Jun 24		992		133			2	19	7	1		0	93.7	22.1		
Jun 25		1033		146			1	36	10	12		1	98.3	19.3	2.5	59.8
Jun 26		624		120			1	35	6	11		0	90.3	30.0	3.1	59.9
Jun 27		1628		184			8	32	8	42		0	85.9	20.5		
Jun 28		862		163			6	45	8	16		0	81.4	19.1	3.0	62.1
Jun 29		841		174			17	62	14	12		0	81.5	19.5		
Jun 30		848		178			36	73	23	70		0	79.6	21.5	2.3	
TOTAL	14,097	19,135		3,556			80	490	125	166		1				
AVG.	829	1472		119			3	16	4	6		0	128.2	46.8	2.3	57.7

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	94,203	6,409
SUMMER	19,135	2,259
TOTAL	113,338	8,668

SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD
80	10,952	4,300	166

BULL TROUT
3

TABLE 116

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	DEG F
Jul 1		827		175			16	58	17	88		0	76.9	21.2		
Jul 2		1,326		295			65	115	37	73		0	72.2	19.0	3.1	64.4
Jul 3		1,102		264			98	115	43	96		1	62.8	18.8	3.3	64.5
Jul 4		758		168			128	132	44	132		0	60.4	18.8		
Jul 5		728		163			142	204	56	97		0	58.2	18.7	4.0	63.8
Jul 6		562		184			162	238	76	194		0	56.9	18.7		
Jul 7		389		136			143	241	83	130		0	56.3	18.6	4.2	64.5
Jul 8		498		148			104	264	100	157		0	57.4	18.7		
Jul 9		335		160			90	246	80	132		1	51.9	18.7	5.0	
Jul 10		356		132			76	213	80	158		0	55.1	18.7		
Jul 11		181		110			80	212	84	168		0	53.0	18.6	4.5	65.6
Jul 12		316		155			107	365	150	76		0	47.1	18.7		
Jul 13		292		107			84	442	174	66		0	48.7	18.7	4.9	66.0
Jul 14		208		103			72	360	139	78		0	42.8	18.6		
Jul 15		136		80			62	394	172	94		0	52.2	18.7	5.0	66.7
Jul 16		137		70			65	385	168	106		0	48.3	18.7	5.0	
Jul 17		113		73			52	393	163	94		0	47.3	18.7	5.0	64.8
Jul 18		92		50			46	401	192	108		0	43.8	18.7		
Jul 19		86		47			49	406	190	154		0	43.6	18.6	5.0	65.7
Jul 20		65		34			49	353	156	140		1	45.6	18.7		
Jul 21		55		34			54	378	140	119		0	44.9	18.7		
Jul 22		55		24			36	345	136	115		1	42.7	18.7	5.0	66.3
Jul 23		80		20			25	454	206	71		0	38.0	18.7		
Jul 24		52		20			23	451	205	104		1	38.6	18.6	5.0	66.2
Jul 25		30		18			17	278	106	44		0	39.5	18.8	5.0	66.9
Jul 26		58		40			25	414	169	100		0	38.5	18.7	5.0	66.3
Jul 27		29		5			16	200	82	22		0	39.9	18.6	5.0	
Jul 28		16		8			11	226	100	14		0	40.2	18.7		
Jul 29		14		8			13	177	70	24		0	36.5	18.6		
Jul 30		30		11			11	216	101	19		0	39.1	18.6		
Jul 31		25		17			22	263	121	13		0	36.8	18.7	5.0	65.9
TOTAL		8,951		2,859			1,943	8,939	3,640	2,986		5				
AVG.		289		92			63	288	117	96		0	48.9	18.8	4.6	65.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	94,203	6,409
SUMMER	28,086	5,118
TOTAL	122,289	11,527

SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD
2,023	19,891	7,940	3,152

BULL TROUT
8

TABLE 117

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS — AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Aug 1		26		12			12	199	84	16	1		36.2	18.7	5.0	66.0
Aug 2		38		17			8	207	88	30	1		38.1	18.7	5.0	67.0
Aug 3		42		13			7	314	120	19	0		39.6	18.6	5.0	67.5
Aug 4		29		22			14	370	167	16	1		43.4	18.7		
Aug 5		37		11			11	267	116	13	0		38.6	18.7	5.0	
Aug 6		29		12			6	252	106	2	0		34.8	18.6	5.0	67.1
Aug 7		128		30			8	643	271	6	0		28.8	15.6	5.0	66.7
Aug 8		101		13			10	1,023	476	11	0		29.5	16.9	4.8	67.0
Aug 9		47		6			12	888	394	4	1		29.4	16.6	5.0	66.9
Aug 10		56		13			8	965	425	0	0		27.2	14.6	5.0	
Aug 11		32		11			7	699	263	1	1		30.3	17.3		
Aug 12		29		11			5	758	306	5	0		31.6	18.7		
Aug 13		19		2			1	563	216	-2	0		31.5	18.6	5.0	67.1
Aug 14		30		2			1	623	259	-4	0		31.3	18.6	5.0	67.3
Aug 15		36		0			1	788	318	-1	0		28.0	15.3	5.0	65.5
Aug 16		7		0			2	267	119	-2	1		29.5	20.1	5.0	65.7
Aug 17		6		1			0	164	66	0	-1		30.2	19.8	4.7	
Aug 18			40	7			1	227	84	1	0		30.2	20.3	5.0	67.8
Aug 19			54	10			4	412	150	0	0		31.5	21.9		
Aug 20			97	35			4	1,224	484	10	2		30.4	17.7	5.0	66.0
Aug 21			36	12			1	777	283	0	1		31.0	18.2	5.0	66.0
Aug 22			49	17			5	816	257	1	1		26.7	13.6	5.0	66.1
Aug 23			37	16			1	610	197	1	0		27.0	14.2		
Aug 24			31	1			2	488	148	-1	0		28.0	15.0		
Aug 25			32	6			0	369	116	1	0		27.4	14.7	4.8	
Aug 26			40	6			0	461	174	1	1		26.3	13.4		
Aug 27			84	19			4	546	179	0	0		25.1	12.3	4.7	
Aug 28			84	35			2	393	119	0	0		24.1	11.5	4.2	63.8
Aug 29			139	29			4	311	95	-1	0		24.1	11.5		
Aug 30			146	34			5	403	95	0	0		24.2	11.5	4.4	65.0
Aug 31			92	22			1	310	90	0	0		24.2	11.5	4.3	64.5
TOTAL		692	961	425			147	16,337	6,265	127	10					
AVG		41	69	14			5	527	202	4	0		30.3	16.5	4.9	66.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	94,203	6,409
SUMMER	28,778	5,294
FALL	961	249
TOTAL	123,942	11,952

SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT
2,170	36,228	14,205	3,279	10	8

TABLE 118

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Sep 1			422	97	0	0	4	2,036	751		2		25.5	0.0		
Sep 2			206	47	0	0	0	1,026	356		0		27.6	0.0	4.5	64.9
Sep 3			614	180	0	0	2	1,013	341		0		27.0	0.0	5.0	65.5
Sep 4			989	239	0	0	1	1,471	492		1		25.7	0.0	5.0	64.4
Sep 5			1,186	294	0	0	0	3,258	974		0		25.4	0.0	5.0	63.6
Sep 6			666	203	0	0	4	2,299	648		2		24.6	0.0	5.0	63.6
Sep 7			444	172	0	0	1	1,556	442		0		26.6	0.0		
Sep 8			995	332	0	0	0	1,795	530		0		25.0	0.0		
Sep 9			1,297	360	0	0	4	2,950	836		-1		25.5	0.0		
Sep 10			1,831	348	4	4	6	3,537	1,018		0		27.6	0.0	4.9	63.3
Sep 11			1,110	192	2	2	0	2,188	670		0		27.0	0.0	5.0	63.3
Sep 12			1,799	298	5	2	0	3,053	893		0		24.7	0.0	5.0	63.7
Sep 13			1,016	260	4	0	0	3,251	888		0		24.4	0.0	5.0	64.0
Sep 14			1,223	280	19	8	1	3,653	1,009		0		27.5	0.0	5.0	
Sep 15			1,046	240	6	4	2	3,733	1,031		0		25.5	0.0		
Sep 16			1,080	226	65	5	1	4,127	1,145		1		24.0	0.0		
Sep 17			1,103	382	10	4	2	2,990	822		0		24.0	0.0	5.0	64.4
Sep 18			1,715	518	29	8	0	4,311	1,097		0		24.9	0.0	5.0	64.5
Sep 19			1,276	336	18	0	0	2,989	805		0		22.9	0.0	4.5	64.6
Sep 20			1,105	353	28	0	1	3,218	862		0		16.4	0.0	4.9	64.6
Sep 21			1,172	490	35	8	0	6,896	1,782		0		23.0	0.0		
Sep 22			625	221	26	11	0	3,102	846		-1		25.1	0.0	5.0	
Sep 23			910	409	40	12	0	4,791	1,345		0		21.4	0.0		
Sep 24			616	293	56	17	0	5,477	1,416		0		23.1	0.0	5.0	66.4
Sep 25			1,115	247	58	13	1	4,255	1,103		0		16.9	0.0	5.0	66.6
Sep 26			1,201	342	32	16	0	3,570	997		0		18.8	0.0	5.0	66.3
Sep 27			913	258	22	8	1	3,749	1,073		0		24.0	0.0	5.0	66.3
Sep 28			1,060	329	23	7	0	3,863	1,002		0		21.1	0.0	5.0	
Sep 29			739	342	32	5	0	4,650	1,247		0		29.0	0.0		
Sep 30			752	292	24	11	0	3,883	917		0		20.8	0.0		
TOTAL			30,226	8,580	538	145	31	98,690	27,338		4					
AVG.			1,008	286	18	5	1	3,290	911		0		24.2	0.0	4.9	64.7

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	94,203	6,409
SUMMER	28,778	5,294
FALL	31,187	8,829
TOTAL	154,168	20,532

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT
538	145	2,201	134,918	41,543	3,279	14	8

TABLE 119

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Oct 1			928	294	24	13		4,123	1,091				22.4	0.0	4.9	66.2
Oct 2			1,153	300	24	18		3,447	910				26.5	0.0		
Oct 3			932	220	97	6		2,747	646				17.1	0.0	4.4	67.0
Oct 4			743	230	29	2		2,292	598				23.0	0.0	4.8	66.7
Oct 5			905	262	23	7		4,152	1,096				21.5	0.0		
Oct 6			796	347	26	18		2,761	629				24.0	0.0	5.0	
Oct 7			593	354	14	20		2,824	738				21.5	0.0	5.0	
Oct 8			487	252	31	20		2,500	722				26.0	0.0	5.0	66.0
Oct 9			391	180	32	14		2,961	764				18.5	0.0	4.7	65.6
Oct 10			385	199	30	10		2,070	536				22.4	0.0	4.6	65.4
Oct 11			432	214	30	13		3,757	1,063				21.5	0.0		
Oct 12			179	102	14	7		2,132	544				23.6	0.0		65.1
Oct 13			298	157	17	13		2,713	750				16.0	0.0		
Oct 14			167	100	25	6		2,433	628				17.2	0.0		
Oct 15			232	90	35	11		3,243	845				22.7	0.0	4.3	64.0
Oct 16			148	62	22	2		2,278	581				17.1	0.0	4.5	64.1
Oct 17			156	56	24	1		1,703	467				15.2	0.0	5.0	63.2
Oct 18			112	62	13	10		1,290	352				21.1	0.0		
Oct 19			109	35	25	4		1,306	358				15.5	0.0	5.0	62.8
Oct 20			107	36	29	4		1,263	361				18.7	0.0		
Oct 21			86	32	23	0		878	292				13.8	0.0		
Oct 22			91	37	62	5		1,470	428				20.2	0.0		
Oct 23			108	53	40	4		1,236	359				17.3	0.0	5.0	59.9
Oct 24			82	35	30	5		1,016	278				15.2	0.0	4.5	59.8
Oct 25			96	40	40	0		1,631	496				20.2	0.0	4.8	59.1
Oct 26			70	26	44	6		1,332	400				21.4	0.0	5.0	
Oct 27			86	31	30	7		1,059	326				21.0	0.0	5.0	
Oct 28			86	41	32	8		1,046	308				21.3	0.0		
Oct 29			73	19	12	1		713	210				17.7	0.0	4.7	58.0
Oct 30			65	24	14	7		582	200				18.4	0.0	5.0	57.3
Oct 31			28	11	12	0		367	138				17.7	0.0		
TOTAL			10,124	3,901	903	242		63,325	17,114							
AVG.			327	126	29	8		2,043	552				19.9	0.0	4.8	63.1

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	94,203	6,409
SUMMER	28,778	5,294
FALL	41,311	12,730
TOTAL	164,292	24,433

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT
1,441	387	2,201	198,243	58,657	3,279	14	8

Note: Visual counts ended October 31.

TABLE 120

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

NOVEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Nov 1			35	23	9	0		249	58				22.3	0.0		
Nov 2			70	8	7	0		305	93				20.8	0.0	5.0	55.0
Nov 3			57	17	6	0		401	127				18.8	0.0	5.0	54.1
Nov 4			45	22	7	2		392	100				23.0	0.0		
Nov 5			38	11	12	0		414	152				24.2	0.0		
Nov 6			28	10	4	0		270	79				15.8	0.0		
Nov 7			12	7	6	1		253	75				15.7	0.0		
Nov 8			13	10	5	0		286	62				20.6	0.0	5.0	53.0
Nov 9			32	11	5	1		539	167				25.0	0.0	5.0	50.5
Nov 10			28	5	1	0		412	91				19.8	0.0	5.0	52.0
Nov 11			18	14	3	0		317	70				20.4	0.0		
Nov 12			26	4	1	0		357	75				18.8	0.0		
Nov 13			28	2	2	0		405	90				21.0	0.0		
Nov 14			18	16	1	0		339	84				18.3	0.0		
Nov 15			12	0	-1	0		163	56				25.4	0.0	5.0	51.0
Nov 16			6	0	0	0		375	121				25.9	0.0	4.6	51.3
Nov 17			13	1	0	0		350	125				22.2	0.0	5.0	52.9
Nov 18			-1	0	0	0		139	43				18.0	0.0		
Nov 19			8	1	0	0		294	120				21.2	0.0		
Nov 20			3	1	0	0		492	174				21.3	0.0		
Nov 21			1	0	0	0		214	73				19.0	0.0		
Nov 22			2	0	0	0		70	19				20.4	0.0	5.0	50.0
Nov 23			1	1	0	0		121	49				20.3	0.0	5.0	47.0
Nov 24			2	0	0	0		61	23				23.7	0.0		
Nov 25			1	0	0	0		147	56				18.7	0.0		
Nov 26			2	1	0	0		68	20				14.0	0.0		
Nov 27			3	0	1	0		86	30				15.6	0.0		
Nov 28			1	0	0	0		47	18				14.9	0.0		
Nov 29			2	0	0	0		19	7				23.4	0.0		
Nov 30			-1	0	-1	0		35	10				18.3	0.0	5.0	46.3
TOTAL			503	165	68	4		7,620	2,267							
AVG.			17	6	2	0		254	76				20.2	0.0	5.0	51.2

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	94,203	6,409
SUMMER	28,778	5,294
FALL	41,814	12,895
TOTAL	164,795	24,598

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT
1,509	391	2,201	205,863	60,924	3,279	14	8

Note: From November 1 to December 31, counts were from video tape. The counts are 10-hour counts and occurred between 0600-1600 PST.
No count on November 17 due to dewater.

TABLE 121

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

LOWER GRANITE PROJECT - FISH COUNTS

DECEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	TOTAL STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT	DISCH KCFS	SPILL KCFS	TURBIDITY SECCHI	TURBIDITY DEG F
Dec 1			0	0		0		50	14				20.2	0.0	5.0	46.1
Dec 2			-1	0		0		49	10				19.4	0.0	5.0	46.0
Dec 3			1	0		1		22	5				20.9	0.0		
Dec 4			-1	0		1		30	14				16.2	0.0		
Dec 5			0	0		0		47	15				17.8	0.0		
Dec 6			0	0		0		16	4				21.5	0.0	5.0	43.7
Dec 7			0	0		0		8	3				21.5	0.0	4.4	42.8
Dec 8			0	0		0		17	6				19.1	0.0	5.0	43.3
Dec 9			0	0		0		23	9				20.4	0.0		
Dec 10			0	0		0		26	9				27.9	0.0		
Dec 11			0	0		0		34	13				19.0	0.0		
Dec 12			0	0		0		39	13				15.1	0.0		
Dec 13			0	0		0		11	1				25.5	0.0		
Dec 14			0	0		0		27	9				40.6	0.0	5.0	43.5
Dec 15			2	0		0		42	17				37.7	0.0	4.7	43.2
Dec 16			0	0		0		29	11				39.5	0.0	5.0	42.9
Dec 17			0	0		0		23	9				37.2	0.0		
Dec 18			0	0		0		39	16				23.9	0.0		
Dec 19			0	0		0		113	42				30.5	0.0		
Dec 20			0	0		0		70	23				34.5	0.0	5.0	43.5
Dec 21			0	0		0		41	15				33.6	0.0	4.3	43.7
Dec 22			0	0		0		36	8				29.3	0.0	4.8	43.5
Dec 23			0	0		0		48	15				25.0	0.0		
Dec 24			0	0		0		29	14				21.8	0.0		
Dec 25			0	0		0		27	14				22.9	0.0		
Dec 26			0	0		0		19	5				25.4	0.0		
Dec 27			0	0		0		14	4				28.3	0.0	5.0	42.6
Dec 28			0	0		0		13	3				23.7	0.0	5.0	42.5
Dec 29			0	0		0		18	7				28.6	0.0	5.0	42.5
Dec 30			0	0		0		35	17				34.7	0.0		
Dec 31			0	0		0		27	9				32.9	0.0		
TOTAL			1	0		2		1,022	354							
AVG.			0	0		0		33	11				26.3	0.0	4.9	43.6

RUN YEAR TOTALS TO DATE

	CHINOOK ADULT	CHINOOK JACK
SPRING	94,203	6,409
SUMMER	28,778	5,294
FALL	41,815	12,895
TOTAL	164,796	24,598

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	unclipped STEELHEAD	SHAD	LAMPREY	BULL TROUT
1,509	393	2,201	206,333	61,077	3,279	14	8

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.

TABLE 122

YEARLY TOTALS OF SALMONIDS COUNTED OVER
LOWER GRANITE DAM
1975 - 2010

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
2009	168,032	323,697	1,219	4,912	497,860
2010	189,394	206,885	2,201	1,902	400,382
Total	1,879,996	3,916,833	7,149	28,513	5,832,491
10-Year Average	118,953	198,153	463	2,465	320,034

*Jacks included

TABLE 123

MONTHLY COUNT OF CHINOOK SALMON
LOWER GRANITE DAM
1975 - 2010

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
2009				95	52,614	45,565	12,404	2,871	44,432	9,630	419	2	168,032
2010			1	9,432	75,785	36,788	11,810	2,078	38,806	14,025	668	1	189,394
Total			16	203,156	745,301	452,856	148,715	20,461	219,636	84,428	5,366	61	1,879,996
10-Year Average				15,219	40,939	28,223	7,497	1,256	19,072	6,406	338		118,953

*Jacks included

TABLE 124

MONTHLY COUNT OF STEELHEAD

LOWER GRANITE DAM
1975 - 2010

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
2009			4,313	5,918	550	486	3,806	8,978	154,804	129,599	14,574	669	323,697
2010			5,934	3,986	542	490	8,939	16,337	98,690	63,325	7,620	1,022	206,885
Total	539	790	109,085	109,452	14,151	6,126	70,805	174,192	1,480,006	1,670,146	249,749	31,792	3,916,833
10-Yr Average			5,300	3,752	317	405	3,870	8,197	83,796	80,093	10,791	1,631	198,153

TABLE 125

Night Count of Sockeye at Lower Granite Dam

2009

Day	JUN	JUL	AUG	SEP
1		7	0	0
2		9	0	0
3		11	0	0
4		14	0	0
5		13	0	0
6		14	0	0
7		13	0	0
8		12	0	0
9		8	0	0
10		8	0	0
11		7	0	0
12		6	0	0
13		4	0	0
14		3	0	0
15		3	0	0
16		2	0	0
17		6	0	0
18		5	0	0
19	0	6	0	0
20	0	4	0	0
21	0	2	2	0
22	0	0	0	0
23	1	0	0	0
24	0	1	0	0
25	0	1	0	0
26	3	0	0	0
27	4	0	0	0
28	6	0	0	0
29	7	0	0	0
30	5	0	0	0
31		0	0	
TOTALS	26	159	2	0

2010

Day	JUN	JUL	AUG
1		6	3
2		14	0
3		6	1
4		12	0
5		9	0
6		9	0
7		5	0
8		8	0
9		9	0
10		3	0
11		8	*
12		6	*
13		11	*
14		11	*
15	0	12	*
16	0	9	0
17	0	4	0
18	0	7	0
19	0	7	1
20	0	4	0
21	0	9	0
22	2	6	0
23	0	3	0
24	0	0	0
25	0	1	0
26	1	3	0
27	2	2	0
28	1	2	0
29	3	0	0
30	4	0	0
31		1	
TOTALS	13	187	5

Note: video counting for night sockeye passage at Lower Granite June 19 - September 30
Not included with the Daytime total sockeye counts.

TABLE 126

Night Count of Lamprey at Lower Granite Dam

2009

Day	JUN	JUL	AUG	SEP
1		0	0	0
2		0	1	1
3		0	1	1
4		0	1	1
5		1	2	0
6		0	0	1
7		0	2	0
8		0	0	-1
9		0	1	2
10		1	0	1
11		0	2	0
12		0	2	0
13		0	3	0
14		0	0	1
15		0	3	0
16		0	0	1
17		4	0	2
18	0	0	1	1
19	0	0	2	0
20	0	1	1	1
21	0	1	1	0
22	0	3		0
23	0	1	1	2
24	0	1	1	-1
25	0	3	1	0
26	0	1	0	0
27	1	0	2	0
28	0	0	0	0
29	0	1	1	0
30	0	3	0	0
31		2	1	
TOTALS	1	23	30	13

2010

Day	JUN	JUL	AUG	SEP
1		0	0	2
2		0	1	4
3		0	1	0
4		0	0	1
5		0	3	1
6		0	1	-1
7		0	0	1
8		0	2	1
9		0	1	3
10		0	2	0
11		0	*	1
12		0	*	2
13		0	*	0
14		0	*	0
15	0	0	*	1
16	0	0	9	0
17	0	1	3	1
18	0	0	4	0
19	0	0	8	0
20	0	0	0	1
21	0	0	3	0
22	0	0	1	2
23	0	1	0	0
24	0	0	2	0
25	0	0	0	0
26	0	0	7	0
27	0	0	1	1
28	0	0	3	0
29	0	0	-1	0
30	0	0	2	0
31		0	1	
TOTALS	0	2	54	21

*Data unavailable

Note: video counting for night lamprey passage at Lower Granite from June 18 - September 30
Not included with the Daytime total lamprey counts.

PRIEST RAPIDS AND WANAPUM DAMS

FISH COUNTING SCHEDULE – PRIEST RAPIDS DAM

Jan 1 – Apr 14	No adult fish counting.
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 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 – 30 Mar	Out of criteria for annual inspection, maintenance, and repairs.
31 Mar – 21 Nov	In service.
22 Nov – 31 Dec	Out of criteria for annual inspection, maintenance, and repairs.

Right Bank Ladder

01 Jan – 16 Feb	Out of criteria (fish passage at ladder flow due to LB shutdown).
17 Feb – 30 Mar	Out of criteria due to shutdown for annual inspection, maintenance and repairs.
31 Mar – 31 Dec	In service.

FISH LADDER OPERATING AND MAINTENANCE SCHEDULE – WANAPUM DAM

Left Bank Ladder

01 Jan – 09 Jan	In service.
10 Jan – 21 Feb	Out of criteria for annual inspection, maintenance and repairs.
22 Feb – Nov 25	In service.
26 Nov – 31 Dec	Out of criteria for annual inspection, maintenance and repairs.

Right Bank Ladder

01 Jan – 20 Feb	In service.
21 Feb – 17 Mar	Out of criteria for annual inspection, maintenance and repairs.
18 Mar – 31 Dec	In service.

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. The fish counting staff 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 for each dam and posted on Grant PUD's Fish, Wildlife, and Water Quality website (http://www.gcpud.org/naturalResources/fishWaterWildlife/fishCounts.php). 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 (WDFW) operated the Priest Rapids Dam off-ladder adult fish trap (OLAFT) a total of 10 days between 10 May and 21 May, 2010 for Chelan County PUD's spring Chinook salmon parental-based tagging feasibility test (Table 1), 34 days between 06 July and 21 October, 2010 as part of its steelhead stock assessment (Table 2) and 16 days between 21 September and 10 November, 2010 as part of its fall Chinook salmon age composition study (Table 3). The Yakama Nation trapped adult sockeye salmon a total of 11 days from 28 June to 13 July, 2010 for the Lake Cle Elum sockeye salmon reintroduction program (Table 4).

Table 1 2010 spring Chinook salmon trapping dates for the Priest Rapids Dam Off Ladder Adult Trap, **Columbia River (river mile 397.1), Washington, USA.**

Spring Chinook Salmon **Parental-based Tagging Feasibility Test Sampling Dates for 2010**	
May 10	May 11
May 12	May 13
May 14	May 17
May 18	May 19
May 20	May 21

Table 2 2010 steelhead trout trapping dates for the Priest Rapids Dam Off Ladder Adult Fish Trap, Columbia River (river mile 397.1), Washington, USA.

Steelhead Trout Stock Assessment Sampling Dates for 2010	
July 6	July 8
July 13	July 15
July 20	July 23
July 27	July 29
August 3	August 5
August 10	August 12
August 17	August 19
August 24	August 26
August 31	September 2
September 8	September 10
September 14	September 16
September 21	September 23
September 28	September 29
September 30	October 5
October 6	October 7
October 12	October 13
October 14	October 21

Table 3 **2010 fall Chinook salmon trapping dates for the Priest Rapids Dam Off Ladder Adult Fish Trap, Columbia River (river mile 397.1), Washington, USA.**

Fall Chinook Salmon Trapping Dates for 2010	
September 21	September 23
September 28	September 29
September 30	October 5
October 6	October 7
October 12	October 13
October 14	October 21
October 21	October 28
November 4	November 10

Table 4 **2010 sockeye salmon trapping dates for the Priest Rapids Dam Off Ladder Adult Fish Trap, Columbia River (river mile 397.1), Washington, USA.**

Sockeye Salmon Trapping Dates for 2010	
June 28	June 29
June 30	July 1
July 2	July 6
July 7	July 8
July 9	July 12
July 13	

TABLE 127

MONTHLY TOTALS OF SALMONIDS, SHAD, AND LAMPREY COUNTED OVER PRIEST RAPIDS DAM
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				7,080	20,716	15,200	35,145	5,679	24,708	12,675	2,373		123,576
STEELHEAD				63	23	229	6,634	9,933	8,150	1,333	111		26,476
SOCKEYE						87,755	268,599	702	2				357,058
COHO*						2		-2	1,677	842	136		2,655
PINK													
TOTAL				7,143	20,739	103,186	310,378	16,312	34,537	14,850	2,620		509,765
SHAD						264	1,307	187	27	12			1,797
LAMPREY					-1	17	75	657	305	61			1,114

*Jacks included

TABLE 128

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Apr 1	BEGIN COUNTING APRIL 15										61.5	0.0	43.5
Apr 2											61.5	0.0	43.7
Apr 3											61.4	0.0	43.3
Apr 4											61.5	0.0	43.5
Apr 5											62.0	0.0	43.7
Apr 6											62.0	0.0	44.1
Apr 7											64.9	0.0	43.9
Apr 8											67.6	0.0	44.2
Apr 9											61.0	0.0	44.8
Apr 10											61.0	0.0	44.2
Apr 11											60.4	0.0	44.8
Apr 12											61.7	0.0	45.1
Apr 13											61.5	0.0	44.8
Apr 14											61.5	0.0	44.6
Apr 15	19			0				5			61.5	0.0	45.3
Apr 16	19			0				4			61.3	0.0	45.9
Apr 17	34			0				7			61.7	0.0	46.0
Apr 18	75			0				6			62.2	0.0	46.2
Apr 19	95			0				6			66.0	0.0	47.7
Apr 20	176			0				5			85.4	0.0	47.7
Apr 21	153			0				1			90.6	0.0	47.8
Apr 22	304			0				5			96.9	0.0	47.7
Apr 23	503			0				6			113.4	15.1	47.8
Apr 24	606			0				1			86.2	24.3	48.2
Apr 25	806			0				6			89.0	23.8	48.9
Apr 26	544			1				3			113.7	26.3	48.2
Apr 27	704			0				1			125.6	25.0	48.0
Apr 28	870			0				2			100.0	23.8	48.2
Apr 29	698			0				2			104.4	25.1	48.2
Apr 30	1,473			0				3			106.8	25.4	47.7
TOTAL	7,079			1				63					
AVG.	442			0				4			76.5	6.3	45.9

TABLE 129

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
May 1	948			1				2		0	100.8	22.1	48.2
May 2	907			0				6		0	99.4	22.0	48.6
May 3	305			0				0		0	90.9	23.1	48.4
May 4	554			1				0		0	115.4	24.1	48.2
May 5	609			1				1		0	121.3	26.1	47.8
May 6	530			0				0		0	117.7	23.3	47.7
May 7	424			2				0		0	102.0	23.8	47.5
May 8	1,555			6				1		0	108.8	27.1	48.6
May 9	1,153			7				3		0	118.5	24.8	48.9
May 10	1,521			7				0		0	122.5	21.1	48.2
May 11	780			9				1		0	123.6	24.3	48.0
May 12	1,138			12				2		0	132.6	23.6	49.1
May 13	681			9				0		0	148.2	24.2	49.1
May 14	787			15				1		0	136.6	23.7	49.6
May 15	1,221			31				0		0	113.7	22.8	51.1
May 16	1,079			37				0		0	112.3	23.4	52.0
May 17	573			23				0		0	134.1	23.8	51.8
May 18	789			48				1		0	135.8	23.3	51.8
May 19	345			32				0		0	110.7	24.8	51.1
May 20	583			50				2		0	136.8	25.1	52.2
May 21	345			65				2		-1	150.6	24.8	52.0
May 22	391			73				0		0	127.1	25.4	51.6
May 23	522			92				0		0	118.0	23.0	51.4
May 24	251			44				1		0	146.7	24.7	51.6
May 25	406			72				0		0	142.5	23.8	51.8
May 26	489			52				0		0	126.6	23.9	52.0
May 27	270			34				0		0	127.3	24.3	51.8
May 28	212			31				0		0	108.1	25.4	52.2
May 29	187			25				0		0	117.0	26.3	52.0
May 30	205			18				0		0	112.5	26.1	53.2
May 31	141			18				0		0	112.0	25.9	52.9
TOTAL	19,901			815				23		-1			
AVG.	642			26				1		0	121.6	24.2	50.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	STEELHEAD	LAMPREY
SPRING	26,980	816	86	-1

TABLE 130

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jun 1	230			20		0	0	0	0	0	105.7	26.1	53.1
Jun 2	165			9		0	0	1	0	0	159.2	26.6	52.7
Jun 3	305			13		0	2	0	0	0	129.5	23.3	53.4
Jun 4	155			6		0	2	1	0	0	124.4	24.3	32.0
Jun 5	299			9		1	6	0	2	0	112.5	23.7	54.9
Jun 6	276			15		0	3	0	4	1	101.2	22.5	55.0
Jun 7	324			7		-1	13	2	1	1	111.7	23.5	54.7
Jun 8	340			14		0	9	0	0	0	101.7	30.5	54.5
Jun 9	297			6		0	17	0	2	1	193.5	57.6	54.9
Jun 10	313			0		0	40	1	0	0	209.3	85.0	55.2
Jun 11	337			8		0	44	1	0	0	222.9	110.6	55.6
Jun 12	221			0		0	46	1	5	0	181.0	70.0	55.8
Jun 13	297			9		0	60	0	1	0	179.6	80.6	55.8
Jun 14		265		4		0	77	2	6	2	191.5	79.7	56.1
Jun 15		313		7		0	112	3	4	2	211.2	103.7	56.3
Jun 16		285		4		0	128	1	3	0	219.4	95.8	56.3
Jun 17		352		0		0	200	4	10	0	218.0	101.9	56.3
Jun 18		175		3		0	206	0	3	0	220.0	86.4	56.1
Jun 19		363		0		0	257	3	5	0	212.3	91.8	56.3
Jun 20		368		17		0	425	8	1	2	203.0	79.7	55.9
Jun 21		420		5		0	673	13	5	0	207.0	116.0	56.3
Jun 22		616		18		0	1,163	7	10	2	252.3	124.0	56.3
Jun 23		390		26		0	2,021	14	19	0	236.5	118.1	57.0
Jun 24		640		4		0	1,938	16	7	3	247.1	120.6	57.4
Jun 25		829		2		0	3,145	24	7	0	232.1	109.4	57.9
Jun 26		751		4		0	4,060	7	12	0	226.2	103.3	57.9
Jun 27		1,110		14		1	8,476	21	15	1	225.5	100.2	58.5
Jun 28		1,225		13		0	14,394	29	37	2	190.4	99.2	59.0
Jun 29		1,493		21		-1	26,007	27	42	0	229.0	109.5	59.0
Jun 30		1,775		13		2	24,231	43	63	0	225.8	109.1	58.6
TOTAL	3,559	11,370		271		2	87,755	229	264	17			
AVG.		669		9		0	2,925	8	9	1	189.3	78.4	55.3

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	30,539	932
SUMMER	11,370	155
TOTAL	41,909	1,087

COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
2	87,755	315	264	16

TABLE 131

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jul 1		1,725		58			26,488	43	70	0	214.1	87.3	58.5
Jul 2		2,015		6			28,956	58	57	0	194.7	76.0	58.5
Jul 3		1,736		28			25,692	84	58	1	158.7	39.2	58.8
Jul 4		2,409		12			36,705	82	88	1	135.1	27.7	59.0
Jul 5		1,086		8			15,580	59	52	0	137.0	26.7	59.9
Jul 6		1,494		1			17,483	93	147	1	152.5	27.1	60.1
Jul 7		1,753		13			15,564	90	56	-1	137.2	26.7	60.8
Jul 8		1,615		22			11,884	99	68	1	137.4	27.0	61.2
Jul 9		1,651		15			10,946	101	86	1	168.2	46.3	61.2
Jul 10		2,300		43			12,280	150	42	2	147.3	31.3	62.1
Jul 11		1,437		22			9,144	165	44	1	138.4	27.8	62.6
Jul 12		1,149		12			8,483	134	43	1	137.8	25.9	62.1
Jul 13		1,412		44			7,431	150	51	1	89.4	27.8	62.1
Jul 14		1,247		2			6,417	123	50	1	145.4	27.9	62.4
Jul 15		1,417		15			7,275	192	18	1	154.3	34.2	62.8
Jul 16		1,346		18			7,452	170	45	0	134.0	26.7	63.1
Jul 17		1,193		25			4,980	205	42	2	118.5	26.7	63.7
Jul 18		1,291		81			4,638	263	24	0	133.0	25.3	63.9
Jul 19		630		21			2,206	229	25	3	116.6	22.3	63.9
Jul 20		663		7			1,649	232	19	3	96.7	24.4	64.4
Jul 21		547		37			1,459	236	19	2	112.0	26.4	66.2
Jul 22		607		21			1,213	224	19	1	80.0	27.0	65.3
Jul 23		578		43			1,209	319	26	2	122.7	26.5	64.4
Jul 24		627		18			1,002	259	14	5	115.3	25.6	65.1
Jul 25		420		18			685	351	23	5	82.8	24.9	66.6
Jul 26		314		18			540	348	21	4	107.3	25.5	66.6
Jul 27		633		29			389	501	27	3	100.6	26.5	66.4
Jul 28		315		5			250	342	17	9	131.6	26.4	66.2
Jul 29		262		17			235	358	23	8	112.5	25.5	65.8
Jul 30		245		43			224	498	19	10	95.1	25.7	67.5
Jul 31		295		31			140	476	14	7	74.4	26.1	66.7
TOTAL		34,412		733			268,599	6,634	1,307	75			
AVG.		1,110		24			8,664	214	42	2	128.4	31.3	63.1

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	30,539	932
SUMMER	45,782	888
TOTAL	76,321	1,820

COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
2	356,354	6,949	1,571	91

TABLE 132

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Aug 1		314		31		0	168	515	15	13	65.2	26.9	*
Aug 2		391		39		0	106	596	23	15	92.2	26.7	*
Aug 3		225		27		0	57	630	5	19	105.9	24.4	*
Aug 4		348		54		0	54	655	13	9	112.0	26.5	*
Aug 5		410		34		0	95	624	4	28	100.3	27.1	*
Aug 6		280		31		0	13	571	19	15	100.9	27.6	67.5
Aug 7		310		34		0	50	581	1	14	101.6	26.9	67.3
Aug 8		227		17		0	12	453	7	16	68.2	26.0	67.5
Aug 9		171		12		0	48	319	6	22	100.5	26.3	67.8
Aug 10		185		18		0	14	385	17	20	96.0	26.4	67.1
Aug 11		128		10		0	30	360	6	11	102.8	25.5	66.4
Aug 12		273		22		0	19	379	3	39	93.7	26.4	67.3
Aug 13		221		0		0	0	327	9	26	44.1	26.8	66.4
Aug 14			109	0		0	14	283	8	18	86.2	26.4	*
Aug 15			238	23		0	3	368	7	19	73.6	26.8	*
Aug 16			151	50		0	1	318	3	18	93.7	26.4	*
Aug 17			154	35		0	1	310	3	34	109.2	25.6	*
Aug 18			99	13		-2	17	201	3	48	119.7	26.3	68.5
Aug 19			91	195		0	0	236	3	20	72.2	25.1	68.4
Aug 20			126	16		0	0	245	4	21	62.6	26.0	67.5
Aug 21			109	64		0	0	175	12	18	75.1	25.7	*
Aug 22			66	12		0	0	141	5	24	44.6	25.1	*
Aug 23			47	25		0	0	93	4	13	84.5	25.7	66.7
Aug 24			134	17		0	0	91	0	28	97.0	9.2	66.9
Aug 25			63	14		0	0	143	2	34	88.0	1.0	67.5
Aug 26			161	0		0	0	147	4	18	106.9	0.9	67.3
Aug 27			172	24		0	0	173	1	31	86.9	1.0	66.7
Aug 28			99	3		0	0	104	0	14	63.4	0.7	66.4
Aug 29			113	13		0	0	124	-2	12	43.0	1.0	65.8
Aug 30			142	29		0	0	196	0	20	77.1	1.0	65.8
Aug 31			122	5		0	0	190	2	20	73.5	1.0	65.8
TOTAL		3,483	2,196	867		-2	702	9,933	187	657			
AVG.		268	122	28			23	320	6	21	85.2	20.0	67.0

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	30,539	932
SUMMER	49,265	1,217
FALL	2,196	538
TOTAL	82,000	2,687

COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
0	357,056	16,882	1,758	748

TABLE 133

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Sep 1			251	44	0	0	0	262	1	13	75.4	0.8	66.0
Sep 2			264	75	0	0	0	252	0	18	62.4	1.1	65.8
Sep 3			424	245	0	0	1	331	1	25	59.0	1.0	66.2
Sep 4			625	65	0	0	1	398	3	24	50.0	0.9	66.2
Sep 5			550	67	3	0	0	337	-2	19	40.2	1.0	65.3
Sep 6			307	33	0	0	0	235	3	3	50.0	1.0	64.6
Sep 7			215	36	1	0	0	240	1	24	73.9	1.0	64.6
Sep 8			338	26	3	1	0	336	2	13	64.9	1.0	64.6
Sep 9			686	64	1	0	0	338	3	12	46.6	1.0	64.8
Sep 10			392	39	3	0	0	337	0	12	39.8	1.0	64.8
Sep 11			452	3	19	4	0	445	1	10	38.4	1.0	64.2
Sep 12			453	59	36	1	0	380	-1	20	39.4	1.0	64.2
Sep 13			832	82	24	3	0	435	0	7	59.8	1.0	64.6
Sep 14			666	50	60	4	0	309	0	8	62.7	1.0	64.9
Sep 15			721	43	37	6	0	301	3	14	54.5	1.1	65.1
Sep 16			1,479	63	163	39	0	400	1	5	60.8	1.0	65.1
Sep 17			1,193	87	89	8	0	334	1	7	53.2	1.0	65.5
Sep 18			790	78	51	5	0	254	5	5	40.6	1.0	65.7
Sep 19			1,248	174	129	14	0	258	2	4	42.7	1.0	65.7
Sep 20			1,304	161	64	12	0	229	0	12	43.5	1.0	65.8
Sep 21			1,018	97	166	24	0	262	2	6	67.3	1.0	65.3
Sep 22			804	93	37	1	0	184	0	5	63.0	1.0	65.3
Sep 23			1,069	118	59	2	0	126	1	3	65.5	0.9	65.1
Sep 24			637	98	88	13	0	171	0	5	63.5	1.0	65.1
Sep 25			898	91	65	0	0	141	0	6	55.8	1.0	64.8
Sep 26			1,160	91	92	15	0	182	0	6	48.8	1.0	64.9
Sep 27			919	90	38	20	0	151	0	3	75.1	1.0	65.1
Sep 28			856	86	100	19	0	153	0	12	70.1	1.0	65.5
Sep 29			937	61	73	9	0	158	0	1	75.2	1.0	65.5
Sep 30			842	59	76	0	0	211	0	3	74.8	1.0	65.7
TOTAL			22,330	2,378	1,477	200	2	8,150	27	305			
AVG.			744	79	49	7	0	272	1	10	57.2	1.0	65.2

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	30,539	932
SUMMER	49,265	1,217
FALL	24,526	2,916
TOTAL	104,330	5,065

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
1,477	200	357,058	25,032	1,785	1,053

TABLE 134

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Oct 1			710	57	76	7		122	0	4	61.1	1.0	65.3
Oct 2			556	59	52	2		132	0	4	77.4	1.0	65.5
Oct 3			908	93	35	1		68	0	7	46.0	1.0	65.5
Oct 4			1,332	59	31	6		65	2	6	82.2	1.0	64.9
Oct 5			642	92	42	11		68	0	2	76.5	1.1	63.9
Oct 6			439	33	16	7		52	0	3	85.5	1.0	64.0
Oct 7			606	45	34	14		89	0	4	76.5	1.1	64.4
Oct 8			486	49	29	8		60	0	6	82.1	1.1	64.4
Oct 9			314	33	7	2		56	2	2	82.0	1.2	64.0
Oct 10			340	53	15	0		30	1	2	56.0	1.1	63.9
Oct 11			198	25	11	0		50	0	2	88.4	1.2	63.5
Oct 12			126	21	13	2		53	0	1	98.4	1.2	63.0
Oct 13			103	8	8	0		34	0	0	109.6	1.0	63.1
Oct 14			242	14	15	1		32	0	3	97.9	0.7	63.1
Oct 15			375	27	26	0		46	0	3	65.5	0.6	63.0
Oct 16			247	25	3	0		34	0	4	69.0	0.7	62.1
Oct 17			120	9	6	0		23	1	4	55.0	0.6	61.7
Oct 18			169	13	21	0		27	0	0	78.7	0.7	61.5
Oct 19			332	13	33	0		38	0	0	77.2	0.6	61.2
Oct 20			235	19	108	0		49	-2	0	60.6	0.4	61.0
Oct 21			214	6	25	1		20	0	1	50.9	0.4	60.6
Oct 22			197	7	33	0		18	4	2	59.5	0.9	60.6
Oct 23			284	20	8	0		20	-1	1	52.6	0.6	60.4
Oct 24			167	9	23	0		25	0	0	69.7	0.5	60.1
Oct 25			518	36	31	3		28	0	0	65.9	0.5	59.9
Oct 26			294	6	10	0		16	0	0	63.0	0.6	59.0
Oct 27			247	8	16	0		15	1	0	80.1	0.7	59.0
Oct 28			468	22	1	0		14	0	0	74.5	0.7	58.8
Oct 29			324	4	13	0		18	0	0	61.6	0.5	58.6
Oct 30			377	21	8	0		18	1	0	66.4	0.8	58.3
Oct 31			218	1	28	0		13	3	0	61.0	0.7	58.1
TOTALS			11,788	887	777	65		1,333	12	61			
AVG.			380	29	25	2		43	0	2	72.0	0.8	62.0

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	30,539	932
SUMMER	49,265	1,217
FALL	36,314	3,803
TOTAL	116,118	5,952

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
2,254	265	357,058	26,365	1,797	1,114

TABLE 135

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

PRIEST RAPIDS PROJECT- FISH COUNTS — NOVEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Nov 1			321	20	22	0		7	3		65.0	0.5	58.1
Nov 2			298	6	14	0		8	5		80.3	2.5	58.1
Nov 3			414	8	27	0		21	2		100.4	8.1	57.7
Nov 4			257	7	17	0		5	1		96.1	2.5	57.4
Nov 5			167	0	10	0		4	2		89.7	0.7	57.2
Nov 6			132	5	14	0		15	0		87.4	0.6	57.0
Nov 7			117	0	13	0		11	0		72.1	0.5	57.0
Nov 8			122	14	10	1		9	-1		80.5	0.5	56.5
Nov 9			131	0	2	0		6	2		84.0	0.6	55.8
Nov 10			88	0	2	0		7	2		59.7	0.8	55.4
Nov 11			80	1	2	0		1	0		74.4	0.5	55.6
Nov 12			46	0	1	0		8	0		82.8	0.7	55.2
Nov 13			62	6	0	0		4	0		75.3	0.6	55.0
Nov 14			36	5	0	0		4	0		64.8	0.5	54.7
Nov 15			29	1	1	0		1	2		60.5	0.2	54.7
Nov 16											80.4	0.0	54.1
Nov 17											114.8	0.0	53.8
Nov 18											106.2	0.0	53.6
Nov 19											95.8	0.0	53.4
Nov 20											100.4	0.0	53.2
Nov 21											107.6	0.0	52.9
Nov 22											101.6	0.0	51.6
Nov 23											111.3	0.0	50.4
Nov 24											116.5	0.0	*
Nov 25											*	*	*
Nov 26											*	*	*
Nov 27											81.5	0.0	*
Nov 28											95.0	0.0	*
Nov 29											112.1	0.0	*
Nov 30											*	*	*
TOTALS			2,300	73	135	1		111	18				
AVG.			153	5	9	0		7	1		88.7	0.7	55.1

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	30,539	932
SUMMER	49,265	1,217
FALL	38,614	3,876
TOTAL	118,418	6,025

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	SHAD	LAMPREY
2,389	266	357,058	26,476	1,815	1,114

TABLE 136

YEARLY TOTALS OF SALMONIDS COUNTED OVER PRIEST RAPIDS DAM
1982 - 2010

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
2009	114,137	40,093	153,466	11,293	318,989
2010	123,576	26,476	357,058	2,655	509,765
Totals	2,073,993	459,585	2,228,399	64,471	4,826,448
10-Year Average	120,068	20,372	115,398	6,094	261,932

*Jacks included

TABLE 137

MONTHLY COUNT OF STEELHEAD
PRIEST RAPIDS DAM: 1960 - 2010

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
2009				24	34	78	2,330	13,537	19,965	4,034	91		40,093
2010				63	23	229	6,634	9,933	8,150	1,333	111		26,476
TOTAL	40	56	288	4,103	8,974	7,305	69,406	190,606	276,559	70,520	4,394	63	632,314
10-Year Average				20	34	212	3,044	6,570	8,715	1,678	101		20,372

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 – Feb 9	Fishway in service.
Feb 10 – Feb 18	Fishway out of service for 2010 annual maintenance
Feb 19 – Dec 31	Fishway in service.

Middle Ladder

Jan 1 – Jan 17	Fishway in service.
Jan 18 – Feb 9	Fishway out of service for 2010 annual maintenance.
Feb 10 – Dec 31	Fishway in service.

Right Bank Ladder

Jan 1 – Feb 23	Fishway out of service for 2009/2010 annual maintenance.
Feb 24 – Dec 31	Fishway in service.

FISH FACILITY ACTIVITIES

The Rock Island Bypass Trap was operated by Chelan County PUD Natural Resource Department employees from 1 April through 31 August 2010. Juvenile fish were sampled daily during that time period.

The adult fish PIT tag system was operational throughout the 2010 adult fish migration. PIT tag detections from all three fishways were uploaded daily to PTAGIS.

From 23 June to 1 July and from 9 August to 17 August 2010, 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 113 pikeminnow were trapped and removed from the river.

TABLE 138

MONTHLY TOTALS OF SALMONIDS AND LAMPREY COUNTED OVER ROCK ISLAND DAM
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				3,067	24,156	10,537	39,156	7,689	5,060	4,098	1,541		95,304
STEELHEAD				103	21	100	3,994	8,946	7,472	1,441	102		22,179
SOCKEYE						20,207	316,914	1,170	17	2			338,310
COHO								1	2,855	4,322	517		7,695
PINK													0
TOTAL				3,170	24,177	30,844	360,064	17,806	15,404	9,863	2,160		463,488
LAMPREY							8	139	138	33			318
BULL TROUT					11	22	18	2					53

TABLE 139

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Apr 1												48.1	0.0	45.5
Apr 2												70.4	0.0	38.4
Apr 3												54.7	0.0	44.7
Apr 4												42.3	0.0	45.5
Apr 5												71.9	0.0	45.3
Apr 6												66.6	0.0	47.1
Apr 7												72.3	0.0	48.6
Apr 8												49.4	0.0	42.4
Apr 9												44.6	0.0	43.1
Apr 10												52.5	0.0	44.2
Apr 11												37.0	0.0	49.1
Apr 12												64.6	0.0	51.4
Apr 13												56.7	0.0	45.3
Apr 14	3			6				12	4			73.8	0.0	43.8
Apr 15	1			1				5	4			73.4	0.0	44.0
Apr 16	4			0				9	5			57.2	0.0	44.0
Apr 17	3			0				7	5			51.6	5.5	44.7
Apr 18	8			0				7	4			62.0	6.8	44.9
Apr 19	9			0				6	3			77.8	7.4	45.4
Apr 20	25			0				7	3			84.4	9.1	45.7
Apr 21	36			0				7	6			98.6	9.1	45.8
Apr 22	78			0				15	8			92.4	9.1	45.9
Apr 23	83			0				6	3			100.8	8.2	46.1
Apr 24	150			0				2	2			79.4	8.2	46.3
Apr 25	132			0				5	4			91.2	8.2	46.5
Apr 26	429			0				4	2			112.0	9.4	46.5
Apr 27	370			16				2	2			97.3	10.2	46.6
Apr 28	526			6				4	4			99.5	11.4	46.8
Apr 29	607			11				3	3			103.5	10.1	46.6
Apr 30	561			2				2	2			81.6	9.6	46.5
TOTAL	3,025			42				103	64					
AVG.	178			2				6	4			72.2	4.1	45.6

TABLE 140

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
May 1	862			0				2	1	0		87.9	10.3	46.5
May 2	984			4				2	2	0		84.2	9.2	46.4
May 3	1,092			4				0	0	0		130.9	11.4	45.4
May 4	907			1				2	2	0		112.4	10.6	46.4
May 5	972			35				3	3	0		115.8	12.1	46.7
May 6	271			16				0	0	0		113.2	11.6	46.3
May 7	327			2				0	0	0		125.6	11.5	45.6
May 8	1,096			17				1	1	1		104.7	9.4	45.7
May 9	612			20				2	2	1		94.1	9.4	45.2
May 10	1,156			23				0	0	0		121.9	12.9	*
May 11	945			11				0	0	0		130.9	13.9	49.2
May 12	1,019			14				1	1	0		143.0	13.9	47.9
May 13	1,496			24				2	1	0		132.3	13.6	48.6
May 14	1,101			12				0	0	0		129.6	12.6	49.2
May 15	1,092			22				0	0	0		107.8	11.5	49.7
May 16	918			18				1	1	0		111.7	11.5	50.4
May 17	1,281			36				0	0	0		139.6	13.0	50.6
May 18	924			45				2	0	0		123.2	13.5	50.4
May 19	472			38				1	1	1		130.7	13.2	50.5
May 20	628			45				0	0	0		136.8	12.6	50.5
May 21	376			32				0	0	0		136.7	12.9	50.1
May 22	827			75				0	0	0		112.4	12.0	49.8
May 23	595			74				0	0	1		115.8	10.9	50.1
May 24	522			78				2	2	0		142.4	13.6	50.3
May 25	574			108				0	0	0		127.9	12.7	50.5
May 26	318			74				0	0	3		134.0	13.6	50.6
May 27	356			68				0	0	0		127.4	13.6	50.6
May 28	215			51				0	0	2		122.0	12.8	50.4
May 29	325			45				0	0	0		117.5	10.9	50.5
May 30	545			65				0	0	1		104.1	10.9	50.9
May 31	254			37				0	0	1		108.1	12.8	51.1
TOTAL	23,062			1,094				21	17	11				
AVG.	744			35				1	1	0		120.1	12.1	48.9

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	26,087	1,136

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT
0	124	81	11

TABLE 141

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS

JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jun 1	164			39			0	2	2	2		138.7	12.2	50.3
Jun 2	169			33			0	0	0	1		141.6	13.6	*
Jun 3	134			23			0	0	0	0		121.7	12.6	50.3
Jun 4	133			18			0	1	1	2		114.2	12.6	52.1
Jun 5	259			21			0	1	1	1		88.1	10.7	52.2
Jun 6	343			33			0	1	1	0		107.7	9.8	52.2
Jun 7	128			18			2	0	0	0		126.8	12.6	51.5
Jun 8	195			31			5	0	0	0		164.9	15.5	53.5
Jun 9	158			16			3	0	0	2		192.2	32.0	53.8
Jun 10	147			20			4	0	0	1		194.3	60.9	53.8
Jun 11	176			19			5	1	1	3		207.8	63.6	53.8
Jun 12	237			10			16	1	1	0		176.6	41.4	54.5
Jun 13	271			18			12	1	1	2		173.6	35.4	55.2
Jun 14	391			36			22	0	0	1		183.1	39.4	55.5
Jun 15	241			16			32	3	3	0		203.7	38.7	55.6
Jun 16	273			17			36	0	0	0		211.2	39.7	55.0
Jun 17	181			15			65	0	0	0		208.5	36.8	54.6
Jun 18	246			10			65	0	0	0		212.4	41.5	54.2
Jun 19	219			12			103	2	1	1		200.7	41.9	54.7
Jun 20	412			19			123	3	3	0		184.9	41.9	54.8
Jun 21	281			14			206	3	3	2		204.0	42.2	55.4
Jun 22	267			19			204	2	2	0		236.6	44.3	56.2
Jun 23	334			24			297	6	5	0		222.0	36.5	56.3
Jun 24		537		47			555	6	5	1		225.3	24.7	56.2
Jun 25		519		25			1,263	10	7	2		217.3	24.5	57.0
Jun 26		522		15			1,273	10	9	0		209.8	38.0	57.4
Jun 27		577		24			1,648	12	10	0		209.8	34.7	57.6
Jun 28		531		36			2,526	9	6	0		212.3	33.9	57.7
Jun 29		791		24			3,867	9	6	1		208.4	40.5	57.8
Jun 30		989		60			7,875	17	8	0		203.3	41.9	57.7
TOTAL	5,359	4,466		712			20,207	100	76	22				
AVG.	233	638		24			674	3	3	1		183.4	32.5	54.7

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	31,446	1,617
SUMMER	4,466	231
TOTALS	35,912	1,848

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT
20,207	224	157	33

TABLE 142

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS — JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jul 1		1,343		61			13,931	24	14	2	0	194.6	40.8	57.7
Jul 2		731		46			14,519	14	8	0	0	181.5	34.7	57.8
Jul 3		1,273		51			18,175	23	13	1	0	155.3	28.9	57.9
Jul 4		1,565		67			27,815	31	17	0	0	120.3	29.8	57.9
Jul 5		2,617		200			31,767	60	38	0	0	141.6	27.0	58.2
Jul 6		1,133		104			20,538	35	17	3	0	147.4	27.4	58.9
Jul 7		1,554		114			22,917	33	16	1	1	121.9	27.8	59.3
Jul 8		1,101		69			25,210	46	29	0	0	146.9	28.6	59.5
Jul 9		2,936		94			24,709	91	43	3	0	162.3	29.3	59.9
Jul 10		1,707		122			17,574	50	27	2	0	140.7	25.9	60.2
Jul 11		1,803		101			14,128	90	50	1	1	132.0	26.6	60.4
Jul 12		2,190		139			13,993	109	56	0	0	127.9	29.0	60.9
Jul 13		1,708		105			11,909	122	74	0	0	137.6	29.1	61.2
Jul 14		774		94			7,505	86	49	0	0	148.8	27.1	61.3
Jul 15		1,043		92			6,234	98	58	0	0	146.2	27.1	61.4
Jul 16		1,355		112			8,382	107	49	0	0	115.6	27.3	61.5
Jul 17		1,425		139			7,288	129	72	0	1	113.1	21.2	61.7
Jul 18		1,524		63			6,852	121	62	1	0	100.3	20.9	61.8
Jul 19		974		102			5,946	161	78	0	0	113.8	23.9	61.9
Jul 20		1,681		162			4,251	159	89	0	0	115.4	26.0	62.5
Jul 21		609		89			2,935	158	91	1	0	119.6	25.1	63.2
Jul 22		549		39			2,240	164	94	1	0	122.9	24.1	63.6
Jul 23		642		18			1,489	204	93	0	0	110.8	25.1	63.4
Jul 24		675		39			1,359	153	89	0	0	103.0	18.2	63.5
Jul 25		588		56			1,496	167	100	1	1	89.1	18.6	63.7
Jul 26		588		107			970	181	104	0	0	107.4	21.4	64.5
Jul 27		406		48			808	214	115	0	1	112.2	22.7	65.1
Jul 28		646		76			901	315	142	1	1	110.5	21.5	64.9
Jul 29		484		48			525	307	151	0	1	101.6	20.1	64.9
Jul 30		532		45			292	270	144	0	0	97.6	23.1	64.5
Jul 31		330		68			256	272	138	0	1	81.5	15.1	64.3
TOTAL		36,486		2,670			316,914	3,994	2,120	18	8			
AVG.		1,177		86			10,223	129	68	1	0	126.4	25.6	61.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	31,446	1,617
SUMMER	40,952	2,901
TOTALS	72,398	4,518

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
337,121	4,218	2,277	51	8

TABLE 143

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS — AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Aug 1		276		41		0	202	236	139	0	0	60.5	14.3	64.5
Aug 2		387		92		0	190	314	155	0	2	99.9	17.7	65.0
Aug 3		430		62		0	201	479	220	1	1	105.9	20.5	65.5
Aug 4		372		46		0	129	506	290	0	1	108.7	20.3	65.6
Aug 5		218		53		0	66	297	146	0	3	102.4	22.2	65.7
Aug 6		292		54		0	65	367	192	0	3	97.6	22.3	65.6
Aug 7		352		81		0	62	369	198	0	7	79.6	15.6	67.2
Aug 8		208		45		0	42	389	196	0	1	65.4	14.3	69.1
Aug 9		366		80		0	28	342	183	0	1	94.2	20.7	66.9
Aug 10		214		28		0	28	319	156	1	0	104.5	21.4	64.9
Aug 11		144		22		0	20	474	244	0	7	95.3	22.9	65.5
Aug 12		256		80		0	21	405	180	0	4	87.9	23.0	65.8
Aug 13		202		56		0	11	345	188	0	6	95.1	20.3	66.1
Aug 14		195		55		0	19	274	144	0	8	86.2	12.4	66.3
Aug 15		252		70		0	13	406	210	0	3	71.4	14.4	65.9
Aug 16		176		66		0	14	277	124	0	3	98.8	21.2	65.7
Aug 17		169		88		0	13	379	143	0	7	112.4	21.0	66.4
Aug 18		142		65		0	7	397	191	0	6	92.9	20.4	66.9
Aug 19		181		55		0	7	313	145	0	5	77.6	19.7	66.8
Aug 20		110		50		0	5	206	99	0	6	92.5	16.5	66.4
Aug 21		108		52		0	4	300	146	0	2	61.2	0.0	66.1
Aug 22		94		25		0	1	133	68	0	10	49.2	0.0	66.0
Aug 23		112		64		0	4	202	79	0	4	96.5	0.0	65.9
Aug 24		56		26		0	1	122	50	0	3	87.6	0.0	66.1
Aug 25		40		62		0	2	214	90	0	6	99.1	0.0	66.5
Aug 26		177		61		0	2	213	88	0	8	84.3	0.0	66.7
Aug 27		61		67		0	2	146	61	0	9	77.5	0.0	66.3
Aug 28		92		43		0	2	190	78	0	6	66.1	0.0	66.0
Aug 29		118		38		1	2	119	54	0	5	55.3	0.0	65.8
Aug 30		86		85		0	6	96	36	0	8	75.0	0.0	65.1
Aug 31		68		23		0	1	117	45	0	4	83.2	0.0	64.5
TOTAL		5,954		1,735		1	1,170	8,946	4,338	2	139			
AVG.		192		56		0	38	289	140	0	4	85.9	12.3	66.0

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	31,446	1,617
SUMMER	46,906	4,636
TOTALS	78,352	6,253

COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
1	338,291	13,164	6,615	53	147

TABLE 144

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS — SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	*DEG F
Sep 1		110		46	0	0	0	262	109		4	65.3	0.0	64.6
Sep 2			66	21	0	0	0	133	75		7	58.1	0.0	64.8
Sep 3			103	81	0	0	0	189	74		7	61.2	0.0	65.2
Sep 4			135	57	0	0	2	254	117		10	46.6	0.0	65.5
Sep 5			143	77	0	0	2	325	145		14	39.9	0.0	64.9
Sep 6			158	41	0	0	0	339	122		5	53.5	0.0	64.8
Sep 7			172	44	0	0	0	308	139		3	60.9	0.0	64.8
Sep 8			150	29	1	0	3	297	119		3	53.4	0.0	64.4
Sep 9			88	45	7	0	2	222	81		7	44.1	0.0	64.4
Sep 10			55	49	8	0	1	251	92		9	44.1	0.0	64.2
Sep 11			44	47	11	8	0	295	111		1	47.8	0.0	64.5
Sep 12			126	33	15	7	1	289	113		5	44.4	0.0	64.8
Sep 13			124	93	26	2	0	275	126		5	70.3	0.0	64.9
Sep 14			111	33	30	3	0	331	129		6	47.0	0.0	65.3
Sep 15			124	45	41	4	1	312	129		3	53.3	0.0	65.1
Sep 16			130	20	54	5	0	303	126		6	52.2	0.0	*
Sep 17			116	34	63	9	0	359	155		1	50.6	0.0	*
Sep 18			165	16	79	5	0	245	118		3	47.3	0.0	*
Sep 19			214	41	96	16	0	220	99		5	42.3	0.0	*
Sep 20			226	36	100	20	0	176	83		6	56.9	0.0	*
Sep 21			280	49	157	29	0	277	119		4	68.5	0.0	*
Sep 22			380	75	167	54	3	351	153		1	61.1	0.0	*
Sep 23			352	71	206	46	0	309	113		2	60.6	0.0	*
Sep 24			191	56	205	47	0	204	78		3	67.8	0.0	*
Sep 25			173	30	183	44	0	165	76		5	58.7	0.0	*
Sep 26			196	47	125	50	1	121	56		2	53.1	0.0	*
Sep 27			203	40	103	24	0	121	46		2	76.2	0.0	*
Sep 28			252	27	230	35	0	188	71		2	67.8	0.0	*
Sep 29			220	49	180	90	0	200	108		1	74.9	0.0	*
Sep 30			253	34	236	34	1	151	69		6	67.3	0.0	*
TOTAL		110	4,950	1,366	2,323	532	17	7,472	3,151		138			
AVG.			171	46	77	18	1	249	105		5	56.5	0.0	

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	31,446	1,617
SUMMER	47,016	4,682
FALL	4,950	1,320
TOTALS	83,412	7,619

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
2,323	533	338,308	20,636	9,766	53	285

TABLE 145

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS

OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Oct 1			294	108	226	25	0	216	96		4	74.9	0.0	*
Oct 2			222	19	220	47	0	147	70		5	73.7	0.0	*
Oct 3			160	44	153	106	0	115	65		0	53.7	0.0	*
Oct 4			152	32	100	13	0	65	31		3	71.7	0.0	*
Oct 5			204	26	204	33	0	141	82		10	80.2	0.0	*
Oct 6			246	37	116	12	0	62	36		1	81.1	0.0	*
Oct 7			268	46	114	66	0	59	19		2	79.4	0.0	*
Oct 8			101	23	92	27	0	59	24		0	88.8	0.0	*
Oct 9			140	44	113	74	0	70	32		1	77.8	0.0	*
Oct 10			104	24	100	53	1	37	13		1	59.3	0.0	*
Oct 11			107	15	38	23	0	32	18		0	92.0	0.0	*
Oct 12			163	41	78	15	0	31	15		0	93.4	0.0	*
Oct 13			85	16	81	35	0	47	22		2	84.4	0.0	*
Oct 14			75	22	53	22	1	25	11		1	68.4	0.0	*
Oct 15			38	8	59	70	0	23	9		0	74.4	0.0	*
Oct 16			60	12	72	30	0	25	15		0	70.6	0.0	*
Oct 17			78	17	104	39	0	22	13		1	69.7	0.0	*
Oct 18			37	5	56	12	0	24	15		0	76.8	0.0	*
Oct 19			39	6	81	22	0	30	15		0	72.0	0.0	*
Oct 20			39	8	70	5	0	24	13		1	54.8	0.0	*
Oct 21			52	8	160	22	0	31	12		0	60.4	0.0	*
Oct 22			66	7	251	32	0	12	8		0	62.9	0.0	*
Oct 23			88	2	188	16	0	37	14		0	61.3	0.0	*
Oct 24			80	10	220	26	0	15	6		0	54.5	0.0	*
Oct 25			70	5	157	5	0	30	9		0	65.2	0.0	*
Oct 26			79	5	65	7	0	9	4		0	77.2	0.0	*
Oct 27			62	7	66	3	0	13	8		0	77.2	0.0	*
Oct 28			82	7	70	11	0	12	5		0	67.9	0.0	*
Oct 29			106	13	59	6	0	12	5		1	72.7	0.0	*
Oct 30			88	5	41	9	0	8	4		0	54.3	0.0	*
Oct 31			88	3	46	3	0	8	2		0	50.2	0.0	*
TOTAL			3,473	625	3,453	869	2	1,441	691		33			
AVG.			112	20	111	28	0	46	22		1	71.0	0.0	

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	31,446	1,617
SUMMER	47,016	4,682
FALL	8,423	1,945
TOTALS	86,885	8,244

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
5,776	1,402	338,310	22,077	10,457	53	318

TABLE 146

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCK ISLAND PROJECT- FISH COUNTS — NOVEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	* DEG F
Nov 1			148	3	55	10		15	5			75.0	0.0	*
Nov 2			188	8	53	4		13	5			90.8	0.0	*
Nov 3			149	9	67	15		3	2			95.1	0.0	*
Nov 4			118	12	47	15		8	5			88.6	0.0	*
Nov 5			165	4	57	8		10	8			95.2	0.0	*
Nov 6			121	6	61	12		10	4			85.7	0.0	*
Nov 7			100	4	15	2		7	3			56.1	0.0	*
Nov 8			92	6	15	0		4	4			77.1	0.0	*
Nov 9			81	0	15	3		7	1			93.7	0.0	*
Nov 10			100	8	22	7		6	2			87.8	0.0	*
Nov 11			57	0	14	3		2	0			87.5	0.0	*
Nov 12			40	6	3	2		8	4			70.0	0.0	*
Nov 13			37	1	3	0		4	2			63.2	0.0	*
Nov 14			37	3	4	3		2	1			49.8	0.0	*
Nov 15			37	1	2	0		3	1			83.0	0.0	*
Nov 16												98.7	0.0	*
Nov 17												101.7	0.0	*
Nov 18												102.9	0.0	*
Nov 19												97.5	0.0	*
Nov 20												81.9	0.0	*
Nov 21												94.4	0.0	*
Nov 22												99.0	0.0	*
Nov 23												109.5	0.0	*
Nov 24												108.2	0.0	*
Nov 25												*	*	*
Nov 26												*	*	*
Nov 27												92.6	0.0	*
Nov 28												87.7	0.0	*
Nov 29												111.2	0.0	*
Nov 30														*
TOTAL			1,470	71	433	84		102	47					
AVG.			98	5	29	6		7	3			88.3	0.0	

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	31,446	1,617
SUMMER	47,016	4,682
FALL	9,893	2,016
TOTALS	88,355	8,315

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
6,209	1,486	338,310	22,179	10,504	53	318

TABLE 147

MONTHLY COUNT OF STEELHEAD

ROCK ISLAND DAM 1981 - 2010

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
2009				62	41	47	1,502	10,229	22,154	3,565	200		37,800
2010				103	21	100	3,994	8,946	7,472	1,441	102		22,179
Total				1,947	2,190	3,636	43,605	125,172	194,724	55,696	5,402		432,372
10-Year Average				60	41	131	2,079	5,809	9,089	1,893	127		19,231

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 to Feb 28	Fishway out of service for 2009/2010 annual maintenance.
Mar 1 to Nov 29	Fishway in service.
Nov 30 to Dec 31	Fishway out of service for 2010/2011 annual maintenance.

FISH FACILITY ACTIVITIES

The adult fish PIT tag system was operational throughout the 2010 adult fish migration. PIT tag detections from the fishway were uploaded daily to PTAGIS.

The juvenile fish bypass system was operated for fish passage from 1 April to 31 August 2010. Juvenile fish sampling occurred over the same time frame. The annual bypass (biological) evaluation included an acoustic tag survival study and collection of species composition, fish condition and diel passage data.

TABLE 148

MONTHLY TOTALS OF SALMONIDS AND LAMPREY COUNTED OVER ROCKY REACH DAM
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*				603	7,625	3,175	27,911	7,334	4,084	3,624	1,527		55,883
STEELHEAD				285	85	49	2,318	7,265	6,024	1,511	334		17,871
SOCKEYE						9,965	283,690	1,954	25	4			295,638
COHO									645	1,802	244		2,691
PINK													0
TOTAL				888	7,710	13,189	313,919	16,553	10,778	6,941	2,105		372,083
LAMPREY							6	126	110	26			268
BULL TROUT					24	61	13	8	1	5	12		124

TABLE 149

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS

APRIL 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Apr 1												48.0	0.0	41.9
Apr 2												67.9	0.0	42.1
Apr 3												53.0	0.0	41.9
Apr 4												41.8	0.0	42.1
Apr 5												70.7	0.0	42.1
Apr 6												63.6	0.0	42.1
Apr 7												72.1	0.0	42.1
Apr 8												48.2	0.0	42.3
Apr 9												44.5	0.0	42.6
Apr 10												52.0	0.0	42.4
Apr 11												36.3	0.0	42.8
Apr 12												63.1	0.0	43.2
Apr 13												55.6	0.0	43.3
Apr 14	0			0				21	14			73.4	0.0	43.3
Apr 15	0			1				33	23			72.2	0.0	43.3
Apr 16	2			0				14	13			55.2	0.0	43.7
Apr 17	1			0				15	8			48.5	0.0	44.1
Apr 18	1			0				21	15			58.6	0.0	44.1
Apr 19	1			0				26	17			74.4	0.0	45.0
Apr 20	2			0				17	13			83.2	0.0	45.1
Apr 21	2			0				21	15			93.7	0.0	45.3
Apr 22	11			0				19	16			87.0	0.0	45.7
Apr 23	15			0				28	19			95.7	0.0	45.7
Apr 24	18			0				18	10			76.4	0.0	45.7
Apr 25	28			0				13	13			86.1	0.0	45.7
Apr 26	2			0				10	10			111.2	0.0	46.0
Apr 27	113			0				12	10			92.7	0.0	46.4
Apr 28	97			0				6	4			95.1	0.0	46.2
Apr 29	135			0				6	4			97.7	0.0	46.2
Apr 30	173			1				5	5			75.9	0.0	45.9
TOTAL	601			2				285	209					
AVG.	35			0				17	12			69.8	0.0	43.9

TABLE 150

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS — MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
May 1	222			0				5	4	0		84.6	0.0	45.9
May 2	178			0				9	9	0		76.5	0.0	46.0
May 3	57			0				5	4	0		124.7	0.0	46.0
May 4	491			0				5	3	0		106.4	0.0	46.6
May 5	139			0				5	4	0		106.3	0.0	46.9
May 6	327			1				4	4	0		107.9	0.0	45.7
May 7	30			0				3	3	0		118.6	0.0	45.1
May 8	297			1				1	1	0		99.5	0.0	46.0
May 9	156			0				2	2	0		86.9	0.0	46.0
May 10	350			6				4	3	0		118.4	0.0	46.4
May 11	431			0				2		0		125.3	0.0	46.6
May 12	244			4				4	4	0		135.8	0.0	47.5
May 13	509			6				2	2	0		127.7	0.0	48.0
May 14	477			5				1	0	0		123.0	0.0	48.6
May 15	332			11				1	1	0		98.9	0.0	50.0
May 16	330			11				2	2	0		101.7	0.0	50.0
May 17	258			5				3	2	1		126.4	0.0	50.0
May 18	369			13				6	5	0		107.5	0.0	50.4
May 19	279			24				3	3	2		112.8	0.0	50.5
May 20	263			14				3	2	1		121.4	0.0	50.4
May 21	160			23				4	3	3		121.6	0.0	50.0
May 22	111			17				1	1	1		100.3	0.0	50.4
May 23	190			24				1	1	1		105.2	0.0	50.0
May 24	264			51				3	3	5		132.4	0.0	50.0
May 25	161			26				0	0	0		119.3	0.0	50.2
May 26	103			35				0	0	1		123.7	0.0	50.5
May 27	101			46				1	1	2		116.4	0.0	50.2
May 28	174			10				2	2	2		110.5	0.0	50.0
May 29	71			11				1	1	0		105.5	0.0	50.0
May 30	70			6				0	0	3		93.5	0.0	50.0
May 31	100			31				2	2	2		96.4	0.0	50.4
TOTAL	7,244			381				85	72	24				
AVG.	234			12				3	2	1		110.8	0.0	48.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	STEELHEAD	WILD STEELHEAD	BULL TROUT
SPRING	7,845	383	370	281	24

TABLE 151

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS — JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jun 1	132			18			0	2	1	2		127.8	0.0	51.6
Jun 2	40			6			0	0	0	4		126.4	0.0	52.3
Jun 3	40			23			0	2	2	3		107.2	0.0	52.2
Jun 4	23			9			0	0	0	1		100.5	0.0	52.2
Jun 5	36			9			0	1	1	6		73.7	0.0	52.3
Jun 6	31			2			0	0	0	4		97.1	0.0	52.5
Jun 7	45			14			0	4	4	2		114.5	0.0	52.9
Jun 8	55			5			3	1	0	3		153.4	1.4	53.4
Jun 9	62			7			1	0	0	2		180.8	46.6	53.4
Jun 10	26			10			3	0	0	4		185.4	56.9	53.4
Jun 11	43			3			5	0	0	0		199.2	55.1	54.0
Jun 12	12			4			8	0	0	4		163.2	22.9	54.0
Jun 13	24			0			6	0	0	1		162.2	30.6	54.5
Jun 14	43			4			28	0	0	2		173.9	49.0	55.0
Jun 15	41			10			17	0	0	1		195.4	54.8	55.2
Jun 16	31			9			24	0	0	2		201.7	61.5	54.9
Jun 17	31			1			33	0	0	3		203.4	56.7	53.6
Jun 18	44			3			58	0	0	1		206.2	58.2	53.4
Jun 19	56			3			59	0	0	1		192.5	58.6	54.3
Jun 20	73			1			91	0	0	2		176.9	41.2	54.3
Jun 21	72			5			99	1	0	3		201.5	57.9	55.0
Jun 22	59			1			128	2	2	2		230.4	76.1	55.6
Jun 23	94			1			162	4	3	1		222.2	62.6	55.0
Jun 24		66		1			241	2	1	1		220.8	81.9	55.0
Jun 25		195		8			423	1	0	3		212.9	73.5	56.7
Jun 26		264		2			965	5	4	1		204.4	55.7	55.8
Jun 27		301		9			1,160	5	4	1		205.5	52.3	57.0
Jun 28		229		2			1,460	4	1	1		209.3	54.4	56.8
Jun 29		306		12			2,046	9	5	0		205.4	46.8	57.4
Jun 30		513		6			2,945	6	5	0		201.5	28.1	57.4
TOTAL	1,113	1,874		188			9,965	49	33	61				
AVG.	48	268		6			332	2	1	2		175.2	39.4	54.4

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	8,958	531
SUMMER	1,874	40
TOTALS	10,832	571

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
9,965	419	314	85	0

TABLE 152

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS — JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jul 1		601		49			6,842	5	0	0	0	193.4	32.7	57.4
Jul 2		705		6			12,610	6	4	1	0	177.1	19.1	57.0
Jul 3		641		28			13,089	13	2	0	0	147.0	14.6	57.4
Jul 4		915		43			19,185	19	9	0	0	116.3	12.6	57.0
Jul 5		1,077		6			23,705	20	8	2	0	136.1	11.7	57.7
Jul 6		1,743		21			23,241	24	12	1	0	140.0	11.9	58.3
Jul 7		940		47			22,763	35	13	0	0	116.7	12.2	58.5
Jul 8		1,212		84			20,872	22	9	3	0	144.1	12.4	58.6
Jul 9		869		4			17,476	27	16	1	0	153.7	18.1	55.0
Jul 10		1,051		27			19,771	49	25	0	0	129.7	10.4	59.0
Jul 11		1,289		45			14,550	58	18	0	0	120.5	10.3	60.3
Jul 12		1,304		57			15,091	56	30	0	0	118.9	11.4	60.1
Jul 13		1,674		44			11,311	80	27	1	0	129.2	11.0	60.4
Jul 14		1,177		15			9,641	60	23	0	0	142.4	11.8	60.1
Jul 15		627		52			5,969	49	26	1	0	138.5	14.8	60.3
Jul 16		852		28			6,460	73	27	0	0	112.0	10.7	61.2
Jul 17		1,034		21			6,276	57	24	0	0	107.0	8.6	60.8
Jul 18		1,021		60			6,867	78	36	0	0	91.1	7.9	60.8
Jul 19		940		37			5,629	84	42	0	0	109.5	10.0	61.0
Jul 20		797		15			5,554	94	36	1	1	111.3	10.0	61.5
Jul 21		1,449		75			4,237	111	40	1	0	115.4	9.4	62.4
Jul 22		470		27			2,829	86	41	0	1	117.2	9.4	62.4
Jul 23		444		16			2,054	108	38	0	0	104.6	9.5	62.4
Jul 24		524		17			1,426	103	50	0	1	97.2	7.1	62.4
Jul 25		505		10			1,289	91	37	0	0	84.2	7.5	62.8
Jul 26		610		21			1,405	122	66	0	1	104.1	9.8	63.5
Jul 27		645		36			1,220	129	85	0	1	110.3	8.3	63.9
Jul 28		492		23			699	127	63	0	0	102.6	8.3	63.9
Jul 29		460		17			680	170	78	0	0	99.3	7.3	63.3
Jul 30		511		22			707	211	80	0	1	93.8	8.8	63.3
Jul 31		357		22			242	151	76	1	0	79.5	7.7	63.1
TOTALS		26,936		975			283,690	2,318	1,041	13	6			
AVG.		869		31			9,151	75	34	0	0	120.7	11.5	60.5

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	8,958	531
SUMMER	28,810	1,015
TOTAL	37,768	1,546

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
293,655	2,737	1,355	98	6

TABLE 153

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS — AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Aug 1		352		37			247	208	78	0	2	56.7	6.1	63.5
Aug 2		316		15			231	184	89	0	0	96.4	8.2	64.2
Aug 3		311		23			188	231	101	0	0	104.4	9.0	64.4
Aug 4		351		84			176	309	107	0	1	107.4	8.7	64.2
Aug 5		461		70			193	293	140	1	5	100.1	8.6	64.6
Aug 6		273		17			144	288	147	0	0	92.3	8.7	64.6
Aug 7		178		15			129	189	98	0	2	77.4	6.3	64.2
Aug 8		273		39			130	228	100	0	4	63.6	5.7	63.7
Aug 9		161		19			98	205	92	1	2	91.7	8.2	63.9
Aug 10		379		28			86	234	120	0	6	100.6	8.2	64.2
Aug 11		271		58			66	216	79	0	4	92.2	8.0	64.6
Aug 12		169		45			52	212	107	0	4	84.9	8.3	64.8
Aug 13		205		45			37	349	122	0	3	94.5	8.1	65.1
Aug 14		237		54			25	356	143	0	3	82.7	5.7	64.9
Aug 15		178		11			28	242	116	0	3	68.9	6.7	64.2
Aug 16		298		55			20	249	114	0	3	98.1	8.1	64.8
Aug 17		260		34			25	278	121	0	1	108.4	8.0	65.7
Aug 18		268		32			17	354	126	0	4	89.3	8.1	65.7
Aug 19		124		20			12	197	80	4	6	76.5	7.5	65.7
Aug 20		121		43			9	253	114	0	8	89.5	6.9	65.7
Aug 21		223		26			8	281	107	1	4	58.9	0.0	65.3
Aug 22		228		24			9	294	142	0	6	48.4	0.0	65.3
Aug 23		105		19			2	248	107	1	1	94.7	0.0	65.3
Aug 24		86		18			4	187	73	0	6	86.2	0.0	65.3
Aug 25		42		10			1	184	71	0	6	97.8	0.0	66.6
Aug 26		70		15			4	194	82	0	3	81.1	0.0	65.8
Aug 27		128		20			5	255	103	0	6	75.4	0.0	65.7
Aug 28		84		25			3	167	60	0	2	64.3	0.0	65.7
Aug 29		87		6			1	91	30	0	6	52.1	0.0	64.8
Aug 30		53		10			2	141	54	0	8	74.8	0.0	64.0
Aug 31		100		25			2	148	51	0	17	82.9	0.8	64.0
TOTAL		6,392		942			1,954	7,265	3,074	8	126			
AVG.		206		30			63	234	99	0	4	83.6	5.0	64.8

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	8,958	531
SUMMER	35,202	1,957
TOTALS	44,160	2,488

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
295,609	10,002	4,429	106	132

TABLE 154

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS — SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Sep 1		71		9	0	0	2	78	30	0	2	63.4	0.0	64.2
Sep 2			88	19	0	0	2	121	45	0	4	56.6	0.0	64.2
Sep 3			95	144	0	0	0	182	76	0	3	59.2	0.0	64.6
Sep 4			58	64	0	0	2	141	62	0	3	44.2	0.0	64.6
Sep 5			117	34	1	0	1	184	82	0	4	38.7	0.0	64.6
Sep 6			118	26	0	0	0	205	72	0	3	52.6	0.0	64.6
Sep 7			64	12	0	0	0	180	71	0	7	58.8	0.0	63.9
Sep 8			83	60	0	0	1	359	123	0	3	50.8	0.0	63.9
Sep 9			210	40	5	4	1	315	134	0	8	41.0	0.0	63.9
Sep 10			51	35	0	0	2	220	85	0	4	43.6	0.0	63.9
Sep 11			76	13	3	6	1	179	49	0	0	45.9	0.0	64.2
Sep 12			46	40	9	0	3	263	87	0	4	42.8	0.0	64.2
Sep 13			54	13	1	0	0	188	70	0	5	66.8	0.0	64.2
Sep 14			59	81	2	0	1	204	74	0	5	46.9	0.0	64.2
Sep 15			140	17	7	2	0	335	128	0	4	49.9	0.0	64.2
Sep 16			75	24	6	2	0	249	94	0	7	51.3	0.0	64.2
Sep 17			31	3	19	5	1	227	72	0	7	48.3	0.0	64.4
Sep 18			61	24	15	1	1	289	108	0	6	45.8	0.0	64.4
Sep 19			103	8	24	8	0	158	64	0	7	39.3	0.0	64.9
Sep 20			195	16	12	13	1	188	76	0	11	54.9	0.0	64.6
Sep 21			164	27	27	5	1	226	87	0	2	65.8	0.0	64.8
Sep 22			87	30	11	6	0	196	55	0	4	58.8	0.0	64.2
Sep 23			125	30	21	0	3	195	85	0	2	58.3	0.0	64.0
Sep 24			306	44	78	17	1	287	85	0	1	65.1	0.0	64.0
Sep 25			77	45	21	6	1	153	56	0	1	55.8	0.0	63.9
Sep 26			79	18	44	6	0	119	38	0	0	50.5	0.0	63.7
Sep 27			119	46	31	3	0	147	56	0	0	73.8	0.0	63.9
Sep 28			60	16	33	8	0	96	39	0	2	64.5	0.0	64.0
Sep 29			193	22	71	8	0	200	82	1	0	73.0	0.0	64.2
Sep 30			111	8	53	51	0	140	62	0	1	63.6	0.0	64.4
TOTAL		71	3,045	968	494	151	25	6,024	2,247	1	110			
AVG.			105	32	16	5	1	201	75	0	4	54.3	0.0	64.2

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	8,958	531
SUMMER	35,273	1,966
FALL	3,045	959
TOTALS	47,276	3,456

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
494	151	295,634	16,026	6,676	107	242

TABLE 155

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	* DEG F
Oct 1			195	24	77	5	0	168	89	0	8	73.9	0.0	64.8
Oct 2			175	20	56	34	0	119	51	0	3	70.0	0.0	64.8
Oct 3			182	25	59	10	0	99	39	0	2	51.2	0.0	64.8
Oct 4			216	10	47	12	0	104	54	0	1	70.6	0.0	64.8
Oct 5			20	11	19	5	0	34	11	0	1	77.4	0.0	64.8
Oct 6			33	13	27	36	0	67	33	0	3	80.5	0.0	64.6
Oct 7			166	26	61	3	0	82	32	0	1	75.9	0.0	64.6
Oct 8			86	16	38	41	1	47	23	0	3	86.6	0.0	64.0
Oct 9			58	9	36	9	1	42	21	0	3	74.9	0.0	63.9
Oct 10			172	44	29	3	0	72	27	0	0	56.8	0.0	63.7
Oct 11			56	9	29	9	0	23	10	0	1	87.5	0.0	63.3
Oct 12			283	7	119	14	0	155	72	0	0	88.3	0.0	63.0
Oct 13			93	19	49	7	0	61	40	0	0	82.2	0.0	62.6
Oct 14			53	9	52	31	0	67	29	0	0	67.7	0.0	62.4
Oct 15			57	8	39	11	0	38	14	0	0	73.9	0.0	62.1
Oct 16			48	8	20	26	0	19	6	0	0	67.6	0.0	63.0
Oct 17			70	9	12	3	1	21	9	1	0	66.4	0.0	61.9
Oct 18			72	9	20	8	0	18	12	0	0	74.7	0.0	61.3
Oct 19			27	4	31	0	0	14	9	0	0	70.9	0.0	61.2
Oct 20			50	9	24	7	0	27	12	0	0	52.1	0.0	60.8
Oct 21			50	6	40	12	1	28	10	1	0	59.1	0.0	60.6
Oct 22			104	4	61	3	0	38	15	0	0	62.5	0.0	60.4
Oct 23			52	4	79	11	0	14	5	0	0	59.0	0.0	60.3
Oct 24			127	5	93	2	0	33	14	0	0	52.5	0.0	60.1
Oct 25			67	5	76	5	0	10	7	0	0	62.5	0.0	59.7
Oct 26			119	3	93	3	0	29	12	1	0	74.7	0.0	59.2
Oct 27			104	1	55	2	0	21	9	1	0	72.7	0.0	58.6
Oct 28			99	6	34	1	0	12	7	1	0	66.4	0.0	58.3
Oct 29			139	7	36	5	0	23	12	0	0	70.1	0.0	58.1
Oct 30			158	9	43	3	0	14	8	0	0	51.9	0.0	57.9
Oct 31			149	5	24	3	0	12	9	0	0	48.0	0.0	57.7
TOTAL			3,280	344	1,478	324	4	1,511	701	5	26			
AVG.			106	11	48	10	0	49	23	0	1	68.7	0.0	61.8

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	8,958	531
SUMMER	35,273	1,966
FALL	6,325	1,303
TOTALS	50,556	3,800

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
1,972	475	295,638	17,537	7,377	112	268

TABLE 156

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROCKY REACH PROJECT- FISH COUNTS — NOVEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Nov 1			55	0	10	0		6	5	0		72.4	0.0	57.6
Nov 2			98	0	35	0		23	8	0		87.1	0.1	57.7
Nov 3			208	12	35	1		68	30	1		91.5	0.0	57.6
Nov 4			129	4	22	12		65	40	0		86.8	0.0	57.4
Nov 5			124	9	31	10		40	29	0		91.4	0.0	57.0
Nov 6			142	10	29	4		23	15	1		81.8	0.0	57.0
Nov 7			178	7	14	7		24	17	0		52.5	0.0	57.0
Nov 8			122	8	3	0		21	9	1		72.0	0.0	57.0
Nov 9			126	6	9	0		19	9	0		92.0	0.0	57.0
Nov 10			64	0	6	1		19	13	0		83.8	0.0	56.3
Nov 11			67	2	6	0		9	1	2		82.8	0.0	56.3
Nov 12			56	1	5	0		7	2	1		67.2	0.0	55.9
Nov 13			37	0	3	0		5	3	1		59.5	0.0	55.8
Nov 14			34	1	0	0		3	1	5		47.4	0.0	55.6
Nov 15			27	0	1	0		2	1	0		82.0	0.0	55.4
Nov 16												97.2	0.0	*
Nov 17												97.0	0.0	*
Nov 18												97.7	0.0	*
Nov 19												93.0	0.0	*
Nov 20												77.4	0.0	*
Nov 21												91.5	0.0	*
Nov 22												96.0	0.0	*
Nov 23												107.4	0.0	*
Nov 24												97.3	0.0	*
Nov 25												*	*	
Nov 26												*	*	
Nov 27												89.3	0.0	*
Nov 28												86.6	0.0	*
Nov 29												109.4	0.0	*
Nov 30														
TOTAL			1,467	60	209	35		334	183	12				
AVG.			98	4	14	2		22	12	1		84.8	0.0	56.7

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	8,958	531
SUMMER	35,273	1,966
FALL	7,792	1,363
TOTALS	52,023	3,860

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
2,181	510	295,638	17,871	7,560	124	268

TABLE 157

MONTHLY COUNT OF STEELHEAD

ROCKY REACH DAM: 1981 - 2010

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
2009				302	134	49	967	7,355	17,011	3,509	220		29,547
2010				285	85	49	2,318	7,265	6,024	1,511	334		17,871
Total				2,805	2,176	2,464	26,287	86,496	140,967	47,208	5,858		314,261
10-Year Average				184	83	94	1,314	4,347	6,953	1,932	233		15,140

WELLS DAM

FISH COUNTING SCHEDULE

The adult counting schedule at Wells Dam is from May 1 through November 15, though passage data is recorded each day of the year, and that data is available from Douglas PUD upon request. Fish are counted by reviewing digital video files from previous days. From 1967 through 1997, counts were reported for a 16-hour period (0500-2100 PST). Since 1998, 24-hour counts (0000-2400) have been reported. Chinook are arbitrarily separated into three populations based upon date of passage through the ladders: Spring Chinook – May 1 through June 28, summer Chinook – June 29 through August 28, and fall Chinook – August 29 through November 15.

FISH LADDER OPERATING SCHEDULE

East Ladder

22 December 2009 – 5 January	Outage for inspection and annual maintenance
21 July, 08:00-13:40	Outage to install DIDSON equipment

West Ladder

14 January – 3 February	Outage for inspection and bi-annual maintenance
21 July 2010, 13:50-16:00,	Outage to install DIDSON equipment
16 December – 29 December	Outage for inspection and annual maintenance

JUVENILE PASSAGE FACILITES

The juvenile bypass at Wells Dam capitalizes on the hydrocombine design of the dam to use flow to the turbines to attract fish to the spillways located between the turbines and above the turbine intakes. Baffles and barriers partially constrict the five even-numbered spill bays and close the remaining six bays to improve the attraction flow from the forebay into the even-numbered, baffled spill bays. With this configuration up to 11,000 cfs of water is available as bypass flow during the juvenile migration.

Spring bypass operations began on April 12th at 0000 hours, and continued through June 13th at 2400 hours for a total of 63 days, utilizing a total volume of 943 thousand acre-feet (KAF), or 7.0 percent of total project discharge volume. Summer bypass operations began on June 14th at 0000 hours and continued through August 26th at 2400 hours, for a total of 74 days, utilizing 1,156.5 KAF, or 6.2 percent of the total discharge volume.

TABLE 158

MONTHLY TOTALS OF SALMONIDS AND LAMPREY COUNTED OVER WELLS DAM
2010

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
CHINOOK*					6,887	1,688	22,200	6,831	2,647	1,063	147		41,463
STEELHEAD					95	34	1,085	4,524	5,235	1,581	375		12,929
SOCKEYE						3,565	285,390	2,766	34	11			291,766
COHO									109	876	249		1,234
TOTAL					6,982	5,287	308,675	14,121	8,025	3,531	771		347,392
LAMPREY							1	0	1	0			2
BULL TROUT					15	21	6	0	0	2			44

*Jacks included

TABLE 159

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT- FISH COUNTS

MAY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
May 1	200			9				0	0	0		84.8	6.3	45.7
May 2	47			1				7	7	0		83.2	6.0	46.4
May 3	34			0				2	2	0		119.4	8.3	46.4
May 4	7			0				8	5	0		113.2	8.0	45.3
May 5	20			0				4	4	0		107.5	8.6	45.0
May 6	399			15				1	0	0		113.3	8.1	45.3
May 7	288			5				5	3	0		117.0	8.0	45.7
May 8	147			12				0	0	0		102.1	7.6	45.5
May 9	210			24				6	6	0		89.4	6.6	46.2
May 10	138			0				1	1	0		123.3	8.1	47.1
May 11	94			2				3	3	0		127.5	8.5	47.5
May 12	231			1				1	0	0		138.6	8.8	48.0
May 13	545			27				11	9	0		131.7	8.7	48.6
May 14	190			10				3	3	2		122.5	8.6	49.3
May 15	212			5				4	4	0		98.0	7.2	49.6
May 16	564			12				3	2	0		107.4	8.2	50.2
May 17	432			8				2	2	0		123.9	8.7	50.4
May 18	438			29				0	0	1		110.2	7.5	50.2
May 19	159			6				3	1	1		115.8	8.0	50.4
May 20	301			7				2	1	1		118.4	8.4	50.0
May 21	432			35				3	0	1		123.1	8.8	49.8
May 22	154			6				6	6	0		102.1	7.6	49.8
May 23	145			18				6	5	0		105.3	7.8	50.2
May 24	63			10				2	2	0		130.8	8.9	50.4
May 25	112			22				1	1	1		125.4	8.7	50.2
May 26	173			32				5	5	0		124.7	8.5	50.2
May 27	186			35				0	0	1		116.2	8.5	50.2
May 28	136			41				1	1	2		113.2	8.3	50.5
May 29	39			20				1	1	1		103.9	8.1	50.9
May 30	231			36				2	2	2		92.5	7.1	51.6
May 31	101			31				2	1	2		95.2	7.5	52.2
TOTAL	6,428			459				95	77	15				
AVG.	207			15				3	2	0		112.2	8.0	48.7

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK	STEELHEAD	WILD STEELHEAD	BULL TROUT
SPRING	6,428	459	95	77	15

TABLE 160

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT- FISH COUNTS — JUNE 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jun 1	27			14			0	3	2	2		128.7	8.5	52.2
Jun 2	52			24			0	0	0	2		123.5	8.8	52.2
Jun 3	27			12			0	0	0	2		104.6	7.9	52.2
Jun 4	140			21			0	1	0	0		98.2	7.0	52.5
Jun 5	17			9			0	-2	0	0		70.2	6.1	53.1
Jun 6	31			5			0	2	2	1		96.5	7.4	53.4
Jun 7	7			8			0	2	2	0		116.2	7.5	53.4
Jun 8	19			7			0	1	1	2		155.2	9.6	53.4
Jun 9	49			7			0	1	1	1		175.4	15.1	53.1
Jun 10	38			7			0	0	0	2		185.5	18.1	53.6
Jun 11	28			6			0	1	1	1		192.3	21.1	54.0
Jun 12	8			7			2	0	0	0		162.4	10.0	54.3
Jun 13	34			8			5	0	0	0		158.7	10.0	55.2
Jun 14	17			4			4	0	0	0		169.7	10.0	55.2
Jun 15	43			5			4	0	0	0		194.9	24.9	54.9
Jun 16	13			6			5	0	0	0		198.7	32.2	54.0
Jun 17	15			4			8	1	1	0		204.9	33.2	53.6
Jun 18	22			3			17	2	2	1		202.5	21.0	54.0
Jun 19	40			5			20	0	0	1		185.7	21.3	54.5
Jun 20	12			4			18	1	0	0		167.1	10.0	55.4
Jun 21	27			1			37	1	1	0		207.8	40.6	55.6
Jun 22	40			8			52	0	0	0		225.4	54.6	55.2
Jun 23	37			6			57	2	2	0		218.9	48.1	55.8
Jun 24	56			6			136	2	1	0		218.0	47.7	56.5
Jun 25	59			1			100	1	1	1		210.2	43.7	56.7
Jun 26	52			3			186	1	1	0		202.2	47.7	56.8
Jun 27	116			1			343	0	0	2		195.2	38.1	56.7
Jun 28	142			10			585	7	2	3		210.8	32.8	57.0
Jun 29		101		9			757	3	3	0		208.2	47.9	57.4
Jun 30		205		3			1,229	4	2	0		204.0	29.7	57.4
TOTAL	1,168	306		214			3,565	34	25	21				
AVG.	42	153		7			119	1	1	1		173.0	24.0	54.6

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	7,596	661
SUMMER	306	12
TOTAL	7,902	673

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT
3,565	129	102	36

TABLE 161

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT- FISH COUNTS

JULY 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Jul 1		212		10			1,532	4	3	0	0	190.3	38.7	57.4
Jul 2		185		9			2,532	4	3	0	0	176.7	16.8	57.2
Jul 3		791		22			6,366	4	4	0	0	144.5	10.0	57.4
Jul 4		548		19			13,341	14	6	0	0	116.6	8.2	58.1
Jul 5		598		10			14,945	10	3	0	0	136.9	8.5	58.1
Jul 6		601		8			18,276	3	3	0	0	136.4	8.0	58.1
Jul 7		1,192		4			22,577	12	2	0	0	119.5	6.8	58.5
Jul 8		1,149		28			22,989	22	12	1	0	142.2	7.0	58.8
Jul 9		1,075		33			19,902	16	10	0	0	149.2	13.9	58.6
Jul 10		953		72			19,416	22	11	2	0	123.2	7.1	59.5
Jul 11		1,115		22			20,463	25	13	0	0	121.0	7.4	60.4
Jul 12		921		11			20,331	18	10	1	0	117.2	8.4	60.8
Jul 13		865		36			15,247	26	8	0	0	131.0	7.8	60.4
Jul 14		1,112		19			11,345	42	24	1	0	147.8	22.8	60.3
Jul 15		641		18			9,980	22	10	0	0	135.0	10.3	60.4
Jul 16		497		24			8,298	32	13	1	0	112.3	8.6	60.1
Jul 17		1,208		69			8,654	48	20	0	0	106.1	8.6	60.6
Jul 18		777		13			6,840	18	8	0	0	81.6	7.3	61.3
Jul 19		443		26			7,718	47	22	0	0	113.5	8.6	62.1
Jul 20		935		79			3,018	46	19	0	0	112.8	8.2	62.1
Jul 21		1,044		31			9,915	66	20	0	0	117.1	8.3	61.9
Jul 22		701		36			4,844	32	17	0	0	112.4	7.2	61.9
Jul 23		1,221		34			3,687	35	3	0	0	105.0	7.8	62.6
Jul 24		468		2			3,436	61	28	0	0	95.1	7.2	63.5
Jul 25		372		13			2,271	58	31	0	0	87.0	6.4	63.5
Jul 26		222		7			1,861	45	20	0	1	106.7	7.8	63.9
Jul 27		454		21			1,413	76	29	0	0	114.9	8.4	63.1
Jul 28		153		28			908	35	12	0	0	98.1	5.9	62.6
Jul 29		247		24			1,310	69	25	0	0	97.6	8.1	63.0
Jul 30		538		45			1,069	95	40	0	0	95.2	7.6	63.9
Jul 31		165		24			906	78	44	0	0	75.1	6.1	64.0
TOTAL		21,403		797			285,390	1,085	473	6	1			
AVG.		690		26			9206	35	15	0	0	119.9	9.8	60.8

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	7,596	661
SUMMER	21,709	809
TOTAL	29,305	1,470

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
288,955	1,214	575	42	1

TABLE 162

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT- FISH COUNTS — AUGUST 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Aug 1		277		72			611	112	36		0	57.7	5.6	64.2
Aug 2		304		64			489	135	49		0	93.7	7.3	64.2
Aug 3		114		41			304	72	36		0	105.3	8.1	64.2
Aug 4		111		11			192	97	52		0	103.8	7.6	64.0
Aug 5		498		64			206	163	77		0	100.6	7.1	63.5
Aug 6		249		35			184	186	88		0	91.0	7.1	63.3
Aug 7		133		46			130	65	13		0	74.1	5.6	63.9
Aug 8		358		30			156	178	64		0	66.9	5.0	64.4
Aug 9		242		42			86	151	80		0	90.8	6.5	64.6
Aug 10		189		31			53	184	85		0	103.0	6.5	64.8
Aug 11		248		27			72	163	73		0	93.1	7.6	64.8
Aug 12		271		25			20	127	52		0	87.5	6.7	64.2
Aug 13		171		32			36	146	70		0	94.5	7.3	64.2
Aug 14		96		23			29	110	58		0	84.9	6.4	65.1
Aug 15		186		43			17	117	50		0	66.2	5.1	65.7
Aug 16		272		64			32	279	129		0	102.1	7.3	65.7
Aug 17		244		48			17	235	93		0	107.6	8.3	65.5
Aug 18		287		53			35	271	129		0	88.6	7.7	65.5
Aug 19		96		20			15	157	65		0	78.3	5.9	65.7
Aug 20		106		12			17	140	68		0	90.0	6.0	65.7
Aug 21		66		34			6	94	39		0	56.5	4.5	65.8
Aug 22		113		37			11	104	42		0	51.0	4.3	66.2
Aug 23		47		29			4	107	54		0	95.1	6.4	66.0
Aug 24		70		18			10	157	80		0	88.6	6.0	65.7
Aug 25		188		31			4	235	96		0	97.6	7.2	65.7
Aug 26		125		28			8	220	91		0	78.6	6.7	65.3
Aug 27		40		66			4	69	31		0	70.3	0.0	64.4
Aug 28		242		63			6	138	64		0	62.0	0.0	64.8
Aug 29			88	38			2	131	55		0	50.1	0.0	65.1
Aug 30			39	94			6	74	31		0	76.7	0.0	65.3
Aug 31			33	107			4	107	35		0	85.2	0.4	65.3
TOTAL		5,343	160	1,328			2,766	4,524	1,985		0			
AVG.		191	53	43			89	146	64		0	83.6	5.5	64.9

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	7,596	661
SUMMER	27,052	1,898
FALL	160	239
TOTAL	34,808	2,798

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
291,721	5,738	2,560	42	1

TABLE 163

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT- FISH COUNTS — SEPTEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Sep 1			64	66	0		5	167	49		0	60.6	0.0	64.8
Sep 2			71	38	0		1	134	53		0	59.8	0.0	64.8
Sep 3			89	20	0		4	214	92		0	57.8	0.0	64.9
Sep 4			188	30	0		4	145	66		0	41.5	0.0	64.9
Sep 5			186	29	2		1	111	39		0	39.6	0.0	64.9
Sep 6			122	21	0		1	171	70		0	57.7	0.0	65.1
Sep 7			87	9	0		1	165	64		0	56.2	0.0	64.9
Sep 8			104	15	0		2	175	69		0	48.6	0.0	64.9
Sep 9			97	24	0		2	168	58		0	41.2	0.0	64.8
Sep 10			44	19	0		2	184	59		0	42.2	0.0	64.8
Sep 11			70	23	0		1	155	53		0	46.2	0.0	64.8
Sep 12			60	11	0		1	163	58		0	47.3	0.0	64.8
Sep 13			40	18	0		1	195	69		0	64.1	0.0	64.6
Sep 14			25	8	0		0	92	40		0	47.3	0.0	64.9
Sep 15			51	21	0		1	205	78		0	48.5	0.0	65.1
Sep 16			52	15	1		1	191	68		0	50.1	0.0	65.3
Sep 17			80	19	0		1	285	110		0	48.0	0.0	65.5
Sep 18			71	21	1		0	275	133		0	47.2	0.0	65.3
Sep 19			67	15	0		0	228	94		0	41.7	0.0	65.3
Sep 20			46	9	2		1	164	61		0	54.2	0.0	65.3
Sep 21			19	18	5		0	125	53		0	62.9	0.0	65.3
Sep 22			45	8	13		1	282	133		0	57.6	0.0	64.9
Sep 23			74	21	4		1	226	101		0	58.3	0.0	64.8
Sep 24			59	32	3		0	213	90		0	62.6	0.0	64.6
Sep 25			23	30	7		2	166	89			54.6	0.0	*
Sep 26			92	30	15		0	181	76		0	51.0	0.0	64.6
Sep 27			31	13	10		0	86	25		0	72.0	0.0	64.9
Sep 28			11	11	3		0	83	24		1	63.3	0.0	65.5
Sep 29			38	8	19		0	109	40		0	69.2	0.0	65.5
Sep 30			26	13	24		0	177	69		0	63.6	0.0	64.2
TOTAL			2,032	615	109		34	5,235	2,083		1			
AVG.			68	21	4		1	175	69		0	53.8	0.0	65.0

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	7,596	661
SUMMER	27,052	1,898
FALL	2,192	854
TOTAL	36,840	3,413

COHO ADULT
109

SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
291,755	10,973	4,643	42	2

TABLE 164

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT- FISH COUNTS — OCTOBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	DEG F
Oct 1			25	11	12	0	1	111	50	0		75.9	0.0	63.5
Oct 2			39	9	40	0	1	126	48	0		66.3	0.0	*
Oct 3			66	4	27	0	0	96	35	0		54.0	0.0	*
Oct 4			16	24	17	0	0	69	25	0		67.8	0.0	*
Oct 5			32	15	14	0	0	81	25	0		75.7	0.0	*
Oct 6			33	3	24	4	0	74	35	0		80.8	0.0	*
Oct 7			33	16	16	0	0	73	27	0		75.5	0.0	*
Oct 8			17	11	16	0	0	94	45	0		87.6	0.0	*
Oct 9			24	10	12	0	0	65	36	0		72.9	0.0	*
Oct 10			36	15	21	0	0	101	41	0		58.1	0.0	*
Oct 11			8	3	5	5	0	29	9	0		87.7	0.0	*
Oct 12			16	2	12	0	0	42	15	0		85.4	0.0	*
Oct 13			23	10	30	0	1	60	18	0		78.1	0.0	*
Oct 14			22	13	40	0	1	76	37	0		67.5	0.0	*
Oct 15			54	12	39	0	2	84	47	1		76.6	0.0	*
Oct 16			30	4	44	1	0	48	19	0		65.7	0.0	*
Oct 17			35	14	40	0	1	52	28	0		65.0	0.0	*
Oct 18			26	9	17	0	0	15	9	0		72.1	0.0	*
Oct 19			17	6	10	0	1	13	5	0		70.0	0.0	*
Oct 20			10	10	20	0	0	12	8	0		51.7	0.0	*
Oct 21			63	7	34	0	0	44	12	0		55.5	0.0	*
Oct 22			38	4	25	0	0	15	4	0		64.1	0.0	*
Oct 23			30	4	19	0	0	20	7	0		57.5	0.0	*
Oct 24			45	11	43	0	1	32	12	0		50.2	0.0	*
Oct 25			19	3	27	0	1	13	6	0		62.6	0.0	*
Oct 26			19	2	37	0	1	30	13	0		75.5	0.0	*
Oct 27			15	3	43	0	0	34	15	0		70.9	0.0	*
Oct 28			5	8	39	0	0	16	6	0		64.4	0.0	*
Oct 29			17	1	50	0	0	21	13	1		70.6	0.0	*
Oct 30			3	0	41	0	0	17	9	0		47.4	0.0	*
Oct 31			3	0	52	0	0	18	6	0		44.6	0.0	*
TOTAL			819	244	866	10	11	1,581	665	2				
AVG.			26	8	28	0	0	51	21	0		67.7	0.0	63.5

*Data unavailable

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	7,596	661
SUMMER	27,052	1,898
FALL	3,011	1,098
TOTAL	37,659	3,657

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
975	10	291,766	12,554	5,308	44	2

TABLE 165

MONTHLY FISH PASSAGE SUMMARY REPORT

U.S. ARMY ENGINEER DISTRICT, PORTLAND

WELLS PROJECT- FISH COUNTS — NOVEMBER 2010

DATE	CHINOOK ADULT SPRING	CHINOOK ADULT SUMMER	CHINOOK ADULT FALL	CHINOOK JACK	COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY	DISCH KCFS	SPILL KCFS	* DEG F
Nov 1			29	4	40			20	10			73.7	0.0	
Nov 2			10	0	37			23	12			88.4	0.1	
Nov 3			22	0	26			40	23			85.9	0.1	
Nov 4			6	1	27			37	21			87.3	0.0	
Nov 5			16	4	22			35	22			90.7	0.0	
Nov 6			16	1	9			24	14			79.8	0.0	
Nov 7			7	0	12			23	11			50.9	0.0	
Nov 8			8	2	13			17	12			71.9	0.0	
Nov 9			4	0	17			18	9			94.3	0.0	
Nov 10			2	0	13			38	21			80.7	0.0	
Nov 11			2	0	10			31	15			80.9	0.0	
Nov 12			3	0	7			33	10			66.0	0.0	
Nov 13			6	0	6			15	8			56.9	0.0	
Nov 14			2	0	5			13	3			45.5	0.0	
Nov 15			2	0	5			8	5			83.1	0.0	
Nov 16												94.4	0.0	
Nov 17												91.4	0.0	
Nov 18												94.9	0.0	
Nov 19												93.7	0.0	
Nov 20												76.9	0.0	
Nov 21												89.8	0.0	
Nov 22												93.8	0.0	
Nov 23												110.1	0.0	
Nov 24												86.3	0.0	
Nov 25												*	*	
Nov 26												*	*	
Nov 27												88.6	0.0	
Nov 28												87.0	0.0	
Nov 29												110.3	0.0	
Nov 30														
TOTALS			135	12	249			375	196					
AVG.			9	1	17			25	13			83.4	0.0	

*Data unavailable.

RUN YEAR TOTALS TO DATE	CHINOOK ADULT	CHINOOK JACK
SPRING	7,596	661
SUMMER	27,052	1,898
FALL	3,146	1,110
TOTAL	37,794	3,669

COHO ADULT	COHO JACK	SOCKEYE	STEELHEAD	WILD STEELHEAD	BULL TROUT	LAMPREY
1,224	10	291,766	12,929	5,504	44	2

TABLE 166

MONTHLY COUNT OF STEELHEAD
WELLS DAM: 1976 - 2010

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
2009					70	37	502	4,777	15,992	3,813	252		25,443
2010					95	34	1,085	4,524	5,235	1,581	375		12,929
TOTAL					2,332	1,517	15,847	63,655	123,110	59,453	10,072		275,986
10-Year Average					64	42	648	2,930	5,697	2,030	269		11,680

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