



FISH PASSAGE CENTER

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September 25, 2008

Mr. Glen Pearson
 Priest Rapids Hatchery
 P.O. Box 937
 Mattawa, WA 99349

Dear Glen-

The Fish Passage Center has been marking fish from the Priest Rapids Hatchery facility over the last several years as part of the Smolt Monitoring Program (SMP). For purposes of this program, data are collected on both the juvenile and adult life stages. The SMP provides information for in-season management of the hydrosystem and post-season analyses to the federal, state, and tribal fishery agencies. We would like to share with you some of the information we developed under the SMP program for the fish used from the Priest Rapids Hatchery facility.

Under the Smolt Monitoring Program, information is collected on the timing, migration speed, and survival from the hatchery to McNary Dam. Priest Rapids Hatchery divides the release of PIT-tags over three release dates. Table 1 below provides estimates of minimum, median, and maximum travel times to McNary Dam from each of the year's releases. Also provided are estimates of the 95% confidence limits around the estimated median travel time.

Table 1. Priest Rapids Hatchery Fall Chinook Travel Times to McNary Dam

Release Date	Migration Year	Travel Time (Days)			Confidence Limits 95%		Priest Rapids	
		Min	Med	Max	Lower	Upper	Flow (kcfs)	Temp (F)
16-Jun	1997	4.3	21.2	65.4	18.5	21.9	182.2	56.5
20-Jun	1997	1.3	11.9	54.4	11.4	12.6	153.7	57
24-Jun	1997	4.3	10.6	38.9	9.7	11.1	110.4	57.5
13-Jun	1998	2.6	7.4	39.1	7.03	8.01		
25-Jun	1998	2.5	9.6	27.4	9.2	9.9		
14-Jun	1999	3.8	13	39.6	12	13.6	184.7	57.6
18-Jun	1999	3.2	10.5	34.3	9.7	11.2	185.6	57.8
23-Jun	1999	2.2	11.7	57.2	11	12.2	196.3	57.8
15-Jun	2000	5.1	12.1	49.9	11.5	13.1	136.5	
19-Jun	2000	4.4	13.4	37.4	12.3	14.2	138.1	
27-Jun	2000	4.3	11.5	43	11.2	13.1	137.6	
11-Jun	2001	4.9	14	46.8	13.6	14.6	93.6	57.3
15-Jun	2001	7.2	13.2	60	12.8	14	94.2	58.2
19-Jun	2001	6.8	13.9	57.8	13.7	14.1	95.1	59.3
11-Jun	2002	5.2	14.1	41.8	13.7	14.9	222.3	13.6
15-Jun	2002	5.9	11.4	39.9	11.1	13.2	223.6	14.2
19-Jun	2002	3.9	11.3	38.9	10.2	13.1	234.2	14.6

Release Date	Migration Year	Travel Time (Days)			Confidence Limits 95%		Priest Rapids	
		Min	Med	Max	Lower	Upper	Flow (kcfs)	Temp (F)
12-Jun	2003	3.9	11.1	41.7	10.6	11.4	148.0	
16-Jun	2003	4.2	9.3	34	8.9	9.8	143.3	
20-Jun	2003	4.5	11.1	35.8	10.9	11.4	138.1	
14-Jun	2004	3.9	6.2	19.6	6.1	6.6	150.3	
18-Jun	2004	3.2	6.8	21.6	6.5	7.0	139.1	
22-Jun	2004	2.7	5.9	27.2	5.6	6.0	129.8	
9-Jun	2005	3.4	7.8	28.2	7.2	8.4		
13-Jun	2005	3.2	5.5	22.9	5.4	6.1		
17-Jun	2005	0.2	7.0	19.4	6.7	7.3		
12-Jun	2006	3	10.8	27.5	8.3	12.3		
16-Jun	2006	3.4	12.1	25	11.1	12.4		
20-Jun	2006	3.2	9.9	22.3	9.3	10.5		
13-June	2007	5.3	15.6	35.8	13.8	17.6	157.9	
17-June	2007	3.9	11.8	31.4	11.0	12.8	151.7	
21-June	2007	4.8	10.0	23.5	9.0	11.1	148.0	
12-June	2008	3.8	17.0	39.3	15.4	19.4	211.4	
16-June	2008	4.4	17.2	33.8	16.0	19.5	207.4	
20-June	2008	4.2	16.7	31.3	15.9	17.6	200.4	

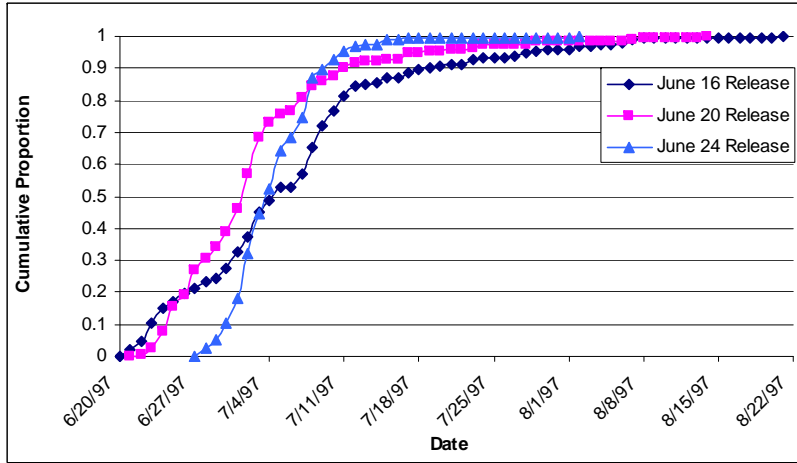
Table 2 below provides estimates of survival from release at the hatchery to McNary Dam, along with the upper and lower confidence limits on these estimates. These yearly survival estimates are for all releases of subyearling fall Chinook within a given migration year.

Table 2. Priest Rapids Hatchery Fall Chinook survivals (Release to McNary Dam)

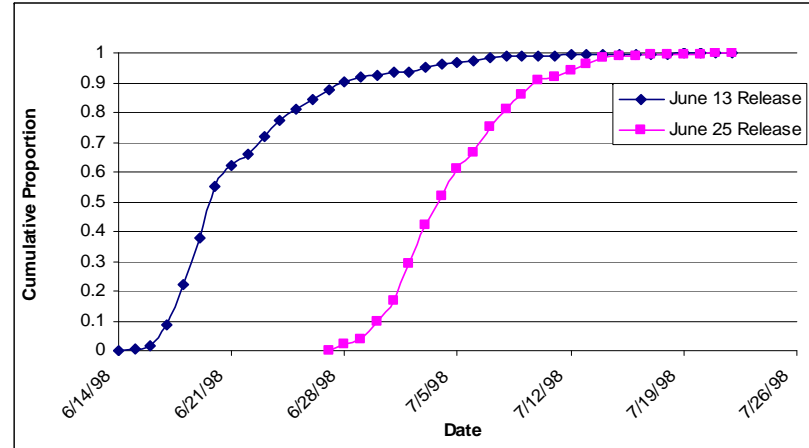
Release Dates	Migration Year	Survival	Confidence Limits (95%)	
			Lower	Upper
June 16-24	1997	0.568	0.458	0.679
June 13-25	1998	0.840	0.639	0.940
June 14-23	1999	0.757	0.679	0.836
June 15-27	2000	0.666	0.577	0.755
June 11-19	2001	0.746	0.670	0.794
June 11-19	2002	0.697	0.627	0.767
June 12-20	2003	0.633	0.590	0.677
June 14-22	2004	0.775	0.689	0.861
June 09-17	2005	0.655	0.573	0.729
June 12-20	2006	0.671	0.577	0.766
June 13-21	2007	0.698	0.556	0.809
June 12-20	2008	0.707	0.526	0.840

Finally, we are providing figures to illustrate passage timing of Priest Rapids Hatchery fall Chinook to McNary Dam over the past several years. Since each migration year has consisted of three separate release dates (except 1998 with only two release dates), each migration year is presented on a separate graph. Please note the different scales on the x-axis among the graphs.

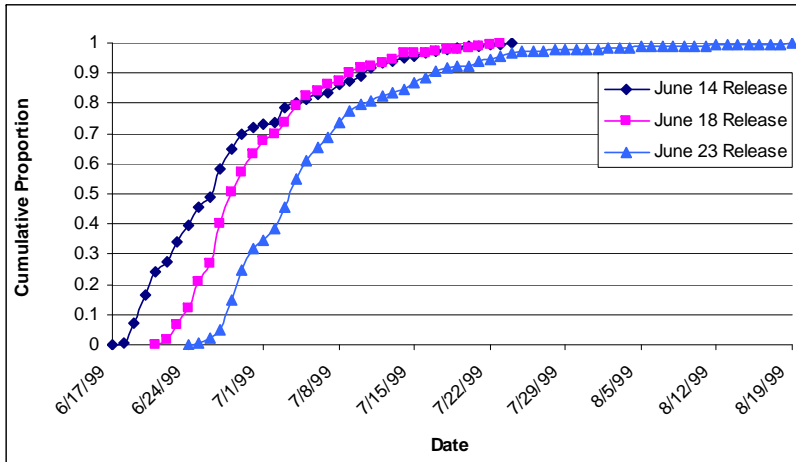
**Priest Rapids Hatchery – Fall Chinook (1997)
Passage Timing to McNary Dam**



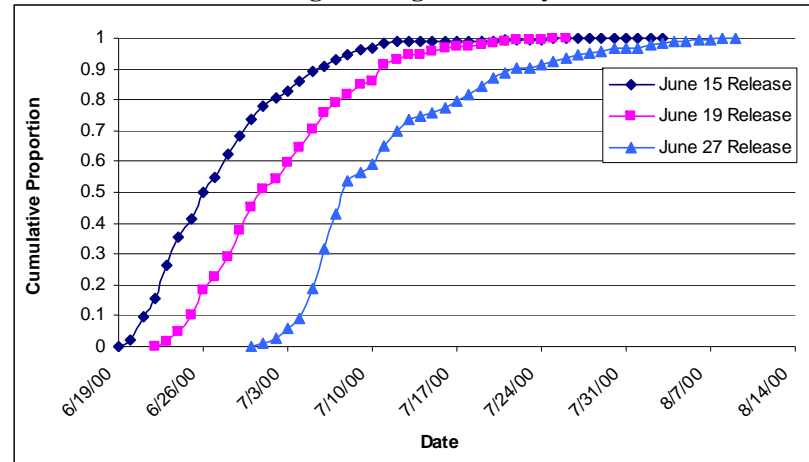
**Priest Rapids Hatchery – Fall Chinook (1998)
Passage Timing to McNary Dam**



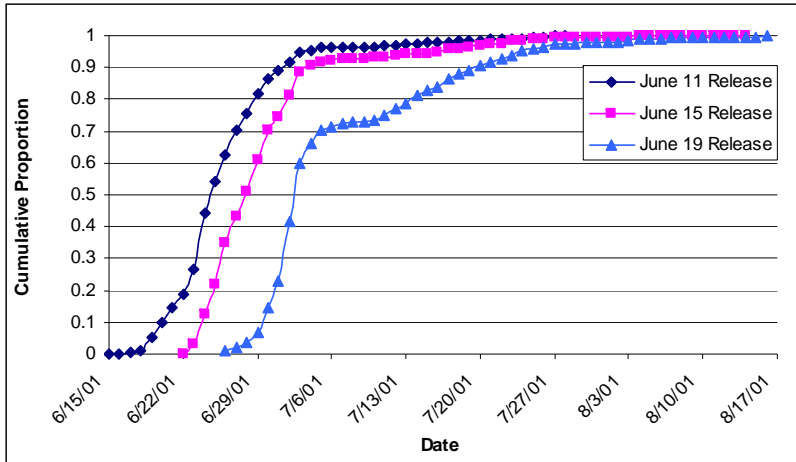
**Priest Rapids Hatchery – Fall Chinook (1999)
Passage Timing to McNary Dam**



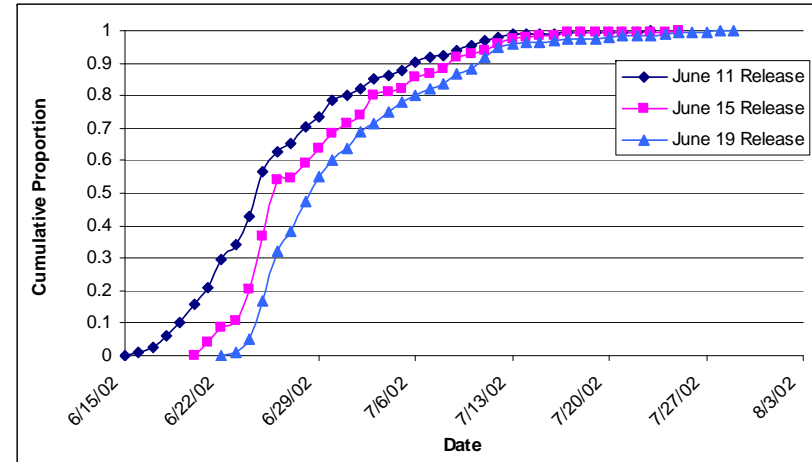
**Priest Rapids Hatchery – Fall Chinook (2000)
Passage Timing to McNary Dam**



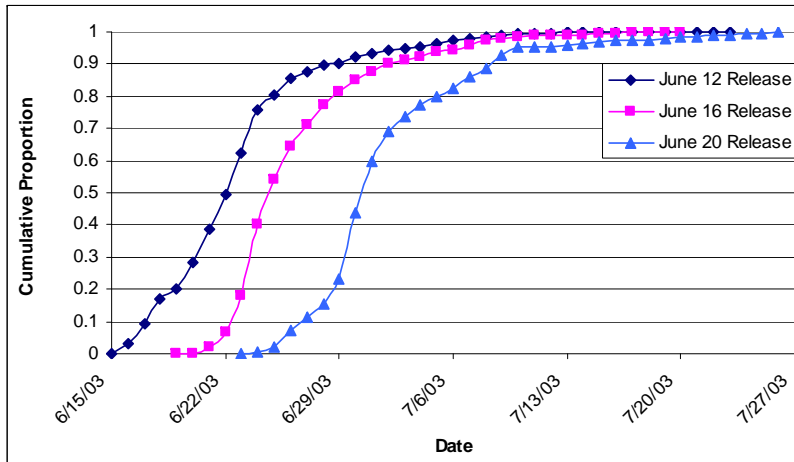
Priest Rapids Hatchery – Fall Chinook (2001)
Passage Timing to McNary Dam



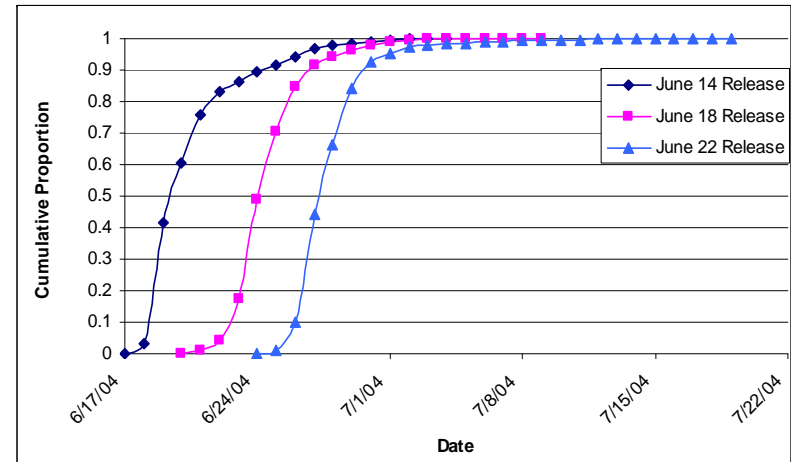
Priest Rapids Hatchery – Fall Chinook (2002)
Passage Timing to McNary Dam



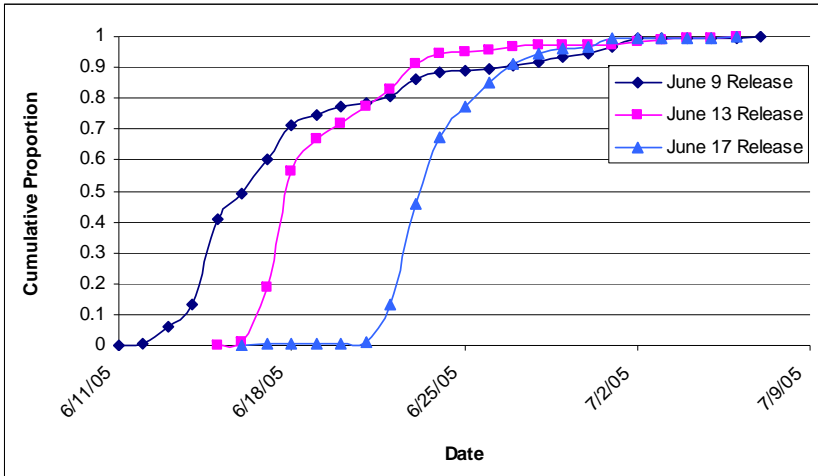
Priest Rapids Hatchery – Fall Chinook (2003)
Passage Timing to McNary Dam



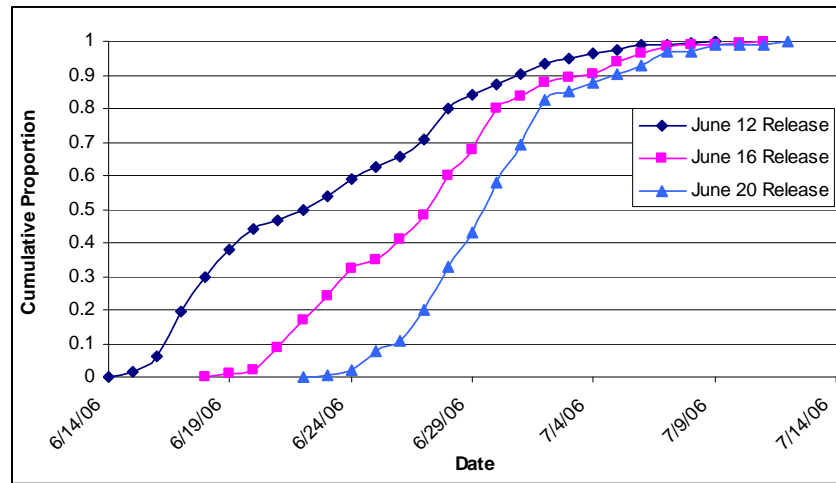
Priest Rapids Hatchery – Fall Chinook (2004)
Passage Timing to McNary Dam



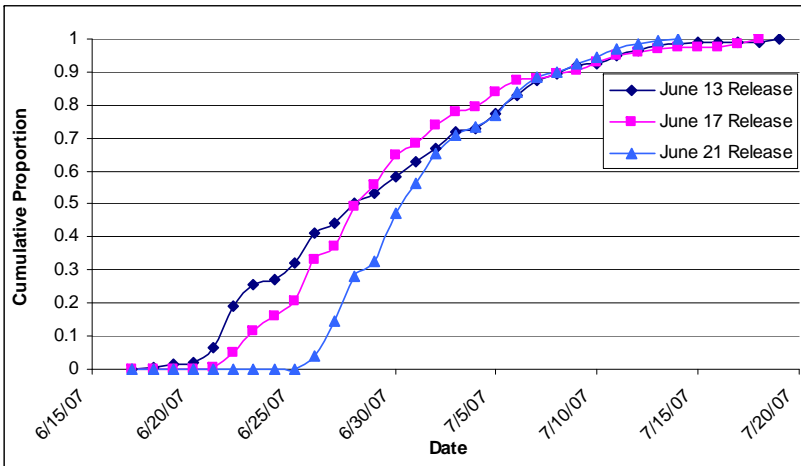
**Priest Rapids Hatchery – Fall Chinook (2005)
Passage Timing to McNary Dam**



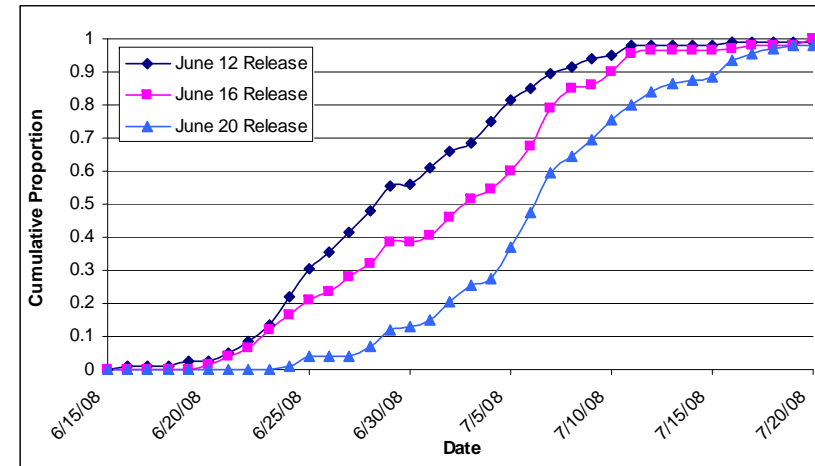
**Priest Rapids Hatchery – Fall Chinook (2006)
Passage Timing to McNary Dam**



**Priest Rapids Hatchery – Fall Chinook (2007)
Passage Timing to McNary Dam**

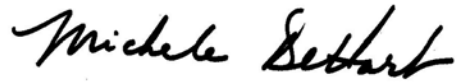


**Priest Rapids Hatchery – Fall Chinook (2008)
Passage Timing to McNary Dam**



We hope that the information we have provided regarding the use and application of information from the groups that have been marked at the hatchery over the last several years is of some use to you. If you would like any additional information regarding these releases please feel free to contact us.

Sincerely,

A handwritten signature in black ink that reads "Michele DeHart". The signature is written in a cursive, flowing style.

Michele DeHart
Fish Passage Center Manager

Cc: Pete Hassemer, IDF&G
Doug DeHart, USFWS
Brian Lipscomb, CBFWA
Tony Nigro, ODFW
Ron Boyce, ODFW
FPAC