

FISH PASSAGE CENTER

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August 29, 2007

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 these studies, data are collected on either juvenile life stage, or 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 this study 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.

The table below describes the median travel times from each release to McNary Dam along with the minimum and maximum travel time. It also provides the 95% confidence limits around the estimated median travel time.

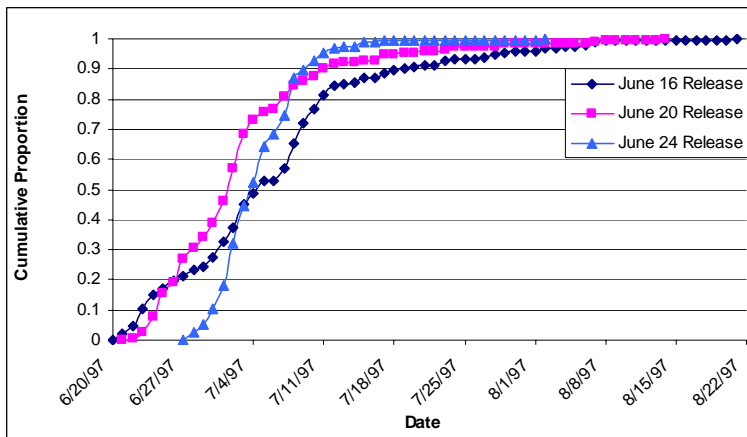
Priest Rapids Hatchery Fall Chinook Travel Times to McNary Dam

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

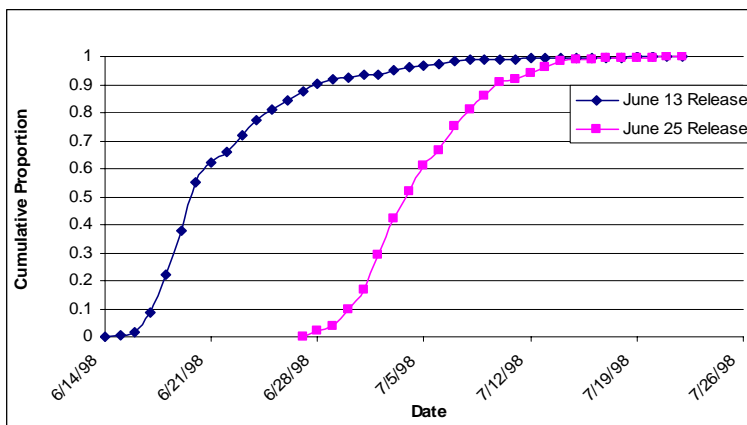
Release Date	Migration Year	Travel Time (Days)			Confidence Limits 95%		Priest Rapids	
		Min	Med	Max	Lower	Upper	Flow (kcfs)	Temp (F)
12-Jun	2003	3.9	11.1	41.7	10.6	11.4		148
16-Jun	2003	4.2	9.3	34	8.9	9.8		143.3
20-Jun	2003	4.5	11.1	35.8	10.9	11.4		138.1
14-Jun	2004	3.9	6.2	19.6	6.1	6.6		150.3
18-Jun	2004	3.2	6.8	21.6	6.5	7		139.1
22-Jun	2004	2.7	5.9	27.2	5.6	6		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	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	12.8		151.7
21-June	2007	4.8	10	23.5	9	11.1		148

We are also providing the following graphs which show passage timing of the hatchery releases to McNary Dam for the past eleven years. Since each migration year has consisted of 3 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.

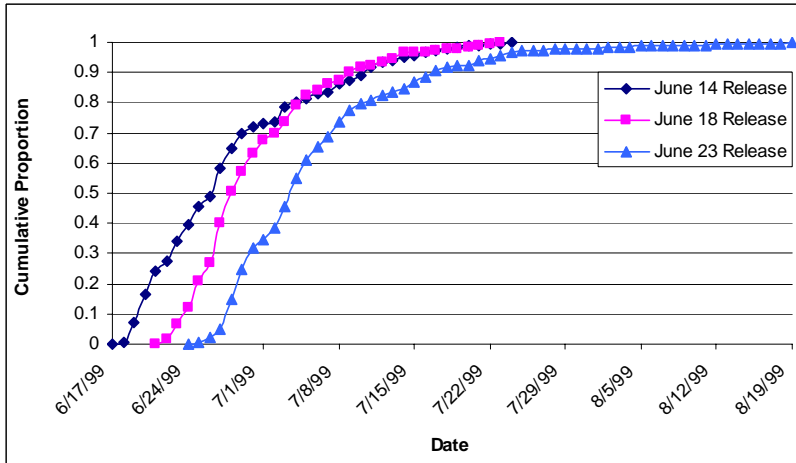
**Priest Rapids Hatchery – Fall Chinook (1997)
Passage Timing to McNary Dam**



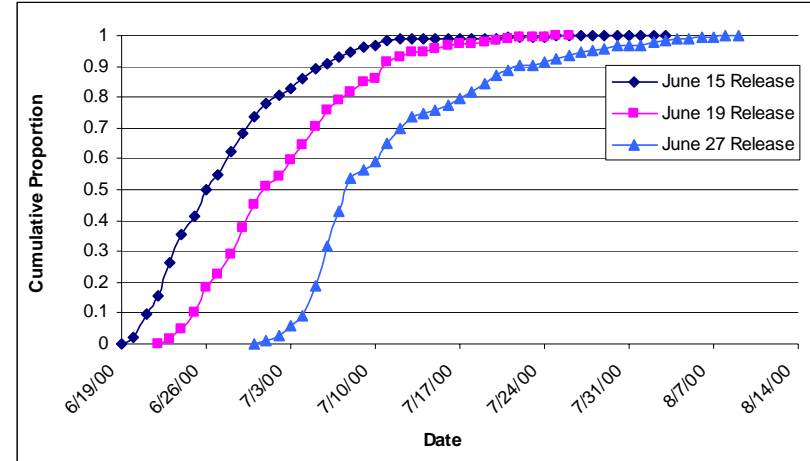
**Priest Rapids Hatchery – Fall Chinook (1998)
Passage Timing to McNary Dam**



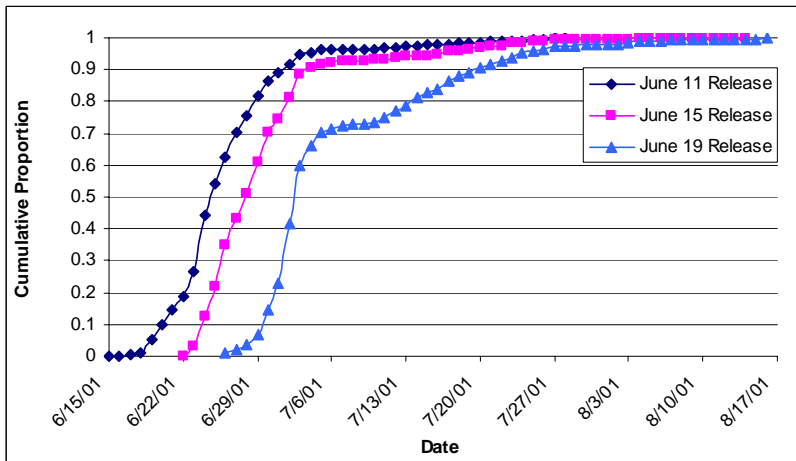
**Priest Rapids Hatchery – Fall Chinook (1999)
Passage Timing to McNary Dam**



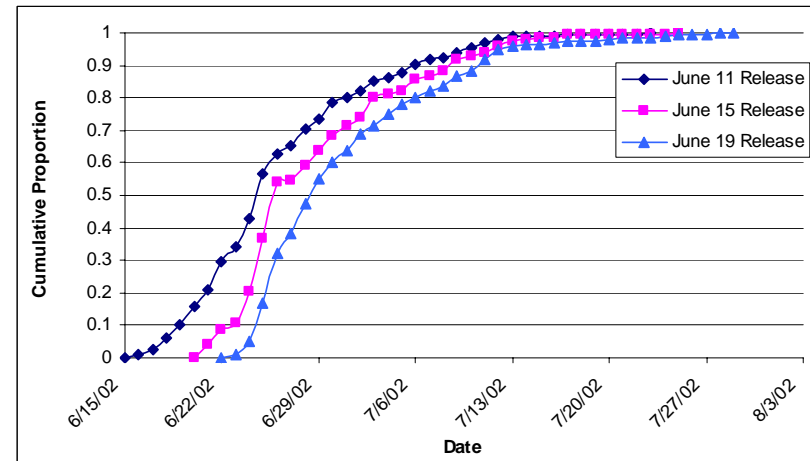
**Priest Rapids Hatchery – Fall Chinook (2000)
Passage Timing to McNary Dam**



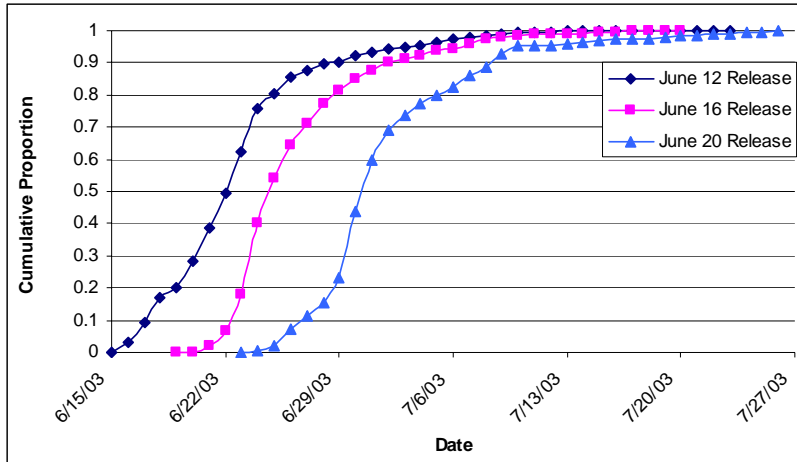
**Priest Rapids Hatchery – Fall Chinook (2001)
Passage Timing to McNary Dam**



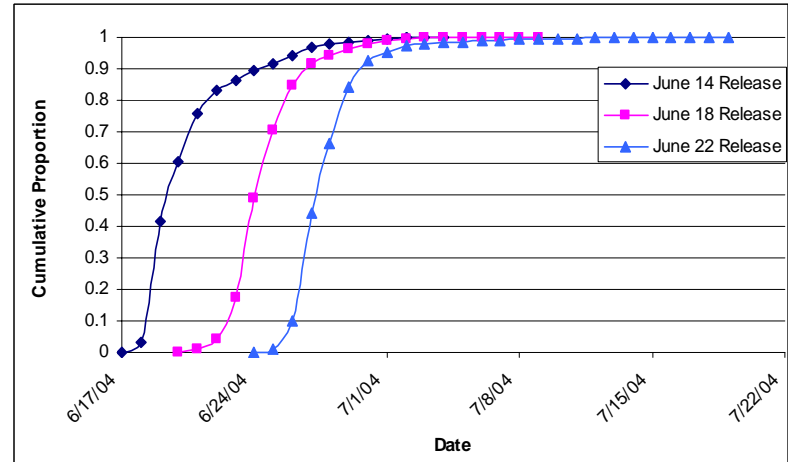
**Priest Rapids Hatchery – Fall Chinook (2002)
Passage Timing to McNary Dam**



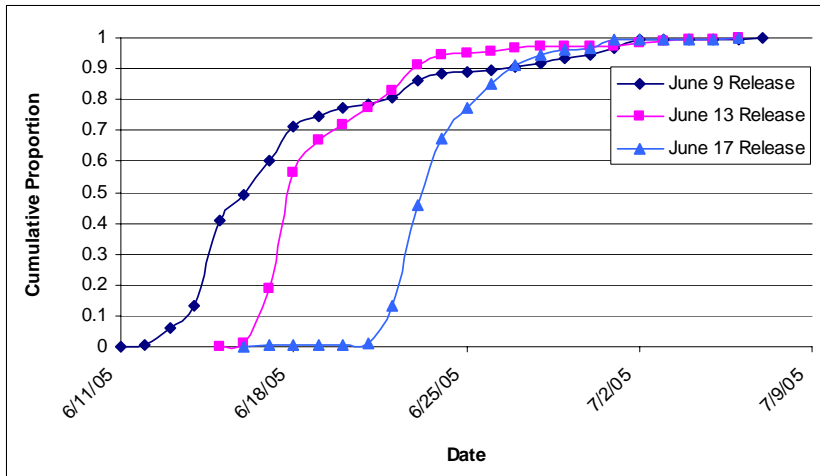
**Priest Rapids Hatchery – Fall Chinook (2003)
Passage Timing to McNary Dam**



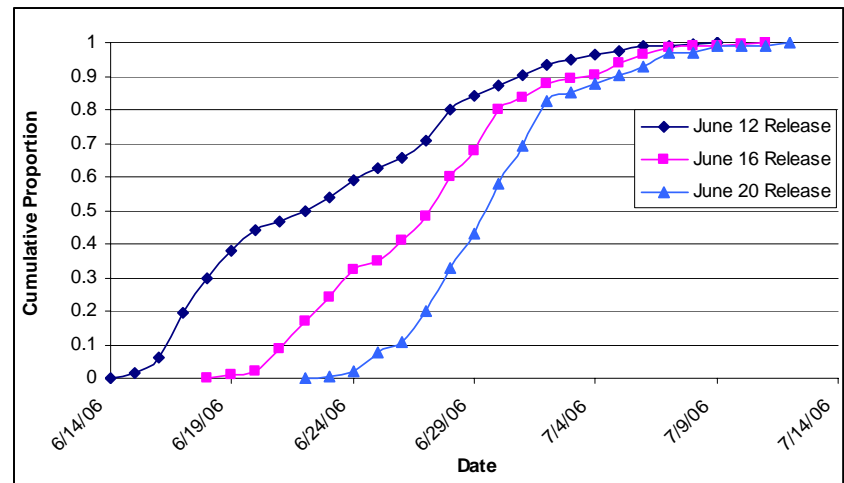
**Priest Rapids Hatchery – Fall Chinook (2004)
Passage Timing to McNary Dam**



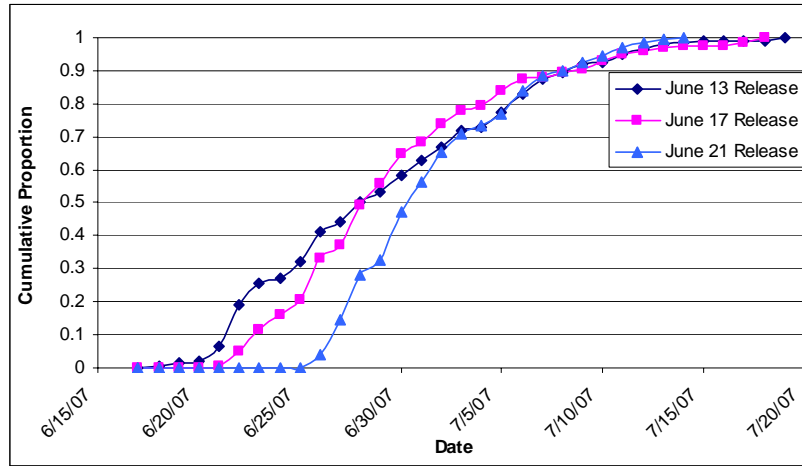
**Priest Rapids Hatchery – Fall Chinook (2005)
Passage Timing to McNary Dam**



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



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



Finally, we are providing 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.

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

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,

Michele DeHart
Fish Passage Center Manager

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Doug DeHart, USFWS
Brian Lipscomb, CBFWA

Tony Nigro, ODFW
Ron Boyce, ODFW
FPAC