

A study to understand the early life history of Snake River Fall Chinook salmon



**National Marine
Fisheries Service**



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- Collect scale samples from returning adult fall Chinook salmon that had been PIT-tagged as juveniles

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- Compare age-at-ocean-entry with juvenile detection history

Collect scale samples from
previously PIT-tagged fish

Lyons Ferry Hatchery

2002 – 97,916

2003 – 53,579

Lower Granite Dam

2004 – 49,287

Fall 2002-06 – 12,450

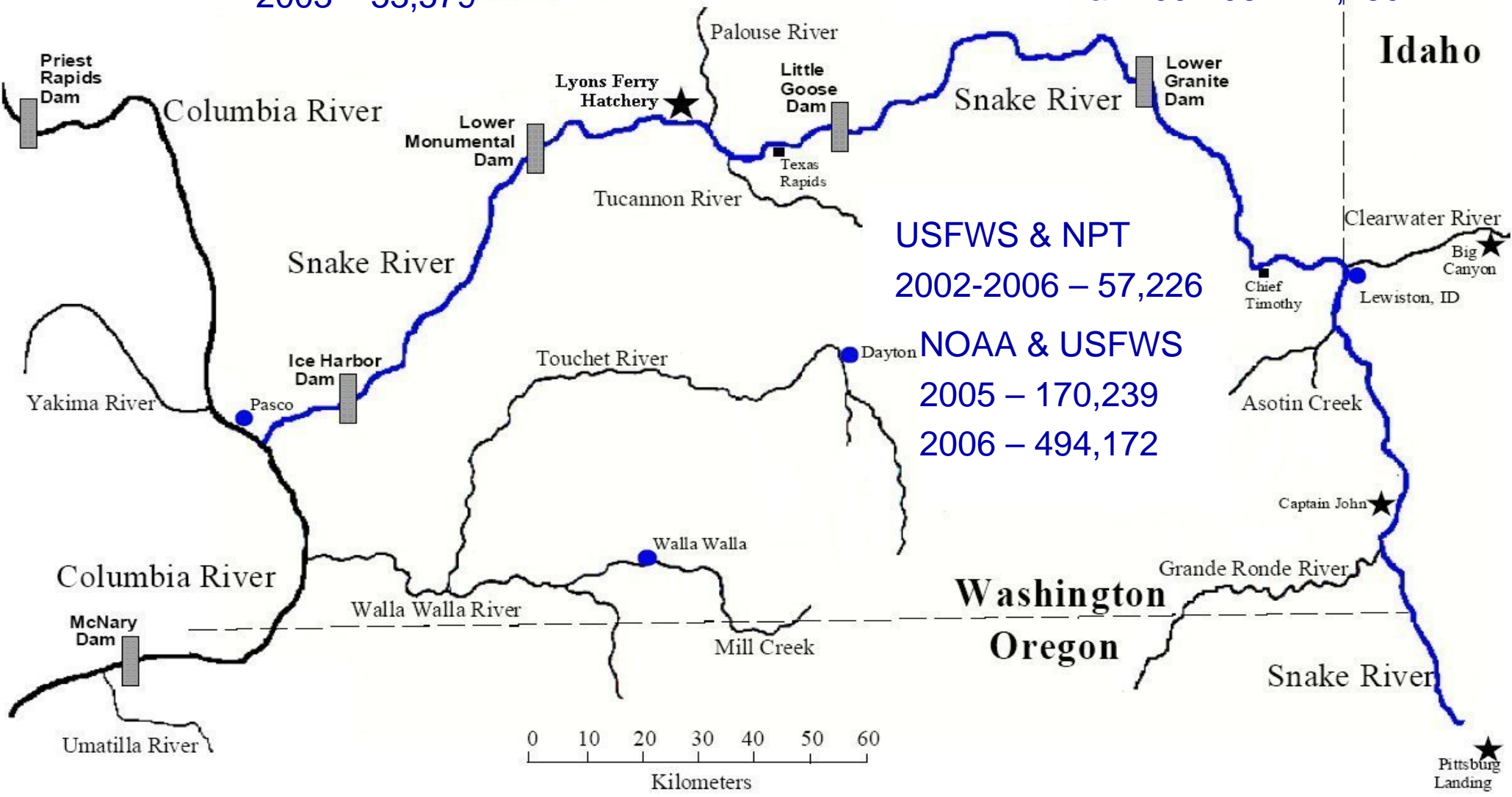
USFWS & NPT

2002-2006 – 57,226

NOAA & USFWS

2005 – 170,239

2006 – 494,172



USFWS collected scales from 1998-2004

NOAA/USFWS collected scales in 2005

2007 COE Study – Collected scales from

635 NOAA, USFWS, & NPT tagged fish



Determine age-at-ocean-entry

Determine age-at-ocean-entry



Compare age-at-ocean-entry
with juvenile detection history

2007 Scale Sampling by Migration Year

Outmigration year	Number of adults returned	Scale samples taken	Scale samples read
2002	1	1	1
2003	7	7	3
2004	34	26	11
2005	116	101	39
2006	560	497	31
Totals	718	632	85

2007 Scale Sampling by Migration Path

Migration pathway	Number of adults returned	Scale samples taken	Scale samples read
Summer transport	151	132	9
Fall transport			
Spring/Summer release	18	17	3
Fall release	57	48	17
Spring transport	2	1	0
Migrant			
Summer	159	141	9
Fall	19	19	5
Spring	28	24	5
Not detected	279	245	36
Totals	713	627	84

2007 Scale Sampling by Migration Path

Migration pathway	Scale samples read	Subyearling	Yearling	Unknown
Summer transport	9	9	-	-
Fall transport				
Spring/Summer release	3	1	2	-
Fall release	17	5	11	1
Spring transport	0	-	-	-
Migrant				
Summer	9	9	-	-
Fall	5	-	5	-
Spring	5	-	5	-
Not detected	36	25	11	-
Totals	84	49	34	1

2007 scale sampling

Conclusions:

- Need to finish reading the rest of the scales

2008 scale sampling

- 780 adults sampled
- Age class breakdown

– 2003 (70,192)	0
– 2004 (61,696)	15
– 2005 (184,042)	49
– 2006 (517,215)	615
– 2007 (16,192)	101



SA

OE



FA OE

HC