



Nez Perce Tribe

Department of Fisheries Resources Management

Administration • Enforcement • Habitat/Watershed • Harvest • Production • Research • Resident Fish
RESEARCH DIVISION

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To: Mr. Scott Marshall, USFWS

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From: William Young, Nez Perce Tribe

Subject: Nez Perce Tribe LSRCP Quarterly Activity Report for October - December 2007

Project Administration

- All research staff attended Research Division Retreat on December 12, 2007 and all fisheries staff attended Department of Fisheries Resources Management Retreat December 13-14, 2007.
- Staff attended Northeast Oregon Pre- Annual Operation Plan on December 18, 2007.
- William Young attended the Anadromous Fish Evaluation Program in Walla Walla, WA workshop sponsored by the Army Corps of Engineers December 5-8, 2007.
- Completed final and received final signatures and approvals for LSRCP M&E, O&M, and Harvest Fiscal Year 2008 Contract.
- Began working on an access agreement with the First Nebraska Trust, Inc., for the use of a private bridge and road to access the proposed weir site on Horse Creek (Imnaha River) for adult steelhead monitoring and evaluations activities.
- Enterprise staff began investigating suitable sites for a resistivity weir on Camp Creek (Imnaha River) for adult steelhead monitoring and evaluations activities.

Field Activities and Data Collections

Fall trapping on the Imnaha River began October 3, 2007 and ended on November 21, 2007. LSRCP and SMP personnel fished the trap for 1171.5 hours. The trap was not fishing for 40.5 hours during this period. For the two months fished, we caught 7,366 (PIT-tagged 7,267) natural Chinook and 57 (PIT-tagged 1) natural steelhead. Table 1 has the daily catch and tagging of target species from October through November. Table 2 illustrates the sample size (n), average fork length, weight, and condition factor (K) with standard deviation for all the target species.

There were a total of 16 natural Chinook mortalities, 11 were trapping mortalities (of those 8 were from piscivorous predation in the live box), 3 were from Pit Tagging, 1 from handling and 1 was a dead on arrival recaptured trap efficiency fish associated with screw trapping during the fall quarter.

The incidental catch during the fall quarter totaled 830 fish. It was comprised of six families of fish: Salmonidae (78.4 %), Castomidae (10.4 %), Centrarchidae (6.6 %), Cyprinidae (3.3 %), Castomidae (0.7 %), and Petromyzotidae (0.6 %). The catch of Salmonidae comprised of 355 rainbow trout, 130 juvenile bull trout, 112 mountain whitefish, 51 adult bull trout, 2 hatchery adult steelhead, and 1 adult natural jack fall Chinook. The juvenile rainbow trout were resident fish biased on morphological characteristics and are not a subset of the natural steelhead catch. Juvenile bull trout were classified as fish less than a fork length of 300 mm and adult bull trout are more than 300 mm. A total of 85 unidentified sucker species, and 1 bridge lip sucker accounted for the catch of Castomidae. Twenty northern pike minnow, 3 redbreast shiner, 2 chiselmouths, 1 longnose dace, and 1 speckled dace represented the Cyprinidae family. Fifty five juvenile small mouth bass accounted for the Centrarchidae catch. A total of 6 *Cottus* species (Sculpins) of the family Cottidae were captured. The catch of the Petromyzotidae family consisted of five juvenile Pacific lamprey. All of these fish were classified as silver lampreys and were assumed to be outmigrant macrophthalmia.

Table 1. Fall quarter summary of target catch at the Imnaha River rkm 7 smolt trap (October 3 through November 21).

End Date	Hours Fished	Fish Caught			Fish Tagged	
		Natural Chinook	Natural Steelhead	Hatchery Steelhead	Natural Chinook	Natural Steelhead
10/4/2007	18.00	8	3		6	
10/5/2007	24.50	27	4		23	
10/6/2007	23.50	32	12		23	
10/7/2007	23.50	3			3	
10/8/2007	24.00	35	7		23	
10/9/2007	24.00	3	1		3	
10/10/2007	23.50	4			4	
10/11/2007	24.00	6			5	
10/12/2007	24.00	1			1	
10/13/2007	24.00	3			3	
10/14/2007	24.00	6			5	
10/15/2007	24.00	5			4	
10/16/2007	25.50	2			2	
10/17/2007	22.50	5			5	
10/18/2007	24.50	30			29	
10/19/2007	26.50	131		1	129	
10/20/2007	26.50	399			391	
10/21/2007	25.00	1015			1007	
10/22/2007	24.00	602			594	
10/23/2007	19.00	272			272	
10/24/2007	22.50	98			96	
10/25/2007	25.00	47	6		45	

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End Date	Hours Fished	Fish Caught			Fish Tagged	
		Natural Chinook	Natural Steelhead	Hatchery Steelhead	Natural Chinook	Natural Steelhead
10/26/2007	23.50	45	1		45	1
10/27/2007	26.50	348	1		345	
10/28/2007	24.00	255	2		254	
10/29/2007	21.00	123	1		121	
10/30/2007	25.00	42	1		41	
10/31/2007	24.00	201			196	
11/1/2007	24.75	84			84	
11/2/2007	24.50	168	1		162	
11/3/2007	23.75	161	7		160	
11/4/2007	24.50	73	5		73	
11/5/2007	24.00	111	2		109	
11/6/2007	23.00	67	3		64	
11/7/2007	24.00	81			81	
11/8/2007	24.50	69			65	
11/9/2007	22.50	59			59	
11/10/2007	24.50	54			52	
11/11/2007	24.00	42			42	
11/12/2007	23.50	39			39	
11/13/2007	24.50	93			93	
11/14/2007	24.00	95			94	
11/15/2007	24.00	54			53	
11/16/2007	24.50	104			103	
11/17/2007	24.00	40			39	
11/18/2007	25.00	114			112	
11/19/2007	29.00	653			653	
11/20/2007	23.50	792			791	
11/21/2007	19.50	665			664	
Totals	1171.50	7366	57	1	7267	1

Table 2. Biological characteristics of target catch during October 3 through November 21, 2007 of fish captured in the Imnaha rotary screw trap.

Data	Natural Chinook	Natural Steelhead	Adult Bull Trout	Juvenile Bull Trout
Fork Length (n)	7326	56	47	123
Avg Fork Length (mm)	79.2	187.7	385.5	261.0
Max Fork Length (mm)	123	269	602	299
Min Fork Length (mm)	53	69	300	185
StdDev Fork Length	9.8	39.0	83.1	25.5
Weight (n)	7334	56	47	123
Avg Weight (g)	6.0	78.4	590.7	182.0
Max Weight (g)	18.2	175.9	1623.9	283.9
Min Weight (g)	1.5	3.5	247.4	65.2

StdDev Weight	2.1	42.6	400.2	53.0
K (n)	7322	56	47	123
Avg K	1.18	1.06	0.92	1.00
Max K	1.69	1.22	1.13	1.66
Min K	0.78	0.88	0.66	0.76
StdDev K	0.13	0.08	0.10	0.13

Progress and Future Activities

Reports

- Currently working on a Lower Snake River Compensation Plan Hatchery Evaluation Studies Annual Project Report 1996-2005. This report will include adult activities in Upper Big Creek and in South Fork Salmon River (with associated tributaries) for a 10 year period, (Authors: William Young, Jason Vogel, Paul Kucera, Mike Blenden, and Jay Hesse).

Planned Activities

- Attend final Northeast Oregon Annual Operation Plan meeting January 24, 2008 in La Grande Oregon.
- Attend Salmon River Annual Operation Plan meeting February 4, 2008 in Boise, Idaho.
- Coordination Meeting with LSRCP and SMP scheduled for late January or early February, 2008.
- Staff will attend the LSRCP meeting March 4 – 6, 2008 in Boise, Idaho.
- The Enterprise LSRCP and SMP crews will begin Imnaha River spring smolt trapping in early March, 2008.
- The Enterprise and SMP crews will begin adult steelhead trapping and marking program on Horse Creek (tributary of Imnaha River) in early March 2008.
- The resistivity weir will be installed in Camp Creek in early March 2008 assuming we can find a site that meets our power requirements.
- The LSRCP staff (Neal, Cameron and Mike) will begin working on a poster for the AFS Western Division meeting and Annual LSRCP meeting in spring of 2008.
- Continue with data summary and analysis of LSRCP data for inclusion in annual reports.
- Continue to participate in the development of Nez Perce Tribe Department of Fisheries

Resources Management strategic management plan process.

- LSRCP staff will continue to participate in the NPT Juvenile, Adult, and Genetics Technical Teams.
- NPT Operations & Maintenance will transport excess adults from Little Sheep Trap for outplanting into Big Sheep Creek.