

Draft: Juvenile Annual Report

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Introduction

Already exists in previous reports, just needs to be combined and formatted for the group report.

Methods/Locations

The methods section will be very similar to what already exists previous documents. We only need to gather that information and place it here.

Results

Table 1 - Data Collection

- RST Operation Dates
- Fall Chinook Juvenile Seining Dates

Table 1: Data Collection - Important dates for Rotary Screw Trap and Juvenile Seining operations.

Project	Start.Date	End.Date
RST 1	2018-02-25	2018-06-27
RST 2	2018-02-14	2018-07-12
Seining	2018-01-28	2018-06-14

Performance Measures

Table 2 – Productivity and Survival

- Juvenile Emigrant Abundance (PM10)
- Post-release Survival (PM19)
- Juvenile Survival to first mainstem dam (PM17)
- Juvenile Survival to all mainstem dam (PM18)
- Smolts (PM11)

Table 2: Juvenile Summer Nacó'x (Chinook salmon) abundance and survival estimates to Lower Granite Dam from Nez Perce Tribe sampling locations. (Standard Error in parentheses)

StreamName	Origin	Lifestage	Species	Abundance (SE)	Survival (SE)	Equivalents
Johnson Creek	Natural	Parr	Spring Chinook	98358 (3508.66)	0.15 (0.01)	14753.70
Johnson Creek	Natural	Presmolt	Spring Chinook	32244 (1919.16)	0.34 (0.04)	10962.96
Johnson Creek	Natural	Smolt	Spring Chinook	5884 (1774.13)	0.32 (0.05)	1882.88
Johnson Creek	Natural	Total	Spring Chinook	136486 (4454.7)	NA (NA)	NA
Secesh River	Natural	Parr	Spring Chinook	167116 (13353.81)	0.2 (0.01)	33423.20
Secesh River	Natural	Presmolt	Spring Chinook	129236 (4298.34)	0.34 (0.02)	43940.24
Secesh River	Natural	Smolt	Spring Chinook	4202 (2225.61)	0.45 (0.11)	1890.90
Secesh River	Natural	Total	Spring Chinook	300554 (14367.05)	NA (NA)	NA
Imnaha River	Natural	Presmolt	Spring Chinook	62308 (16757)	NA (NA)	NA
Imnaha River	Natural	Smolt	Spring Chinook	34904 (4262)	NA (NA)	NA
Imnaha River	Natural	Total	Spring Chinook	97212 (16011)	NA (NA)	NA
Lolo Creek	Natural	Presmolt	Spring Chinook	NA (NA)	0.62 (0.23)	NA
Lolo Creek	Natural	Smolt	Spring Chinook	NA (NA)	0.65 (0.1)	NA
Newsome Creek	Natural	Presmolt	Spring Chinook	NA (NA)	0.14 (0.02)	NA
Newsome Creek	Natural	Smolt	Spring Chinook	NA (NA)	0.6 (0.11)	NA

Table 3 – Hatchery Performance Measures

- Hatchery Production Abundance (PM47)
- Prerelease Mark Retention (PM58)
- Prerelease Tag Retention (PM59)
- Hatchery Release Timing (PM60)

Table 3: Hatchery Chinook Production Information.

Release.Site	Release.Date	Abundance	Prerelease.Mark.Retention	Prerelease.Tag.Retention
Johnson Creek	2018-03-26	150000	99%	97%
Imnaha River	2018-04-03	500000	98%	98%

Table 4 – Recruits/Spawner

- Recruit/spawner (R/S) (Smolt Equivalents per Redd or female) (PM15)

Table 4: Smolt Equivalents per Redd. The number of smolts per Redd counted per stream. [Calculated as Smolt Equivalents/# Redds]

BroodYear	StreamName	Species	SurveyMethod	Abundance	TotalRedds	SmoltsPerRedd
2015	Johnson Creek	Spring Chinook	Ground	136486	7441	18.34243
2015	Secesh River	Spring Chinook	Ground	300554	1780	168.85056
2015	Imnaha River	Spring Chinook	NA	97212	NA	NA

Table 5 – Size and Condition

- Size-at-Release (PM49)
- Size-at-Emigration (PM32)
- Age-at-Emigration (PM30)
- Juvenile Condition Factor (PM50)
- Condition of Juveniles at Emigration (PM33)

Table 5: Length, Weight, and Condition Factor of Age Classes.
CF: Condition Factor. (Standard Error in Parenthesis)

Site	Statistic	YOY	Parr	Presmolt	Smolt	Yearling
JOHTRP	Mean Length	46.89	54.62	72.79	84.53	104.69
JOHTRP	SE Length	0.04	0.07	0.08	0.06	0.10
JOHTRP	Min Length	34.00	35.00	43.00	42.00	82.00
JOHTRP	Max Length	63.00	109.00	103.00	104.00	124.00
JOHTRP	Mean Weight	0.98	1.80	4.33	6.66	13.69
JOHTRP	SE Weight	0.00	0.01	0.01	0.01	0.03
JOHTRP	Min Weight	0.20	0.30	0.70	0.70	6.50
JOHTRP	Max Weight	2.50	17.40	11.90	16.60	23.40
JOHTRP	Mean CF	0.92	1.02	1.07	1.08	1.17
JOHTRP	SE CF	0.00	0.00	0.00	0.00	0.00
JOHTRP	Min CF	0.43	0.55	0.67	0.93	0.96
JOHTRP	Max CF	1.98	1.62	1.47	1.48	1.44
SECTRP	Mean Length	49.00	55.85	72.48	87.38	101.63
SECTRP	SE Length	0.04	0.05	0.06	0.05	0.05
SECTRP	Min Length	45.00	33.00	47.00	68.00	82.00
SECTRP	Max Length	53.00	108.00	118.00	105.00	120.00
SECTRP	Mean Weight	1.30	2.00	4.17	7.23	11.52
SECTRP	SE Weight	0.01	0.01	0.01	0.01	0.02
SECTRP	Min Weight	0.70	0.40	1.10	3.50	6.10
SECTRP	Max Weight	1.90	14.60	18.40	13.40	17.20
SECTRP	Mean CF	1.02	1.08	1.06	1.06	1.08
SECTRP	SE CF	0.00	0.00	0.00	0.00	0.00
SECTRP	Min CF	0.77	0.57	0.66	0.88	0.91
SECTRP	Max CF	1.28	1.74	1.67	1.29	1.34

Table 6: Proportion of Run

Release Site	Brood Year	SRR Verbose	YOY	Parr	Presmolt	Smolt	Yearling
JOHTRP	2016	Wild Summer Chinook	0.0921	0.5518	0.3342	0.0201	0.0018
SECTRP	2016	Wild Summer Chinook	0.0001	0.4709	0.5174	0.0066	0.0050

Table 6 / Figure 1

- Juvenile Emigration Timing (PM37)
- Mainstem Arrival Timing (PM38)

Emigration Timing

Table 7: Arrival Timing at Lower Granite Dam

ReleaseSite	Origin	0%	10%	50%	90%	100%
CLWR	Natural	2017-03-20	2017-06-20	2017-07-12	2017-07-27	2017-08-03
IMNAHR	Hatchery	2017-04-14	2017-04-27	2017-05-06	2017-05-11	2017-05-26
IMNAHR	Natural	2017-03-29	2017-04-14	2017-04-22	2017-05-19	2017-05-28
IMNAHW	Hatchery	2017-04-09	2017-04-25	2017-05-03	2017-05-09	2017-05-28
IMNTRP	Natural	2017-03-23	2017-04-08	2017-04-17	2017-05-03	2017-07-06
JOHNSC	Hatchery	2017-04-20	2017-04-27	2017-05-06	2017-05-12	2017-05-24
JOHTRP	Natural	2017-03-23	2017-04-13	2017-04-24	2017-05-16	2017-06-06
LOLOC	Hatchery	2017-03-28	2017-04-20	2017-05-09	2017-06-07	2017-06-22
LOLOC	Natural	2017-03-24	2017-04-13	2017-05-17	2017-06-04	2017-06-25
LOOH	Hatchery	2017-04-12	2017-04-26	2017-05-05	2017-05-10	2017-05-23
LOSTIP	Hatchery	2017-04-12	2017-04-25	2017-05-05	2017-05-13	2017-05-25
LOSTIR	Natural	2017-03-23	2017-04-13	2017-04-25	2017-05-23	2017-06-26
NEWSOC	Hatchery	2017-03-20	2017-04-28	2017-05-27	2017-06-17	2017-06-26
NEWSOC	Natural	2017-03-22	2017-04-13	2017-05-27	2017-06-18	2017-06-28
NPTH	Hatchery	2017-03-20	2017-05-09	2017-07-01	2017-07-21	2017-08-02
SECTRP	Natural	2017-03-24	2017-04-09	2017-04-15	2017-04-28	2017-05-30

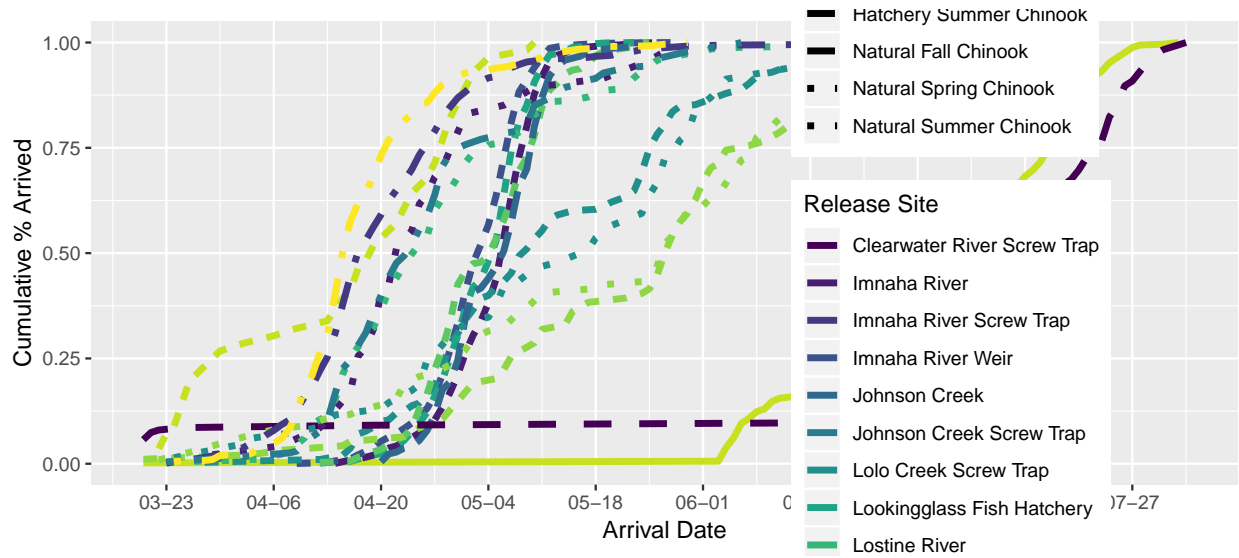


Table 7

- Fish and Amphibian Assemblage (PM46)

Table 8: Fish and Amphibian Assemblage. Count of all species caught during the sampling period.

Project Code	SRR Verbose	Migration Year	Total
CDR	Hat. Summer Chinook	2017	5

Project Code	SRR Verbose	Migration Year	Total
CDR	Mountain Whitefish	2017	23
CDR	Scuplin	2017	11
CDR	Wild Summer Chinook	2017	444
CDR	Wild Summer Steelhead	2017	287

Discussion

Keeping in my the goal of minimizing the length of this report, the discussion should only include noteworthy (e.g. abnormal) events or results from the sample year and reference back to results/appendix.

Appendix

- Raw data here along with anything else that is necessary.