



Susan Bishop - NOAA Federal <susan.bishop@noaa.gov>

RE: Nooksack Information

1 message

Alan Chapman <AlanC@lummi-nsn.gov>

Fri, May 6, 2016 at 1:05 PM

To: Susan Bishop - NOAA Federal <susan.bishop@noaa.gov>

Cc: Breena Apgar-Kurtz <BreenaAK@lummi-nsn.gov>, "Randy Kinley Sr." <RandyK@lummi-nsn.gov>, "Merle Jefferson Sr." <MerleJ@lummi-nsn.gov>, "Steven M. Toby" <StevenT@lummi-nsn.gov>, Ned Currence <ncurrence@nooksack-nsn.gov>

Susan:

Last year was complicated because of the low warm water levels in the Nooksack followed at the end of August by significant rainfall. We were so concerned that the conditions at Skookum would not be conducive to maturing captive brood that the entire process was completed at Kendall. We did have a surprising return of Chinook to the Skookum hatchery We incorporated a number of them into the production but we were overwhelmed by small males

Here are the numbers through the end of August

Captive Brood at Kendall

	Male	Female	Total
Manchester	69	117	186
Kendall	143	101	244
Total	212	218	430

Skookum- Not All Known

	Female	Male	Total
8/17/2015		11	11
8/20/2015	2	13	15
8/25/2015		27	27
8/31/2015	3	55	58
Total	5	106	111

After the end of August we curtailed the exhaustive analysis of the returning fish and did not identify fish by return date. CWT analysis of 499 excess fish provided the following information. The proportion of the returns in that sample were extrapolated to the 396 fish that were transported up stream to contribute to the spawning population. This accounts for a return of just under 900 Chinook with 846 of them estimated to be from the 2013 release. These numbers are still awaiting more rigorous analysis and data checking by they are of the right order of magnitude.

Hatchery CWT Recoveries by Tag Code

Tag Code	Number	BY	Age
211021 (SCH)	1	2011	4

11/22/21, 4:48 PM

National Oceanic and Atmospheric Administration Mail - RE: Nooksack Information

211066 (SCH)	25	2012	3
211105 (SCH)	328	2013	2
211106 (SCH)	144	2013	2
636749 (GWS)	1	2013	2
Total	499		

Upriver Relocation Expansion

Code	Est. #	Age
211066	20	3
211105	260	2
211106	114	2
Known Total	396	

The releases to date are as follows

Brood Year	Release year	Numbers Released
2010	2011	1,989
2011	2012	32,677
2012	2013	155,740
2013	2014	677,410
2014	2015	343,294
2015	2016	800,000

2013 was our largest brood year production and we have been dropping since them. I do not have final numbers for the Release this year but they are just under the 400,000 CWTs we ordered.

We can cross our fingers and hope that the returns will be based on cohort survival and not a higher proportion of the "Jacks" 2 year old males. This seems consistent with the high jacking rate noted in coho last year as well as the small size of the returning adult coho. The conditions in the marine environment in 2014 were anomalous (remember the blob).

11/22/21, 4:48 PM

National Oceanic and Atmospheric Administration Mail - RE: Nooksack Information

At the tangle net this year we are releasing CWT only fish in the expectation that they are Skookum releases. I am missing this week's data, but through the end of last week the totals were 122 NOR, 4 CWT only and 53 NF Hatchery fish (CWT+ac or ac only). We have tissue that we will run when we have the resources to ensure the stock identification. We hope to see the fish in the hatchery to improve our survival estimates as well as to double check stock ID.

When I get a better handle on the returns last year, I will adjust my projections, because we did not project 2 year olds, and this year's returns should provide a better estimate the proportions by age of each brood return.

I will do what I can to get the information out on estimates. I hope that the actual and potential returns from the rescue program will ease your concerns about the south fork stock and the issues with the selective fishery.

I will help you with your needs to the best of my ability.

Alan

Alan Chapman, ESA Coordinator

Lummi Natural Resources

2665 Kwina Road, Bellingham WA, 98226

Phone 360 312-2298 Fax 360 380-6989

Cell 360 224-3129

From: Susan Bishop - NOAA Federal [mailto:susan.bishop@noaa.gov]

Sent: Friday, May 06, 2016 10:20 AM

To: Alan Chapman

Cc: Breana Appgar-Kurtz; Randy Kinley Sr.; Merle Jefferson Sr.; Steven M. Toby; Ned Currence

Subject: Re: Nooksack Information

Thank you, Alan.

Thank you for providing this information, Alan. Very much appreciated. It sounds like you have escapement estimates for the North Fork in 2014 and maybe 2015?

I really do need the Nooksack escapement estimates or some assessment of the escapements in 2014 and 2015 relative to the most recent years for which we have information. I have to assess the status of the populations in the biological opinion and we use escapement estimates as our primary source. The most recent escapements I have are for 2013 which were extremely low so it would be very useful to know if the magnitude of escapements were different in 2014 and 2015. I also thought that you might have had returns from the South Fork program in 2015 which would be different than previous years.

What is the latest prediction of returns from the South Fork captive brood program? You had provided a really useful table of projected returns several years back but you've probably updated with the much more recent info. If you have, would you mind sending me the updated table so I have the best info?

Susan

On Fri, May 6, 2016 at 8:25 AM, Alan Chapman <AlanC@lummi-nsn.gov> wrote:

Susan:

It has come to my attention that you have questions about the situation in the Nooksack.

Nooksack early Chinook: The 2014 and 2015 Puget Sound Chinook Harvest Management Plan postseason reports have not included total and natural-origin escapement information and it was not provided as part of the consultation package. Please provide the total and natural-origin escapements for the North Fork and South Fork Nooksack populations for 2014 and 2015 so that we can accurately assess the status of the populations and anticipated effects of the proposed fisheries. Collection and reporting of this information is consistent with provisions of the 2014 and 2015 Puget Sound Chinook Harvest Management Plans.

Due to changes in personnel and responsibilities at Lummi there have been delays in processing the data from spawning ground surveys in the South Fork and that has been exacerbated by delays in getting the information collected by Nooksack together with the Lummi data for analysis. This includes the redd counts, carcass counts, DNA tissue samples, CWTs and stock assignments. We are also waiting on analyses on smolt trap data to provide information on the output of both HOS and NOS. Surveys last year will take a little more work to evaluate because of the pinks and river flow issues.

Similarly, we request data collected on summer run steelhead encounters and mortalities, and the results of the DNA analysis from samples taken in those fisheries in order to evaluate the potential effects on listed Puget Sound steelhead from the proposed fisheries.

Below are the preliminary numbers collected from the selective fishery

2015 Lummi Selective Fishing Pilot

		NOR Released	CWT only Release	HOR Retained	Total Chinook	NOR Target	NOR Remain	% NOR	Cumulative % NOR	Cumulative HOR/NOR		Steel Kelt	Steel Bright	Char
Week 1							30	#DIV/0!			10a			
	4/9/2015							#DIV/0!	#DIV/0!	#DIV/0!				
Week 2	4/13/2015	0	0	4	4	1	30	0.00	0.00	#DIV/0!	10a	0	0	2
	4/16/2015	0	1	5	6			0.00	0.00	#DIV/0!	10a	2	0	1
Week 3	4/20/2015	0	0	1	1	2	29	0.00	0.00	#DIV/0!	10a	2	0	1
	4/23/2015	1	0	2	3			0.33	0.07	12	10a	5	0	1
Week 4	4/30/2015	0	0	6	6	3	29	0.00	0.05	18	10a	1	0	1
	5/1/2015	0	0	3	3			0.00	0.04	21	10a	0	0	2
Week 5	5/4/2015	0	0	0	0	4	26	#DIV/0!	0.04	21	10a	3	0	3
	5/7/2015	2	0	21	23			0.09	0.07	14	10a	2	0	0
	5/8/2015	1	0	0	1			1.00	0.09	11	10a	4	0	0
Week 6	5/11/2015	2	0	1	3	4	24	0.67	0.12	7	10a	2	0	0
	5/14/2015	0	0	4	4			0.00	0.11	8	10a	2	0	3
Week 7	5/19/2015	1	0	6	7	4	23	0.14	0.11	8	10a	1	0	0
	5/21/2015	0	0	10	10			0.00	0.10	9	10a	6	0	4
Week 8	5/26/2015	2	0	5	7	4	21	0.29	0.12	8	10a	1	0	0
	5/28/2015	0	0	3	3			0.00	0.11	8	10a	2	0	0
Week 9	6/1/2015	1	0	2	3	3	19	0.33	0.12	7	10a	1	0	0
	6/4/2015	1	0	6	7			0.14	0.12	7	10a	1	0	0
Week 10	6/9/2015	0	0	0	0	3	17	#DIV/0!	0.12	7	10a	1	0	0
	6/11/2015	2	0	2	4			0.50	0.14	6	10a	0	0	0
Week 11	6/15/2015	0	0	0	0	2	17	#DIV/0!	0.14	6	10a	0	0	0
	6/17/2015				0			#DIV/0!	0.14	6	10a			

11/22/21, 4:48 PM

National Oceanic and Atmospheric Administration Mail - RE: Nooksack Information

...

[Message clipped]

--

Susan Bishop

Puget Sound/Washington Coastal Harvest Management Team Leader

NOAA Fisheries Service - Salmon Management Division

206-526-4587

susan.bishop@noaa.gov