
Action Items from December 2018 Forum Meeting – Updated January 18, 2019

Steelhead data provided by DFO should include CSAS RPA and specific information identified in the FRAFS letter outlining some of the data shortcomings.

This item refers to data provided to the Joint Technical Working Group. A package of all available Steelhead data will be compiled for distribution to the JTWG in February.

DFO to follow up and report back on any collaborative work being done to address chum spawning habitat concerns. (Note from Linda – upon discussion with Pauline, it was confirmed that she was looking for info on any work done wrt habitat for all species)

A presentation on Habitat will be provided at the January Forum in Nanaimo.

Linda Stevens to follow up re providing chum size data from assessments and whether that has changed over time. (Note from Linda: Confirmed with Ray he is looking for info on size at return for all species, not just chum.)

Please see tables in the Appendix for Fraser Sockeye and Pink. For Fraser Chinook, there is also a table from a paper that indicates the size at age is declining (also in appendix). For any other stocks or species – we would have to take a look at the specific data.

DFO to provide steelhead encounter data for 2018 commercial fisheries.

DFO will compile this and provide a handout. Waiting on update from Genetics lab on Steelhead samples taken in 2018 (a few are available from test fisheries). This will likely not be available for the January meeting.

DFO/JTWG to discuss priorities for in-season DNA analysis if chum stock composition data is important.

This is a larger item for discussion as in-season run size models would need to be developed in conjunction with the use of in-season stock composition data to properly apportion the test fishery stock composition data to the entire run. A one pager from DFO will be prepared that will outline these issues, but it may not be available for the January meeting.

Request that Wilf Luedke and Beth Pechter be present for the next Forum meeting to address repeated requests to address data gaps.

Wilf Luedke will likely attend on Jan. 29th and Beth Pechter on Jan. 30th.

DFO to report breakdown of Lower Fraser steelhead encounters by gear type.

Lower Fraser First Nations Steelhead Releases 2018

from Fraser Mouth to Sawmill Creek

month	beach seine	drift net	set net	total
3	0	0	0	0
4	0	4	11	15
5	0	0	1	1
6	0	2	13	15
7	0	0	1	1
8	0	0	1	1
9	24	0	1	25
10	12	3	0	15
11	5	0	0	5
total	41	9	28	78

Data from Fisheries Operating System (18-Dec-2018)

FRAFS EC to invite Jenn Davis from the Province to an EC meeting

This item is for FRAFS to comment on.

LFFA following up with DFO (Matt P) re proposed Lower Fraser sampling DNA program to ID steelhead encounters

This item is moved to the LFFA.

DFO to share link to new Cultus sockeye document.

http://dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2018/2018_052-eng.pdf

FRAFS to distribute link to DFO Webex on 2019 salmon outlook and oceans update.

<https://gts-ee.webex.com/gts-ee/ldr.php?RCID=a062e528fb26d482df981a8fd2763745>

Size Information as Requested

Chinook (this info is a paper titled “Science Information to Inform to Support Consultations on BC Chinook Salmon Fishery Management Measures in 2018” published in 2018).

Table 2. Summary of recent trends in characteristics for select stocks within Transboundary and BC management units.

Management Unit	Stock	2017 Escapement	CU Escapement Trend ⁶	WSP Integrated Status Assessment	Survival	Generation Time	Female Length	Fecundity
		(relative to 2003-13 avg)	(% change over 3 generations up to 2016)	Data to 2012 (DFO 2016)	(2007-2011 brood year avg relative to 1980-1990 avg)	(Decline rate)	(Trend)	(Trend)
Transboundary	Alsek	-65%	-	-	Unk	Unk	Unk	Unk
	Taku	-73%	-	-	-39%	stable ⁷	Declining	Unk
	Stikine	-71%	-	-	Unk	-0.026	Unk	Unk
Northern BC	Nass	-72%	-	-	Unk	Unk	Declining	Unk
	Skeena	-68%	-	-	-36%	-0.025	Declining	Unk
	Kitsumkalum	-66%				age-5,-6		
Central BC	Atnarko Total	-13%	-	-	28%	-0.015	Unk	Unk
	Atnarko Wild	-21%						
Upper Georgia Strait	NEVI (Quinsam)	NA	NA CK-28 ⁸ -60% CK-29	DD (CK-28) Red (CK-29)	-81%	-0.017	Declining age-4,-5	Declining since 2011
	Big Qualicum	-51%	-45% CK-27	TBD	-44%	-0.017	Declining age-3,-4	Declining since 2011
	Puntledge Summers	-45%	-80% CK-83	TBD	-9%	-0.009	Unk	Unk
Lower Georgia Strait	Cowichan	422%	386% CK-22	TBD	-73%	-0.008	Unk	Stable
	Nanaimo		-5% CK-25	TBD	Unk	Unk	Unk	Unk
WCVI	WCVI aggregate	164%	-12% CK-31 287% CK-32 -10% CK-33	Red (CK-31) Red (CK-32) TBD (CK-33)	-73%	stable	Unk	Unk
Fraser Spring 4 ₂	Fraser Spring 1.2 (Nicola)	-52% -67%	-51% CK-16 98% CK-17	Red (CK-16) Red (CK-17)	-55%	stable	Declining, age-4	Unk

⁶ Based on the short-term trend metric present in DFO (2016) and updated to include escapement time series ending in 2016 for all sites within the CU (wild and enhanced combined). Trends were estimated from a linear trend in \log_e (spawner abundances) over 3 generations, based on all years with reviewed escapement time series data and using infilled values where applicable.

⁷ The complete time series is stable, but shows a consistently declining trend since 1990.

⁸ CK-28 is represented by the Phillips River which is a relatively new CWT indicator (established in 2014) and as such, does not presently have a three generation time series to calculate trend.

Fraser Sockeye Weights from 2013 to 2018

Year	Sex	Average Weight 4 ₂	Average Weight 5 ₂
2013	Male	5.5 lbs	7.1 lbs
	Female	4.9 lbs	6.0 lbs
2014	Male	5.6 lbs	7.3 lbs
	Female	5.1 lbs	6.3 lbs
2015	Male	6.1 lbs	
	Female	4.3 lbs	
2016	Male	5.8 lbs	6.8 lbs
	Female	4.5 lbs	
2017	Male	5.0 lbs	6.5 lbs
	Female	4.7 lbs	5.8 lbs
2018	Male	6.2 lbs	6.3 lbs
	Female	5.3 lbs	7.3 lbs

Fraser Pink Salmon - average weights of Fraser pinks (average weight in purse seine catches after more than 90% of the pinks are thought to be of Fraser origin)

4	Return Year	Total Run	Avg. Wt.	Avg. Wt.
			(kg)	(lbs)
5	1959	6,460,055	2.40	5.28
6	1961	1,890,685	3.00	6.60
7	1963	5,481,312	2.35	5.17
8	1965	2,316,788	2.83	6.23
9	1967	12,962,791	2.45	5.39
10	1969	3,929,548	2.73	6.01
11	1971	9,762,376	2.36	5.19
12	1973	6,803,723	2.46	5.41
13	1975	4,893,955	2.75	6.05
14	1977	8,209,485	2.68	5.90
15	1979	14,404,121	2.29	5.04
16	1981	18,684,688	2.20	4.84
17	1983	15,345,996	1.95	4.29
18	1985	19,037,688	2.42	5.32
19	1987	7,171,773	2.05	4.51
20	1989	16,484,260	2.05	4.51
21	1991	22,180,122	1.82	4.00
22	1993	16,983,498	1.73	3.81
23	1995	12,903,708	1.73	3.81
24	1997	8,175,964	1.84	4.05
25	1999	3,585,477	1.76	3.87
26	2001	21,173,154	1.95	4.29
27	2003	26,000,000	1.95	4.29
28	2005	10,000,000	1.92	4.22
29	2007	11,000,000	1.90	4.19
30	2009	19,936,153	1.66	3.64
31	2011	20,645,118	1.94	4.26
32	2013	15,897,819	1.86	4.11
33	2015	5,778,903	1.45	3.20
34	2017	3,549,232	2.13	4.70