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2015 NASS RIVER SALMON STOCK ASSESSMENT UPDATE – MONDAY, 31 AUGUST

The following is the tenth general update for Nass River salmon and summer-run steelhead stock assessment from the Nisga'a Lisims Government Fisheries and Wildlife Department. Two more updates will be provided for 2015, one at end of fishwheel operations (15 September) and one for preliminary post-season estimates (25 November).

All data presented in this update are preliminary and subject to change with further assessment information that becomes available and should be interpreted cautiously. For in-season assessment purposes only.

NASS RIVER ASSESSMENT OPERATIONS UPDATE

OPERATIONAL ASSESSMENT INFORMATION FOR 2015

1. Fishwheel Assessment data: 4 June–30 August (see below). Fishwheel operations will end on 11 September.
2. Meziadin Fishway data: 1 July–30 August
 - Counts to date are below average for large salmon (Sockeye: 141,346 [2657 tagged] vs. 143,000; Chinook: 54 [6 tagged] vs. 300, and Coho: 419 [4 tagged] vs 700), and just above average for steelhead (3 vs. 1) when compared to returns since 1994. Other counts include small salmon (1849 Sockeye, 4 Chinook, and 16 Coho) and 3 Bull Trout. Water temperature is average (14.5°C vs. 14.0°C) when compared from 1999–2014.
3. Kwinageese Weir data: 3 July–30 August
 - Fish passage through the downstream barrier has occurred and water pooling is fine for 2015 based on upstream movements through the weir and survey results from a NFWD helicopter flight on 23 July. Counts to date are above average for large Chinook (1094 [89 tags] vs 840) and Sockeye (6595 [55 tags] vs. 3800), above average for summer-run steelhead (7 vs. 3), and below average for Coho (19 vs. 130) since monitoring began in 2002. Other counts are: 11 Bull Trout. The current water level is higher than average (0.43 m vs. 0.29 m) and water temperatures are near average (13°C vs. 14°C).

GITWINKSIHLKW (GW) FISHWHEELS (NASS TEST FISHERY –STARTED IN 1994 [22nd year]):

The Nass River test fishery fishwheels began operation on 4 June (FW1 and FW2) for tagging and historical catch index assessments for salmon and summer-run steelhead. All fish caught in the GW fishwheels are released alive after tagging and/or counting. Fishwheels 1 and 2 are currently operating at average water levels (1.7 m) based on 1994–2014 operations. A chart of the water levels at the test fishery follows the text summary that compares current levels to historical levels. The Nass River water temperature is 0.2 °C lower than average (9.0°C vs. 9.2°C) based on the 1994–2014 operations.

GREASE HARBOUR (GH) FISHWHEELS:

Start-up dates of the GH fishwheels were 10 June (FW5), 12 June (FW3 and FW6), and 28 June (FW4). Two fishwheels are currently operating at Grease Harbour (upstream of Ts'im Anwiihlist) with the shutdown of FW4

on 21 August and FW3 on 31 August. The GH fishwheels are used for in-season mark-recapture tag recoveries, abundance estimates passing upstream, additional tagging (adult Chinook and Chum salmon, and Pacific Lamprey), and for selective harvesting when permitted by NLG (e.g., Sockeye Salmon for the Nisga'a Lisims Government's Nass River In-land Demonstration Fishery that is part of DFO's Inland Selective Demonstration Fishery Program for 2015). Of the 68,291 Sockeye caught at all fishwheels to date, 7508 were harvested and 60,783 released. The Nass fishwheel catches are above average for Sockeye, Chum, and Pacific Lamprey; and below average for Chinook, Coho, steelhead, and Pink. Weekly comparisons of catches at the Gitwinksihlkw fishwheels to historical levels since 1994 are included in attachment. Total fishwheel catches of salmon, steelhead, and Pacific Lamprey to date are shown below including tagging results and jacks caught.

FISHWHEEL CATCH SUMMARIES	SOCK	CHIN	COHO	STEEL	PINK-ODD	CHUM	LAMP
FISHWHEEL TOTAL CATCH OF ADULTS	68,291	3,392	5,640	632	6,372	102	731
HISTORICAL AVG CUM CATCH (00-14) TO DATE	41,200	5,400	11,000	700	20,000	90	500
HISTORICAL AVG CUM TOTAL CATCH (00-14)	42,000	5,400	13,000	1,000	22,000	130	500
AVERAGE DAILY CATCH (5 D) OF ADULTS - GW	166	2	45	11	29	3	0
AVERAGE DAILY CATCH (5 D) OF ADULTS - GH	396	0	80	10	7	1	1
FISHWHEEL TOTAL TAGGED (OR ADIPOSE FIN MARKED)	12,908	2,809	1,439	431	NA	100	395
FISHWHEEL TOTAL JACKS - GW ONLY	1,105	154	9	NA	NA	NA	NA
HISTORICAL MEAN JACKS AT GW (94-14) TO DATE	1,220	200	108	NA	NA	NA	NA

Other adult species and juvenile salmon catches at the fishwheels to date include: 211 Dolly Varden, 129 Pike Minnow, 92 Whitefish sp., 80 Rainbow Trout, 68 Peamouth Chub, 54 Cutthroat Trout, 15 Red-Side Shiner, 15 Sculpin, 1 River Lamprey, and 107 salmon smolts (19 Coho, 77 Chinook, 11 Sockeye), 2 frogs, and 1 Otter.

RUN SIZE AND ESCAPEMENT ESTIMATES FOR NASS SALMON & SUMMER-RUN STEELHEAD

In-season estimates of run size and projected forecasts to Gitwinksihlkw fishwheels for adult Nass salmon and summer-run steelhead are shown below. The current run sizes for 2015 are above average for Nass Sockeye and Chinook; average for summer-run steelhead; and below average for Coho when compared to means to date from 1994–2014.

	SOCK	CHIN	COHO	STEEL
IN-SEASON RUN SIZE ESTIMATE TO DATE	459,650	26,305	39,730	8,319
HISTORICAL MEAN RUN SIZE TO GW FOR DATE (94-14)	271,000	20,400	70,842	8,330
RUN SIZE TARGET 2015 (MIN. FOR STEELHEAD)	250,000	15,000	65,000	4,200

The current in-season Nass Sockeye estimates are generated using mark-recapture data from GH fishwheels that fluctuate over a 5 d period as GW tagged fish pass the GH site. In comparison, in-season fishwheel catch index estimates to date at GW are ranging from 218,000 to 985,000 based on high and low catchability estimates with a mean estimate of 506,000. The MR estimate is considered more accurate at predicting the in-season abundance of the run passing the GW fishwheels based on an overall 4.9% of the run sampled. The MR estimate (~460,000) is based on tags applied at GW fishwheels (n=12,908), total catch at GH and Upper Stratum IS fisheries (n=88,831), and tag recoveries in the Upper Stratum (n=2549).

The current in-season Upper Nass Chinook estimate (~26,500) is generated using a new method being evaluated since 2014 that uses tags applied at GH fishwheels (n=1535), total catch (n=2285), tag recoveries (n=193), and estimated harvests between GW and GH to estimate mark rates and compute daily abundance estimates to Gitwinksihlkw. Estimates fluctuate over 10 d periods as marked fish begin to pass upstream sites with 5.7% of the run estimated to be sampled to date. In comparison, in-season fishwheel catch index estimates to date are ranging from 11,700 to 48,000 based on high and low catchability estimates with a mean estimate of 21,000 passing GW fishwheels.

The current in-season Nass Coho estimate (~40,000) is generated using mark-recapture data from GH fishwheels that fluctuate over a 7 d period as GW tagged fish pass the GH site. In comparison, in-season fishwheel catch index estimates to date at GW are ranging from 21,000 to 56,000 based on high and low

catchability estimates with a mean estimate of 34,000. The MR estimate is considered more accurate at predicting the in-season abundance of the run passing the GW fishwheels with an overall 4.1% of the run sampled to date. The MR estimate is based on tags applied at GW fishwheels (n=1439), total catch at GH and Upper Stratum IS fisheries (n=5580), and tag recoveries in the Upper Stratum (n=181).

The current in-season Nass summer-run steelhead estimate (~8,400) is generated using the Coho mark-recapture data to estimate the steelhead population that passed GW fishwheels. In comparison, the in-season fishwheel catch index estimates to date, based on historical steelhead catch rates at GW are ranging from 5,600 to 25,000 based on high and low catchability estimates with a mean estimate of 11,500.

In-season projected return forecasts to date are below and suggest targets have been reached for Sockeye, Chinook, and summer-run steelhead (minimum); and are tracking below target for Coho. Estimates to GW are based on two methods, mean run timing and log-regression of the in-season to final estimate and are shown in table below.

IN-SEASON FORECASTS TO GW - METHODS:	SOCK	CHIN	COHO	STEEL		30-Aug-15
1. RUN TIMING METHOD (94-14) - Mean Run timing	469,000	26,000	46,400	11,000		
Lower (-2 S.D.)	453,000	26,000	39,200	8,300		
Upper (+2 S.D.)	485,000	27,000	57,000	17,100		
2. IN-SEASON TO FINAL (regression):	468,000	26,000	48,000	12,000		In-season to Final
95% CI - lower	432,000	26,000	33,000	7,000		r ² (CH) = 1.00
95% CI - upper	504,000	27,000	63,000	17,000		r ² (SO) = 1.00
						r ² (CO) = 0.96
GW RUN SIZE TARGET (DEPENDING ON HARVESTS ABOVE GW)	250,000	15,000	65,000	4,200		r ² (ST) = 0.83

Net Escapement Estimates for adult Nass salmon and summer-run steelhead to date are shown below. Based on preliminary in-season estimates, aggregate net escapement targets have been reached for Sockeye, Chinook, and summer-run steelhead (minimum).

IN-SEASON NET ESCAPEMENT ESTIMATES	SOCK	CHIN	COHO	STEEL
HARVEST ESTIMATES ABOVE GW TO DATE	79,705	3,476	3,866	169
NET ESCAPEMENT (ABOVE GW):	379,945	22,821	35,864	8,150
NET ESCAPEMENT TARGET (UPPER RIVER ONLY)	200,000	13,000	60,000	4,000

HARVEST ESTIMATES FOR ADULT NASS SALMON & STEELHEAD

ALASKAN FISHERIES IN SE ALASKA (information courtesy from ADFG's website):

Alaskan gillnet fisheries start dates in 2015: District 101 (Tree Point) on 21 June and District 106 (Sumner and Upper Clarence) on 17 June. Alaskan seine fisheries start dates in 2015: District 101 (Lower Clarence/Revilla) on 5 July; District 102 (Middle Clarence) on 21 June; District 103 (Cordova) on 19 July, and District 104 (Noyes/Dall) on 5 July. The table below shows the current estimates of catches of salmon in Alaskan net fisheries in Districts 101–104 (and mean catch comparisons between 2000 and 2014) to week ending **29 AUGUST** based on data from ADFG's website. Current catches are above average for Sockeye and Chum, and below average for Chinook, Pink, and Coho. Of the total in-season Sockeye catch reported in Alaskan fisheries to date (741,000), approximately 128,000 (17%) are estimated as Nass origin based on mean stock composition estimates from 1982–2014 and are currently just below average (132,000) to date. The average total mean harvest of Nass Sockeye in Alaskan fisheries from 2000–2014 is 129,000 (range: 47,000–300,000).

IN-SEASON SE ALASKAN CUM. SALMON CATCH ESTIMATES (ADFG WEBSITE) - 2015									WEEK END: 29-Aug-15		
DISTRICTS	AREA	SOCK CATCH	AVG (00-14)	CHIN CATCH	AVG (00-14)	PINK CATCH	AVG ODD (00-13)	CHUM CATCH	AVG (00-14)	COHO CATCH	AVG (00-14)
DIST 101 GN	TREE PT	21,000	76,000	1,100	1,400	127,000	358,000	332,000	216,000	12,000	23,000
DIST 106 GN	UPP. CLAR	114,000	89,000	1,500	1,400	214,000	151,000	222,000	146,000	81,000	79,000
DIST 101 SN	LOW CLAR	69,000	58,000	200	800	1,354,000	4,391,000	592,000	261,000	19,000	39,000
DIST 102 SN	MID CLAR.	76,000	35,000	600	800	2,444,000	3,172,000	661,000	414,000	46,000	47,000
DIST 103 SN	CORDOVA	31,000	25,000	100	500	1,780,000	2,054,000	58,000	122,000	17,000	29,000
DIST 104 SN	NOYES/DALL	430,000	276,000	6,300	6,600	3,811,000	2,378,000	222,000	175,000	62,000	69,000
CUMULATIVE TOTAL		741,000	559,000	9,800	11,500	9,730,000	12,504,000	2,087,000	1,334,000	237,000	286,000

*Chinook catch data were not available from June to 11 July. For those weeks, mean weekly catches from 2000-2014 were used as approximate estimates for 2015.

CANADIAN COMMERCIAL NET FISHERIES IN AREA 3 (information courtesy from DFO Prince Rupert):

Area 3 commercial net fisheries start dates in 2015 were 9 June for gillnet and 6 July for seines. DFO commercial net fishery openings in Area 3 for 2015 were 28 gillnet and 13 seine. Commercial fishery openings in Area 3 have been closed since 13 August. Commercial net harvest and release data for 2015 for salmon and steelhead in Area 3 are shown below by week-ending Saturday periods:

GEAR	AK V	Vessels	SO-harv	SO-Rel	CO-HARV	CO-Rel	PK-HARV	PK-Rel	Chum-harv	Chum-Rel	CH-harv	CH-Rel	STEEL-Rel
GN	24	104	2,223	0	4	0	0	2	0	5	0	90	38
	25	283	9,880	0	9	3	2	0	0	80	0	675	20
	26	512	18,371	0	1,893	14	828	9	0	1,249	783	234	80
	27	339	21,845	0	326	0	5,154	7	2,738	797	469	118	16
	28	317	29,136	0	1,179	4	25,976	82	23,935	1,160	169	85	39
	29	471	37,915	0	1,694	11	55,300	104	29,932	1,744	147	95	57
	31	300	26,975	1	2,062	64	49,199	322	0	10,673	100	59	87
	32	209	26,544	0	2,038	7	18,222	0	0	3,582	72	26	134
	33	124	10,521	0	1,609	0	4,407	34	0	2,096	52	36	129
GN Total		2,659	183,410	1	10,814	103	159,088	560	56,605	21,386	1,792	1,418	600
SN	28	29	6,746	0	651	0	25,205	0	24,818	13	0	182	28
	29	106	9,543	0	4,104	0	79,295	0	85,068	0	0	499	104
	30	16	0	5,641	312	1	12,944	2	0	8,454	0	51	7
	31	37	5,760	0	2,573	43	63,774	0	0	14,613	0	111	25
SN Total		188	22,049	5,641	7,640	44	181,218	2	109,886	23,080	0	843	164
Grand Total		2,847	205,459	5,642	18,454	147	340,306	562	166,491	44,466	1,792	2,261	764

LABELS: SO=SOCKEYE, PK=PINK, CO=COHO, CH=CHINOOK; STEEL=STEELHEAD, HARV=HARVESTED, AND REL=RELEASED; VESSELS=BOAT DAYS.

Note that DFO implemented management actions in Area 3 to reduce harvest impacts on the Kwinageese Sockeye stock during their migration through Area 3 in July. The stock required rebuilding from a past spawning barrier detected in 2011 and poor returns from 2010 and 2012–2014. Sockeye retention was not be permitted in commercial fisheries in Area 3 from 19–25 July (WK 30), the anticipated peak of the Kwinageese Sockeye migration, as documented in DFO’s 2015 Integrated Fisheries Management Plan (IFMP).

Sub-area breakout of catch is as follows:

GEAR	AREA 3	Vessels	SO-harv	SO-Rel	CO-HARV	CO-Rel	PK-HARV	PK-Rel	Chum-harv	Chum-Rel	CH-harv	CH-Rel	STEEL-Rel
GN	3-12	1177	88,456	0	3,872	38	68,838	109	0	6,752	714	688	351
	3-7A	534	31,860	0	2,053	23	28,901	312	0	6,009	483	354	111
	3-7B	794	53,668	1	3,810	42	49,881	102	33,213	8,521	504	340	123
	BOSTON R	105	6,761	0	786	0	9,545	27	20,088	0	71	25	15
	TRACEY B	46	2,556	0	274	0	1,856	9	3,304	73	20	11	0
GN Total		2,659	183,410	1	10,814	103	159,088	560	56,605	21,386	1,792	1,418	600
	3-7A	8	237	1,675	351	0	8,890	0	0	3,665	0	28	4
	3-7B	77	13,405	1,108	3,565	30	100,831	0	32,846	12,763	0	398	72
	BOSTON R	70	5,369	2,050	2,639	14	44,959	2	53,455	4,980	0	307	69
	TRACEY B	29	3,038	0	1,013	0	23,906	0	23,585	3	0	92	19
SN Total		188	22,049	5,641	7,640	44	181,218	2	109,886	23,080	0	843	164
Grand Total		2,847	205,459	5,642	18,454	147	340,306	562	166,491	44,466	1,792	2,261	764

**Sub-area catches reporting fewer than 5 boats are not shown by sub area but included in totals by gear type.*

Of the total commercial catch (205,000) of Sockeye in Area 3, NFWD is estimating approximately **153,000** are of Nass origin (75%) based on stock composition modeling. The average total mean harvest of Nass Sockeye in Canadian commercial net fisheries from 2000–2014 is 95,000 (range: 26,000-280,000).

UPPER NASS HARVESTS – GITANYOW FISHERIES (information courtesy of the Gitanyow Fisheries Authority)

Estimates of harvests in Gitanyow fisheries to date are 18,550 Sockeye based on preliminary FSC (7165) and inland demonstration (11,385) catches to **22 August**. The Gitanyow acquired 55 Area C license for the inland Sockeye economic fishery at Meziadin. Other harvests include 253 Chinook (252 large and 1 small) and 2 Coho. Of the total catch reported in Gitanyow fisheries to date, 166 tags (161 Sockeye and 5 Chinook) were returned to NFWD. The average salmon harvests in Gitanyow fisheries from 2000–2014 are 8,000 Sockeye, 150 Chinook (large), and 200 Coho.

NISGA'A DOMESTIC (FSC) AND SALE FISHERIES:

Nisga'a domestic and sale fisheries are monitored by the Nisga'a Fisheries and Wildlife Department and began on 2 May 2015. Cumulative harvests to week ending **29 AUGUST** are shown in the table below for FSC catches. For the same week ending period, mean cumulative harvests from 2000–2014 are shown for comparison. The total harvests estimated in 2015 including sale fishery catches are above average for Nass Chinook, Sockeye, Pink, and steelhead; and below average for Coho and Chum.

FSC Reported Week Ending Period		DOMESTIC (FSC) HARVESTS TO WK END - 2015		TOTAL HARVESTS TO DATE INCLUDING SALE FISHERIES - 2015	
NASS SPECIES	Wk end	Harvest	Mean*	Harvest	Mean
CHINOOK	29-Aug-15	6,040	5,100	8,102	5,900
SOCKEYE	29-Aug-15	37,614	27,600	151,994	87,000
PINK	29-Aug-15	3,182	3,070	22,604	18,100
COHO	29-Aug-15	1,760	2,130	6,561	9,580
CHUM	29-Aug-15	251	570	251	570
STEELHEAD	29-Aug-15	430	330	430	330

* Mean harvests from 2000-2014 for week end periods. Harvests include all gear types estimates (net, angling, seine, fishwheels, etc.)

Nisga'a Sale fishery information to date:

- Total Individual-sale (IS) fisher permits issued in 2015 are 296 (including 62 elder permits). Of the permits issued, 194 sold in the Nisga'a sale fisheries for salmon.
- Summary of permits issued by community are: 87 Gitlaxt'aamiks, 50 Laxgalts'ap, 45 Gingolx, 35 Gitwinksihkw, 34 Prince Rupert, 32 Terrace, and 13 other areas.
- The Nisga'a sale fisheries closure periods for the Kwinageese Sockeye stock to pass upriver were: 19–25 July for Marine and 23–29 July (and 29 July–4 August above GH) for In-river sale fisheries.
- Individual-sale fishery data to date for Nisga'a **Marine** is as follows including future fisheries:

NUMBER OF NISGA'A MARINE FISHERIES (16 HR OPENINGS):	15	JUNE 18; JULY 2, 3, 7, 8, 12, 13, 15, 16, 29, 30; AUG 16, 17, 19, 20
DATA FROM JUNE 18 FISHERY (25 BOATS; 22 FISHERS SOLD) - FINAL		1853 SOCKEYE
DATA FROM JULY 2 FISHERY (24 BOATS; 23 FISHERS SOLD) - FINAL		3403 SOCKEYE, 51 CHINOOK, AND 456 PINKS
DATA FROM JULY 3 FISHERY (25 BOATS; 32 FISHERS SOLD) - FINAL		3665 SOCKEYE, 48 CHINOOK, 543 PINKS, AND 1 COHO
DATA FROM JULY 7 FISHERY (23 BOATS; 14 FISHERS SOLD) - FINAL		2064 SOCKEYE, 12 CHINOOK, AND 685 PINKS
DATA FROM JULY 8 FISHERY (25 BOATS; 27 FISHERS SOLD) - FINAL		2574 SOCKEYE, 28 CHINOOK, AND 1523 PINKS
DATA FROM JULY 12 FISHERY (23 BOATS; 17 FISHERS SOLD) - FINAL		2430 SOCKEYE, 13 CHINOOK, 1403 PINKS, AND 3 COHO
DATA FROM JULY 13 FISHERY (23 BOATS; 24 FISHERS SOLD) - FINAL		2452 SOCKEYE, 14 CHINOOK, 1564 PINKS, AND 3 COHO
DATA FROM JULY 15 FISHERY (23 BOATS; 17 FISHERS SOLD) - FINAL		2633 SOCKEYE, 31 CHINOOK, 1998 PINKS, AND 13 COHO
DATA FROM JULY 16 FISHERY (23 BOATS; 31 FISHERS SOLD) - FINAL		3797 SOCKEYE, 31 CHINOOK, 2634 PINKS, AND 24 COHO
DATA FROM JULY 29 FISHERY (20 BOATS; 18 FISHERS SOLD) - FINAL		1299 SOCKEYE, 11 CHINOOK, 3031 PINKS, AND 118 COHO
DATA FROM JULY 30 FISHERY (18 BOATS; 19 FISHERS SOLD) - FINAL		1883 SOCKEYE, 26 CHINOOK, 2325 PINKS, AND 103 COHO
DATA FROM AUG 16 FISHERY (12 BOATS; 13 FISHERS SOLD) - FINAL		3040 SOCKEYE, 20 CHINOOK, 116 PINKS, AND 366 COHO
DATA FROM AUG 17 FISHERY (12 BOATS; 14 FISHERS SOLD) - FINAL		2132 SOCKEYE, 16 CHINOOK, 94 PINKS, AND 232 COHO
DATA FROM AUG 19 FISHERY (20 BOATS; 19 FISHERS SOLD) - FINAL		3192 SOCKEYE, 15 CHINOOK, 151 PINKS, AND 475 COHO
DATA FROM AUG 20 FISHERY (20 BOATS; 19 FISHERS SOLD) - FINAL		2156 SOCKEYE, 12 CHINOOK, 69 PINKS, AND 172 COHO
NEXT NISGA'A MARINE FISHERY PLANNED:		CLOSED FOR SEASON

- Individual-sale fishery data to date for Nisga'a **In-river** is as follows including future fisheries:

NUMBER OF NISGA'A IN-RIVER FISHERIES (10 HR OPENINGS):	10	JULY 6, 8, 10, 13, 15, 17, 31; AUG 5, 18, 20
DATA FROM JULY 6 FISHERY (64 FISHERS) - FINAL		6318 SOCKEYE AND 336 CHINOOK
DATA FROM JULY 8 FISHERY (63 FISHERS) - FINAL		5920 SOCKEYE, 296 CHINOOK, AND 2 COHO
DATA FROM JULY 10 FISHERY (53 FISHERS) - FINAL		5660 SOCKEYE AND 243 CHINOOK
DATA FROM JULY 13 FISHERY (71 FISHERS) - FINAL		8937 SOCKEYE AND 311 CHINOOK
DATA FROM JULY 15 FISHERY (70 FISHERS) - FINAL		8189 SOCKEYE, 242 CHINOOK, AND 6 COHO
DATA FROM JULY 17 FISHERY (60 FISHERS) - FINAL		5680 SOCKEYE, 210 CHINOOK, AND 31 COHO
DATA FROM JULY 31 FISHERY (54 FISHERS) - FINAL		10,519 SOCKEYE, 31 CHINOOK, AND 207 COHO
DATA FROM AUG 5 FISHERY (47 FISHERS) - FINAL		7102 SOCKEYE, 29 CHINOOK, AND 645 COHO
DATA FROM AUG 18 FISHERY (40 FISHERS) - FINAL		5923 SOCKEYE, 22 CHINOOK, AND 1332 COHO
DATA FROM AUG 20 FISHERY (32 FISHERS) - FINAL		3831 SOCKEYE, 14 CHINOOK, AND 902 COHO
NEXT NISGA'A IN-RIVER FISHERY PLANNED:		CLOSED FOR SEASON

- A Nisga'a seiner was contracted by the Nisga'a Pacific Ventures Limited Partnership to fish the NLG entitlement for Nass Pinks in 2015. Preliminary estimates of harvest for 2015 are: 220 Sockeye, 5

Chinook, 28 Coho, and 2830 Pink for 2 days of fishing (August 2 & 3) in Area 3-12. Releases are: 495 Chum, 8 Chinook jacks, and 3 steelhead.

NLG's inland selective demonstration fishery to date:

NLG were successful in negotiating the leasing of 45 Area C commercial gillnet licenses (20 at start of fisheries and 25 from 27 July onward) to participate in DFO's Inland Selective Demonstration Fishery Program in 2015. DFO allocated weekly gillnet catches of Sockeye to NLG's inland selective fishery program based on a license sharing formula from commercial gillnet catches in Area 3. These harvests were additional to Nisga'a Treaty Allocations (and IS targets) and had to be caught selectively (no gillnets). The Grease Harbour fishwheels were used to harvest these additional catch shares as arranged by NLG and the Nisga'a Pacific Ventures Limited Partnership.

DFO issued a revised total allocation of 7510 Sockeye to NLG on 19 August for selectively harvesting from the GH fishwheels based on Area 3 commercial gillnet catches (4.1% of 183,410) in 2015. Of 45,844 Sockeye caught at the GH fishwheels to date, 7508 were harvested (7501 Sockeye as part of the demonstration fishery from 3-4 July, 9-10 July, 16-17 July, 25-26 July, 5-7 August, 13-16 August, and 19-20 August; and 7 as part of the NLG treaty catch) and 38,336 were released. The demonstration harvest completed on 20 August. Note that the Kwinageese Sockeye closure period for GH harvesting was from 29 July to 3 August where no harvesting was permitted as the stock passed upriver.

The total harvest summary to date in all of the Nisga'a harvest fisheries are as follows:

NISGA'A TOTAL HARVEST SUMMARY	SOCK	CHIN	COHO	PINK-ODD	CHUM	STEEL
MARINE SALE FISHERY TOTAL	38,573	328	1,510	16,592	CLOSED	CLOSED
IN-RIVER SALE FISHERY TOTAL	68,079	1,734	3,125	0	CLOSED	CLOSED
INDIVIDUAL SALE (IS) FISHERY TOTAL	106,652	2,062	4,635	16,592	CLOSED	CLOSED
NLG COMMUNAL SELECTIVE FISHWHEEL TREATY FISHERY	7	0	138	CLOSED	CLOSED	CLOSED
NLG COMMUNAL SEINE SELECTIVE TREATY FISHERY (REVIEWED)	220	5	28	2,830	CLOSED	CLOSED
DOMESTIC (FSC) GILLNET FISHERY - WK END 29 AUG (DRAFT)	37,614	6,035	1,760	3,182	251	430
SUB TOTAL (NLG TREATY FISHERIES)	144,493	8,102	6,561	22,604	251	430
NLG SOCK DEMONSTRATION SELECTIVE FISHERY HARVEST	7,501	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
GRAND TOTAL	151,994	8,102	6,561	22,604	251	430

TOTAL RETURN TO CANADA (TRTC) AND NISGA'A ENTITLEMENT ESTIMATES FOR NASS SALMON

Pre-season forecasts for Nass salmon returns in 2015 projected below average returns for Sockeye, Chinook, odd-year Pink, and Chum, and an above average return for Coho. The summary below includes pre-season Nisga'a catch entitlement estimates.

PRE-SEASON TRTC & ENTITLEMENT FORECASTS	SOCK	CHIN	COHO	PINK-ODD	CHUM
HISTORICAL MEAN TRTC (1994-2014)	580,000	33,000	210,000	1,020,000	54,000
PRE-SEASON TRTC FORECAST	562,000	24,000	236,000	734,000	15,000
PRE-SEASON NISGA'A ENTITLEMENT	98,399	5,040	18,880	80,093	No surplus
CUM NISGA'A UNDERAGE (+)/OVERAGE (-): 2000-14	21,000	8,000	9,000	-21,000	15,000
TOTAL PRE-SEASON NISGA'A CATCH POTENTIAL	119,000	13,000	28,000	59,000	No surplus

The current tracking of in-season TRTC and Nisga'a entitlement estimates for Nass salmon to **31 AUGUST** are based on mean run timing to date (Sockeye 98%, Chinook 99%, Coho 86%, Pink 84%, and Chum 58%) with minimum and maximum run timing for range estimates from 1994–2014 returns. The in-season TRTC estimates are currently tracking above the pre-season forecasts for Nass Sockeye, Chinook, and Chum; and well below pre-season forecasts for Coho and Pink.

IN-SEASON TRTC & ENTITLEMENT ESTIMATES	SOCK	CHIN	COHO	PINK-ODD	CHUM
PROJECTED TRTC BASED ON MEAN RUN % & MR EST.	724,000	37,000	94,000	272,000	29,000
ESTIMATED %TRTC TO DATE: MEAN. RUN TIMING	98%	99%	86%	84%	58%
MINIMUM FORECAST	714,000	37,000	84,000	235,000	14,000
MAXIMUM FORECAST	754,000	38,000	117,000	339,000	80,000
IN-SEASON NISGA'A ENTITLEMENT TARGET	123,000	7,700	7,500	8,000	No surplus
IN-SEASON UNDERAGE (+)/OVERAGE (-)	21,000	400	-	-	small return
TOTAL IN-SEASON NISGA'A TREATY CATCH POTENTIAL	144,000	8,100	7,500	8,000	No surplus
MINIMUM ENTITLEMENT FORECAST	143,000	7,800	6,720	2,000	No surplus
MAXIMUM ENTITLEMENT FORECAST	148,000	8,000	9,360	19,000	6,400
NLG SELECTIVE DEMONSTRATION FISHERY ALLOCATION	7,510	NA	NA	NA	NA
TOTAL IN-SEASON NISGA'A CATCH POTENTIAL - ALL FISHERIES	152,000	8,100	7,500	8,000	No surplus

The in-season Nisga'a entitlement estimate for Nass Sockeye, not including the selective demonstration allocation, is ranging from 143,000 to 148,000 (min/max run timing) with a point estimate of approximately **144,000** based on the in-season TRTC mean point estimate (724,000) and the cumulative underage (21,000) from 2000–2014 including Nass Chum species conversion. The current catch of Nass Sockeye to date in NLG's treaty fisheries is approximately **144,500** and the in-season entitlement has been reached for 2015. Of the 7510 allocated for the inland demonstration fishery, 7501 Sockeye were harvested as part of the Nass inland selective demonstration fishery program.

The in-season Nisga'a entitlement estimate for Nass Chinook is approximately **8,100**, including 400 (5%) from the total cumulative underage (8000) from 2000–2014 based on the in-season TRTC mean point estimate (37,000). The current catch of Nass Chinook to date in all Nisga'a fisheries is approximately **8,150** and the in-season entitlement has been reached for 2015.

The in-season Nisga'a entitlement estimate for Nass Coho is ranging from 7,000 to 9,500 (min/max run timing) with a point estimate of approximately **7,500** based on the in-season TRTC mean point estimate (94,000) and not including the cumulative underage (9000) from 2000–2014. The current catch of Nass Coho to date in all of Nisga'a fisheries is approximately **6,600**.

The in-season Nisga'a entitlement estimate for Nass Pink is ranging from 2,000 to 19,000 (min/max run timing) with a point estimate of approximately **8,000** based on the in-season TRTC mean point estimate (272,000). The in-season TRTC estimate of odd-year Nass Pink is now based on fishwheel catch expanded by the cumulative Coho mark rate (4.3%), the difference in the method from the 2013 escapement (169%), and mean run timing (85%; range is 68–98%). The current catch of Nass Pink to date in NLG's treaty fisheries is approximately **23,000** and the in-season entitlement has been exceeded for 2015. Note that over the season with the low TRTC return of Nass Area Pink in 2015, the Nisga'a entitlement dropped by 90% from pre-season to in-season targets (80,000 to 8,000).

The in-season Nass Chum TRTC estimate is 29,000. The in-season TRTC estimate is based on Area 3 commercial catch of Chum to date (211,000) expanded by a mean harvest rate (6%; range 2-12%) and a mean Nass stock composition estimate (28%) from 2000 to 2013. Based on the current in-season estimates for Nass Chum, the TRTC is just below the minimum (30,000) and target (45,000) escapement goals to date so no directed harvests are planned and incidental catch is anticipated to be **<500** for 2015. The current catch of Nass Chum to date in all Nisga'a fisheries is **251**.

The next Nass River stock assessment update from Nisga'a Fisheries is planned for:
Tuesday, 15 September 2015.

Nisga'a Fisheries Stock Assessment Update link (please remember to refresh these links by pushing F5):
<ftp://ftp.lgl.com/Nass%20Stock%20Assessment%20Updates/>

NASS TRTC RANKINGS BY YEAR FOR SALMON, 1985-2015.

TRTC	SOCKEYE	PINK	CHINOOK	COHO	CHUM
1985	10	6	19	11	12
1986	26	14	1	9	6
1987	23	12	15	20	10
1988	31	22	24	30	17
1989	27	4	2	19	8
1990	30	24	6	7	9
1991	6	2	30	29	15
1992	2	19	16	15	14
1993	1	9	5	28	1
1994	13	26	9	3	3
1995	5	10	27	27	4
1996	8	15	10	22	16
1997	14	16	14	31	20
1998	19	29	4	26	2
1999	11	3	21	24	7
2000	15	21	18	17	21
2001	25	7	3	6	18
2002	3	18	22	4	24
2003	4	5	7	14	5
2004	9	13	17	16	13
2005	16	1	23	8	19
2006	12	30	8	21	11
2007	28	8	11	12	28
2008	29	31	20	18	31
2009	21	11	12	2	23
2010	24	27	25	10	29
2011	18	28	28	23	30
2012	22	23	31	13	25
2013	20	17	29	1	27
2014	17	20	26	5	26
2015	7	25	13	25	22

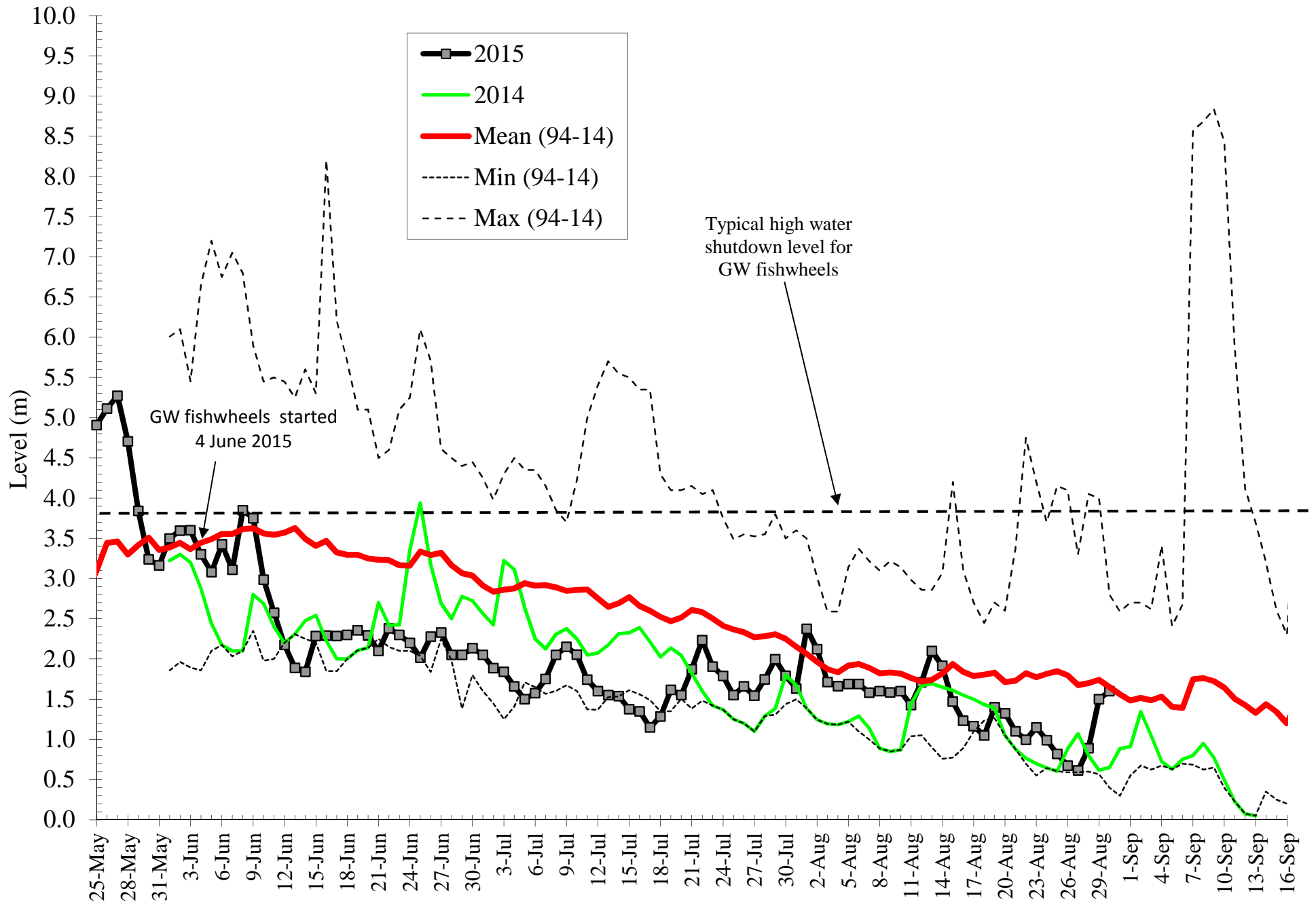
*2015 are preliminary.

NASS NET ESCAPEMENT RANKINGS BY YEAR FOR SALMON, 1985-2015.

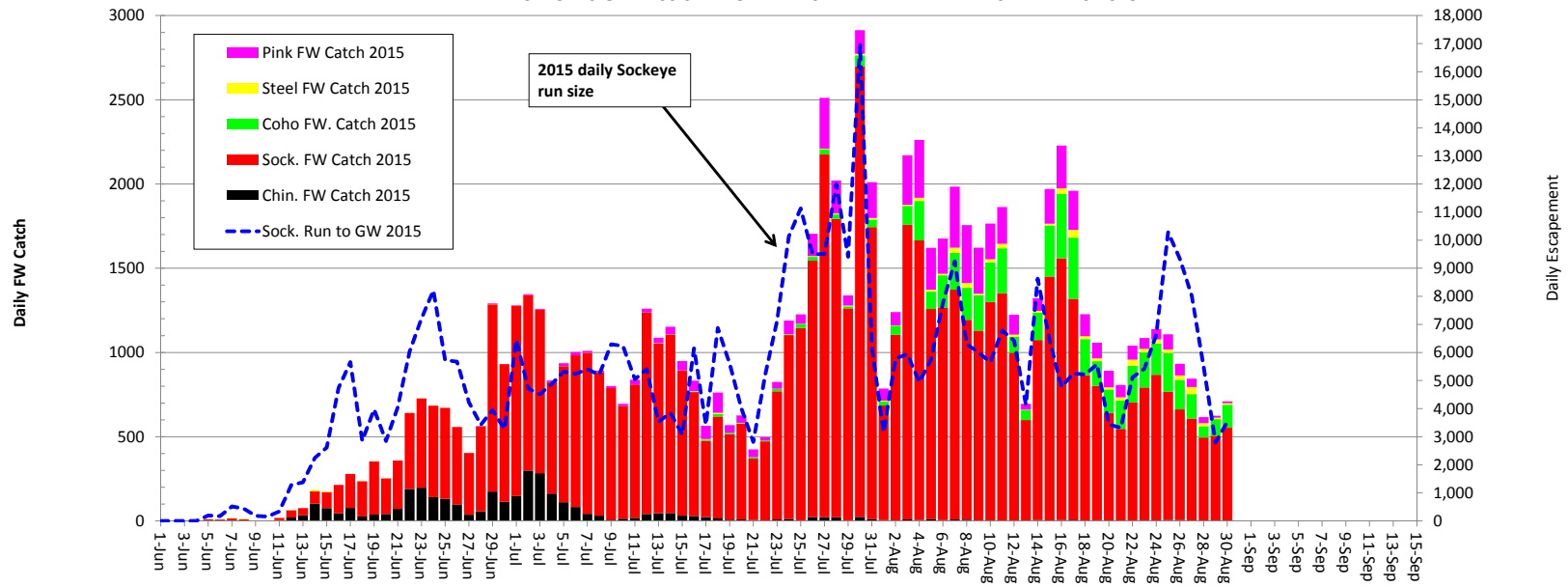
ESC	SOCKEYE	PINK	CHINOOK	COHO	CHUM
1985	3	7	18	11	11
1986	21	18	1	10	8
1987	23	12	15	22	12
1988	30	27	22	30	16
1989	31	5	4	21	10
1990	27	25	7	7	9
1991	7	13	31	29	18
1992	1	22	20	16	17
1993	2	11	8	28	2
1994	6	26	10	5	3
1995	10	10	30	27	7
1996	19	17	12	24	19
1997	14	15	17	31	20
1998	9	30	11	26	1
1999	22	8	26	18	13
2000	25	21	19	17	23
2001	28	3	2	6	15
2002	4	16	24	3	26
2003	11	2	5	13	4
2004	20	9	21	20	6
2005	17	1	23	9	14
2006	13	29	6	19	5
2007	29	6	9	12	28
2008	18	31	14	15	31
2009	15	4	3	2	22
2010	16	24	16	8	29
2011	8	28	27	23	30
2012	26	20	28	14	24
2013	24	14	29	1	27
2014	12	19	25	4	25
2015	5	23	13	25	21

*2015 are preliminary.

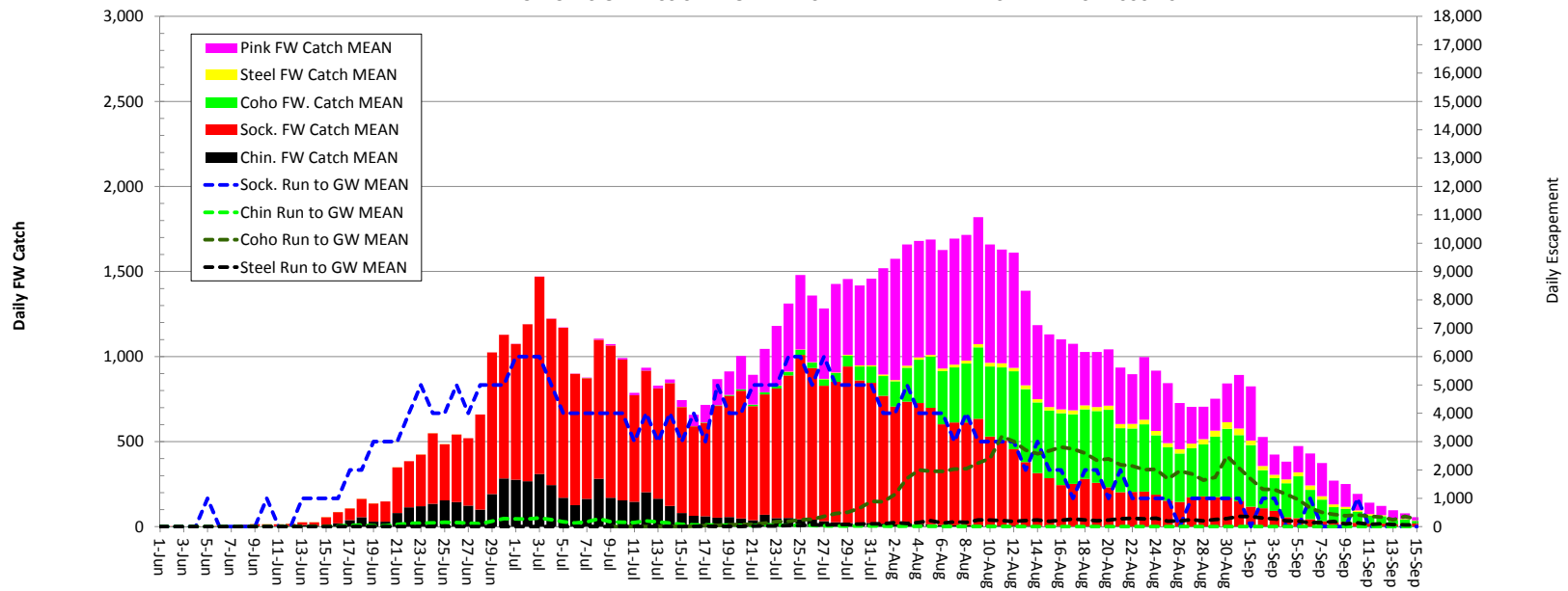
Daily Water Level at Gitwinksihlkw Fishwheels 2015



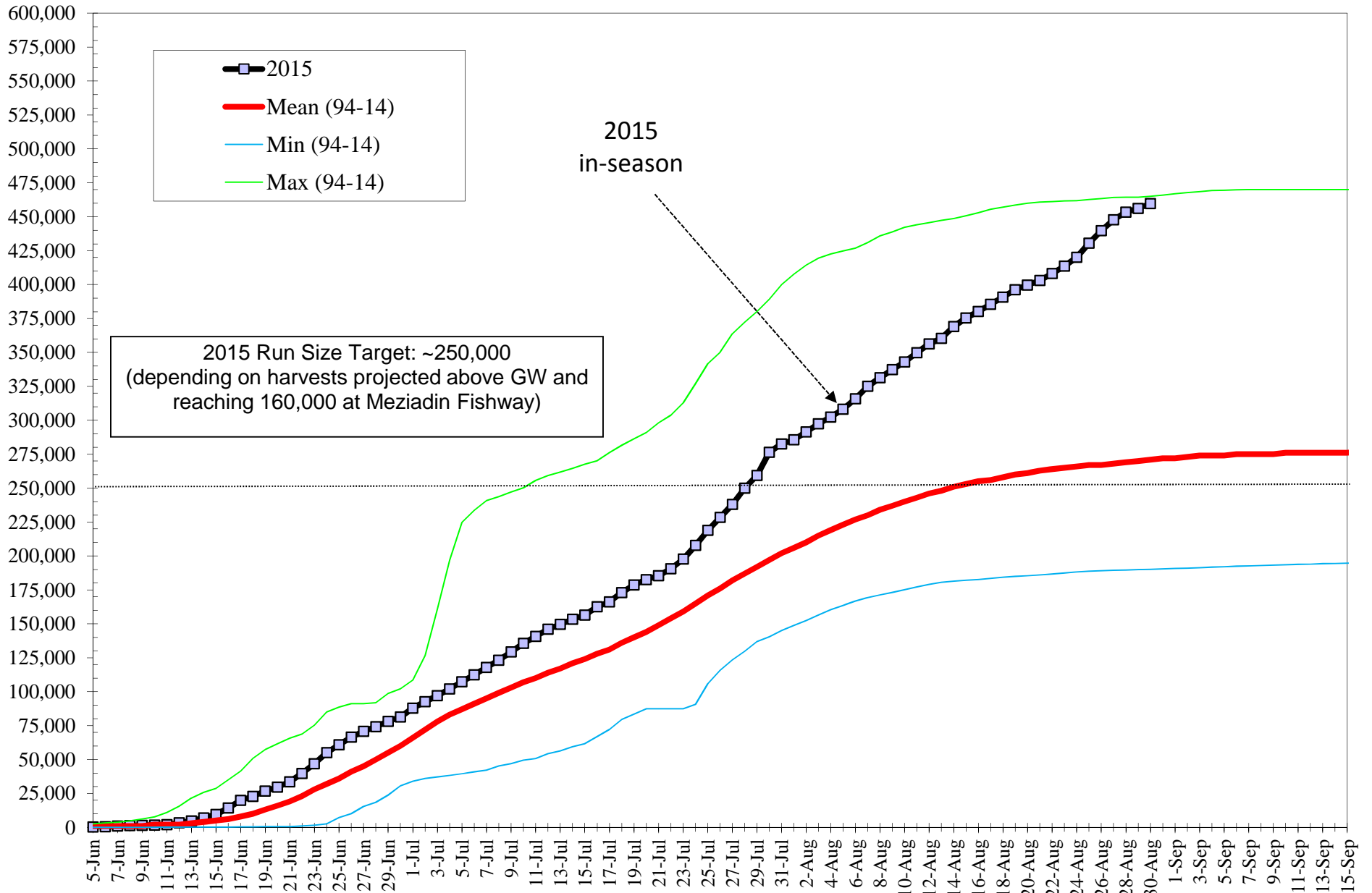
DAILY CATCHES OF NASS SALMON AND STEELHEAD AT THE FISHWHEELS 2015



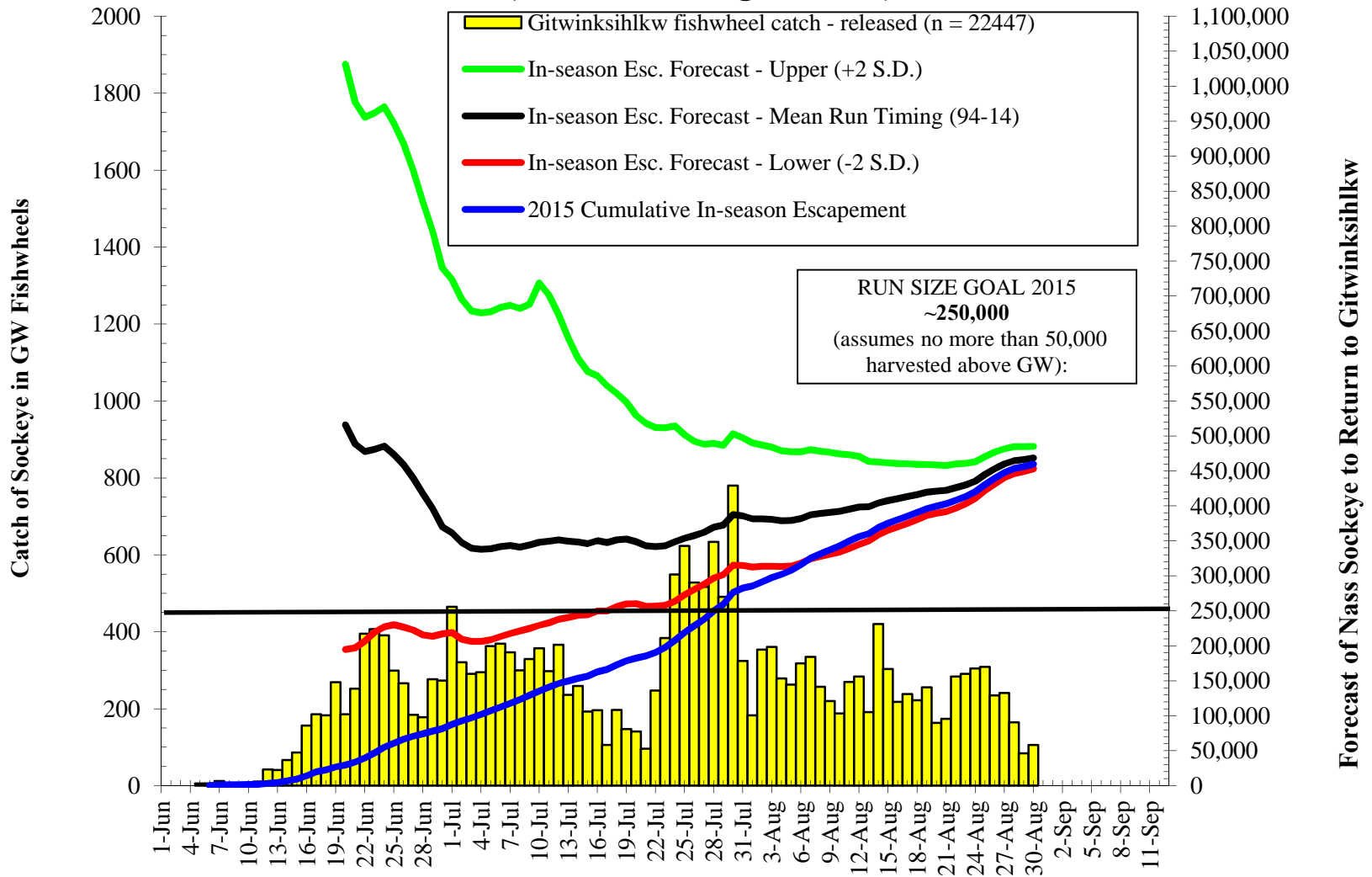
MEAN DAILY CATCHES OF NASS SALMON AND STEELHEAD AT THE FISHWHEELS - 2000-2014



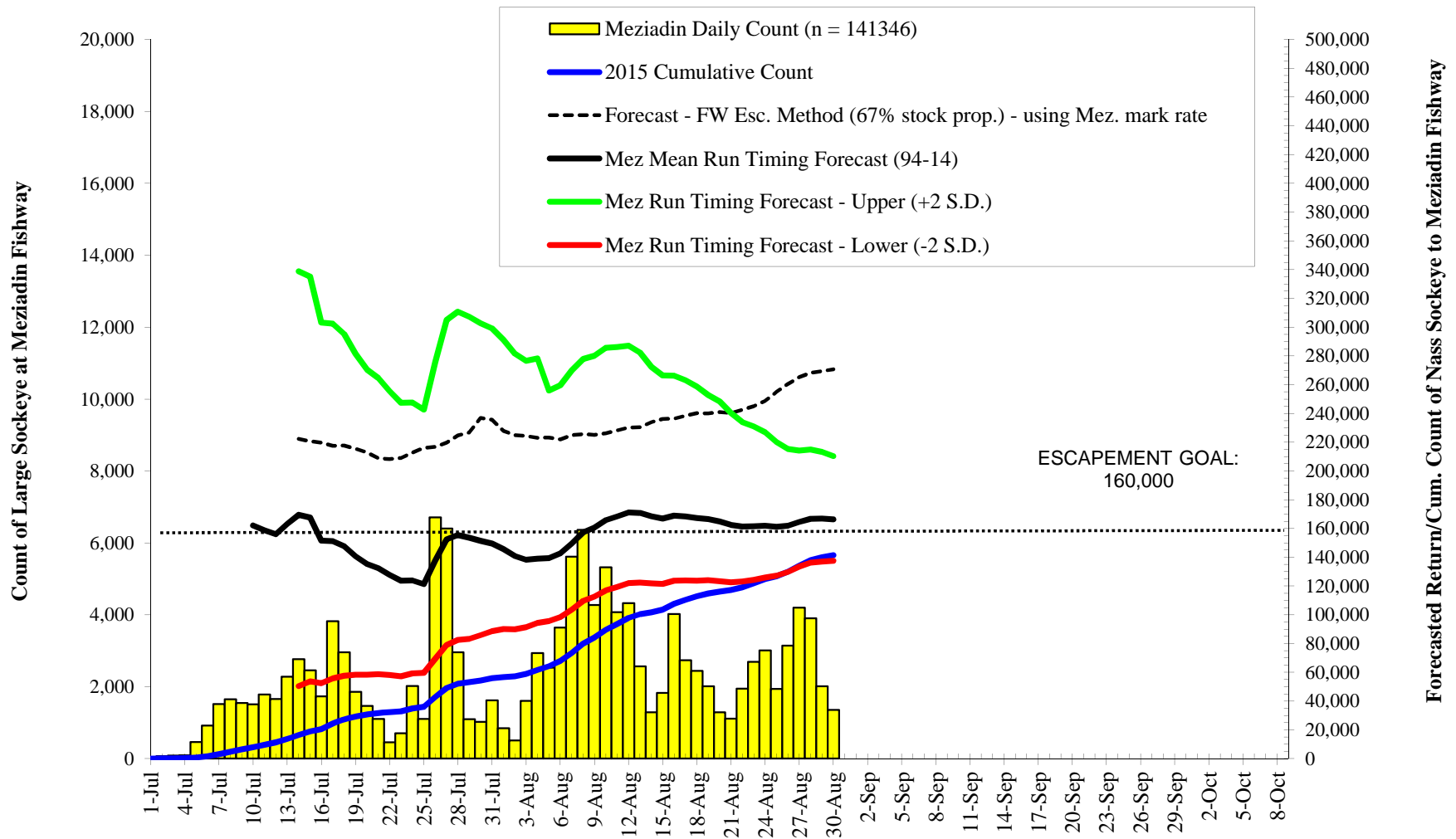
Nass Sockeye Cum. Run Size to Gitwinksilhkw Fishwheels 2015 versus 94-14 Mean, Min, Max returns (before upriver harvests)



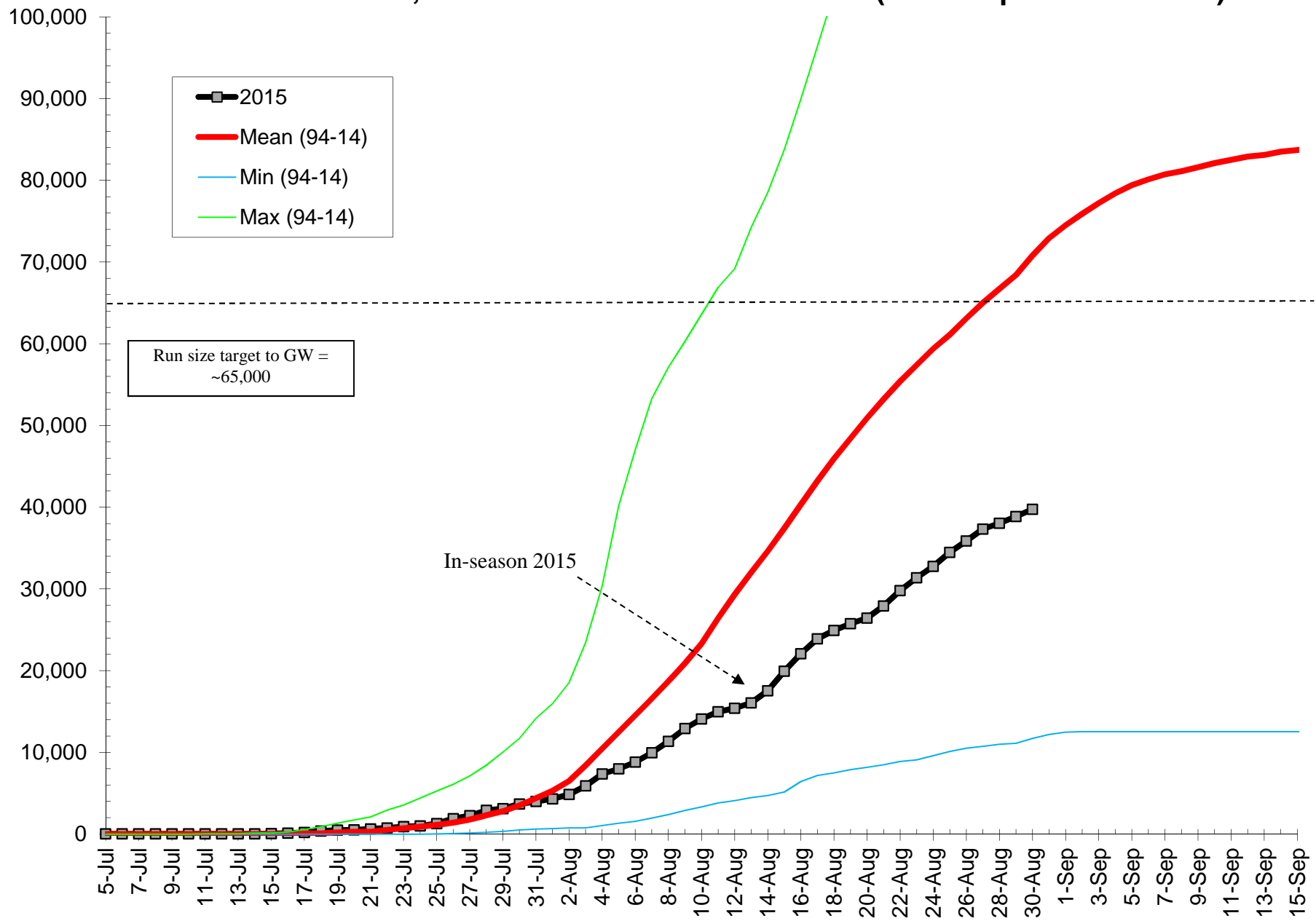
Nass Sockeye (≥ 45 cm NFL) Run Forecasts to Gitwinksihlkw Fishwheels 2015 (Mean Run timing - 1994-14)



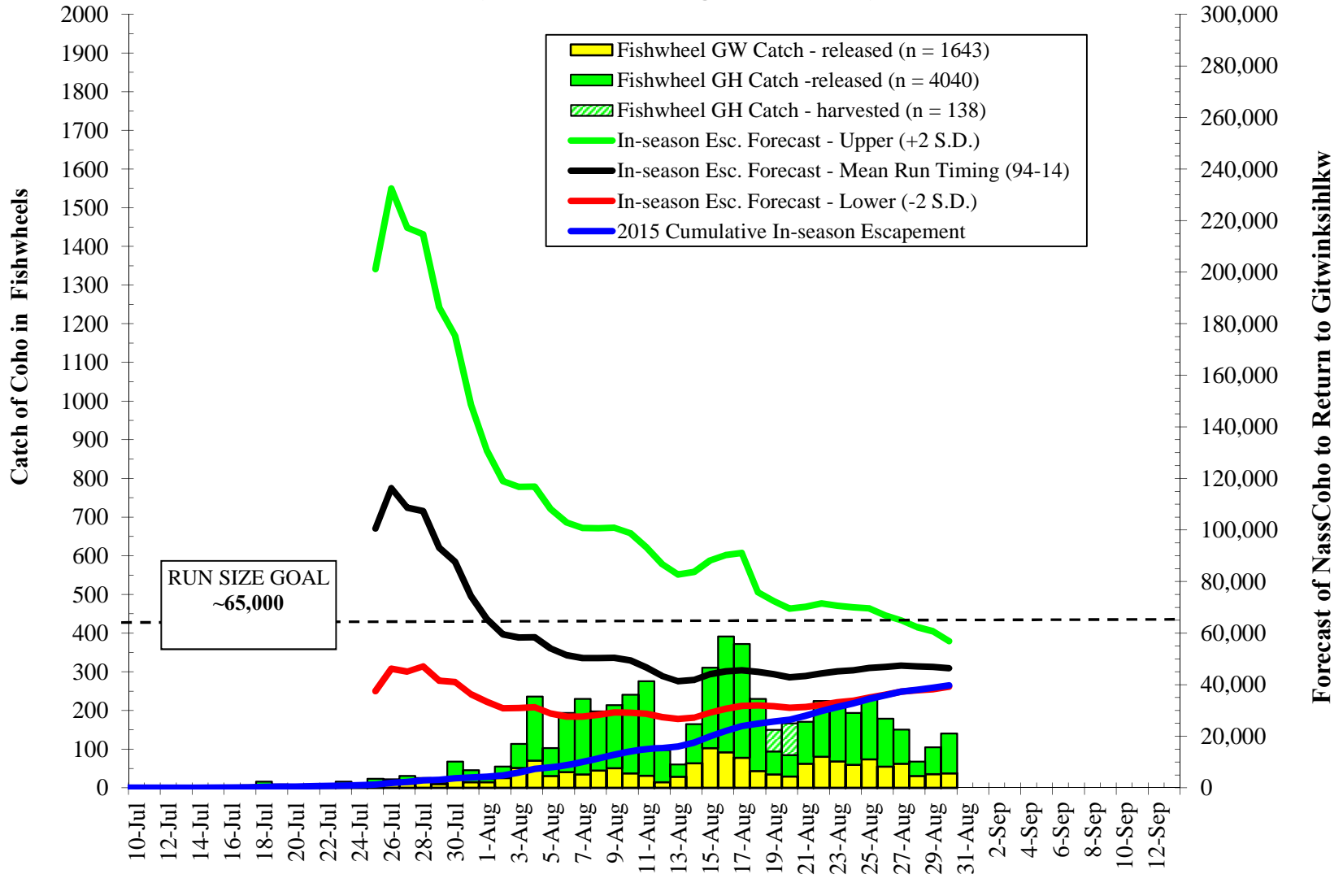
Meziadin Fishway Sockeye Counts & In-season Forecast Data 2015



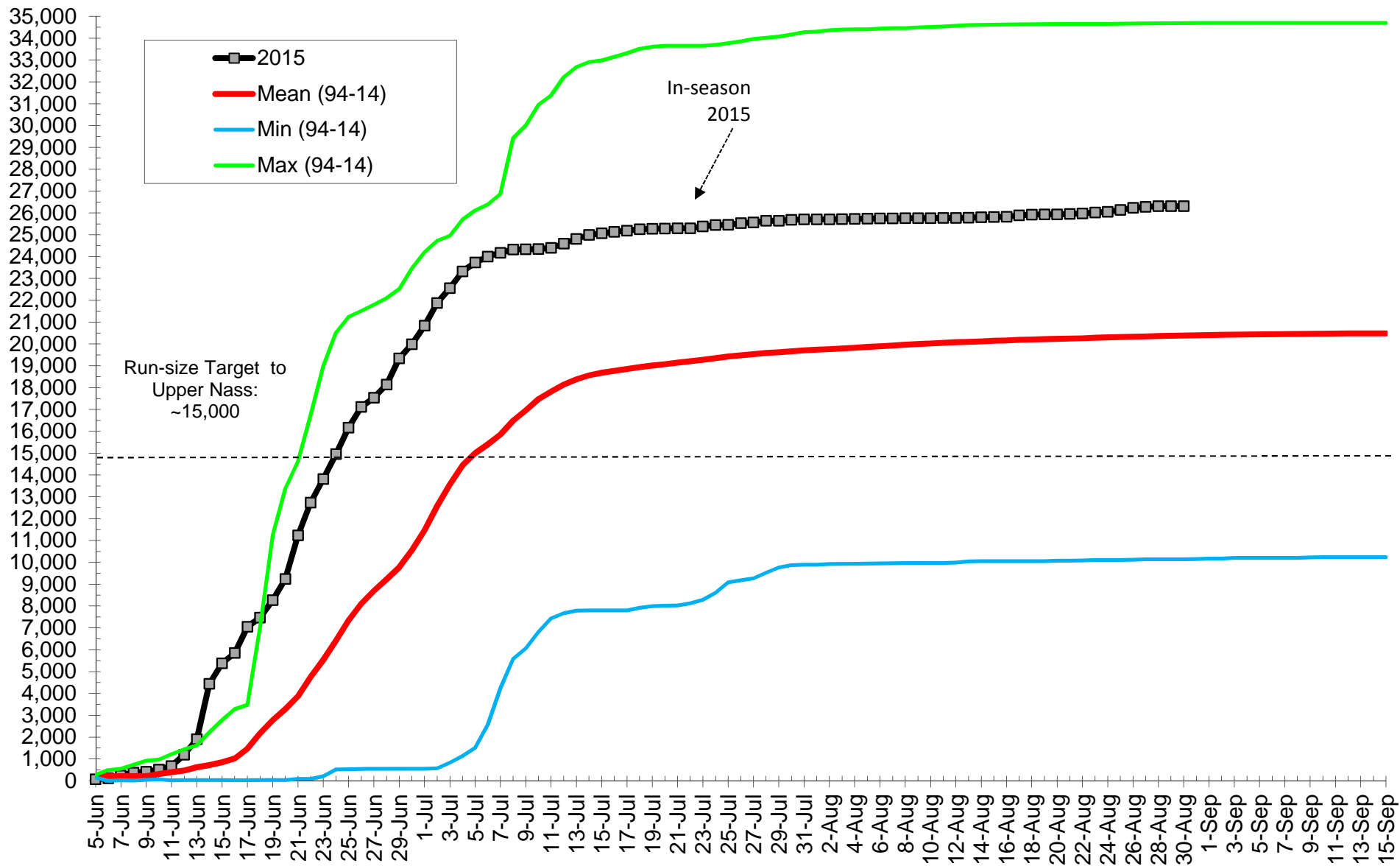
Cumulative Nass Adult Coho Run Size to Gitwinksihlkw 2015 vs. 94-14 Mean, Minimum and Maximum returns (before up river harvests)



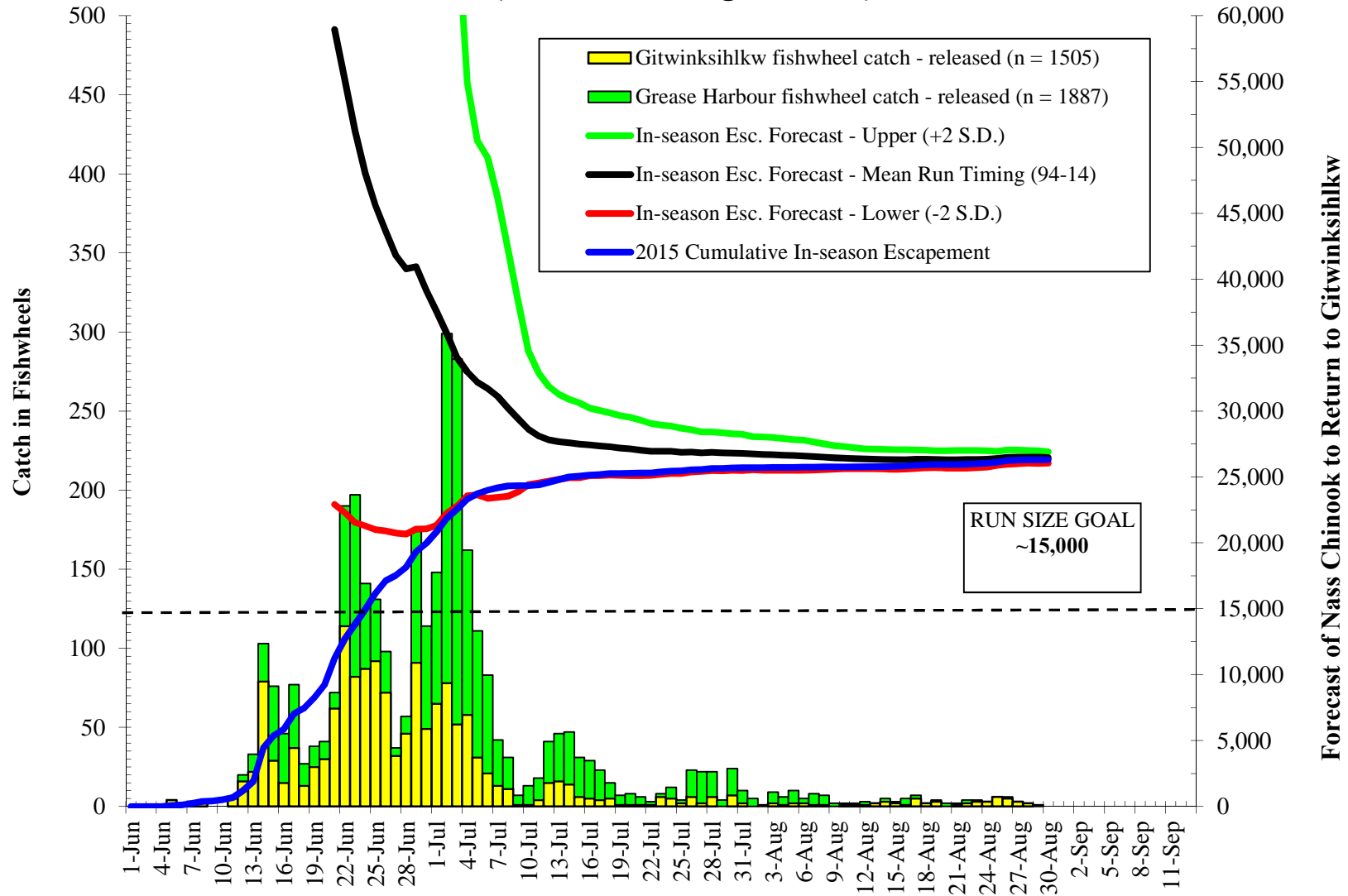
Nass Coho (≥ 40 cm NFL) Forecasts to Gitwinksihlkw Fishwheels 2015 (Mean Run timing - 1994-2014)



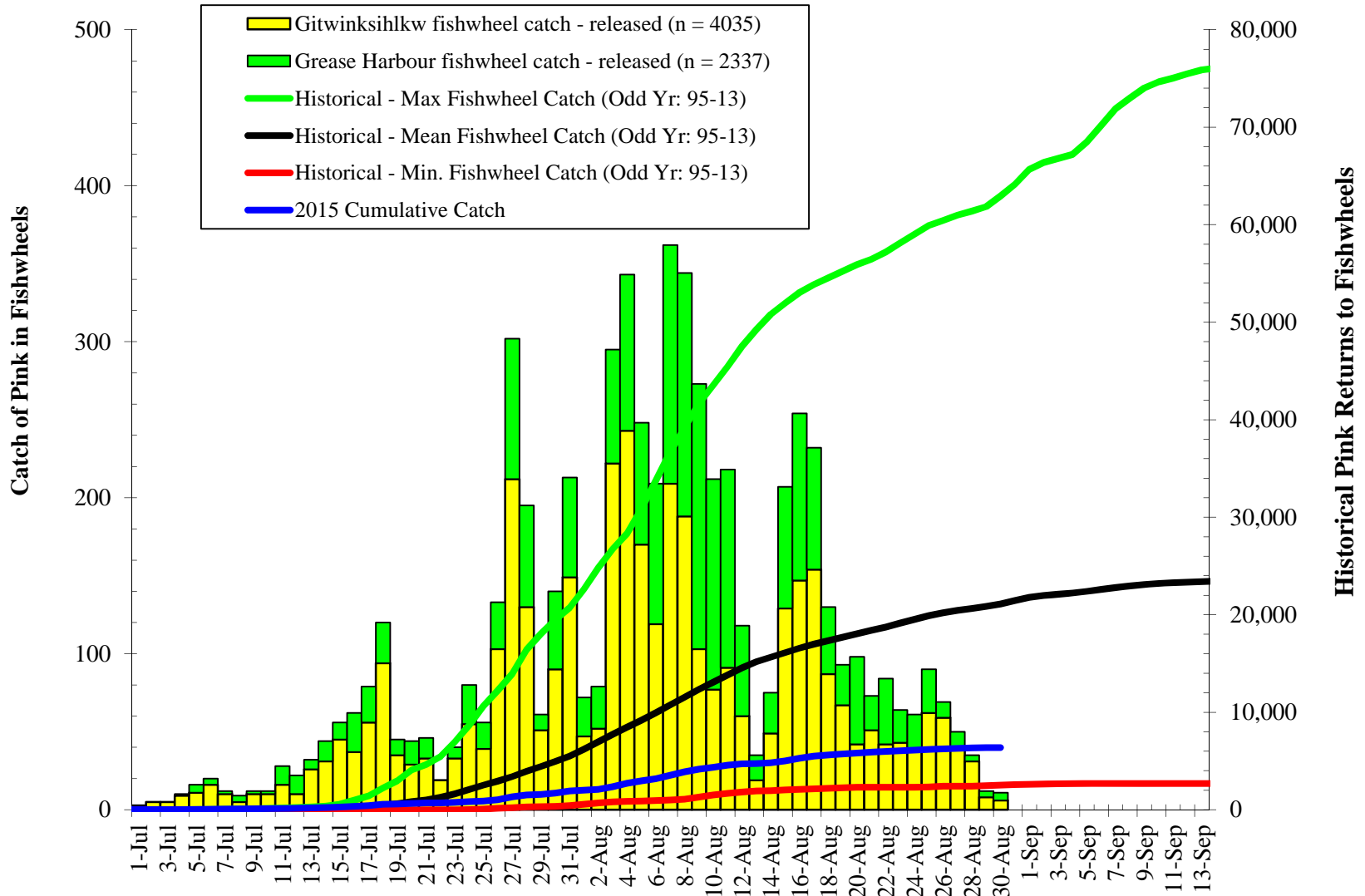
Cumulative Nass Adult Chinook Run Size to Gitwinksihlkw 2015 vs 94-14 Mean, Minimum and Maximum returns (before up river harvests)



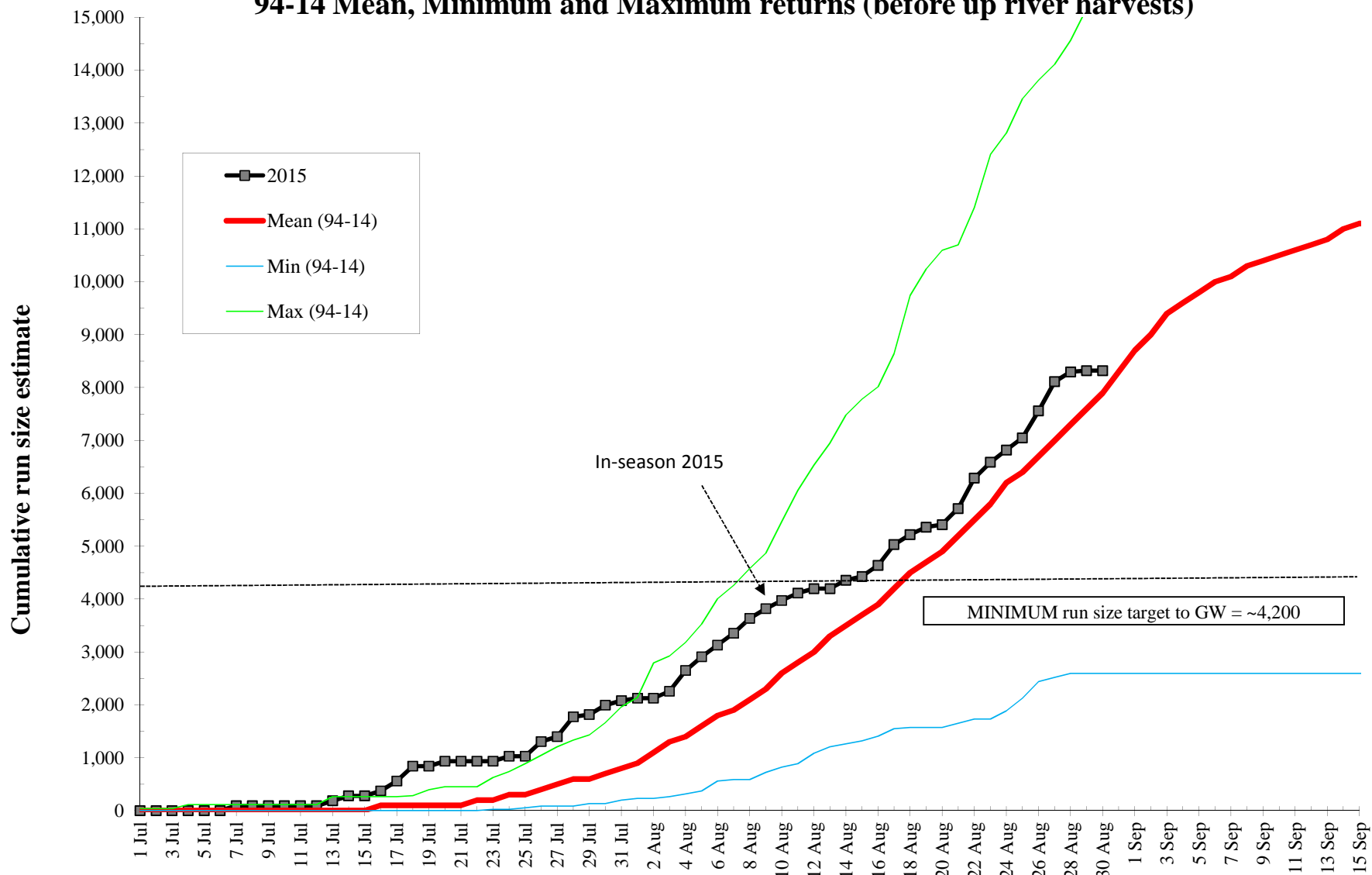
Nass Chinook (≥ 50 cm NFL) Forecasts to Gitwinksihlkw Fishwheels 2015 (Mean Run timing - 1994-14)



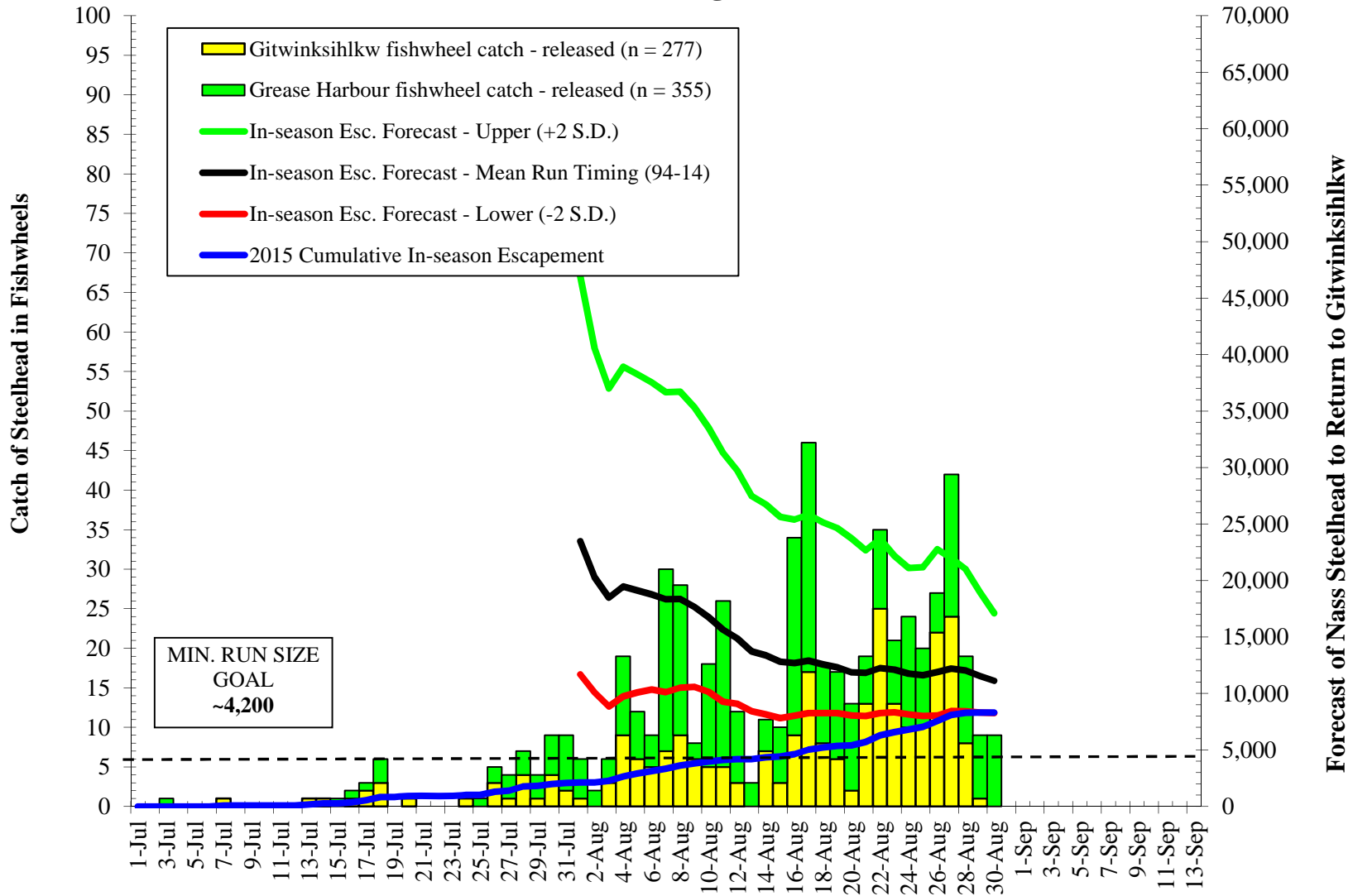
Nass Pink Salmon Returns to Gitwinksihlkw and Grease Harbour Fishwheels 2015



Cumulative Nass Adult Summer-run Steelhead Return to Gitwinksihlkw 2015 vs. 94-14 Mean, Minimum and Maximum returns (before up river harvests)



Nass Summer Run Steelhead Forecasts to Gitwinksihlkw Fishwheels 2015 (Mean Run timing - 1994-2014)



2015 Nass Fishwheel Catches

	GW		GW Total	GH				GH Total	Grand Total
Data	FW1	FW2		FW3	FW4	FW5	FW6		
Chin-adult catch	283	1,222	1,505	630	260	702	295	1,887	3,392
Chin-tagged	252	1,022	1,274	527	191	577	240	1,535	2,809
Chin-recaps	21	32	53	94	59	181	64	398	451
Chin-Jacks	53	101	154	43	40	58	79	220	374
Sum of CH Harv	0	0	0	0	0	0	0	0	0
Sockeye-adult catch	7,452	14,995	22,447	12,682	5,796	17,723	9,643	45,844	68,291
Sockeye-tagged	4,875	8,033	12,908	0	0	0	0	0	12,908
Sockeye-recaps	302	301	603	266	165	573	254	1,258	1,861
Sockeye_jacks	214	891	1,105	174	102	345	228	849	1,954
Sum of Sk Harv	0	0	0	1,955	1,467	2,370	1,716	7,508	7,508
Coho-adult catch	902	741	1,643	640	512	1,946	899	3,997	5,640
Coho-tagged	802	637	1,439	0	0	0	0	0	1,439
Coho-recaps	54	62	116	14	13	84	36	147	263
Coho-jack	6	3	9	5	0	6	6	17	26
Sum of CO Harv	0	0	0	24	23	54	37	138	138
Steel-adult catch	87	190	277	110	21	149	75	355	632
Steel-Adipose marked	79	169	248	50	12	73	48	183	431
Steel-unmarked	8	21	29	60	9	76	27	172	201
Steel-recap-total	7	8	15	20	5	34	16	75	90
Pacific Lamprey-catch	9	134	143	92	30	294	172	588	731
Lamprey-tagged	8	104	112	41	10	154	78	283	395
Lamprey-released	1	30	31	51	20	140	94	305	336
Lamprey-recaps	0	0	0	1	0	14	9	24	24
River Lamprey	0	0	0	0	0	1	0	1	1
Pink-adult-catch	1734	2301	4035	791	337	850	359	2337	6372
Chum-adult-catch	28	57	85	7	0	9	1	17	102
Chum-tagged	28	55	83	7	0	9	1	17	100
Chum-punched	1	2	3	0	0	0	0	0	3
Chum-recaps	0	1	1	2	0	1	1	4	5
Dolly Varden	50	132	182	10	1	13	5	29	211
Pike Minnow	2	1	3	56	0	47	23	126	129
Whitefish sp.	9	10	19	23	3	22	25	73	92
Rainbow Trout	15	5	20	14	6	13	27	60	80
Peamouth Chub	3	4	7	25	0	25	11	61	68
Cutthroat Trout	20	27	47	1	0	5	1	7	54
Red-Side Shiner	1	0	1	9	0	2	3	14	15
Sculpin	1	2	3	0	0	10	2	12	15
Sucker	0	0	0	0	0	8	5	13	13
Sum of chin_smolt	29	6	35	16	5	6	15	42	77
Sum of co_smolt	7	2	9	2	2	1	5	10	19
Sum of sk_smolt	1	4	5	2	0	4	0	6	11

Chinook (GW wheels only)																						Cum		
Week Ending (Sat)	Stat wk	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	94-14 Cum Mean
30-May	22																							
6-Jun	23			9	29												0	4		13	8	0	6	11
13-Jun	24	94	19	96	178		18		163			6	28	10	0	29	0	21	0	58	37	77	55	49
20-Jun	25	517	232	278	444	644	18	272	428		455	271	198	23	3	94	56	67	10	70	63	139	283	214
27-Jun	26	879	533	307	870	981	285	1,205	1,283	697	1,405	275	689	829	318	250	733	227	59	144	316	213	824	595
4-Jul	27	1,581	632	1,175	1,919	1,083	838	1,416	3,354	1,458	1,510	660	856	1,464	971	382	1,118	279	163	943	534	301	1,263	1,078
11-Jul	28	1,907	746	1,337	2,099	1,156	1,101	1,563	4,097	1,676	1,710	869	1,006	1,565	1,880	787	1,187	296	352	1,004	570	365	1,345	1,299
18-Jul	29	1,953	772	1,415	2,203	1,175	1,240	1,859	4,375	1,704	1,771	987	1,058	1,733	1,889	877	1,227	306	438	1,153	583	380	1,410	1,386
25-Jul	30	1,988	785	1,435	2,215	1,186	1,275	1,892	4,409	1,723	1,833	1,013	1,084	1,753	2,073	887	1,255	312	476	1,265	591	395	1,427	1,421
1-Aug	31	1,998	787	1,448	2,224	1,189	1,297	1,908	4,478	1,735	1,861	1,032	1,095	1,767	2,148	898	1,271	316	502	1,319	595	404	1,450	1,442
8-Aug	32	2,005	789	1,463	2,243	1,198	1,315	1,961	4,500	1,743	1,877	1,050	1,108	1,784	2,156	907	1,298	322	515	1,340	601	420	1,459	1,457
15-Aug	33	2,011	794	1,467	2,254	1,200	1,337	1,991	4,520	1,749	1,888	1,081	1,114	1,797	2,171	913	1,311	330	521	1,355	602	425	1,469	1,468
22-Aug	34	2,018	796	1,476	2,277	1,204	1,349	2,001	4,525	1,757	1,891	1,095	1,121	1,812	2,182	919	1,319	332	526	1,364	606	432	1,483	1,476
29-Aug	35	2,029	797	1,482	2,284	1,213	1,353	2,004	4,529	1,757	1,896	1,102	1,145	1,817	2,190	932	1,329	333	527	1,367	610	440	1,505	1,483
5-Sep	36	2,031	799	1,487	2,287	1,216	1,356	2,007	4,530	1,763	1,899	1,103	1,151	1,821	2,196	940	1,330	334	528	1,368	612	443	1,486	1,486
12-Sep	37			1,489		1,220	1,357	2,007	4,531	1,764			1,157	1,821	2,201	940	1,332	337	541	1,368	612	446		1,486
19-Sep	38			1,489				2,008					1,161	1,821	2,204	940			340					1,486
26-Sep	39							2,008								940			340					1,486
Grand Total		2031	799	1489	2287	1220	1387	2008	4531	1764	1899	1103	1161	1821	2204	940	1332	340	545	1368	612	446	1,505	1,486

Sockeye (GW wheels only)																								
Week Ending (Sat)	Stat wk	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	94-14 Cum Mean
30-May	22																							
6-Jun	23			8													5	6		45	-	45	12	8
13-Jun	24	19	41	86	56	82	33		120			46	42	12	-	78	5	28	-	665	450	588	126	129
20-Jun	25	166	587	584	164	823	33	426	428		1,471	745	562	107	26	467	511	155	41	950	1,283	1,816	1,359	567
27-Jun	26	558	2,071	848	614	1,508	1,654	2,889	1,421	4,186	3,311	995	2,108	1,093	1,060	1,949	3,274	1,237	367	2,840	7,911	3,510	3,453	2,162
4-Jul	27	2,906	4,094	5,340	2,458	2,243	4,615	5,346	2,995	10,908	5,015	3,330	4,224	3,490	2,968	3,760	4,937	2,114	1,262	8,771	10,000	4,605	5,553	4,542
11-Jul	28	6,457	7,202	6,827	4,039	3,031	10,267	7,229	4,608	15,326	7,362	7,769	6,112	5,737	4,450	7,211	6,467	3,095	3,162	9,749	10,641	5,571	7,916	6,777
18-Jul	29	9,696	8,749	9,128	5,747	3,511	13,591	8,595	7,277	17,181	9,904	10,480	8,087	7,625	4,639	9,070	8,012	4,142	3,899	12,915	11,317	6,643	9,469	8,581
25-Jul	30	11,371	10,137	10,917	7,534	4,000	16,037	9,549	9,186	20,146	12,566	12,473	9,927	9,518	7,644	10,288	9,286	4,804	6,223	17,460	12,056	7,786	11,656	10,424
1-Aug	31	13,181	11,047	12,758	8,911	4,454	16,953	10,371	12,247	22,636	15,044	13,676	10,869	11,527	10,225	11,144	11,328	5,621	9,213	20,063	12,364	8,666	15,113	12,014
8-Aug	32	14,165	11,648	14,017	10,051	4,719	18,508	12,398	13,225	23,600	16,527	15,322	11,690	11,690	11,667	14,110	6,368	11,101	21,458	12,579	9,412	9,622	17,280	13,203
15-Aug	33	16,450	12,216	14,541	11,151	4,949	19,498	13,000	13,591	24,206	17,378	16,780	12,277	14,239	12,321	12,161	14,819	6,746	11,842	21,992	12,705	10,258	19,156	13,958
22-Aug	34	17,446	12,621	14,826	12,182	5,146	19,884	13,122	13,734	24,745	17,720	17,597	12,861	15,530	12,624	12,601	15,098	6,975	12,262	22,153	12,773	10,746	20,711	14,412
29-Aug	35	17,777	12,868	15,010	12,774	5,242	20,112	13,198	13,829	24,947	17,822	17,856	13,835	16,017	12,773	12,781	15,247	7,058	12,416	22,185	12,830	11,119	22,341	14,652
5-Sep	36	17,916	13,035	15,145	5,293	20,190	13,333	13,910	25,323	17,860	17,948	14,292	16,445	12,864	12,863	15,349	7,085	12,635	22,197	12,841	11,390		14,896	14,896
12-Sep	37		15,155		5,368	20,283	13,393	13,953			17,993	14,550	16,445	12,919	12,864	15,386	7,130	13,238	22,204	12,847	11,530			14,896
19-Sep	38		15,167		5,377	20,291	13,417				17,993	14,732	16,445	12,941	12,864		7,144	13,287						14,896
26-Sep	39				5,377	20,319	13,417							12,942			7,146	13,377						14,896
Grand Total		17,916	13,035	15,167	12,774	5,377	20,319	13,417	13,933	25,323	17,860	17,993	14,732	16,445	12,942	12,864	15,386	7,146	13,377	22,204	12,847	11,530	22,341	14,896

Steelhead (GW wheels only)																								
Week Ending (Sat)	Stat wk	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	94-14 Cum Mean
30-May	22			0	0	0															0	0	0	0
6-Jun	23			4	0	0															5	2	3	2
13-Jun	24	1	1	6	16	3	2		6			1	2	2	0	4	0	8	0	10	5	8	9	4
20-Jun	25	4	2	8	19	8	2	1	8		0	2	4	2	0	4	7	10	1	10	6	8	14	5
27-Jun	26	5	2	8	19	9	2	1	8	0	0	2	5	4	2	4	10	11	5	13	6	10	14	6
4-Jul	27	6	2	9	19	9	2	1	8	0	0	2	5	4	2	4	10	11	6	16	6	10	14	6
11-Jul	28	6	2	9	19	10	3	2	8	0	0	2	5	4	2	4	10	11	8	16	6	12	15	7
18-Jul	29	8	3	11	19	14	3	6	10	1	0	2	7	5	6	6	10	12	10	16	6	17	23	8
25-Jul	30	16	5	18	21	17	5	11	11	4	7	6	12	7	6	16	12	20	11	24	12	43	25	14
1-Aug	31	25	8	26	34	26	14	25	24	31	36	27	19	12	9	42	24	33	19	59	22	81	41</	

Coho (GW wheels only)																									94-14	Mean	
Week Ending (Sat)	Stat wk	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015				
30-May	22			0	0	0											0	0	0	0	0	0	0	0	0		
6-Jun	23			0	0	0											0	0	0	0	0	0	0	0	0		
13-Jun	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20-Jun	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
27-Jun	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4-Jul	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11-Jul	28	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0		
18-Jul	29	0	4	2	0	0	1	0	2	6	10	6	12	0	6	7	4	0	8	58	4	11	6	6			
25-Jul	30	2	14	17	2	8	8	9	3	27	76	101	71	78	27	81	75	37	0	57	239	126	45	50			
1-Aug	31	93	30	172	70	118	132	83	150	171	256	428	219	408	153	315	400	258	35	449	788	664	161	257			
8-Aug	32	420	192	584	169	300	486	1206	790	540	690	1049	495	1179	415	1162	1797	1098	120	1887	1769	1910	462	869			
15-Aug	33	2947	483	950	363	483	1154	1750	2683	1281	1304	2197	1355	2267	906	2172	2637	2176	418	3485	2584	3070	794	1746			
22-Aug	34	4438	682	1471	627	1113	1704	1981	3715	2435	1908	3170	2362	3311	1344	3517	3900	3069	614	4390	3369	4690	1217	2562			
29-Aug	35	5157	910	1907	784	1351	2462	2297	4322	3018	2283	3517	3914	3581	1673	4525	5254	3315	823	4839	3891	5458	1,605	3,109			
5-Sep	36	5453	1006	2175	1540	2958	2703	5198	4930	2445	3669	4653	3798	1930	5132	6068	3428	1111	5180	4180	6124	1,605	3,684	3,976			
12-Sep	37			2222	1652	3319	2790	5495			3727	5004	3798	2167	5150	6348	3428	1111	5180	4180	6124	1,605	3,684	3,976			
19-Sep	38			2222	1696	3476	2852				3727	5184	3798	2258	5150		3840	1898						3,976			
26-Sep	39				1696	3683	2852							2258	5150		3890	2170						3,976			
Grand Total		5453	1006	2222	784	1696	3683	2852	5495	4930	2445	3727	5184	3798	2258	5150	6348	3890	2170	5414	4371	6658	1,605	3,976			
Pinks (GW wheels only)																									MEAN ODD	YR (95-15)	
Week Ending (Sat)	Stat wk	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015				
30-May	22			-	-	-																		0	-		
6-Jun	23			-	-	-																		0	-		
13-Jun	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-		
20-Jun	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-		
27-Jun	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-		
4-Jul	27	-	3	-	-	1	-	-	1	-	4	4	13	1	-	-	6	1	-	-	27	-	26	5			
11-Jul	28	2	54	5	8	5	6	-	12	3	137	30	57	5	1	1	22	4	-	178	16	104	48				
18-Jul	29	30	334	53	75	64	77	32	69	41	2,063	270	1,027	40	1	34	241	14	2	1	609	78	403	450			
25-Jul	30	391	870	202	352	315	422	126	196	162	8,725	1,680	3,792	164	120	86	2,170	48	63	44	3,404	1,361	646	2,011			
1-Aug	31	984	1,274	872	1,495	1,497	1,909	223	4,850	1,021	15,030	6,052	5,399	657	2,290	243	4,356	183	499	501	6,093	3,568	1,428	4,320			
8-Aug	32	1,588	1,761	2,647	3,170	3,564	4,172	10,338	2,570	17,939	9,858	6,611	1,271	5,013	516	14,274	496	1,896	1,469	10,082	6,062	2,631	7,526				
15-Aug	33	5,026	2,870	4,122	4,759	3,935	8,710	5,296	14,355	3,913	19,893	13,972	7,586	1,492	7,151	816	19,184	1,222	3,905	2,735	12,134	7,161	3,159	10,055			
22-Aug	34	7,673	3,646	5,991	7,376	6,294	12,325	5,792	16,464	5,987	21,300	15,610	8,311	1,821	7,811	1,054	21,103	1,500	4,678	3,356	13,432	10,799	3,749	11,645			
29-Aug	35	9,582	4,645	9,486	9,132	6,970	14,772	6,009	17,972	6,190	22,405	16,240	9,190	1,912	8,211	1,209	23,007	1,638	4,927	3,827	14,227	14,739	4,029	12,849			
5-Sep	36	9,992	5,437	12,331	10,855	7,170	15,711	6,535	22,231	8,329	22,783	16,376	9,389	1,961	8,336	1,345	23,762	1,682	5,108	4,110	14,518	16,682		13,813			
12-Sep	37	10,044	5,437	12,985	10,855	7,222	17,324	6,592	26,539	8,705	22,783	16,415	9,475	1,961	8,437	1,357	24,004	1,777	5,936	4,177	14,603	17,359		14,539			
19-Sep	38	10,044	5,437	13,087	10,855	7,234	18,045	6,618	26,676	8,705	22,783	16,415	9,501	1,961	8,449	1,357		1,789	5,991					14,539			
26-Sep	39	10,044	5,437	13,117	10,855	7,234	18,348	24,966	26,676	8,705	22,783	16,374	9,501	1,961	8,449	1,357		1,789	6,261					14,539			
Grand Total		10,044	5,437	13,117	10,855	7,234	18,348	24,966	26,676	8,705	22,783	16,415	9,501	1,961	8,449	1,357	24,004	1,789	6,261	4,177	14,603	17,359	4,029	14,539			
Chum (GW wheels only)																									94-14	Cum	Mean
Week Ending (Sat)	Stat wk	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015				
30-May	22			0	0	0																		0	0		
6-Jun	23			0	0	0												0	0	0	0	0	0	0	0		
13-Jun	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20-Jun	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
27-Jun	26	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1		
4-Jul	27	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	2	1	1		
11-Jul	28	2	0	2	1	1	0	0	0	1	0	0	0	0	0	0	1	1	0	1	2	0	4	1	1		
18-Jul	29	5	6	3	1	2	1	1	2	1	1	0	1	0	0	7	1	2	1	2	3	0	4	2	5		
25-Jul	30	8	9	7	3	2	2	2	5	3	12	0	8	1	0	10	7	6	2	3	3	6	8	5	2		
1-Aug	31	19	12	14	9	3	6	3	8	7	25	0	13	6	5	15	9	13	6	11	4	9	16	10			
8-Aug	32	24	33	41	26	16	11	17	16	9	42	0	25	20	11	18	13	16	12	12	7	17	23	19			
15-Aug	33	60	62	68	31	17	14	29	29	13	52	0	26	31	18	19	26	19	31	21	8	22	50	29			
22-Aug	34	120	113	107	58	35	24	46	45	22	62	5	27	47	21	22	36	25	43	31	13	33	85	45			
29-Aug	35	178	129	166	72	49	36	51	57	22	87	11	48	35	31	26	53	28	53	47	27	47	85	61			
5-Sep	36	215	172	238	96	63	41	143	77	32	99	23	62	69	36	38	65	30	60	60	33	59	82	82			
12-Sep	37	225	172	293	96	81	64	166	111	38	99	49	66	69	45	38	74	32	109	65	34	64	95	95			
19-Sep	38	225	172	305	96	106	71	177	115	38	99	64	68	69	54	38		34	112				109	109			
26-Sep	39				106	83	177											34	134					109	109		
Grand Total		225	172	305	96	106	83	177	115	38	99	64	68	69	54	38	74	34	134	65	34	64	85	109			