2020 Grays Harbor Fall Salmon Management Summary Tables Model A Base – 2020 Forecasts with 2019 fisheries (NOF2 Coho run 2019b)

		CHEH	IALIS RIVER	BASIN					
		Chinook			Coho			Chum	
-	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
_	11,144	2,189	13,333	43,313	26,666	69,979	30,324	2,325	32,649
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	1,391	1,611	3,002	14,807	25,166	39,973			11,649
Non-treaty Share	696	806	1,501	7,404	12,583	19,987			5,825
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest	551	179	730	7,438	4,766	12,204			6,280
Marine Area 2.2 Harvest	168	76	244	1,163	838	2,001			35
Freshwater Harvest	257	75	332	4,702	2,959	7,661			653
Commercial Harvest (Area 2A, 2D)	126	29	155	1,573	969	2,542			5,592
Chehalis Tribal Harvest	117	0	117	320	1,075	1,395			(
QIN Treaty Harvest	2,231	438	2,669	9,013	5,549	14,562			6,829
Total Chehalis Basin Harvest	2,899	617	3,516	16,771	11,390	28,161			13,109
Expected Escapement	8,245	1,572	9,817	26,542	15,276	41,818			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	4.9%	8.18%	5.47%	17.17%	17.87%	17.44%			19.23%
Total Recreational harvest rate	3.81%	6.86%	4.31%	13.54%	14.24%	13.81%			2.11%
Proportion of Rec Marine Area 2.2	39.5%	50.31%	42.34%	19.8%	22.07%	20.71%			5.05%
Proportion of Rec Freshwater	60.48%	49.69%	57.66%	80.17%	77.93%	79.29%			94.95%
Commercial Impact Rate in 2A-D only	0.68%								
Commercial harvest rate	1.13%	1.33%	1.16%	3.63%	3.63%	3.63%			17.13%
Chehalis Tribal harvest rate	1.05%	0.00%	0.88%	0.74%	4.03%	1.99%			0.00%
QIN Treaty Harvest Rate	20.02%	20.02%	20.02%	20.81%	20.81%	20.81%			20.92%
Total Chehalis Basin Harvest Rate	26.01%	28.21%	26.37%	38.72%	42.72%	40.24%			40.15%

		HUMPT	<b>TULIPS RIVE</b>	R BASIN					
	Chinook			Coho			Chum		
_	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
-	3,857	4,683	8,540	3,614	11,206	14,820	30,324	2,325	32,649
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	284	4,314	4,598	-3,280	10,806	7,526			11,649
Non-treaty Share	142	2,157	2,299	-1,640	5,403	3,763			5,825
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
WDFW-managed fishery Harvest	223	2,147	2,370	133	1,614	1,748			212
Marine Area 2.2 Harvest	11	102	114	10	123	133			(
Freshwater Harvest	110	1,918	2,028	67	1,318	1,384			95
Commercial Harvest	102	126	228	56	174	230			117
QIN Treaty Harvest	620	752	1,372	848	2,629	3,477			4,031
Total Humptulips Basin Harvest	842	2,899	3,742	981	4,244	5,225			4,243
Expected Escapement	3,015	1,784	4,798	2,633	6,962	9,595			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	5.77%	45.84%	27.75%	3.69%	14.41%	11.79%			0.65%
Total Recreational harvest rate	3.14%	43.15%	25.08%	2.14%	12.85%	10.24%			0.29%
Proportion of Rec Marine Area 2.2	9.2%	5.07%	5.30%	13.5%	8.52%	8.78%			See above
Proportion of Rec Freshwater	90.80%	94.93%	94.70%	86.49%	91.48%	91.22%			100.00%
Commercial harvest rate in 2C Only	2.56%								
Commercial harvest rate	2.63%	2.69%	2.66%	1.55%	1.55%	1.55%			0.36%
QIN Treaty Harvest Rate	16.07%	16.07%	16.07%	23.46%	23.46%	23.46%			12.35%
Total Harvest Rate	21.84%	61.91%	43.81%	27.16%	37.87%	35.26%			13.00%

## **2020 Grays Harbor Fall Salmon Management Summary Tables**

Model A Base - 2020 Forecasts with 2019 fisheries (NOF2 Coho run 2019b) Cont'd

		GRAY	S HARBOR	TOTAL					
		Chinook			Coho			Chum	
-	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	15,001	6,872	21,873	46,927	37,872	84,799	30,324	2,325	32,649
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	1,675	5,925	7,600	11,527	35,972	47,499			11,649
Non-treaty Share	838	2,963	3,800	5,764	17,986	23,750			5,825
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				23					
Total Impacts									
Harvest Impacts									
WDFW-managed fishery Harvest	773	2,326	3,099	7,571	6,381	13,952			6,491
Marine Area 2.2 Harvest	179	178	357	1,173	961	2,134			35
Freshwater Harvest	367	1,993	2,360	4,768	4,277	9,045			748
Commercial Harvest	227	155	382	1,629	1,143	2,772			5,709
Chehalis Tribe	117	0	117	320	1,075	1,395			0
Total NT - Harvest	890	2,326	3,216	7,891	7,456	15,347			6,491
QIN Treaty Harvest	2,851	1,191	4,042	9,861	8,178	18,039			10,860
Total GH Harvest	3,741	3,517	7,258	17,752	15,634	33,386			17,352
Expected Escapement	11,260	3,355	14,615	29,175	22,238	51,413			15,297
	2,066								
Harvest Rates									
Non-treaty Harvest Rate	5.16%	33.85%	14.17%	16.13%	16.85%	16.45%			19.88%
Proportion of Rec Marine Area 2.2									4.44%
Marine Area 2.2 harvest rate	1.19%	2.59%	1.63%	2.50%	2.54%	2.52%			0.11%
Freshwater harvest rate	2.45%	29.00%	10.79%	10.16%	11.29%	10.67%			2.29%
Commercial harvest rate	1.51%	2.26%	1.75%	3.47%	3.02%	3.27%			17.49%
QIN Treaty Harvest Rate	19.00%	17.33%	18.48%	21.01%	21.59%	21.27%			33.26%
Total GH Harvest Rate	24.94%	51.17%	33.18%	37.83%	41.28%	39.37%			53.15%

## Model B - NT Comm 2A/D 4 days Wk 43, 3 day Wk 44, 2C no days; FW 2 fish Oct, 1 fish Nov-Dec (NOF2 Cohe 2010b)

Coho 2019b)									
			HALIS RIVER	BASIN					
-		Chinook			Coho			Chum	
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	11,144	2,189	13,333	43,313	26,666	69,979	30,324	2,325	32,649
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	1,391	1,611	3,002	14,807	25,166	39,973			11,649
Non-treaty Share	696	806	1,501	7,404	12,583	19,987			5,825
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest	489	164	653	6,842	4,372	11,214			5,322
Marine Area 2.2 Harvest	168	76	244	1,163	838	2,001			35
Freshwater Harvest	246	70	316	4,228	2,640	6,868			279
Commercial Harvest (Area 2A, 2D)	75	18	93	1,451	894	2,345			5,009
Chehalis Tribal Harvest	117	0	117	320	1,075	1,395			,
QIN Treaty Harvest	2,231	438	2,669	9,013	5,549	14,562			6,829
Total Chehalis Basin Harvest	2,837	602	3,439	16,175	10,996	27,171			12,152
Expected Escapement	8,307	1.587	9,894	27,138	15,670	42,808			N/A
	0,001	.,	0,00	21,100	.0,0.0	,000			
Harvest Rates WDFW-managed fishery Harvest Rate	4.4%	7.48%	4.90%	15.80%	16.40%	16.03%			16.30%
Total Recreational harvest rate	3.72%	6.65%	4.20%	12.45%	13.05%	12.67%			0.96%
Proportion of Rec Marine Area 2.2	40.5%	51.87%	43.49%	21.6%	24.10%	22.56%			11.08%
Proportion of Rec Freshwater	59.45%	48.13%	56.51%	78.43%	75.90%	77.44%			88.92%
Commercial Impact Rate in 2A-D only	0.67%	70.1070	30.3176	70.4376	10.00/0	11.77/0			00.02 /0
Commercial impact Rate in ZA-D only	0.67%	0.83%	0.70%	3.35%	3.35%	3.35%			15.34%
Chehalis Tribal harvest rate	1.05%	0.00%	0.70%	0.74%	4.03%	3.35% 1.99%			0.00%
QIN Treaty Harvest Rate	20.02%	20.02%	20.02%	20.81%	20.81%	20.81%			<b>20.92%</b>
Total Chehalis Basin Harvest Rate	25.46%	27.50%	25.80%	37.34%	41.24%	38.83%			37.22%
i otai Olielialis Dasili Harvest Kate	23.40%	21.30%	23.00%	37.34%	41.2470	J0.0J%			31.227

2020 Grays Harbor Fall Salmon Management Summary Tables

Model B - NT Comm 2A/D 4 days Wk 43, 3 day Wk 44, 2C no days; FW 2 fish Oct, 1 fish Nov-Dec (NOF2 Coho 2019b) Cont'd

		HUMP1	TULIPS RIVE	R BASIN					
	Chinook			Coho			Chum		
<del>-</del>	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	3,857	4,683	8,540	3,614	11,206	14,820	30,324	2,325	32,649
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	284	4,314	4,598	-3,280	10,806	7,526			11,649
Non-treaty Share	142	2,157	2,299	-1,640	5,403	3,763			5,825
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
WDFW-managed fishery Harvest	124	2,027	2,151	97	1,503	1,600			37
Marine Area 2.2 Harvest	11	102	114	10	123	133			(
Freshwater Harvest	110	1,918	2,028	67	1,318	1,384			37
Commercial Harvest	3	6	9	20	62	82			(
QIN Treaty Harvest	620	752	1,372	848	2,629	3,477			4,031
Total Humptulips Basin Harvest	744	2,779	3,523	945	4,132	5,077			4,068
Expected Escapement	3,113	1,904	5,017	2,669	7,074	9,743			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	3.22%	43.28%	25.19%	2.69%	13.41%	10.80%			0.11%
Total Recreational harvest rate	3.14%	43.15%	25.08%	2.14%	12.85%	10.24%			0.11%
Proportion of Rec Marine Area 2.2	9.2%	5.07%	5.30%	13.5%	8.52%	8.78%			See above
Proportion of Rec Freshwater	90.80%	94.93%	94.70%	86.49%	91.48%	91.22%			100.00%
Commercial harvest rate in 2C Only	0.00%								
Commercial harvest rate	0.07%	0.13%	0.11%	0.56%	0.56%	0.56%			0.00%
QIN Treaty Harvest Rate	16.07%	16.07%	16.07%	23.46%	23.46%	23.46%			12.35%
Total Harvest Rate	19.28%	59.35%	41.26%	26.16%	36.87%	34.26%			12.46%

		GRAY	S HARBOR	ΤΟΤΔΙ					
		Chinook	OTIANDON	IOIAL	Coho			Chum	
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	15,001	6,872	21,873	46,927	37,872	84,799	30,324	2,325	32,649
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	1,675	5,925	7,600	11,527	35,972	47,499			11,649
Non-treaty Share	838	2,963	3,800	5,764	17,986	23,750			5,825
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				23					
Total Impacts									
Harvest Impacts									
WDFW-managed fishery Harvest	613	2,191	2,804	6,939	5,875	12,814			5,359
Marine Area 2.2 Harvest	179	178	357	1,173	961	2,134			35
Freshwater Harvest	356	1,989	2,345	4,294	3,958	8,252			315
Commercial Harvest	78	24	102	1,472	956	2,427			5,009
Chehalis Tribe	117	0	117	320	1,075	1,395			C
Total NT - Harvest	730	2,191	2,921	7,260	6,950	14,210			5,359
QIN Treaty Harvest	2,851	1,191	4,042	9,861	8,178	18,039			10,860
Total GH Harvest	3,581	3,381	6,963	17,120	15,128	32,249	'		16,219
Expected Escapement	11,420	3,491	14,910	29,807	22,744	52,550			16,430
	1,906								
Harvest Rates									
Non-treaty Harvest Rate	4.09%	31.88%	12.82%	14.79%	15.51%	15.11%			16.41%
Proportion of Rec Marine Area 2.2									9.92%
Marine Area 2.2 harvest rate	1.19%	2.59%	1.63%	2.50%	2.54%	2.52%			0.11%
Freshwater harvest rate	2.38%	28.94%	10.72%	9.15%	10.45%	9.73%			0.97%
Commercial harvest rate	0.52%	0.35%	0.47%	3.14%	2.52%	2.86%			15.34%
QIN Treaty Harvest Rate	19.00%	17.33%	18.48%	21.01%	21.59%	21.27%			33.26%
Total GH Harvest Rate	23.87%	49.21%	31.83%	36.48%	39.95%	38.03%			49.68%

2020 Grays Harbor Fall Salmon Management Summary Tables
Model C -2A/D 3 days Wk 43 and 44, 2C 4 days Wk 43; 2019 rec fisheries (NOF2 Coho run 2019b)

		CHEH	IALIS RIVER	BASIN					
		Chinook			Coho			Chum	
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	11,144	2,189	13,333	43,313	26,666	69,979	30,324	2,325	32,649
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	1,391	1,611	3,002	14,807	25,166	39,973			11,649
Non-treaty Share	696	806	1,501	7,404	12,583	19,987			5,825
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest	488	166	654	7,038	4,520	11,558			4,882
Marine Area 2.2 Harvest	168	76	244	1,163	838	2,001			35
Freshwater Harvest	257	75	332	4,702	2,959	7,661			653
Commercial Harvest (Area 2A, 2D)	63	16	79	1,174	723	1,896			4,194
Chehalis Tribal Harvest	117	0	117	320	1,075	1,395			(
QIN Treaty Harvest	2,231	438	2,669	9,013	5,549	14,562			6,829
Total Chehalis Basin Harvest	2,836	604	3,440	16,371	11,144	27,515			11,711
Expected Escapement	8,308	1,585	9,893	26,942	15,522	42,464			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	4.4%	7.57%	4.90%	16.25%	16.95%	16.52%			14.95%
Total Recreational harvest rate	3.81%	6.86%	4.31%	13.54%	14.24%	13.81%			2.11%
Proportion of Rec Marine Area 2.2	39.5%	50.31%	42.34%	19.8%	22.07%	20.71%			5.05%
Proportion of Rec Freshwater	60.48%	49.69%	57.66%	80.17%	77.93%	79.29%			94.95%
Commercial Impact Rate in 2A-D only	0.51%								
Commercial harvest rate	0.57%	0.72%	0.59%	2.71%	2.71%	2.71%			12.85%
Chehalis Tribal harvest rate	1.05%	0.00%	0.88%	0.74%	4.03%	1.99%			0.00%
QIN Treaty Harvest Rate	20.02%	20.02%	20.02%	20.81%	20.81%	20.81%			20.92%
Total Chehalis Basin Harvest Rate	25.45%	27.59%	25.80%	37.80%	41.79%	39.32%			35.87%

		HUMP1	<b>TULIPS RIVE</b>	R BASIN					
	Chinook			Coho			Chum		
-	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	3,857	4,683	8,540	3,614	11,206	14,820	30,324	2,325	32,649
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	284	4,314	4,598	-3,280	10,806	7,526			11,649
Non-treaty Share	142	2,157	2,299	-1,640	5,403	3,763			5,825
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
WDFW-managed fishery Harvest	132	2,036	2,168	104	1,522	1,626			158
Marine Area 2.2 Harvest	11	102	114	10	123	133			C
Freshwater Harvest	110	1,918	2,028	67	1,318	1,384			95
Commercial Harvest	11	15	26	26	82	108			63
QIN Treaty Harvest	620	752	1,372	848	2,629	3,477			4,031
Total Humptulips Basin Harvest	752	2,788	3,540	952	4,151	5,103			4,189
Expected Escapement	3,105	1,895	5,000	2,662	7,055	9,717			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	3.42%	43.47%	25.38%	2.87%	13.58%	10.97%			0.48%
Total Recreational harvest rate	3.14%	43.15%	25.08%	2.14%	12.85%	10.24%			0.29%
Proportion of Rec Marine Area 2.2	9.2%	5.07%	5.30%	13.5%	8.52%	8.78%			See above
Proportion of Rec Freshwater	90.80%	94.93%	94.70%	86.49%	91.48%	91.22%			100.00%
Commercial harvest rate in 2C Only	0.22%								
Commercial harvest rate	0.28%	0.32%	0.30%	0.73%	0.73%	0.73%			0.19%
QIN Treaty Harvest Rate	16.07%	16.07%	16.07%	23.46%	23.46%	23.46%			12.35%
Total Harvest Rate	19.49%	59.54%	41.45%	26.33%	37.05%	34.43%			12.83%

2020 Grays Harbor Fall Salmon Management Summary Tables Model C -2A/D 3 days Wk 43 and 44, 2C 4 days Wk 43; 2019 rec fisheries (NOF2 Coho run 2019b) Cont'd

	,	GRAY	S HARBOR	TOTAL					
		Chinook			Coho			Chum	
_	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	15,001	6,872	21,873	46,927	37,872	84,799	30,324	2,325	32,649
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	1,675	5,925	7,600	11,527	35,972	47,499			11,649
Non-treaty Share	838	2,963	3,800	5,764	17,986	23,750			5,825
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				23					
Total Impacts									
Harvest Impacts									
WDFW-managed fishery Harvest	620	2,202	2,822	7,142	6,042	13,184			5,040
Marine Area 2.2 Harvest	179	178	357	1,173	961	2,134			35
Freshwater Harvest	367	1,993	2,360	4,768	4,277	9,045			748
Commercial Harvest	74	31	104	1,200	804	2,004			4,257
Chehalis Tribe	117	0	117	320	1,075	1,395			0
Total NT - Harvest	737	2,202	2,938	7,462	7,118	14,579			5,040
QIN Treaty Harvest	2,851	1,191	4,042	9,861	8,178	18,039			10,860
Total GH Harvest	3,588	3,392	6,980	17,323	15,296	32,619			15,900
Expected Escapement	11,413	3,480	14,893	29,604	22,576	52,180			16,749
	1,913								
Harvest Rates									
Non-treaty Harvest Rate	4.13%	32.04%	12.90%	15.22%	15.95%	15.55%			15.44%
Proportion of Rec Marine Area 2.2									4.44%
Marine Area 2.2 harvest rate	1.19%	2.59%	1.63%	2.50%	2.54%	2.52%			0.11%
Freshwater harvest rate	2.45%	29.00%	10.79%	10.16%	11.29%	10.67%			2.29%
Commercial harvest rate	0.49%	0.45%	0.48%	2.56%	2.12%	2.36%			13.04%
QIN Treaty Harvest Rate	19.00%	17.33%	18.48%	21.01%	21.59%	21.27%			33.26%
Total GH Harvest Rate	23.92%	49.36%	31.91%	36.91%	40.39%	38.47%			48.70%

		CHE	IALIS RIVER	BASIN					
		Chinook	, (210 KIV2K	2,101	Coho			Chum	
-	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
-	11,144	2,189	13,333	43,313	26,666	69,979	30,324	2,325	32,649
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006		_,	21,000
Total Available Harvestable	1,391	1,611	3,002	14,807	25,166	39,973			11,649
Non-treaty Share	696	806	1,501	7,404	12,583	19,987			5,825
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest	550	179	729	7,437	4,761	12,198			6,280
Marine Area 2.2 Harvest	168	75	242	1,162	832	1,995			35
Freshwater Harvest	257	75	332	4,702	2,959	7,661			653
Commercial Harvest (Area 2A, 2D)	126	29	155	1,573	969	2,542			5,592
Chehalis Tribal Harvest	117	0	117	320	1,075	1,395			(
QIN Treaty Harvest	2,231	438	2,669	9,013	5,549	14,562			6,829
Total Chehalis Basin Harvest	2,898	617	3,515	16,770	11,385	28,155			13,109
Expected Escapement	8,246	1,572	9,818	26,543	15,281	41,824			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	4.9%	8.16%	5.47%	17.17%	17.85%	17.43%			19.23%
Total Recreational harvest rate	3.81%	6.83%	4.31%	13.54%	14.22%	13.80%			2.11%
Proportion of Rec Marine Area 2.2	39.5%	50.11%	42.23%	19.8%	21.95%	20.66%			5.05%
Proportion of Rec Freshwater	60.54%	49.89%	57.77%	80.18%	78.05%	79.34%			94.95%
Commercial Impact Rate in 2A-D only	0.68%								
Commercial harvest rate	1.13%	1.33%	1.16%	3.63%	3.63%	3.63%			17.13%
Chehalis Tribal harvest rate	1.05%	0.00%	0.88%	0.74%	4.03%	1.99%			0.00%
QIN Treaty Harvest Rate	20.02%	20.02%	20.02%	20.81%	20.81%	20.81%			20.92%
Total Chehalis Basin Harvest Rate	26.01%	28.18%	26.36%	38.72%	42.69%	40.23%			40.15%

2020 Grays Harbor Fall Salmon Management Summary Tables Model D - 2019 fisheries; except North Bay Rec schedule Sun-Thur only (NOF2 Coho run 2019b) Cont'd

		HUMPT	<b>TULIPS RIVE</b>	R BASIN					
	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	3,857	4,683	8,540	3,614	11,206	14,820	30,324	2,325	32,649
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	284	4,314	4,598	-3,280	10,806	7,526			11,649
Non-treaty Share	142	2,157	2,299	-1,640	5,403	3,763			5,825
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
WDFW-managed fishery Harvest	222	2,139	2,361	133	1,583	1,715			212
Marine Area 2.2 Harvest	10	95	105	10	91	101			(
Freshwater Harvest	110	1,918	2,028	67	1,318	1,384			95
Commercial Harvest	102	126	228	56	174	230			117
QIN Treaty Harvest	620	752	1,372	848	2,629	3,477			4,031
Total Humptulips Basin Harvest	842	2,892	3,733	981	4,212	5,193			4,243
Expected Escapement	3.015	1,791	4.807	2,633	6.994	9.627			N/A
·	-,-	, -	,	,	-,	-,-			
Harvest Rates WDFW-managed fishery Harvest Rate	5.75%	45.68%	27.65%	3.67%	14.12%	11.58%			0.65%
Total Recreational harvest rate	3.12%	42.99%	24.98%	2.12%	12.57%	10.02%			0.29%
Proportion of Rec Marine Area 2.2	8.6%	4.71%	4.93%	12.6%	6.48%	6.80%			See above
Proportion of Rec Freshwater	91.45%	95.29%	95.07%	87.38%	93.52%	93.20%			100.00%
·									
Commercial harvest rate in 2C Only	2.56%								
Commercial harvest rate	2.63%	2.69%	2.66%	1.55%	1.55%	1.55%			0.36%
QIN Treaty Harvest Rate	16.07%	16.07%	16.07%	23.46%	23.46%	23.46%			12.35%
Total Harvest Rate	21.82%	61.75%	43.72%	27.13%	37.59%	35.04%			13.00%

		GRAY	S HARBOR	TOTAL					
		Chinook			Coho			Chum	
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
	15,001	6,872	21,873	46,927	37,872	84,799	30,324	2,325	32,649
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	1,675	5,925	7,600	11,527	35,972	47,499			11,649
Non-treaty Share	838	2,963	3,800	5,764	17,986	23,750			5,825
Management Objectives									
Marine Area 2.2 impact rat	Э								< 2% total
Commercial impact rate	:			23					
Total Impact	S								
Harvest Impacts									
WDFW-managed fishery Harvest	772	2,318	3,090	7,570	6,343	13,913			6,491
Marine Area 2.2 Harves	t 178	170	348	1,172	924	2,096			3
Freshwater Harves	t 367	1,993	2,360	4,768	4,277	9,045			748
Commercial Harves	227	155	382	1,629	1,143	2,772			5,709
Chehalis Tribe	e 117	0	117	320	1,075	1,395			(
Total NT - Harves	t 889	2,318	3,207	7,890	7,419	15,309			6,49
QIN Treaty Harvest	2,851	1,191	4,042	9,861	8,178	18,039			10,860
Total GH Harvest	3,740	3,508	7,248	17,751	15,597	33,348			17,352
Expected Escapement	11,261	3,364	14,625	29,176	22,275	51,451			15,297
	2,065								
Harvest Rates									
Non-treaty Harvest Rate	5.15%	33.73%	14.13%	16.13%	16.75%	16.41%			19.88%
Proportion of Rec Marine Area 2.	2								4.44%
Marine Area 2.2 harvest rat	e 1.19%	2.47%	1.59%	2.50%	2.44%	2.47%			0.11%
Freshwater harvest rat	e 2.45%	29.00%	10.79%	10.16%	11.29%	10.67%			2.29%
Commercial harvest rat	e 1.51%	2.26%	1.75%	3.47%	3.02%	3.27%			17.49%
QIN Treaty Harvest Rate	19.00%	17.33%	18.48%	21.01%	21.59%	21.27%			33.26%
Total GH Harvest Rate	24.93%	51.05%	33.14%	37.83%	41.18%	39.33%			53.15%

# 2020 Grays Harbor Fall Salmon Management Summary Tables Model E - Rec bag 2 Sept, 1 Nov-Dec; Comm 2B (NOF2 Coho run 2019b)

		CHEH	IALIS RIVER	BASIN					
		Chinook			Coho			Chum	
-	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
·	11,144	2,189	13,333	43,313	26,666	69,980	30,324	2,325	32,649
Escapement Goals	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	1,391	1,611	3,002	14,807	25,166	39,974			11,649
Non-treaty Share	696	806	1,501	7,404	12,583	19,987			5,825
Chehalis River Management Objectives									
Proportion of Rec Marine Area 2.2	<27%			<27%					< 2% total
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery	=<5%			=<5%					
Harvest Impacts									
WDFW-managed fishery Harvest	433	152	584	6,497	4,160	10,657			4,016
Marine Area 2.2 Harvest	168	76	244	1,163	838	2,001			35
Freshwater Harvest	246	70	316	4,228	2,640	6,868			279
Commercial Harvest (Area 2A, 2D)	18	6	25	1,107	681	1,788			3,703
Chehalis Tribal Harvest	117	0	117	320	1,075	1,395			(
QIN Treaty Harvest	2,231	438	2,669	9,013	5,549	14,562			6,829
Total Chehalis Basin Harvest	2,780	590	3,371	15,830	10,784	26,614			10,846
Expected Escapement	8,364	1,599	9,962	27,483	15,882	43,365			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	3.9%	6.94%	4.38%	15.00%	15.60%	15.23%			12.30%
Total Recreational harvest rate	3.72%	6.65%	4.20%	12.45%	13.05%	12.67%			0.96%
Proportion of Rec Marine Area 2.2	40.5%	51.87%	43.49%	21.6%	24.10%	22.56%			11.08%
Proportion of Rec Freshwater	59.45%	48.13%	56.51%	78.43%	75.90%	77.44%			88.92%
Commercial Impact Rate in 2A-D only	0.16%								
Commercial harvest rate	0.16%	0.29%	0.18%	2.55%	2.55%	2.55%			11.34%
Chehalis Tribal harvest rate	1.05%	0.00%	0.88%	0.74%	4.03%	1.99%			0.00%
QIN Treaty Harvest Rate	20.02%	20.02%	20.02%	20.81%	20.81%	20.81%			20.92%
Total Chehalis Basin Harvest Rate	24.95%	26.96%	25.28%	36.55%	40.44%	38.03%	·		33.22%

		HUMP	<b>TULIPS RIVE</b>	R BASIN					
	Chinook			Coho			Chum		
-	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	3,857	4,683	8,540	3,614	11,206	14,819	30,324	2,325	32,649
Escapement Goal	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	284	4,314	4,598	-3,280	10,806	7,525			11,649
Non-treaty Share	142	2,157	2,299	-1,640	5,403	3,763			5,825
Humptulips River Management Objectives									
Marine Area 2.2 impact rate	37%			18 - 34%					
Commercial impact rate in 2C Only	< 5.4%								
Total Impacts				< 5%					
Harvest Impacts									
WDFW-managed fishery Harvest	144	2,070	2,215	100	1,511	1,611			37
Marine Area 2.2 Harvest	11	102	114	10	123	133			(
Freshwater Harvest	110	1,918	2,028	67	1,317	1,384			37
Commercial Harvest	23	49	73	23	70	93			(
QIN Treaty Harvest	620	752	1,372	848	2,629	3,477			4,031
Total Humptulips Basin Harvest	764	2,823	3,587	948	4,140	5,088			4,068
Expected Escapement	3,093	1,860	4,953	2,666	7,066	9,731			N/A
Harvest Rates									
WDFW-managed fishery Harvest Rate	3.75%	44.21%	25.93%	2.77%	13.48%	10.87%			0.11%
Total Recreational harvest rate	3.14%	43.15%	25.08%	2.14%	12.85%	10.24%			0.11%
Proportion of Rec Marine Area 2.2	9.2%	5.07%	5.30%	13.5%	8.52%	8.78%			See above
Proportion of Rec Freshwater	90.80%	94.93%	94.70%	86.49%	91.48%	91.22%			100.00%
Commercial harvest rate in 2C Only	0.00%								
Commercial harvest rate	0.60%	1.05%	0.85%	0.63%	0.63%	0.63%			0.00%
QIN Treaty Harvest Rate	16.07%	16.07%	16.07%	23.46%	23.46%	23.46%			12.35%
Total Harvest Rate	19.81%	60.28%	42.00%	26.23%	36.95%	34.33%			12.46%

2020 Grays Harbor Fall Salmon Management Summary Tables Model E - Rec bag 2 Sept, 1 Nov-Dec; Comm 2B (NOF2 Coho run 2019b) Cont'd

		GRAY	S HARBOR	TOTAL					
		Chinook			Coho				
-	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
0	15,001	6,872	21,873	46,927	37,872	84,799	30,324	2,325	32,649
Escapement Goal	13,326	947	14,273	35,400	1,900	37,300			21,000
Total Available Harvestable	1,675	5,925	7,600	11,527	35,972	47,499			11,649
Non-treaty Share	838	2,963	3,800	5,764	17,986	23,749			5,825
Management Objectives									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate				23					
Total Impacts									
Harvest Impacts									
WDFW-managed fishery Harvest	577	2,222	2,799	6,597	5,671	12,268			4,053
Marine Area 2.2 Harvest	179	178	357	1,173	961	2,134			3
Freshwater Harvest	356	1,989	2,345	4,294	3,958	8,252			31
Commercial Harvest	42	56	97	1,129	752	1,881			3,70
Chehalis Tribe	117	0	117	320	1,075	1,395			(
Total NT - Harvest	694	2,222	2,916	6,917	6,746	13,663			4,053
QIN Treaty Harvest	2,851	1,191	4,042	9,861	8,178	18,039			10,860
Total GH Harvest	3,545	3,413	6,958	16,778	14,924	31,702			14,913
Expected Escapement	11,456	3,459	14,915	30,149	22,948	53,097			17,736
	1,870								
Harvest Rates									
Non-treaty Harvest Rate	3.85%	32.34%	12.80%	14.06%	14.97%	14.47%			12.41%
Proportion of Rec Marine Area 2.2									9.92%
Marine Area 2.2 harvest rate	1.19%	2.59%	1.63%	2.50%	2.54%	2.52%			0.119
Freshwater harvest rate	2.38%	28.94%	10.72%	9.15%	10.45%	9.73%			0.97%
Commercial harvest rate	0.28%	0.81%	0.44%	2.41%	1.98%	2.22%			11.34%
QIN Treaty Harvest Rate	19.00%	17.33%	18.48%	21.01%	21.59%	21.27%			33.26%
Total GH Harvest Rate	23.63%	49.66%	31.81%	35.75%	39.41%	37.39%			45.68%

Model	Fishery	Area	Total Bag Limit	Chinook Fishery - UM Release Required (MSF)	Natural Coho Bag Limit	Hatchery Coho Bag Limit	Chum	
	Marine Rec	North Bay	1	Aug 1-Sept 15	MSF	1	Retention	
	Mai me Rec	East Bay	2	Release all Chinook	2	2	Retention	
	FW Rec	Humptulips	2 Sept, 1 Oct - Dec	MSF	MSF	2 Sept, 1 Oct - Dec	Retention	
A		Chehalis	2	Release all Chinook	2	2	Retention	
11	Fishery	Area	Season	Chinook	Natural Coho	Hatchery Coho	Chum	
	Commercial	2A/D	4 days Wk 43 4 days Wk 44	MSF	Retention	Retention	Retention	
	Gommerciai	2C	1 day Wk 42 1 day Wk 44	Retention	Retention	Retention	Retention	
	Marine Rec	North Bay	1	Aug 1-Sept 15	MSF	1	Retention	
	Marine Rec	East Bay	2	Release all Chinook	2	2	Retention	
	FW Rec	Humptulips	2 Sept, 1 Oct - Dec	MSF	MSF	2 Sept, 1 Oct - Dec	Release Nov-Dec	
В		Chehalis	2 Oct, 1 Nov-Dec	Release all Chinook	2 Oct, 1 Nov-Dec	2 Oct, 1 Nov-Dec	Release Nov-Dec	
	Fishery	Area	Season	Chinook	Natural Coho	Hatchery Coho	Chum	
	Commercial	2A/D	4 days Wk 43 3 days Wk 44	MSF	Retention	Retention	Retention	
		2C						
	Marine Rec	North Bay	1	Aug 1-Sept 15	MSF	1	Retention	
		East Bay	2	Release all Chinook	2	2	Retention	
	FW Rec	Humptulips	2 Sept, 1 Oct - Dec	MSF	MSF	2 Sept, 1 Oct - Dec	Retention	
С		Chehalis	2	Release all Chinook	2	2	Retention	
	Fishery	Area	Season	Chinook	Natural Coho	Hatchery Coho	Chum	
	Commercial	2A/D	3 days Wk 43 3 days Wk 44	MSF	Retention	Retention	Retention	
		2C	4 day Wk 43	Retention	Retention	Retention	Retention	
	Marine Rec	North Bay	1	Aug 1-Sept 15 Sun-Thur	MSF	1	Retention	
		East Bay	2	Release all Chinook	2	2	Retention	
	FW Rec	Humptulips	2 Sept, 1 Oct - Dec	MSF	MSF	2 Sept, 1 Oct - Dec	Retention	
D		Chehalis	2	Release all Chinook	2	2	Retention	
	Fishery	Area 2A/D	Season 4 days Wk 43 4 days Wk 44	<b>Chinook</b> MSF	Natural Coho Retention	Hatchery Coho  Retention	<b>Chum</b> Retention	
	Commercial	2C	1 day Wk 42 1 day Wk 44	Retention	Retention	Retention	Retention	
	D	North Bay	1	Aug 1-Sept 15	MSF	1	Retention	
	Marine Rec	East Bay	2	Release all Chinook	2	2	Retention	
	FW Rec	Humptulips	2 Sept, 1 Oct - Dec	MSF	MSF	2 Sept, 1 Oct - Dec	Release Nov-Dec	
Е		Chehalis	2 Oct, 1 Nov-Dec	Release all Chinook	2 Oct, 1 Nov-Dec	2 Oct, 1 Nov-Dec	Release Nov-Dec	
_ E	Fishery	Area	Season	Chinook	Natural Coho	Hatchery Coho	Chum	
		2A/D		MSF	Retention	Retention	Retention	
	Commercial	2B	4 days Wk 43 3 days Wk 44	MSF	Retention	Retention	Retention	
		2C						

### 2020 Grays Harbor Fishery Model Option Summary

		WDFW Availabl	Policy Price	orities	Sport Allocation %									
	NOR	Chinook	NOR Coho Chum		Harvest Ra		Chi	nook		Coho				
Model	Chehalis	Humptulips	Chehalis	GH	Humptulips		Chel	Chehalis		otulips	Chehalis		Humptulips	
	available 6	96 available 142	available 7,419	available 5,825	Chinook	Coho	Marine	FW (73%)	Marine	FW (82%)	Marine	FW (73%)	Marine	FW (82%)
Α	667	223	7,758	6,491	5.77%	3.70%	40%	60%	9%	91%	20%	80%	14%	86%
В	606	124	7,162	5,359	3.22%	2.70%	38%	62%	5%	95%	23%	77%	9%	91%
С	605	132	7,342	5,040	3.42%	2.90%	37%	63%	5%	95%	21%	79%	9%	91%
D	667	222	7,740	6,491	5.75%	3.70%	37%	63%	5%	95%	21%	79%	7%	93%
Е	549	144	6,817	4,053	3.75%	2.80%	38%	62%	5%	95%	23%	77%	9%	91%

	Harvest																		
		Chinook							Co	ho			Chum						
	Chehalis (impacts)			Humptulips			Chehalis			Humptulips			Chehalis			Н	Humptulips		
Model	NT Comm	FW	Marine	NT Comm	FW	Marine	NT Comm	FW	Marine	NT Comm	FW	Marine	NT Comm	FW	Marine	NT Comm	FW	Marine	
Α	155	421	244	228	2,028	114	2,542	7,661	1,940	230	1,384	133	5,592	653	35	117	95	0	
В	93	406	244	9	2,028	114	2,345	6,868	1,940	82	1,384	133	5,009	279	35	0	37	0	
С	76	421	244	26	2,028	114	1,896	7,661	1,940	108	1,384	133	4,194	653	35	63	95	0	
D	155	421	242	228	2,028	105	2,542	7,661	1,934	230	1,384	101	5,592	653	35	117	95	0	
E	25	406	244	73	2,028	114	1,788	6,868	1,940	93	1,384	133	3,703	279	35	0	37	0	