

2021 Grays Harbor Fall Non-Treaty Terminal Area Planning Model

Model 2 - NT Comm 2A/D 3-Wk 44, 2-Wk 45, 2C 4-Wk 43, 2-44; FW 1 fish Chehalis (FRAM 2124a)

CHEHALIS RIVER																			
Chinook																			
Coho																			
Chum																			
GH Total																			
Wild Hatchery Total																			
Escapement Goal																			
Harvestable																			
Non-Treaty Share																			
CHEHALIS RIVER																			
ANTICIPATED HARVEST IMPACTS																			
Chinook																			
Coho																			
Chehalis Chum																			
Stat	Wk - DATE	AREA	# DAYS	day length	NDR Chin	NDR Coho	MSF	Wild	Wild 2A/2D onl	Hatchery	Total	MSF	Wild	Hatchery	Total	MSF	Chum		
Chinook	34	15-Aug-21	all	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
	35	22-Aug-21	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
	36	29-Aug-21	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
	37	5-Sep-21	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
	38	12-Sep-21	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
	39	19-Sep-21	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
Coho	40	26-Sep-21	cheh	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
	41	3-Oct-21	cheh	0	1.00	0.03	0.02	0.31	0	0	0	0	1.00	0	0	0	1	0	
	42	10-Oct-21	cheh	0	1.00	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0	
	43	17-Oct-21	cheh	0	1.00	0.03	0.02	0.56	8	0	1	9	1.00	3	1	4	1	0	
Chum	44	24-Oct-21	cheh	3	1.00	0.03	0.02	0.56	5	4	5	10	1.00	316	170	486	1	1,952	
	45	31-Oct-21	cheh	2	0.75	0.03	0.02	0.56	0	0	0	0	1.00	143	77	221	1	282	
Late Coho	46	7-Nov-21	cheh	0	0.75	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0	
	47	14-Nov-21	cheh	0	1.00	0.03	0.02	0.56	0	0	0	0	1.00	0	0	0	1	0	
	48	21-Nov-21		0	1.00	0.03	0.02	1.00	0										
				5		<b>Total NT Net Catch</b>			12	4	7	19		462	249	711		2,234	
12-hour days	2011-2013					GH Marine Area 2.2			51	0.0004	20	71		279	144	423		33	
24-hour days	1973-2013					Westport Boat Basin			0		0	0		0	9	9		0	
24-hour days	1991-2013					FW River Sport			158		42	200		1,282	1,918	3,200		622	
									<b>209</b>		<b>62</b>	<b>271</b>		<b>1,561</b>	<b>2,071</b>	<b>3,632</b>		<b>655</b>	
										87									
									Chehalis Tribe	92		92		260	869	1,129		0	
										<b>314</b>	<b>4</b>	<b>69</b>	<b>383</b>	<b>2,284</b>	<b>3,189</b>	<b>5,472</b>		<b>2,889</b>	
										<b>Expected Escapement</b>	9,531	1,620	11,151	34,132	16,321	50,453		35,316	
										<b>Escapement Goal</b>	9,753	578	10,331	28,506	1,500	30,006		21,000	
										<b>Total Remaining Harvest</b>	-222	1,042	820	5,626	14,821	20,447		<b>14,316</b>	
										<b>Share Remaining</b>	<b>236</b>	573	809	<b>3,739</b>	6,980	10,719		<b>7,457</b>	
										<b>Terminal Harvest Rate</b>	<b>0.029</b>	<b>0.020401</b>	0.037	0.030	<b>0.050</b>	0.146	0.070		<b>0.075</b>
										NT Chehalis River HR				2,028				0.068	

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HUMPTULIPS RIVER																			
Chinook																			
Coho																			
Chum																			
Wild																			
Hatchery																			
Total																			
Escapement Goal																			
Harvestable																			
Non-Treaty Share																			
HUMPTULIPS RIVER																			
ANTICIPATED HARVEST IMPACTS																			
Chinook																			
Coho																			
Humptulips Chum																			
DATE	AREA	# DAYS	length	Chin	Coho	MSF	Wild	Wild Hump onl	Hatchery	Total	MSF	Wild	Hatchery	Total	Chin	Coho	MSF	Chum	
34	15-Aug-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	0	0
35	22-Aug-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	0	0
Chinook	36	29-Aug-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0	0	0
	37	5-Sep-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0	0	0
	38	12-Sep-21	hump	0	0.75	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0	0	0
Coho	39	19-Sep-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0	0	0
	40	26-Sep-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0	0	0
	41	3-Oct-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0	0	0
	42	10-Oct-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0	0	0
Chum	43	17-Oct-21	hump	4	1.00	0.03	0.02	1.00	19	19	23	42	1.00	9	27	37	1	109	0
	44	24-Oct-21	hump	2	1.00	0.03	0.02	1.00	1	1	2	3	1.00	5	15	20	1	36	0
Late Coho	45	31-Oct-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	1	4	5	1	0	0
	46	7-Nov-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	0
	47	14-Nov-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	0
	48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	0
2 11-hour and 1 8-hour			6	Total NT Net Catch			20	20	25	45	16	47	62	145					
24-hour days			GH Marine Area 2.2			8	0.4245%	118	127	12	126	138							
			FW River Sport			110		2,093	2,203	45	939	984	133						
			Total NT Sport Catch			119		2,211	2,330	57	1,066	1,123	133						
			Total NT Humptulip River Terminal Impact			139		2,236	2,375	72	1,112	1,185	278						
			Expected Escapement			3,915		2,711	6,627	1,876	4,629	6,505	35,316						
			Escapement Goal			3,573		369	3,942	6,894	400	7,294	21,000						
			Total Remaining Harvestable			342		2,342	2,685	-5,018	4,229	-789	14,316						
			Share Remaining			409		428	836	-2,312	2,286	-27	7,457						
			Terminal Harvest Rate			2.97%		0.393	0.229	3.0%	0.155	0.123	0.075						

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Chehalis 2A and 2D			
WDFW managed		goal	model
<b>Chinook</b>	share	550	221
	goal	9,753	<b>9,531</b>
commercial rate		< or = 0.8%	<b>0.04%</b>
WDFW total		< or = 5.0%	<b>2.04%</b>
	MA2.2	27%	26%
	FW	73%	74%
<b>Coho</b>	share	6,023	2,023
	goal	28,506	<b>34,132</b>
WDFW total		< or = 5.0%	5.0%
	MA2.2	27%	12%
	FW	73%	88%

Humptulips 2C			
WDFW managed		goal	model
<b>Chinook</b>	rate	< or = 1.2%	<b>0.4%</b>
	share	548	<b>139</b>
	goal	3,573	<b>3,915</b>
	MA 2.2	22%	5%
	FW	78%	95%
<b>Coho</b>	goal	6,894	<b>1,876</b>
	WDFW total	< or = 5.0%	<b>3.00%</b>
Total		< or = 10%	22.3%
	MA 2.2	18%	12%
	FW	82%	88%

Grays Harbor Total			
<b>Chinook</b>	goal	13,326	<b>13,446</b>
	share (incl. CTR)	1,097	452
<b>Coho</b>	goal	35,400	<b>36,009</b>
	share (incl. CTR)	3,783	2,356
			<b>4.9%</b>
<b>Chum</b>	goal	21,000	<b>35,316</b>
	share (incl. CTR)	10,624	3,167
MA 2.2	= to or <2%	4.19%	
FW	>98%	96%	<b>\$ 30,567</b>

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Fishery Description				
Sport				
Marine 2.2		Dates	Bag Limit	
	Area 2D only	Oct 1-Nov 30	1 Adult bag: release Chinook (east of 2B only)	
	Area 2C only	Aug 1-Sept 23	1 Adult bag: release wild Chinook and wild Coho	
	Chehalis River Mouth to Hwy 6	No spring Chinook fishery		
	Chehalis River Mouth to South Elma Bridge	Aug 1-Sept 23	: Release adult salmon	
	Chehalis river mouth to Hwy 107 Bridge	Oct 1-Nov 30	1 Adult bag: Release Chinook	
	Chehalis river mouth to Hwy 107 Bridge	Dec 1-31	1 adult bag: Release Chinook and wild coho	
	Hwy 107 Bridge to South Elma Bridge	Oct 1-Dec 31	1 adult bag: Release Chinook and wild coho	
	Chehalis River South Elma Bridge up to High Bridge	Oct 1-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Hwy 6 to high bridge			
	Hoquiam	Oct 1-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Wishkah	Oct 1-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Wynoochee	Oct 1-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Satsop	Oct 1-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Black River	Oct 1-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Skookumchuck	Oct 16-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Newaukum	Oct 16-Dec 31	1 Adult bag: Release Chinook and wild coho	
		0	0	
	Elk and Johns	Oct. 1-Dec 31	1 Adult bag: Release Chinook and wild coho	
			0	
	Humtulpis River FW	Sept. 1-Sept 30	2 Adult bag: release wild Chinook and wild Coho	
		Oct. 1-Oct 31	1 Adult bag: 1 may be Chinook, release wild Chinook and wild Coho	
		Nov 1-Dec 31	1 Adult bag: release Chinook and wild Coho	
	Area 2A/2D	Week 44	3	12 hr days, live boxes, short soak, release wild Chinook
	Area 2A/2D	Week 45	2	12 hr days, live boxes, short soak, release wild Chinook
	Area 2C	Week 43	4	24 hr days, live boxes
	Area 2C	Week 44	2	24 hr days, live boxes

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CHEHALIS RIVER BASIN									
	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
Escapement Goals	10,852	1,862	12,714	40,552	21,837	62,389	30,324	2,325	42,248
	9,753	578	10,331	28,506	1,500	30,006			21,000
Total Available Harvestable	1,099	1,284	2,383	12,046	20,337	32,383			21,248
Non-treaty Share	550	642	1,192	6,023	10,168	16,191			10,624
<b>Chehalis River Management Objectives</b>									
Proportion of Rec Marine Area 2.2	<27%			<27%					
Commercial Impact Rate in 2A-D Only	< 0.8%								
Total WDFW-managed fishery				=<5%					
<b>Harvest Impacts</b>									
<b>WDFW-managed fishery Harvest</b>	<b>221</b>	<b>69</b>	<b>290</b>	<b>2,023</b>	<b>2,320</b>	<b>4,343</b>			<b>2,889</b>
Marine Area 2.2 Harvest	51	20	71	279	153	432			33
Freshwater Harvest	158	42	200	1,282	1,918	3,200			622
Commercial Harvest (Area 2A, 2D)	12	7	19	462	249	711			2,234
Chehalis Tribal Harvest	92	0	92	260	869	1,129			0
<b>QIN Treaty Harvest</b>	<b>1,007</b>	<b>173</b>	<b>1,180</b>	<b>4,136</b>	<b>2,327</b>	<b>6,463</b>			<b>2,907</b>
<b>Total Chehalis Basin Harvest</b>	<b>1,321</b>	<b>242</b>	<b>1,563</b>	<b>6,420</b>	<b>5,516</b>	<b>11,935</b>			<b>5,796</b>
<b>Expected Escapement</b>	<b>9,531</b>	<b>1,620</b>	<b>11,151</b>	<b>34,132</b>	<b>16,321</b>	<b>50,453</b>			<b>N/A</b>
<b>Harvest Rates</b>									
<b>WDFW-managed fishery Harvest Rate</b>	<b>2.0%</b>	<b>3.71%</b>	<b>2.28%</b>	<b>4.99%</b>	<b>10.62%</b>	<b>6.96%</b>			<b>6.84%</b>
<b>Total Recreational harvest rate</b>	<b>1.93%</b>	<b>3.35%</b>	<b>2.13%</b>	<b>3.85%</b>	<b>9.48%</b>	<b>5.82%</b>			<b>1.55%</b>
Proportion of Rec Marine Area 2.2	24.48%	32.29%	26.27%	17.89%	7.37%	11.90%			5.04%
Proportion of Rec Freshwater	75.52%	67.71%	73.73%	82.11%	92.63%	88.10%			94.96%
Commercial Impact Rate in 2A-D only	<b>0.04%</b>								
Commercial harvest rate	0.11%	0.36%	0.15%	1.14%	1.14%	1.14%			5.29%
Chehalis Tribal harvest rate	0.85%	0.00%	0.73%	0.64%	3.98%	1.81%			0.00%
<b>QIN Treaty Harvest Rate</b>	<b>9.28%</b>	<b>9.29%</b>	<b>9.28%</b>	<b>10.20%</b>	<b>10.66%</b>	<b>10.36%</b>			<b>6.88%</b>
<b>Total Chehalis Basin Harvest Rate</b>	<b>12.17%</b>	<b>13.00%</b>	<b>12.29%</b>	<b>15.83%</b>	<b>25.26%</b>	<b>19.13%</b>			<b>13.72%</b>

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HUMPTULIPS RIVER BASIN										
	Chinook			Coho			Chum			
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total	
Escapement Goal	0	4,668	5,696	10,364	2,414	7,197	9,610	30,324	2,325	42,248
Total Available Harvestable		3,573	369	3,942	6,894	400	7,294			21,000
Non-treaty Share		1,095	5,327	6,422	-4,480	6,797	2,316			21,248
		548	2,664	3,211	-2,240	3,398	1,158			10,624
<b>Humptulips River Management Objectives</b>										
Marine Area 2.2 impact rate		37%			18 - 34%					
Commercial impact rate in 2C Only										
Total Impacts					< 5%					
<b>Harvest Impacts</b>										
<b>WDFW-managed fishery Harvest</b>		139	2,236	2,375	72	1,112	1,185			278
Marine Area 2.2 Harvest		8	118	127	12	126	138			0
Freshwater Harvest		110	2,093	2,203	45	939	984			133
Commercial Harvest		20	25	45	16	47	62			145
<b>QIN Treaty Harvest</b>		614	749	1,363	465	1,455	1,920			858
<b>Total Humptulips Basin Harvest</b>		753	2,985	3,738	537	2,567	3,105			1,136
<b>Expected Escapement</b>		3,915	2,711	6,626	1,877	4,629	6,506			N/A
<b>Harvest Rates</b>										
<b>WDFW-managed fishery Harvest Rate</b>		2.97%	39.25%	22.91%	3.00%	15.46%	12.33%			0.66%
<b>Total Recreational harvest rate</b>		2.54%	38.81%	22.48%	2.35%	14.81%	11.68%			0.32%
Proportion of Rec Marine Area 2.2		7.00%	5.35%	5.43%	21.24%	11.86%	12.34%			See above
Proportion of Rec Freshwater		93.00%	94.65%	94.57%	78.76%	88.14%	87.66%			100.00%
Commercial harvest rate in 2C Only		0.42%								
Commercial harvest rate		0.43%	0.44%	0.43%	0.65%	0.65%	0.65%			0.34%
<b>QIN Treaty Harvest Rate</b>		13.15%	13.15%	13.15%	19.26%	20.22%	19.98%			2.03%
<b>Total Harvest Rate</b>		16.13%	52.40%	36.06%	22.26%	35.68%	32.31%			2.69%

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GRAYS HARBOR TOTAL									
	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
Escapement Goal	15,520	7,558	23,078	42,966	29,033	71,999	30,324	2,325	42,248
Total Available Harvestable	13,326	947	14,273	35,400	1,900	37,300			21,000
Non-treaty Share	2,194	6,611	8,805	7,566	27,133	34,699			21,248
	1,097	3,306	4,403	3,783	13,567	17,350			10,624
<b>Management Objectives</b>									
Marine Area 2.2 impact rate									< 2% total
Commercial impact rate									
Total Impacts									
<b>Harvest Impacts</b>									
<b>WDFW-managed fishery Harvest</b>	<b>360</b>	<b>2,305</b>	<b>2,665</b>	<b>2,096</b>	<b>3,432</b>	<b>5,528</b>			<b>3,167</b>
Marine Area 2.2 Harvest	59	138	198	291	279	571			33
Freshwater Harvest	268	2,135	2,403	1,327	2,858	4,184			755
Commercial Harvest	32	32	64	478	295	773			2,379
<i>Chehalis Tribe</i>	92	0	92	260	869	1,129			0
<i>Total NT - Harvest</i>	452	2,305	2,757	2,356	4,301	6,657			3,167
<b>QIN Treaty Harvest</b>	<b>1,621</b>	<b>922</b>	<b>2,543</b>	<b>4,601</b>	<b>3,782</b>	<b>8,383</b>			<b>3,765</b>
<b>Total GH Harvest</b>	<b>2,073</b>	<b>3,227</b>	<b>5,300</b>	<b>6,957</b>	<b>8,083</b>	<b>15,040</b>			<b>6,932</b>
<b>Expected Escapement</b>	<b>13,447</b>	<b>4,331</b>	<b>17,778</b>	<b>36,009</b>	<b>20,950</b>	<b>56,959</b>			<b>35,316</b>
	-121								
<b>Harvest Rates</b>									
<b>Non-treaty Harvest Rate</b>	<b>2.32%</b>	<b>30.49%</b>	<b>11.55%</b>	<b>4.88%</b>	<b>11.82%</b>	<b>7.68%</b>			<b>7.50%</b>
Proportion of Rec Marine Area 2.2									<b>4.19%</b>
Marine Area 2.2 harvest rate	0.38%	1.83%	0.86%	0.68%	0.96%	0.79%			0.08%
Freshwater harvest rate	1.73%	28.24%	10.41%	3.09%	9.84%	5.81%			1.79%
Commercial harvest rate	0.21%	0.42%	0.28%	1.11%	1.02%	1.07%			5.63%
<b>QIN Treaty Harvest Rate</b>	<b>10.44%</b>	<b>12.20%</b>	<b>11.02%</b>	<b>10.71%</b>	<b>13.03%</b>	<b>11.64%</b>			<b>8.91%</b>
<b>Total GH Harvest Rate</b>	<b>13.36%</b>	<b>42.69%</b>	<b>22.97%</b>	<b>16.19%</b>	<b>27.84%</b>	<b>20.89%</b>			<b>16.41%</b>