

2021 Grays Harbor Fall Non-Treaty Terminal Area Planning Model

Model 3C - NT Comm 2A/D 3-Wk 44, 2-Wk 45, 2C 4-Wk 43, 2-44; FW 1 fish Chehalis Wed-Sun only (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	10	1.00	3	1	4	1	0	
Chum	44	24-Oct-21	cheh	3	1.00	0.03 0.02	0.56	3	3	4	7	1.00	316	170	486	1	2,389	
	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>		11	3	5	17		462	249	711		2,671	
12-hour days	2011-2013					GH Marine Area 2.2		46	0.0002	19	65		252	131	383		30	
24-hour days	1973-2013					Westport Boat Basin		0		0	0		0	8	8		0	
24-hour days	1991-2013					FW River Sport		156		42	198		1,227	1,821	3,047		617	
								203		61	263		1,478	1,961	3,439		647	
									87									
							Chehalis Tribe	92		0	92		260	869	1,129		0	
								306	3	66	372		2,201	3,078	5,279		3,318	
							<b>Expected Escapement</b>	9,538		1,623	11,161		34,215	16,431	50,646		34,887	
							<b>Escapement Goal</b>	9,753		578	10,331		28,506	1,500	30,006		21,000	
							<b>Total Remaining Harvest</b>	-215		1,045	830		5,709	14,931	20,640		13,887	
							<b>Share Remaining</b>	243		576	819		3,822	7,090	10,912		7,028	
							<b>Terminal Harvest Rate</b>	0.028	0.019724	0.035	0.029		0.048	0.141	0.067		0.085	
							NT Chehalis River HR						2,028				0.079	

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

HUMPTULIPS RIVER																			
Chinook																			
Coho																			
Chum																			
Wild																			
Hatchery																			
Total																			
Escapement Goal																			
Harvestable																			
Non-Treaty Share																			
									4,668	5,696			10,364	6,894			7,197	9,610	42,248
									3,573	369			3,942	6,894			400	7,294	21,000
									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
HUMPTULIPS RIVER																			
ANTICIPATED HARVEST IMPACTS																			
Chinook																			
Coho																			
Humptulips																			
DATE	AREA	# DAYS	length	NDR			MSF	Wild	Wild Hump onl	Hatchery	Total	MSF	Wild	Hatchery	Total	Humptulips			
				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		
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		
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		
	37	5-Sep-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	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		
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		
	40	26-Sep-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	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		
	42	10-Oct-21	hump	0	1.00	0.03	0.02	1.00	0	0	0	1.00	0	0	0	1	0		
Chum	43	17-Oct-21	hump	4	1.00	0.03	0.02	1.00	20	20	25	45	1.00	9	27	37	1	109	
	44	24-Oct-21	hump	2	1.00	0.03	0.02	1.00	1	1	2	2	1.00	6	17	23	1	36	
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	
	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	
	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	
	48	48-53	hump	0	1.00	0.03	0.02	1.00	0	0	0	0	1.00	0	0	0	1	0	
2 11-hour and 1 8-hour			6	Total NT Net Catch				21	21	26	48		16	48	64		145		
24-hour days				GH Marine Area 2.2				8	0.4514%	120	128		12	126	138				
				FW River Sport				134		2,166	2,299		45	939	984		133		
				Total NT Sport Catch				142		2,285	2,427		57	1,066	1,122		133		
				Total NT Humptulip River Terminal Impact				163		2,311	2,475		73	1,114	1,187		278		
				Expected Escapement				3,891		2,636	6,527		1,876	4,628	6,504		34,887		
				Escapement Goal				3,573		369	3,942		6,894	400	7,294		21,000		
				Total Remaining Harvestable				318		2,267	2,585		-5,018	4,228	-790		13,887		
				Share Remaining				384		352	736		-2,313	2,284	-29		7,028		
				Terminal Harvest Rate				3.49%		0.406	0.239		3.0%	0.155	0.123		0.085		

Chehalis 2A and 2D			
WDFW managed		goal	model
<b>Chinook</b>	share	550	214
	goal	9,753	<b>9,538</b>
	commercial rate	< or = 0.8%	<b>0.02%</b>
	WDFW total	< or = 5.0%	<b>1.97%</b>
	MA2.2	27%	25%
	FW	73%	75%
<b>Coho</b>	share	6,023	1,941
	goal	28,506	<b>34,215</b>
	WDFW total	< or = 5.0%	4.8%
	MA2.2	27%	11%
	FW	73%	89%

Humptulips 2C			
WDFW managed		goal	model
<b>Chinook</b>	rate	< or = 1.2%	<b>0.5%</b>
	share	548	<b>163</b>
	goal	3,573	<b>3,891</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>3.02%</b>
	Total	< or = 10%	22.3%
	MA 2.2	18%	12%
	FW	82%	88%

Grays Harbor Total			
<b>Chinook</b>	goal	13,326	<b>13,429</b>
	share (incl. CTCR)	1,097	469
<b>Coho</b>	goal	35,400	<b>36,091</b>
	share (incl. CTCR)	3,783	2,274
			<b>4.7%</b>
<b>Chum</b>	goal	21,000	<b>34,887</b>
	share (incl. CTCR)	10,624	3,596
MA 2.2	= to or <2%	3.79%	
FW	>98%	96%	<b>\$ 32,475</b>

2021 Grays Harbor Fall Non-Treaty Terminal Area Planning Model

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

Fishery Description		Dates	Bag Limit
<b>Sport</b>			
Marine 2.2			
	Area 2D only	Oct 1-Nov 30	Wed-Sunday, 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-Dec 31	Wed-Sunday, 1 Adult bag: release Chinook
	Hwy 107 Bridge to South Elma Bridge	Oct 1-Dec 31	1 adult bag: Release Chinook and wild coho (two pole)
	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
	Humptulips 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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Model 3C - NT Comm 2A/D 3-Wk 44, 2-Wk 45, 2C 4-Wk 43, 2-44; FW 1 fish Chehalis Wed-Sun only (FRAM 2124a)

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
Total Available Harvestable	9,753	578	10,331	28,506	1,500	30,006			21,000
Non-treaty Share	1,099	1,284	2,383	12,046	20,337	32,383			21,248
	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>214</b>	<b>66</b>	<b>280</b>	<b>1,941</b>	<b>2,209</b>	<b>4,150</b>			<b>3,318</b>
Marine Area 2.2 Harvest	46	19	65	252	140	392			30
Freshwater Harvest	156	42	198	1,227	1,821	3,047			617
Commercial Harvest (Area 2A, 2D)	11	5	17	462	249	711			2,671
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>1,313</b>	<b>239</b>	<b>1,552</b>	<b>6,337</b>	<b>5,405</b>	<b>11,742</b>			<b>6,225</b>
<b>Expected Escapement</b>	<b>9,539</b>	<b>1,623</b>	<b>11,162</b>	<b>34,215</b>	<b>16,432</b>	<b>50,646</b>			<b>N/A</b>
<b>Harvest Rates</b>									
<b>WDFW-managed fishery Harvest Rate</b>	<b>2.0%</b>	<b>3.54%</b>	<b>2.20%</b>	<b>4.79%</b>	<b>10.12%</b>	<b>6.65%</b>			<b>7.85%</b>
<b>Total Recreational harvest rate</b>	<b>1.87%</b>	<b>3.25%</b>	<b>2.07%</b>	<b>3.65%</b>	<b>8.98%</b>	<b>5.51%</b>			<b>1.53%</b>
Proportion of Rec Marine Area 2.2	22.91%	31.32%	24.84%	17.03%	7.13%	11.39%			4.57%
Proportion of Rec Freshwater	77.09%	68.68%	75.16%	82.97%	92.87%	88.61%			95.43%
Commercial Impact Rate in 2A-D only	<b>0.02%</b>								
Commercial harvest rate	0.10%	0.29%	0.13%	1.14%	1.14%	1.14%			6.32%
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>12.10%</b>	<b>12.83%</b>	<b>12.21%</b>	<b>15.63%</b>	<b>24.75%</b>	<b>18.82%</b>			<b>14.73%</b>

## 2021 Grays Harbor Fall Salmon Management Summary Table

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

HUMPTULIPS RIVER BASIN									
	Chinook			Coho			Chum		
	Natural	Hatchery	Total	Natural	Hatchery	Total	Natural	Hatchery	Total
Escapement Goal	4,668	5,696	10,364	2,414	7,197	9,610	30,324	2,325	42,248
	3,573	369	3,942	6,894	400	7,294			21,000
Total Available Harvestable	1,095	5,327	6,422	-4,480	6,797	2,316			21,248
Non-treaty Share	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>									
WDFW-managed fishery Harvest	163	2,311	2,475	73	1,114	1,187			278
Marine Area 2.2 Harvest	8	120	128	12	126	138			0
Freshwater Harvest	134	2,166	2,299	45	939	984			133
Commercial Harvest	21	26	48	16	48	64			145
QIN Treaty Harvest	614	749	1,363	465	1,455	1,920			858
Total Humptulips Basin Harvest	777	3,060	3,838	538	2,569	3,107			1,136
Expected Escapement	3,891	2,636	6,526	1,876	4,628	6,504			N/A
<b>Harvest Rates</b>									
WDFW-managed fishery Harvest Rate	3.49%	40.58%	23.88%	3.02%	15.48%	12.35%			0.66%
Total Recreational harvest rate	3.04%	40.12%	23.42%	2.35%	14.81%	11.68%			0.32%
Proportion of Rec Marine Area 2.2	5.77%	5.24%	5.27%	21.16%	11.85%	12.32%			See above
Proportion of Rec Freshwater	94.23%	94.76%	94.73%	78.84%	88.15%	87.68%			100.00%
Commercial harvest rate in 2C Only	0.45%								
Commercial harvest rate	0.45%	0.46%	0.46%	0.67%	0.67%	0.67%			0.34%
QIN Treaty Harvest Rate	13.15%	13.15%	13.15%	19.26%	20.22%	19.98%			2.03%
Total Harvest Rate	16.65%	53.73%	37.03%	22.28%	35.70%	32.33%			2.69%

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

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>377</b>	<b>2,377</b>	<b>2,755</b>	<b>2,013</b>	<b>3,323</b>	<b>5,337</b>			<b>3,596</b>
Marine Area 2.2 Harvest	55	139	193	264	266	530			30
Freshwater Harvest	290	2,207	2,497	1,271	2,760	4,031			751
Commercial Harvest	32	32	64	478	297	775			2,816
<i>Chehalis Tribe</i>	92	0	92	260	869	1,129			0
<i>Total NT - Harvest</i>	469	2,377	2,847	2,274	4,192	6,466			3,596
<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>2,090</b>	<b>3,299</b>	<b>5,390</b>	<b>6,875</b>	<b>7,974</b>	<b>14,849</b>			<b>7,361</b>
<b>Expected Escapement</b>	<b>13,430</b>	<b>4,259</b>	<b>17,688</b>	<b>36,091</b>	<b>21,059</b>	<b>57,150</b>			<b>34,887</b>
	-104								
<b>Harvest Rates</b>									
<b>Non-treaty Harvest Rate</b>	<b>2.43%</b>	<b>31.46%</b>	<b>11.94%</b>	<b>4.69%</b>	<b>11.45%</b>	<b>7.41%</b>			<b>8.51%</b>
Proportion of Rec Marine Area 2.2									<b>3.79%</b>
Marine Area 2.2 harvest rate	0.35%	1.83%	0.84%	0.61%	0.92%	0.74%			0.07%
Freshwater harvest rate	1.87%	29.20%	10.82%	2.96%	9.51%	5.60%			1.78%
Commercial harvest rate	0.21%	0.42%	0.28%	1.11%	1.02%	1.08%			6.66%
<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>13.47%</b>	<b>43.66%</b>	<b>23.36%</b>	<b>16.00%</b>	<b>27.47%</b>	<b>20.62%</b>			<b>17.42%</b>