

2022 Willapa Bay Terminal Area Management Model (TAMM)

Updated: 4/5/2022

PFMC #: Coho2218_NOF1_031622_FINAL.xlsx

PFMC Model: Middle Ocean Coho Option # 2218

DRAFT: Model A: NALF (New abundances, last year's fisheries)

Fishery Description - NALF (New abundances, last year's fishery)

Marine Area Rec:	Chinook and Coho MSF Aug 1, 2 adult daily limit, Release UM Chinook and UM coho
Freshwater Rec:	2 Adult daily limit, Release UM CHK and UM Coho, CLOSE: North, Smith, Bear, Palix & Hwy 4 to hatchery in Naselle thru Oct 16, SF Willapa and Nemah rivers close Oct 1.
Commerical:	2N & 2M prior to Labor Day, Tangle nets wks 34-38, Limited Nov time 2T, 2U, 2M, Release UM CHK

Commercial Chinook Drop out	0.03	Sport hook & line drop off	0.05
Commercial Coho Drop out	0.02	Marine Hooking Mortality	0.14
Small mesh gear mortality	0.56	Freshwater Hooking Mortality	0.10
Tangle net mortality	0.31		

Pre-Season Runsize Escapement Goal Harvestable	Chinook				Coho				Chum			Total	
	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total	Willapa North	Nemah Palix		Naselle Bear
	30,071	5,256	13,046	11,769	55,381	17,683	0	37,698	32,067	21,285	5,120		5,662
6,304	294	2,342	3,668	2,500	1,000	0	1,500	13,600	9,679	1,294	2,628	35,400	
23,767	4,962	10,704	8,101	52,881	16,683	0	36,198	18,467	11,606	3,826	3,035	12,406	
	0.175	0.434	0.391	0.709	0.074	0.217	0.319	0.000	0.681	0.664	0.160	0.177	

Stat Week	2022 Dates	Days Fished					MSF - Chinook					Natural Chinook Catch					Hatchery Chinook					Natural Chinook					Hatchery Coho				Natural Coho				CHUM MSF	Chum Catch					Total Chum		
		T	U	N	R	M	T	U	N	R	M	T	U	N	R	M	Total Hatchery	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total	Total WB Origin	Willapa North	Nemah Palix	Naselle Bear	Total	Willapa North	Nemah Palix		Naselle Bear	T	U	N	R		M	
		32	July 31 - Aug 6	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	1.00		0	0
Commercial Catch Totals		14	17	24	5	15						27	103	38	0	82	3,650	3,650	491	1,831	1,328	286	250	158	28	64	11,392	3,364	0	8,029	6,464	4,039	836	1,590	3,215	545	616	662	2,052	7,090			

CHINOOK	Willapa R. Natural Chinook Impact Rate		Naselle R. Natural Chinook Impct Rate	
	Expected	Cap	Expected	Cap
	11.4%	20%	13.2%	20%

COHO Expected Natural Escapement	Expected	Goal	25,376	13,600
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CHUM Expected Total Escapement	Expected	Goal	40,613	35,400	Willapa Bay Chum Expected Impact Rate 15.0%
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Rec Marine Catch	Hatchery Chinook				Natural Chinook				Hatchery Coho				Natural Coho				Chum
	710	441	65	204	53	49	0	3	889	446	443	59	45	10	4		
Harvest Rate	0.024	0.084	0.00	0.017	0.017	0.023	0.001	0.005	0.016	0.025	0.012	0.002	0.002	0.002	0.001	8	
Rec Freshwater Catch	3,649	555	2,452	642	73	41	11	21	3,094	731	2,363	169	128	0	40	95	
Harvest Rate	0.121	0.106	0.188	0.055	0.024	0.019	0.050	0.031	0.056	0.041	0.063	0.005	0.006	0.000	0.007	0.002	
Total Recreational Catch	4,359	996	2,517	846	126	90	12	24	3,983	1,177	0	2,806	227	173	10	45	103
Harvest Rate	0.145	0.190	0.193	0.072	0.041	0.042	0.051	0.036	0.072	0.067	0.074	0.007	0.008	0.002	0.008	0.002	
Expected Escapement	22,062	3,768	8,699	9,595	2,695	1,929	188	578	40,006			25,376	Goal	13,600		Goal	35,400
Total Harvest Rates	0.266	0.283	0.333	0.185	0.123	0.114	0.173	0.132	0.278			0.209				15.0%	

2022 WILLAPA BAY FISHERY SUMMARY

Model A = NALF - 2022 forecasts, last year's fisheries

DRAFT

CHINOOK					
Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	
2022 Pre-Season Runsize	30,071	5,256	13,046	11,769	3,071
					2,178 227 666

HATCHERY				
Total Hatchery	WB Origin	Willapa North	Nemah Palix	Naselle Bear
Commercial Catch	3,650	3,650	491	1,831
Commercial Impacts				1,328
Commercial Harvest Rate (HR)	0.121	0.093	0.140	0.113

NATURAL				
Total Natural	WB Origin	Willapa North	Nemah Palix	Naselle Bear
0	0	0	0	0
286	250	158	28	64
0.082	0.073	0.122	0.097	

Recreational Marine Catch	710	441	65	204
Marine HR	0.024	0.084	0.005	0.017
Recreational Freshwater Catch	3,649	555	2,452	642
FW HR	0.121	0.106	0.188	0.055

53	49	0	3
0.017	0.023	0.001	0.005
73	41	11	21
0.024	0.019	0.050	0.031

Expected Escapement	22,062	3,768	8,699	9,595
Total Exploitation Rate	0.266	0.283	0.333	0.185

2,695	1,929	188	578
0.123	0.114	0.173	0.132

Chinook Hatchery Escapement Goal = 6,173

Chinook Natural Escapement Goal = 4,353

COHO					
Total Hatchery	Willapa North	Nemah Palix	Naselle Bear	Total Natural	
2022 Pre-Season Runsize	55,381	17,683	0	37,698	32,067
					21,285 5,120 5,662

Post Ocean Fisheries

HATCHERY			
Total Hatchery	Willapa North	Nemah Palix	Naselle Bear
Commercial Catch	11,392	3,364	0
Commercial Harvest Rate (HR)	0.206	0.190	0.000

NATURAL			
Total Natural	Willapa North	Nemah Palix	Naselle Bear
6,464	4,039	836	1,590
0.202	0.190	0.163	0.281

Recreational Marine Catch	889	446	0	443
Marine HR	0.016	0.025	0.000	0.012
Recreational Freshwater Catch	3,094	731	0	2363
FW HR	0.056	0.041	0.000	0.063

59	45	10	4
0.002	0.002	0.002	0.001
169	128	0	40
0.007	0.006	0.000	0.007

Expected Escapement	40,006			
Total Exploitation Rate	27.8%			

25,376			
20.9%			

Coho Hatchery Escapement Goal 2,500

Coho Natural Escapement Goal = 13,600

TOTAL CHUM	
2022 Pre-Season Runsize	47,806
Commercial Catch	7,090
Commercial Harvest Rate (HR)	0.148

Recreational Marine Catch	8	Recreational Retention allowed
Marine HR	0.000	
Recreational Freshwater Catch	95	Recreational Retention allowed
FW HR	0.002	

Expected Escapement	40,613	Escapement Goal = 35,400
Total Exploitation Rate	15.0%	

Total Commercial Days Scheduled							
2022 Dates	Stat Week	2T	2U	2N	2R	2M	
July 31 - Aug 6	32	0	0	0	0	0	Closed
Aug 7 - 13	33	0	0	0	0	0	
Aug 14 - 20	34	0	0	1	0	0	12 hr openings, CHK MSF and Chum Retention allowed, Tangle Net Only
Aug 21 - 27	35	0	0	1	0	1	
Aug 28 - Sept 3	36	0	0	1	0	1	
Sept 4 - 10	37	0	0	1	0	1	
Sept 11 - 17	38	2	2	4	0	2	12 hr openings, CHK MSF & Chum Retention allowed. Gillnet small mesh gear.
Sept 18 - 24	39	4	3	4	1	2	
Sept 25 - Oct 1	40	2	4	4	1	2	
Oct 2 - 8	41	1	2	2	1	2	
Oct 9 - 15	42	2	2	2	1	1	Closed
Oct 16 - 22	43	1	1	1	1	1	
Oct 23 - 29	44	0	0	0	0	0	12 hr openings, CHK MSF & Chum Retention allowed. Gillnet small mesh gear.
Oct 30 - Nov 5	45	1	1	1	0	0	
Nov 6 - 12	46	1	1	1	0	1	Closed
Nov 13 - 19	47	0	1	1	0	1	
Nov 20 - 26	48	0	0	0	0	0	
Nov 27 - 30	49	0	0	0	0	0	
Total		14	17	24	5	15	

Recreational Regulations										
Area	Section	Season	Daily Limit	Adult daily Limit	2-Pole	2-Pole Upper Extent	Natural CHK Retention	Natural Coho Retention		
Marine Area 2.1	Control Zone Open	June 19 - July 31	Same as Marine Area 2 when open for salmon							
		Aug. 1 - Jan. 31	6	2	Yes	-	0	0		
Willapa River	mouth upstream to Hwy 6 Bridge below Trap Crk	Aug. 1 - Jan. 31	6	2	Yes	2nd Bridge on Camp One Rd.	0	0		
	Hwy 6 upstream to Fork Creek	Aug. 16 - Jan. 31	6	2	Yes		0	0		
	Mouth of Fork Creek to Hwy 6 Br (near Lebam)	Oct. 1 - Jan. 31	6	2	No	-	0	0		
SF Willapa River	mouth to bridge on Pehl Rd	Aug. 1 - Sept 30	6	2	No	-	0	0		
Fork Creek	Fork Crk Hatchery rack upstream 500' at the fishing boundary sign	Oct. 1 - Jan. 31	6	2	No	-	0	0		
North River	mouth upstream to Fall River	Closed to salmon fishing								
Smith Creek	mouth to Hwy 101 Bridge	Closed to salmon fishing								
North Nemah River	Hwy 101 Br. to Nemah Valley Rd. Br.	Aug. 1 - Sept 30	6	2	No	-	0	0		
	Nemah Valley Rd. Br. Upstream to Hancock Property Line approx. 1.66 M	Closed to salmon fishing								
	Hancock Property Line upstream to temporary weir	Aug. 1 - Sept 15, Seniors Only*	6	2	No	-	0	0		
	temporary weir upstream to Nemah Hat. Dam	Closed to ALL fishing								
	Nemah Hatchery dam upstream to N700 Rd	Closed to salmon fishing								
Middle Nemah River	mouth to bridge on Middle Nemah A-line Rd	Sept. 1 - Sept 30	6	2	No	-	0	0		
South Nemah River	mouth to confluence with Middle Nemah R.	Sept. 1 - Sept 30	6	2	No	-	0	0		
Palix River	Hwy 101 to mouth of Middle Fork	Closed to salmon fishing								
Niawiakum River	Hwy 101 Br. To the S. Bend/Palix Rd Br	Closed to salmon fishing								
Naselle River	mouth (Hwy 101) upstream to South Fork Naselle River	Aug. 1 - Jan. 31	6	2	Yes	South Fork	0	0		
	from South Fork Naselle River upstream to Hwy 4	Aug. 1 - Jan 31	6	2	No	-	0	0		
	Hwy 4 to 300' below hatchery attraction channel	Oct 16 - Jan. 31	6	2	No	-	0	0		
	Attraction channel upstream to Crown Mainline Bridge	Oct 16 - Jan. 31	6	2	No	-	0	0		
Bear River	Mouth upstream to Lime Quarry Rd	Closed to salmon fishing								

* Seniors defined as 70 years old and over