OCEANS NORTH

1459 Hollis St, Suite 101, Halifax, NS, B3J 1V1

www.oceansnorth.org

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Recommendations following the March 2026 Northern Shrimp Advisory Committee meeting

Introduction

Oceans North is a charitable organization that advances science- and community-based conservation in the Arctic and Atlantic regions of Canada, as well as western Greenland. Across all fisheries processes in which we participate, our objective is to support the long-term sustainability and rebuilding of marine populations where needed, while ensuring that fisheries can continue to provide enduring benefits to harvesters and coastal communities within healthy, functioning ecosystems.

Oceans North appreciates the opportunity to provide written comments to the Northern Shrimp Advisory Committee following our participation in NSAC meetings. We support the transition to MSE-based Harvest Decision Rules (HDRs) as the primary mechanism for setting Total Allowable Catches and to reflect trade-offs between yield, stability, and sustainability. We recognize the extensive work undertaken by DFO Science to develop a robust, transparent framework to support long-term, precautionary management of the Northern shrimp fishery. We recommend a balanced approach to optimize long-term catch outcomes while also providing a meaningful buffer against future declines.

Northern Shrimp - HCR Selection for MSE

We greatly appreciate efforts taken to run new HDRs with intermediate Exploitation Rates (ER) for consideration given the calculated risk of even healthy stocks entering the Critical Zone at the ERs proposed in the January meeting. As noted by DFO Science at this prior meeting, these healthy stocks have never been pushed beyond the Limit Reference Point (LRP) and it is unknown how or if the stock may recover if driven into the Critical Zone. Avoiding the critical zone in the first place should be upmost priority.

Additional HCRs presented for consideration included a 17% ER for the Northern Stock Assessment Region (NSAR) and 8% and 12.5% ER for the Southern Stock Assessment Region (SSAR). The MSE trade-offs demonstrate that higher ERs deliver only small, short-term gains in catch, while substantially increasing the likelihood that the stock will decline into the Cautious Zone or, in some cases, the Critical Zone. This is not a balanced trade-off, particularly given ongoing uncertainty in recruitment and ecosystem conditions.

Oceans North maintains support for a maximum ER of 15% within the NSAR and a maximum ER of 10% within the SSAR for the *initial* implementation of the Harvest Decision Rule.

Results for the NSAR MSE demonstrate that more conservative HDRs can maintain high probabilities of remaining above the LRP. In contrast, HDRs that prioritize higher ERs or reduced buffering show modest but meaningful declines in long-term LRP performance (e.g., Table 1; pLRP30 declining toward 0.88), indicating increased risk over 30-year horizons. The MSE results indicate that under current, lower productivity/recruitment conditions, the 15% ER provides a meaningful buffer against future declines and achieves similar long-term catch outcomes with reduced risk to reference points. Increasing exploitation beyond 15% therefore adds risk without delivering commensurate benefits. Likewise, a 10% ER for SSAR already sits at, or very near, the upper bound of productivity implied by the MSE (Table 2). Increasing beyond 10% would increase risk to the stock with little long-term benefit.

We stress that as these stocks have new management boundaries and enter a MSE structure, decisions in these early and uncertain years should aim to maintain substantial buffers above the LRP towards a risk-balanced application of the MSE that better protects this fishery under cumulative uncertainty.

Oceans North further recommends that any adopted Harvest Decision Rules be formally reviewed at least every three years, alongside continued refinement of the Exceptional Circumstances framework and full transparency in how MSE outputs are applied in annual management decisions.

Striped Shrimp – Eastern Assessment Zone (EAZ) entering Critical Zone

Recent survey indices indicate the Striped Shrimp stock within the EAZ management zone is now in the Critical Zone, with a 79% decrease in Fishable Biomass (FB) from 2024-25 that is the lowest in the time series. Given the simultaneous increase in FB within the adjacent Western Assessment Zone (WAZ) and the spatial analysis showing greatest change in EAZ survey indices nearest the WAZ boundary, we support further investigation into shrimp distribution dynamics between these two areas.

It was noted during the meeting that this is the fifth time since 2010 that the EAZ Spawning Stock Biomass (SSB) has reached this low level but bouncing back above the time-series mean each time (Figure 1). Harvesters and DFO Science contend this could be an artifact of shrimp simply shifting across the EAZ-WAZ boundary. We encourage further research into this issue and options for management boundary adjustments and suggest a deeper look into past management measures in years when the stock reached low levels that seem to have succeeded in SSB rebounding following

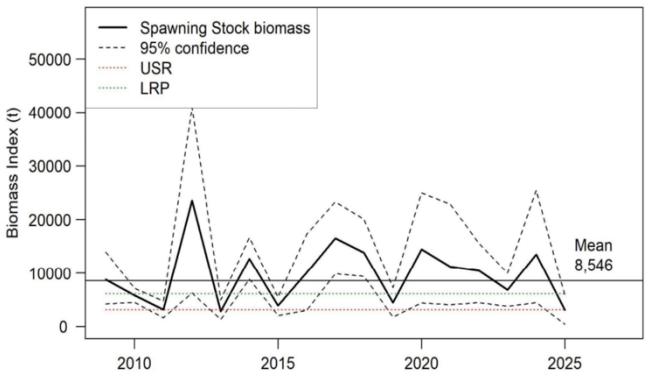

Figure 1. Spawning stock biomass trend in the Eastern Assessment Zone (EAZ) over time.

declines. However, we also note that until additional data is available to resolve potential shifting of biomass across boundary lines, DFO has an obligation to adhere to adopted protocols for critical stocks (maximum 10% ER) and should not cherry-pick measures until additional data to confirm distribution shifts is available.

Catch Utilization Adjustment

We reiterate our concern that utilization adjustments, stacked with other catch flexibility measures, may result in increased fishing pressure that may disproportionately impact particular management areas and exacerbate fishing impacts in easily-accessibly regions already under higher fishing levels (i.e., SFA 5).

Because the MSE framework already assumes 100% TAC utilization, the addition of a utilization adjustment reduces the precautionary buffer built into the harvest advice and increases the likelihood that realized removals approach the upper bounds tested in the MSE.

If management does decide to move forward with 5% catch utilization adjustment to address persistent under-harvest in certain management areas, we encourage overallocations to prioritize supporting increased access for indigenous stakeholders in Nunavut, Nunavik, and Nunatsiavut.

Electronic Video Monitoring

We recognize the decision has been made to allow harvesters to opt-in for Electronic Video Monitoring (EVM) + 20% ASO coverage in lieu of 100% ASO coverage. However, we reiterate our aforementioned concerns regarding the decline in data quality with this change that would deprive the fishery of robust biological data on both targeted catch and bycatch throughout the season. While data on bycatch discards-at-sea will undoubtedly still suffer, we encourage advancement of improved dock-side monitoring of targeted catch to compensate for decline in ASO coverage.

Continued at-sea observer coverage is essential to validate EVM outputs, detect emerging issues, and maintain confidence in catch, bycatch, and species composition data. While Oceans North supports the integration of EVM systems accompanied by clear performance standards (which are yet to be developed in Canada), we would prefer to see EVM efforts and resources be used to improve monitoring data in one of the many fisheries in Canada with <5% at-sea observer coverage and those that are failing to meet their targets rather than reducing one with 100% coverage.

Conclusion

Oceans North strongly encourages management to consider the cumulative risks of implementing HDRs with exploitation rates at MSY thresholds, with models indicating high probabilities of stocks entering cautious or even critical zones, without clear timelines for future review, while also introducing a new monitoring system that would degrade the quality of catch data required for stock assessment. We share the concerns raised by DFO Science regarding the high-risk of industry-preferred MSEs and uncertainty of stocks to recover if pushed too far which is not in the best interest of Canada's industry. Our proposed options optimize catches while taking these concerns into account.

Sincerely,

Brynn Devine, Arctic Fisheries Scientist

Gemma Rayner, Fisheries and Special Projects Advisor

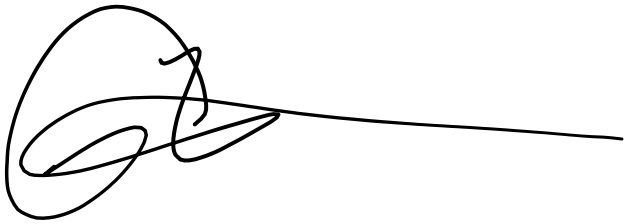

Table 1. Proposed HCRs for the NSAR for *Pandalus borealis* provided by DFO at the NSAC meeting.

		4yr_phase-in		Max TAC change 25%		Max TAC change 25% & 4yr_phase-in	
		Max 17% exploitation rate	Max 20% exploitation rate	Max 17% exploitation rate	Max 20% exploitation rate	Max 17% exploitation rate	Max 20% exploitation rate
	2026-27 Harvest Level	**40.90**	**41.76**	**40.20**	**43.66**	**40.90**	**41.76**
Primary objectives	Conservation						
	pLRP30	0.93	0.91	0.92	0.89	0.91	0.88
	pLRP10	0.97	0.96	0.97	0.95	0.93	0.92
	Yield						
	MAC10	22.95	24.45	22.85	24.75	23.90	25.45
	TAC_1	38.30	39.00	35.40	38.10	38.30	39.00
	TAC_2	34.90 (25.9 - 41.3)	36.10 (27.0 - 43.6)	29.30 (26.5 - 42.0)	32.60 (28.6 - 47.5)	34.90 (34.0 - 41.3)	36.10 (34.2 - 43.6)
	TAC_3	26.00 (13.8 - 38.8)	28.50 (14.5 - 41.9)	23.60 (19.9 - 37.1)	27.20 (21.5 - 41.8)	29.70 (28.9 - 38.6)	31.30 (29.1 - 41.6)
	TAC_4	19.05 (4.7 - 35.7)	21.35 (5.4 - 39.8)	22.25 (14.9 - 34.6)	25.00 (16.1 - 39.3)	24.80 (21.7 - 35.7)	26.45 (21.8 - 39.4)
	TAC_5	15.95 (5.1 - 33.7)	17.25 (5.7 - 38.3)	20.00 (11.3 - 32.1)	21.75 (12.2 - 35.9)	20.80 (16.3 - 33.5)	22.60 (16.3 - 37.2)
	Catch stability						
	AAV10	27.60	27.40	16.95	16.90	15.25	15.15
	AAV95th	43.35	44.20	21.90	22.05	18.65	18.85
2º objectives	Conservation						
	pUSR30	0.65	0.58	0.64	0.58	0.62	0.56
	pUSR10	0.66	0.61	0.65	0.58	0.57	0.54
	Yield						
	MAC21-30	19.65	20.55	20.15	20.65	19.95	20.65

Table 2. Proposed HCRs for the SSAR for *Pandalus borealis* provided by DFO at the NSAC meeting.

		2-step HDR					
		3yr_phase-in			Max TAC change 25%		
		Max 10% exploitation rate	Max 12.5% exploitation rate	Max 15% exploitation rate	Max 10% exploitation rate	Max 12.5% exploitation rate	Max 15% exploitation rate
	2026-27 Harvest Level	**13.90**	**14.37**	**14.85**	**12.92**	**14.35**	**15.78**
Primary objectives	Conservation						
	pLRP30	0.93	0.92	0.91	0.93	0.92	0.90
	pLRP10	0.99	0.99	0.99	0.99	0.99	0.98
	Yield						
	MAC10	11.98	13.95	15.91	11.84	13.89	15.84
	TAC_1	10.30	10.70	11.10	9.90	11.00	12.20
	TAC_2	11.20 (9.0 - 15.0)	12.40 (9.6 - 17.2)	13.60 (10.2 - 19.3)	11.40 (8.0 - 12.4)	13.50 (9.3 - 13.8)	15.20 (10.6 - 15.2)
	TAC_3	12.50 (6.0 - 22.7)	14.80 (7.2 - 27.8)	17.20 (8.4 - 33.2)	12.01 (6.9 - 15.4)	14.50 (8.5 - 17.3)	17.10 (9.8 - 19.1)
	TAC_4	13.15 (5.5 - 26.7)	16.05 (6.6 - 32.8)	18.95 (7.6 - 38.6)	12.72 (6.7 - 19.3)	15.23 (7.8 - 21.6)	17.84 (9.2 - 23.8)
	TAC_5	12.92 (4.6 - 27.1)	15.76 (5.5 - 33.2)	18.40 (6.4 - 39.2)	12.61 (5.8 - 22.9)	15.21 (6.8 - 27.0)	17.63 (7.7 - 29.8)
	Catch stability						
	AAV10	15.60	17.17	18.63	12.78	13.38	13.95
	AAV95th	29.58	30.93	31.34	18.12	18.23	18.82
2º objectives	Conservation						
	pUSR30	0.75	0.71	0.68	0.74	0.71	0.67
	pUSR10	0.89	0.87	0.85	0.89	0.87	0.85
	Yield						
	MAC21-30	8.46	9.69	10.71	8.22	9.47	10.51