The Boat Company

EXPLORATIONS

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Re: Agenda Item D-2 Programmatic Environmental Impact Statement

Mr. Kinneen:

We submit the following comments in support of moving forward with a scoping process for a programmatic Environmental Impact Statement (EIS) on behalf of The Boat Company. The Boat Company conducts multi-day conservation, education, sport fishing and adventure tours in Southeast Alaska aboard two small cruise vessels. It is also a charitable organization that focuses on Alaska conservation issues, including efforts to protect and maintain fishery resources and habitat which support diverse local economies throughout Alaska.

The Ecosystem Committee's proposed need statement recognizes that climate change impacts warrant revisiting the programmatic EIS. Alaska's marine ecosystems have experienced record-setting marine heat waves over the past decade.[1] Significant changes to ecosystems and marine biodiversity occurred, including species range shifts, abundance declines, and lower survival and growth of both commercial and forage fish species.[2] Marine heat waves are now the most common cause of declared fishery disasters in the U.S. and may increase in frequency and intensity.[3] Socioeconomic consequences include loss of fisheries income and employment, food availability and loss of other ecosystem services.[4] These impacts to marine ecosystems and coastal communities warrant analysis of alternative management approaches.[5]

The Ecosystem Committee suggested three alternatives: no action, a less precautionary ecosystem-based management policy and a more precautionary ecosystem-based management policy. The Boat Company recommends that there be several alternatives aimed at providing heightened conservation benefits relative to the status quo. While the agency scoping process may provide the best avenue for

refining the alternatives, The Boat Company also requests that the Council consider adding some substance to them.

A broader range of alternatives is necessary in order to serve NEPA's primary purposes of ensuring fully informed decisions and providing for meaningful public participation in environmental analyses.[6] The development of multiple alternatives enables an agency and the public to evaluate various courses of action, including alternatives that have heightened resource conservation benefits.[7] In a programmatic EIS there is a heightened need to consider multiple alternatives that would achieve greater conservation benefits relative to the status quo.[8]

Multiple alternatives are also necessary to meet NEPA's requirement to analyze meaningfully distinct ways to address activities that affect the environment.[9] NEPA requires federal agencies to explore a reasonable range of alternatives "in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public."[10] In other words, alternatives should reflect a range of minimum and maximum resource uses and values.[11]

The Boat Company requests that the Council consider some level of management measures that would fit within each alternative. Ecosystem-based fishery management recognizes a need to account for a wide range of ecological relationships.[12] The alternatives could be structured so that one is more protective of marine resources than the other, or they could include different management tools. For example, alternatives could propose: (1) quantifiably and qualitatively distinctive approaches to optimum yield caps and ranges and harvest quota setting; (2) varying degrees of habitat protection; (3) different ranges of bycatch limits; (4) consider forage fish and food web interactions and (5) address other management issues such as allocation and access by encouraging shifts to lower impact gear types at levels that range from experimental to substantial for some species.[13]

Multiple approaches to optimum yield in particular should be open to public comment during scoping. National Standard 1 accounts for the importance of local community-based fisheries – optimum yield is not just a single target number but rather "the amount of fish that will provide the greatest overall benefit to the nation … *as reduced by any relevant, economic, social, or ecological factor*."[14] Social factors include "preservation of a way of life for fishermen and their families, and dependence of local communities on a fishery (e.g., involvement in fisheries and ability to adapt to change).[15] Alternatives should consider prioritizing sociological components optimum yield in terms of catches and species that are best for traditional fishing communities, potentially at the expense of large corporations

Ecosystem-based fishery management alternatives should add ecological and coastal community socio-economic objectives to inform optimum yield determinations. Both Fishery Management Plans currently specify an optimum yield range and use caps and assume that that there is no significant detrimental impact on the industry.[16] The fishing "industry" is so diverse that optimum yield caps and ranges have different effects on different fishermen. Alaska fishing fleets range from community-based fishermen working in skiffs and small boats to large catcher processors from Seattle.[17] Most of the commercial fleet – nearly 6,000 vessels – consists of smaller boats less than 58' long.[18] Nearly a half million residents and visitors sport fish in Alaska each year and many rely on hundreds of sport fish guide businesses concentrated in coastal communities where Chinook and halibut are

accessible.[19] Lower abundances of crab, salmon and halibut magnify the impacts of bycatch on other fishermen when taken in pursuit of groundfish harvest targets.[20]

Alternatives or alternative sub-options could consider designating different percentages of federally managed waters for various purposes – whether for broader habitat conservation purposes or species-specific protections, such as halibut and crab nursery areas or seasonal closures of salmon migratory routes to fisheries that take salmon as bycatch.[21] Larger networks of protected areas could assist species tracking thermal habitats.[22] Options could focus on mobile bottom contact gear which has the highest impacts to sea bed habitats, coral reefs, sea floor species and habitats used by fish for spawning, breeding, feeding or growth to maturity.[23]

The scoping process should solicit public comment on a range of options for revisiting bycatch limits, including for species that currently have no limits: Bering Sea chum salmon, Gulf of Alaska tanner crab and herring, sablefish. Options could focus on additional abundance-based or percentage reductions for trawl gear which is responsible for the largest proportion of the bycatch mortality of valuable commercial, sport and subsistence species in the Bering Sea and Gulf of Alaska.[24] The bycatch includes a high proportion of juvenile fish which reduces future yields for sport, subsistence and commercial fishermen who would otherwise harvest the bycaught species once mature or benefit from improved recruitment in future years. Alternatives could identify thresholds at which bycatch cannot exceed harvests in directed fisheries: (1) when directed fisheries are closed for conservation purposes, and (2) levels at which trawl bycatch consumes a disproportionate share of the harvestable quota.

In sum, the Boat Company requests that the Council move the process forward for public scoping, and requests there be several ecosystem-based fishery management alternatives with some degree of additional development to inform public comment on a range of area-based protections, bycatch limit reductions, and other measures that enhance coastal and interior Alaska fishing community resilience to climate change.

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[1] Walsh, J.E., Thoman, R.L., Bhatt, U.S., Bieniek, P.A., Brettschneider, B., Brubaker, M., Danielson, S., Lader, R., Fetterer, F., Holderied, K. and Iken, K., 2018. The high latitude marine heat wave of 2016 and its impacts on Alaska. *Bull. Am. Meteorol. Soc*, *99*(1), pp.S39-S43; Siddon, E. 2021. Ecosystem Status Report 2021: Eastern Bering Sea, Stock Assessment and Fishery Evaluation Report. North Pacific Fishery Management Council, Anchorage, AK.

[2] *Id.;* Cheung, Suryan et al. 2021. Ecosystem response persists after a prolonged marine heatwave. Scientific Reports (2021) 11:6235; Barbeaux, S.J., Holsman, K. and Zador, S., 2020. Marine heatwave stress test of ecosystem-based fisheries management in the Gulf of Alaska Pacific cod fishery. *Frontiers in Marine Science*, *7*, p.703.; Cheung, W.W., Frölicher, T.L., Lam, V.W., Oyinlola, M.A., Reygondeau, G., Sumaila, U.R., Tai, T.C., Teh, L.C. and Wabnitz, C.C., 2021. Marine high temperature extremes amplify the impacts of climate change on fish and fisheries. *Science Advances*, *7*(40), p.eabh0895; Ferriss, B.E. and Zador, S. 2021. Ecosystem Status Report 2021: Gulf of Alaska, Stock Assessment and Fishery Evaluation Report. Thoman, R.L., Bhatt, U.S., Bieniek, P.A., Brettschneider, B.R., Brubaker, M., Danielson, S.L., Labe, Z., Lader, R., Meier, W.N., Sheffield, G. and Walsh, J.E., 2020. The record low Bering Sea ice extent in 2018. *Bulletin of the American Meteorological Society*, *101*(1), pp.S53-S58; Hunt, G.L., L. Eisner & N.M. Call. 2021. How will diminishing sea ice impact commercial fishing in the Bering Sea? Arctic, Antarctic and Alpine Research 53:1; Siddon, E. 2021; Fedewa, E.J.,

T.M. Jackson, J.K. Richar, J.L. Gardner & M.A. Litzow. 2020. Recent shifts in northern Bering Sea snow crab (Chionoecetes opilio) size structure and the potential role of climate-mediated range contraction. Deep–Sea Research II 181-182 (2020) 104878; Szuwalski, C. 2021. An assessment for eastern Bering Sea snow crab.

[3] Bellquist, L., Saccomanno, V., Semmens, B.X., Gleason, M. & J. Wilson. 2021. The rise in climate change-induced federal fishery disasters in the United States. PeerJ 9:e311186. Cheung, W.W., et al. 2021; Walsh, J.E. et al. 2018; Markon, C., S. Gray, M. Berman, L. Eerkes-Medrano, T. Hennessy, H. Huntington, J. Littell, M. McCammon, R. Thoman and S. Trainor, 2018: Alaska. In: Impacts, risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington DC, USA, pp. 1185-1241.

[4] Smith, K.E., Burrows, M.T., Hobday, A.J., Sen Gupta, A., Moore, P.J., Thomsen, M., Wernberg, T., & Smale, D.A. 2021. Socioeconomic impacts of marine heatwaves: Global issues and opportunities. Science, 374(6566).

[5] *Id.* (identifying "a pressing need to develop a toolbox of adaptation and mitigation measures, including improved climatological forecasting, proactive resource management, and enhanced resilience…").

[6] *See* 42 U.S.C. § 4332; 40 C.F.R. § 1500.1(b), (c); *Westlands Water Dist. V. U.S. Dep't of Interior,* 376 F.3d 853, 872 (9th Cir. 2004) (explaining that the key criterion for determining whether a range of alternatives is reasonable "is whether an EIS's selection and discussion of alternatives fosters informed decisionmaking and informed public participation"); *see also New Mexico ex rel. Richardson,* 565 F.3d 683, 708 (10th Cir. 2009)(explaining that "[w]ithout substantive, comparative environmental impact information regarding other possible courses of action, the ability of an EIS to inform agency deliberation and facilitate public involvement would be greatly degraded").

[7] *Headwaters, Inc. v. Bureau of Land Mgmt.*, 914 F.2d 1174, 1180 (9th Cir. 1990); *California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982).

[8] *State of Cal. v. Block,* 690 F.2d at 766-768 (ruling that 8 alternatives developed for a programmatic EIS that would allocate roadless acreage between wilderness and non-wilderness designation were inadequate in large part because the Forest Service failed to consider designating more than of third of the acreage as Wilderness); *Center for Biological Diversity v. Nat. Highway Traffic Safety Admin.,* 538 F.3d 1172, 1218-1219 (9th Cir. 2008) (ruling that a range of alternatives that would regulate vehicle emissions through fuel economy standards but considered only a small decrease from baseline emission levels were inadequate because of a failure to consider more stringent standards); *Resources Limited Inc. v. Robertson*, 35 F.3d 1300, 1307 (9th Cir.1993)((approving a range of multiple alternatives that provided enhanced conservation benefits by reducing timber removals below existing levels); *Seattle Audubon Society v. Moseley,* 80 F.3d 1401, 1404 (9th Cir. 1996)((finding that the inclusion of an alternative that would have prohibited old-growth timber sales satisfied NEPA's requirements); *see also Westlands Water Dist.* 376 F.3d at 868 – 872 (concluding, in a non-programmatic context, that a Department of Interior EIS evaluating six alternatives, including two endpoints for maximum and minimum instream water flows and mid-range alternatives, was sufficient).

[9] *New Mexico ex rel. Richardson,* 565 F.3d at 688-689, 709-711 (reviewing a BLM EIS oil and gas leasing plan that violated NEPA by considering only two alternatives and failing to include an alternatives with heightened environmental protections relative to the existing plan); *see also Muckleshoot Indian Tribe v. U.S. Forest Service,* 177 F.3d 800, 812-813 (9th Cir. 1999).

[10] 40 C.F.R. § 1502.14(a); *see also Barnes v. U.S. Dep't. of Transp.,* 655 F.3d 1124, 1131 (9th Cir. 2011)("Congress created NEPA to protect the environment by requiring that federal agencies carefully weigh environmental considerations and consider potential alternatives to the proposed action before the government launches any major federal action")

[11] *See, e.g., Natural Resources Defense Council v. U.S. Forest Service,* 421 F.3d 797, 814 (9th Cir. 2005).

[12] Pace, N.L., 2009. Ecosystem-based management under the Magnuson-Stevens Act: Managing the competing interests of the Gulf of Mexico red snapper and shrimp fisheries. *Sea Grant L. & Pol'y J.*, *2*, p.1.

[13] *See, e.g.* Kuriyama, P.T., Siple, M.C., Hodgson, E.E., Phillips, E.M., Burden, M., Fluharty, D., Punt, A.E., Essington, T.E., Henderschedt, J. and Armstrong, D.A., 2015. Issues at the fore in the land of Magnuson and Stevens: A summary of the 14th Bevan Series on Sustainable Fisheries. *Marine Policy*, *54*, pp.118-121 (explaining that reducing forage fish harvests during low productivity years can prevent severe stock collapses and maintain a crucial energy source for higher trophic level species);

Chuenpagdee, R, L.E. Morgan, S.M. Maxwell, E.A. Norse & D. Pauly. 2003. Shifting gears: assessing collateral impacts of fishing methods in US waters. Front Ecol Environ 2003: 1(10):517-524; Perez Roda, M.A. (ed.), Gilman, E., Huntington, T., Kennelly, S.J., Suuronen, P., Chaloupka, M. and Medley, P. 2019. A third assessment of global marine fisheries discards. FAO Fisheries and Aquaculture Technical Paper No. 633. Rome, FAO. 78 pp.

[14] 50 C.F.R. § 600.310(e)(3).

[15] 50 C.F.R. § 600.310(e)(3)(iii)(B)(1), (2). The availability of alternative employment opportunities and economic contributions to fishing communities in Alaska are also economic factors

[16] NPFMC. 2020. Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands at §3.2.2.2. Anchorage, AK. November 2020; NPFMC. 2020b. Fishery Management Plan for groundfish of the Gulf of Alaska at §3.2.2.2. Anchorage, AK. November 2020. The plans also recognize the need to revisit optimum yield if major changes occur in the relevant ecological, social, or economic factors,

[17] McKinley Research Group, LLC. 2022 The economic value of Alaska's seafood industry at 24. January 2022. Prepared for Alaska Seafood Marketing Institute. *Available at:* https://www.alaskaseafood.org/wp-content/uploads/MRG_ASMI-Economic-Impacts-Report_final.pdf

[18] *Id.*

[19] Himes-Cornell, A., K. Hoelting, C. Maguire, L. Munger-Little, J. Lee, J. Fish, R. Felthover & C. Geller. 2013. Community profiles for North Pacific fisheries- Alaska. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-259, Vol. 1, 70 p. Tables 19-21.

[20] *See* Fisheries Catch and Landings Reports in Alaska | NOAA Fisheries Average annual trawl bycatch of species targeted in other fisheries between 2017 and 2021 was 46,365 Chinook salmon, 392,345 chum salmon,4,272,000 round pounds of sablefish, 4,293,000 net pounds of halibut, over 1.1 million individual tanner and snow crab and 27,187 red king crab.

[21] For example, Alternatives 3 and 4 in the 2004 PEIS considered expanding protected areas in ranges of up to twenty percent, and fifty percent, respectively.

[22] Smith, K.E., et al. 2021.

[23] Steadman, D., J.B. Thomas, V.R. Villanueva, F. Lewis, D. Pauly, M.L. Deng Palomares, N. Bailly, M. Levine, J. Virdin, S. Rocliffe & T. Collinson. 2021. New perspectives on an old fishing practice: Scale, context and impacts of bottom trawling; Cook, K.V., A.J. Reid, D.A. Patterson, K.A. Robinson, J.M. Chapman, S.G. Hinch, S.J. Cooke. 2018. A synthesis to understand responses to capture stressors among fish discarded from commercial fisheries and options for mitigating their severity. Fish and Fisheries 2018:1-19; Olsgard, F., M.T. Schaanning, S. Widdicombe, M.A. Kendall, M.C. Austen. 2008. Effects of bottom trawling on ecosystem functioning. Journal of Experimental Marine Biology and Ecology 366 (2008) 123-133; Armstrong, C.W., G.K. Vondolia & M. Aansen. 2016. Use and Non-use values in an applied bioeconomic model of fisheries and habitat connections. Marine Resource Economics 32, No. 4; Chuenpagdee, R, L.E. Morgan, S.M. Maxwell, E.A. Norse & D. Pauly. 2003.

[24] Fissel, B. et al. 2021. Stock assessment and fishery evaluation report for the groundfish fisheries of the Gulf of Alaska and Bering Sea Aleutian Islands Area: economic status of the groundfish fisheries off Alaska, 2019, Table 12: Prohibited species catch (PSC) by species, area and gear 2015-2019.