

Arctic Storm Management Group
2727 Alaskan Way, Pier 69
Seattle, WA 98121

February 1, 2013

Eric Olson, Chairman
North Pacific Fishery Management Council
605 West 4th, Suite 306
Anchorage, AK 99501

RE: Final Action on Skate HAPC. Support for Alternative 2.

Dear Chairman Olson,

Arctic Storm Management Group (ASMG) supports Alternative 2, options (a), (d) and (e) as the appropriate action in consideration of six skate egg -casing deposit sites as HABITAT AREAS OF PARTICULAR CONCERN (HAPC). The Council has identified this as its Preferred Preliminary Alternative. We urge adoption of the PPA with some clarification.

ASMG operates vessels that are long time participants in the Bering Sea pollock fishery. Our vessels sometimes operate in the proposed HAPC site in Pervenets Canyon and could be negatively impacted by this action.

The HAPC Environmental Assessment (EA) on Skate Egg Concentration allowed the Council and public to take a hard look at three alternatives: 1) Status Quo, 2) Identification of the six sites as HAPC and 3) Closure of HAPC sites to most fishing activities. Based on the best scientific information available, Alternative 2 seems the most appropriate choice and seems to best match the Purpose and Need Statement of the proposed action as well as the goals and objectives of the precautionary policy adopted by the Council in its Programmatic SEIS.

In identifying these as HAPC sites, these six skate egg deposition sites will be considered for further protection should development or other activities threaten the sustainability of skate populations. The inclusion of option (a) proposes to monitor the continued utility of these sites for changes in egg density and potential effects of fishing. It also includes a request that industry support the collection of data and evaluation of monitoring and management efforts relative to those sites. This request of industry support in the collection and evaluation of data is vague, seems inappropriate and should be stricken. Option (d) suggests adding research and monitoring of skate egg concentrations to the Council's research priority list. This seems appropriate. However, there is no reason to identify specific research and monitoring efforts as part of this action. Option (e) is a housekeeping issue that proposes adoption of formatting standards as stated in the final rule implementing Amendment 89 into the BSAI Groundfish FMP.

We began this review intuitively thinking that these sites seemed unique, vulnerable and that fishery impacts might be significant. However, after taking a hard look at the data, the analysis shows that our intuition was more conjecture than fact. Specifically, we learned that:

- There is no information indicating that the skate population trend is in decline.
- There are existing skate conservation measures in place.
- Water temperature and depth rather than physical habitat features seem to be most important in determining skate egg sites.
- Impacts of fishing gear on these sites or the population of skates in general remains unknown.

The summary of these findings generally occur in pages 55-62 of the HAPC, Areas of Skate Egg Concentration EA document.

Stable Skate Population Trends, (page 55) : *"Alaskan skates make up 90% of the population in the Bering Sea...Alaska skate spawning biomass is substantially greater than the estimated limit of sustainability. Biomass estimates from the AFSC groundfish shelf survey, suggest that total skate biomass has remained at approximately the same level since a dramatic increase in the mid-1980's... Total biomass has tended to increase fairly steadily at an average rate of about .7% per year over the same time period."*

Existing Conservation Measures, (page 55): *1) There is no directed fishery for skates in the BSAI and 2) Skates were recently separated from the Other Species Complex, providing them with a separate and limited harvest cap for bycatch in other fisheries.*

Habitat Features Important to Skate Egg Sites: (page 18) *"Areas of skate egg concentration occur over a narrow depth range (from 150 – 375meters) on generally flat sandy to muddy bottom, with little bottom structure or attached biota This may be temperature dependent."*

Impacts by Fishing Gear:

Page 56: *"There has been no directed study of the effects of fishing on skates or their eggs at skate nursery sites in the eastern, Bering Sea, therefore little is known about how fishing may be interacting with reproduction."*

Page 57: *"The direct impact on skate egg cases from fishing gear has not yet been investigated."*

Page 58: *"The effects of fishing activity at skate nursery sites are currently unknown."*

Page 58, Table 14. Summary of Potential Impacts on Skate Eggs: For all four gear types it reads, *"Unknown, Unknown, Unknown and Unknown."*

Page 58, Table 14. The three suspected impacts were as follows: 1) *Dispersal of egg casings making them more susceptible to predation: "Unknown."* 2) *Mortality to egg embryos by gear impact: "Unknown."* 3) *Mortality to egg embryos by sediment clogging of flushing slits: "Unknown."*

Alternative 3 proposes mitigation measures to protect the FMP species from negative impacts. In determining whether mitigation measures are necessary some scientific evidence is required to demonstrate that impacts from fishing are *more than minimal and more than temporary*. At this time we have no evidence of harmful effects to the skate egg sites or the sustainability of skate stocks caused by fishing.

In choosing Alternative 2 (HAPC identification) and options (a) monitoring (without industry support of collection and evaluation activities) and (d) research, we have given priority to learning about known skate egg deposition sites and impacts to the reproduction of skates and the long term sustainability of

the species. We have also guaranteed that impacts to these sites will be considered if development or other activities are proposed in those locations.

Importantly, we believe designation of the sites as HABITAT AREAS OF PARTICULAR CONCERN, as proposed in Alternative 2, is most consistent with Council's precautionary approach policy to fishery management as developed under the Programmatic SEIS. This policy is grounded in the development of sound science to be used in developing conservation measures for the FMP species and in development of reasonable precautionary actions when faced with uncertainty .

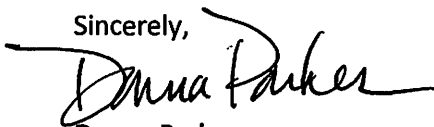
In formally designating these areas as sites of concern to be monitored and targeted for research, we are affording appropriate precautionary measures that will increase knowledge of the species and prohibit development without due consideration of impacts. And because the habitat feature most important to location of skate egg sites is mud and sand and seems related to water temperature and depth rather than high relief structures, it cannot be damaged by fishing if future protection of egg sites is determined necessary.

To close all or some of these sites to fishing without any knowledge of impacts caused by fishing or to the sustainability of the species of concern would go beyond the precautionary approach policy embraced by the Council in the Programmatic SEIS. And while the potential financial impacts of site closures to the trawl fleets of \$1.6 million annually are not judged significant by NEPA standards, Alternative 3 could impose significant hardship to specific sectors or vessels that fish in those regions without any known benefit to skate populations.

Finally, Alternative 2 is most consistent with the goal and objectives of the Purpose and Need Statement which proposes to take action appropriate to the level of knowledge we have about the ecological function of these sites, their rarity and the vulnerability and stress caused by human-induced activities. Based on the best scientific information available, identification, monitoring and further research seem the most appropriate action.

Thank you.

Sincerely,



Donna Parker
Director, Govt. Affairs



Marine Conservation Alliance

promoting sustainable fisheries to feed the world

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January 25, 2013

Adak Community Development Corporation

Alaska Bering Sea Crabbers

Alaska Longline Co.

Alaska Whitefish Trawlers Association

Alaska Groundfish Data Bank

Alaska Scallop Association

Aleutian Pribilof Island Community Development Association

Akutan, Atka, False Pass, Nelson Lagoon, Nikolski, St. George

Arctic Storm Management Group

Bristol Bay Economic Development Corporation

Aleknagik, Clark's Point, Dillingham, Egegik, Ekwik, Ekwik, King Salmon, Levelock, Manokotak, Naknek, Napaskiak, Newtok, Nightmute, Oscarville, Platinum, Quinhagak, Scammon Bay, Toksook Bay, Tututuliak, Tunuk

Central Bering Sea Fishermen's Association

St. Paul

City of Unalaska

Coastal Villages Region Fund

Cheforak, Chevak, Eek, Goodnews Bay, Hooper Bay, Kipnuk, Kongiganak, Kwigillingok, Mekoryuk, Napakiak, Napaskiak, Newtok, Nightmute, Oscarville, Platinum, Quinhagak, Scammon Bay, Toksook Bay, Tututuliak, Tunuk

Glacier Fish Company

Groundfish Forum

High Seas Vessels

Ocean Harvester, Sea Storm, Neakahnne

Icicle Seafoods

International Seafoods of Alaska

North Pacific Seafoods

Norton Sound Economic Development Corporation

Brevig Mission, Diomedes, Elm, Gambell, Golovin, Koyuk, Nome, Saint Michael, Savoonga, Shaktoolik, Stebbins, Teller, Unalakleet, Wales, White Mountain

Trident

United Catcher Boats

Akutan Catcher Vessel Association, Mothership Fleet Cooperative, Northern Victor Fleet, Pieter Plan Fleet Cooperative, Unalaska Co-op, Unisea Fleet Cooperative, FV Arctic Wind, FV Caitlin Ann, FV Dona Marita, FV Pacific Prince

U.S. Seafoods

Waterfront Associates

Western Alaska Fisheries, Inc.

Mr. Eric Olson, Chairman
North Pacific Fishery Management Council
605 West 4th, Suite 306
Anchorage, Alaska 99501

RE: Agenda Item C-1(a) Final action on HAPC – Skate egg concentration areas.

Dear Mr. Olson,

On behalf of the members of the Marine Conservation Alliance (MCA) I submit these recommendations and accompanying rationale regarding Final Action on Skate egg concentration areas and their possible designation as Habitat Areas of Particular Concern (HAPC).

First and foremost, we would like to thank Council and NMFS staff for their work on this issue. As we have said before, the scientific information developed in support of this action represents a significant contribution to our understanding of Bering Sea skate biology and life history and with this greater understanding comes an improvement in our ability to sustainably manage these species. In addition to acknowledging this particular scientific contribution, we also would like to thank staff for the effort that has led to the development of the Environmental Assessment that is currently available, particularly the more recent efforts which have clarified several issues related to the Alternatives and their effects on the natural and human environment. We believe the document as it stands is sufficient for the Council to take Final Action at this time, though we have some comments concerning the analysis which we recommend be incorporated into the Final EA before it is completed. Our recommendations for this action and suggestions for analytical improvement are contained below.

Summary Recommendation

In summary, MCA recommends that the Council adopt the PPA (Alternative 2, suboptions a, d, and e) as your Final Preferred Alternative (FPA). In doing so, we recommend that your FPA clarify aspects of the alternatives, specifically with respect to suboption (a). Suboption (a), as written, would ask for the industry's support in monitoring efforts. At this time it is not clear what more the industry could do in addition to the observer coverage and VMS coverage that already exists. We therefore suggest that suboption (a) be clarified by striking the text "...and the Council would request that industry support in collection of data in evaluation of monitoring and management efforts relative to those HAPCs."

We believe the information is sufficient to illustrate that the identified areas meet the criteria for designation as HAPCs, with some reservations. However, the information does not appear to illustrate that impacts from fishing gear to the physical substrate in these areas is “more than minimal and not temporary” in nature, which is a standard for invoking EFH-related restrictions. In other words, these areas are clearly important areas for skates, however the information does not suggest that fishing causes much of an impact to the physical habitat.

Designation of these areas as HAPCs will provide benefits. Designation provides for a heightened sense of awareness that helps in agency-to-agency consultation processes. If a non-fishing related human activity is proposed which could detrimentally impact these sites, HAPC designation focuses attention for potential abatement or impact minimization activities in the designated area. In this way designation provides beneficial protection to the proposed sites.

The Policy Framework

Essential Fish Habitat (EFH) decisions can be broken into two related, but distinct decisions. These two decisions can be described as:

1. Identification of EFH
2. Management measures to protect that EFH

Separating actions into these two decisions is an important construct because it is not necessarily the case that EFH is affected by fishing. For instance large areas of upland watershed habitat is vital to the survival of salmon, yet it would be impossible for marine fisheries to affect this habitat. Therefore it must be true that essential habitat can exist without a corresponding need to restrict fishing activities on that habitat.

When considering the presence of EFH in the marine environment, the separation between that habitat and fishing is not so clear cut as the salmon habitat example given above. Therefore, it is important to examine the implementing regulations for EFH actions. These regulations provide a standard of “more than minimal and not temporary” when considering whether fishing activities affect EFH. In other words, fishing restrictions should be given consideration when their impact to areas designated as EFH (or HAPC for that matter) is “more than minimal and not temporary” in nature.

When contemplating these sites for designation, it is important to recall certain definitional issues and criteria used for designation. The Magnuson-Stevens Act states that *Essential fish habitat means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity*. However, when it comes to the identification of HAPCs, a more refined set of criteria exists, which include:

- That the sites are rare, and
- Ecologically important, or
- Sensitive to disturbance, or
- May be stressed.

These criteria were established with the intention that HAPCs deserve recognition that distinguishes them from other forms of EFH.

Analytical Rationale

EFH and HAPC Designation

The available information appears to warrant the designation of the proposed sites as HAPCs. While we continue to have concerns and questions regarding the rarity of skate egg deposition sites, at this time it appears that they may indeed meet the rarity criteria for HAPC designation. The Scientific and Statistical Committee noted in June that the estimated number of sites contained in the Draft EA likely overestimates the number of areas of skate egg deposition. This overestimate is due to the fact that the areas used by skates are not mutually exclusive (some sites are used by more than one species). The SSC notes that the estimated number is probably closer to 13 to 14 sites rather than the 16 to 19 sites. We appreciate the SSC's comment in this regard, however defining a habitat area as "rare" is also a function of whether these sites are found in all of the NPFMC management areas or not. This point is particularly relevant in light of the fact that skates are found in areas outside the Bering Sea (such as in the Aleutians and the Gulf of Alaska) and it is therefore highly likely that additional skate egg sites exist in these other management areas, but they simply have not been found yet. Therefore, meeting the "rarity" criteria here appears to be tied to the fact that we simply haven't found additional sites that we fully expect exist. While we can accept that these sites meet the rarity criteria for now, we ask that the Council leave the door open to removing sites designated as HAPCs when and if we discover additional sites in other management areas and potentially conclude that the sites considered here are not actually "rare".

The ecological importance of these areas appears to be linked to the particular importance of these sites as skate egg deposition areas. It appears that skates rely upon very particular areas for spawning, and therefore these areas appear meet an ecological importance standard.

Considering the above points, we believe that HAPC designation is warranted at this time even though substantial questions remain regarding the actual rarity of these sites. Given these questions – and the likelihood that other sites exist in the Bering Sea, Aleutian Islands, and the Gulf of Alaska – we believe that HAPC designation for these sites at this time would constitute a relatively precautionary action.

Fishing Restrictions

When it comes to fishing restrictions, we examine the nexus between the habitat type – and the factors that make that habitat valuable for skate eggs – and the effect of fishing gear on that habitat. As we articulated in our comment letter dated June 2012, the available information indicates that these skate egg deposition areas are comprised of flat substrate that is predominately sand and mud. It is not completely clear why these areas are valuable for skate eggs, but information suggests that temperature is an important variable, as is depth. These factors (flat sandy or muddy bottom, temperature, and depth) are factors which are generally thought to not be altered by fishing gear, or altered to any substantial degree. It therefore appears that fishing restrictions are not warranted at these sites.

Benefits of Designation without Fishing Restrictions

Designation brings benefits to the areas defined even if such a designation is not complimented with fishing restrictions. We view the main benefits of designation as a tool that will help in agency-to-agency consultation if a future human activity is proposed that could have an adverse impact on these sites. Designation helps to focus attention on possible impacts, and this can further lead to a focused discussion about possible abatement or avoidance of these areas if future activities appear to pose harm to sites designated as HAPCs. Designation would also appear to focus research priorities, especially if the Council's FPA includes Suboption D, which would add these sites to the Council's Research Priorities.

Comments on the Analysis

While we believe the EA is much improved from prior versions, we have made several suggestions below which we believe will help to bolster the analysis and help lend support to the Council's Final Preferred Alternative.

Habitat Impacts versus Impacts to Skate Eggs

The existing EA has a substantial degree of focus on the impact fishing gear has upon skate eggs located at the proposed sites. Certainly fishing gear will impact skate eggs through capture, dispersion, and in this regard fishing will cause mortality to skates. However, it is important to distinguish between the impact on skates and skate eggs from the impact on the physical environment and the features which make these areas valuable for skate egg deposition. Existing policy guidance appears fairly clear in guiding decisions toward the effect of gear on physical features that make habitat valuable. The existing EA would benefit from a clear delineation between the effect on physical habitat and the effect on skate eggs.

Economic Analysis

The economic analysis concludes that no significant economic impact would be expected to occur from any of the existing alternatives. It is important to note that the definition of economic significance is spelled out in EO 12866 as exceeding \$100 million annually, or representing a significant impact to a sector of the economy. When measured against this standard, the economic impacts would not be considered significant; however this does not mean that the impacts should be considered insignificant to the fishing industry. As a point of reference, many sectors of the North Pacific fishing industry do not exceed \$100 million in harvest revenue annually. A \$100 million impact would be considered devastating to many sectors of the North Pacific fishing industry.

The existing analysis also uses a type of "revenue at risk" analysis to show how much catch occurred from areas that are being considered as HAPCs. This analysis, while insightful in many respects, does not paint a complete picture of the economic implications of a spatial closure, especially in a highly-fished area. One major impact of closing off some of these areas is the "road block" that is placed in the middle of a highly fished area which causes vessels to move around that area and jeopardize their harvest rates. If several vessels are fishing on a school of fish, one vessel moving away from a HAPC site could cause a domino effect which causes the other vessels to move and this may result in all of those vessels moving away from the available school of fish. Those vessels would then need to make additional passes, or to fish longer, thus

driving up the cost and expenditure of fishing. The effect of closing these sites to fishing on the operational costs of vessels should be more fully articulated in the final analysis.

Conclusion

The existing EA is much improved from prior versions and we are grateful for the recent updates. We believe the EA is at a state where the Council should be able to take final action at this time. However, prior to finalizing the EA, we believe that the document could be further enhanced on the matter of economic impacts and also by distinguishing the effect of fishing gear on skate eggs and the effect of gear on the physical features which make the proposed sites valuable for skate egg deposition.

Based on the information before us at the time of drafting this comment letter, the members of MCA support the adoption of the PPA, with some clarifications to suboption (a). Specifically, that the text in suboption (a) which states, “...and the Council would request that industry support in collection of data in evaluation of monitoring and management efforts relative to those HAPCs” should be dropped given the lack of clarity about what this entails. This would designate these areas as HAPCs without fishing restrictions, monitor these sites, add skate egg areas to the Council’s research priorities. We continue to view the available information as one which supports designation, but that same information leads us to conclude that the physical habitat features in these areas are such that fishing gear should not be expected to have an impact to the physical habitat to any substantial degree.

Sincerely,

Merrick Burden
Executive Director



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January 29, 2013

Mr. Eric Olson, Chair
North Pacific Fishery Management Council
605 W. Fourth Avenue, Suite 306
Anchorage, AK 99501-2252

Dr. James Balsiger, Regional Administrator
NOAA Fisheries, Alaska Region
709 West Ninth Street
Juneau, AK 99802-1668

RE: C-1a Skate Nurseries

Dear Mr. Olson, Dr. Balsiger, and Council members:

We continue to support the Council's efforts to protect important areas, like skate nurseries, consistent with its obligation under the Magnuson Stevens Fishery Conservation and Management Act to protect Essential Fish Habitat. The six skate nursery sites analyzed in the Public Review Draft EA/RIR/IRFA should be identified and protected as Essential Fish Habitat. We urge the Council to choose *Alternative 3, Option C: Identify and conserve skate nurseries by prohibiting pelagic trawl, bottom trawl, dinglebar, and dredge gear*, as the final action alternative.

The six skate nursery sites considered here comprise a tiny fraction of the Bering Sea. Yet the sites are disproportionately important to the Alaska, Aleutian, and Bering skates for spawning, breeding, and growth to maturity. It is estimated that there are only 13 to 14 similar sites and that the proposed areas, if protected, would protect up to half of the reproductive habitat for these skates.¹ Skates are vulnerable to overfishing due to their slow growth, delayed maturation rates and low fecundity, which heightens the need for cautious management¹. Alaska skates only lay 21 to 37 eggs per year², and these eggs take at least 3 years to hatch. There is a clear need and responsibility for protecting this reproductive habitat.

Due to their importance and small number precautionary management of these nursery areas is imperative. Alternative 3, Option C prohibits the gear types that have the potential to adversely impact this Essential Fish Habitat, including pelagic trawl gear as it is fished in the Bering Sea. In the EFH fishing effects model, pelagic trawls were estimated to contact the seafloor across some substrates for 44% of the duration of a tow.³ The BSAI trawl performance standard is not a sufficient protection. It defines 'pelagic' trawling is a measure of the number of crabs onboard a vessel at any time and, therefore is very uncertain:

¹ NPFMC and NMFS. January 2013. Habitat Areas of Particular Concern (HAPC) Areas of Skate Egg Concentration Public Review Draft Environmental Assessment (EA) /Regulatory Impact Review (RIR) /Initial Regulatory Flexibility Analysis (IRFA)

² Matta, M.E. 2006. Aspects of the life history of the Alaska skate, *Bathyraja parmifera*, in the eastern Bering Sea. M.S. thesis, University of Washington, Seattle.

³ NMFS. 2005. Final EFH EIS: Appendix B. April 2005

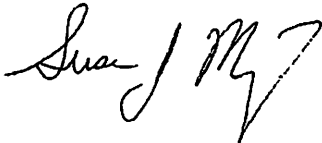
“Because typical pelagic trawls have large mesh webbing in the lower section of the net and are affixed to chain footropes, bycatch enumerated by onboard observers might substantially underestimate the number of demersal fish and invertebrates that are affected because they fall through the large mesh panels instead of being captured by this gear.”⁴

Thus, a pelagic trawl footrope could be in contact with the seafloor but not documented by onboard observers if no crabs were retained in the net.

There are five distinct habitat types in the Bering Sea: the coastal domain (0-50 meters depth), middle domain (50-100 meters depth), outer domain (100-200 meters depth), shelf break domain, and basin.⁵ Of these broad habitat types, only portions of the coastal and middle shelf domain are represented in any of the Council’s current habitat protection areas. This action before the Council is an excellent opportunity to establish some small control areas of the shelf break domain by protecting the proposed skate nurseries.

We urge the Council to choose *Alternative 3, Option C: Identify and conserve skate nurseries by prohibiting pelagic trawl, bottom trawl, dinglebar, and dredge gear*, as the final action alternative.

Sincerely,



Susan Murray
Vice President, Pacific
Oceana

⁴ National Research Council. 2002. Effects of Trawling and Dredging on Seafloor Habitat

⁵ National Research Council. 1996. The Bering Sea Ecosystem: Report of the Committee on the Bering Sea Ecosystem. National Academy Press. Washington D.C. 324 pp.

PUBLIC TESTIMONY SIGN-UP SHEET

Agenda Item: C-1(a) Skate HAPC

	NAME (PLEASE PRINT)	TESTIFYING ON BEHALF OF:
1	Phyllis M. Jackson	C-POD (CAUTION) TO PROTECT DIVERSITY
2	Jon Warendule	Oceana
3	Merrick Burden	Marine Conservation Alliance
4	John Gausin	Alaska Seafish Association
5	HENRY MITCHELL	Coastal Villages Regio - Fund
6	Stephanie Nordsem	At-sea Processors
7	Donna Puhse	Arctic Storm
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NOTE to persons providing oral or written testimony to the Council: Section 307(1)(I) of the Magnuson-Stevens Fishery Conservation and Management Act prohibits any person "to knowingly and willfully submit to a Council, the Secretary, or the Governor of a State false information (including, but not limited to, false information regarding the capacity and extent to which a United State fish processor, on an annual basis, will process a portion of the optimum yield of a fishery that will be harvested by fishing vessels of the United States) regarding any matter that the Council, Secretary, or Governor is considering in the course of carrying out this Act.