

C-11  
Supplementa  
June 2013

**Subject:** Fwd: Bering Sea Petitions

**From:** Jackie Dragon <jackie.dragon@greenpeace.org>

**Date:** 6/3/2013 9:57 PM

**To:** Gail Bendixen <gail.bendixen@noaa.gov>, Diana Stram <Diana.Stram@noaa.gov>

Hi Gail & Diana,

Attached here are the files that include 35,026 other letters you should have received for C7 - Bering Sea Canyons. The PDF files of the petitions are too large to attach through Gmail, but I have attached them as MS Word documents. I would caution against opening them at the same time, as they will crash MS Word because they are so large.

If you need us to put these in a dropbox tomorrow we can do that. Just let me know.

- Jackie

The body of the letter reads:

As public stakeholders, we urge you make the adoption of protections for the Bering Sea canyons and the fragile coral and sponge habitat within them a top priority.

Despite the ecological and commercial importance of the Bering Sea shelf break there are currently no protected areas along this entire "greenbelt." Given how little we understand about deep sea ecosystems or the connections between seafloor habitats and commercially important species, it is extremely risky not to set aside representative portions of the shelf break as a buffer against uncertainty.

As prudent stewards of one of our nation's most valuable marine resources we expect you to prioritize the protection of sensitive habitats, including the vulnerable coral and sponge communities in Zhemchug and Pribilof canyons that support the long-term productivity of our fisheries.

At your Council meeting, please take clear and strong action towards protecting the Bering Sea Green Belt and Zhemchug and Pribilof Canyons.

— Attachments: —

May 2013 Bering Sea Petitions (16008) pt.1.docx 27 bytes

May 2013 Bering Sea Petition part 2 (19018).docx 27 bytes

Jenelle Thomson  
52 Niagara St  
North Tonawanda, NY 14120-6116

May 21, 2013

**Subject: C7- the Bering Sea Canyons**

Dear Chairman Olsen and Council members,

As prudent stewards of one of our nation's most valuable marine resources we expect you to prioritize the protection of sensitive habitats, including the vulnerable coral and sponge communities in Zhemchug and Pribilof canyons that support the long-term productivity of our fisheries.

At your Council meeting, please take clear and strong action towards protecting the Bering Sea Green Belt and Zhemchug and Pribilof Canyons.

As public stakeholders, we urge you make the adoption of protections for the Bering Sea canyons and the fragile coral and sponge habitat within them a top priority.

Despite the ecological and commercial importance of the Bering Sea shelf break there are currently no protected areas along this entire "greenbelt." Given how little we understand about deep sea ecosystems or the connections between seafloor habitats and commercially important species, it is extremely risky not to set aside representative portions of the shelf break as a buffer against uncertainty.

Sincerely,  
Jenelle Thomson

146 letters submitted

C-1  
Supplemental  
June 2011

**Bering Sea Canyons Letters Submitted at OceanDoctor.org**

Entry Date: 5/27/2013 12:32:05 PM

RE: C7 - Bering Sea Canyons  
North Pacific Fishery Management Council  
605 West 4th Avenue, Suite 306  
Anchorage, AK 99501-2252

RE: C7 – Bering Sea Canyons

Dear Members of the North Pacific Fishery Management Council:

The Bering Sea Canyons are rare features occurring along the, as yet, unprotected Bering Sea shelf break – a highly productive marine zone known as the Green Belt. Zhemchug and Pribilof Canyons are the largest underwater canyons in the world.

As a public stakeholder, I urge you make the adoption of protections for the Bering Sea Canyons and the fragile coral and sponge habitat within them a top priority. Bottom-tending fishing gear—especially trawl nets—destroys ancient corals and sponges that provide this essential habitat, including spawning and nursery areas for fish, crab, skates and other marine species.

Despite the ecological and commercial importance of the Bering Sea shelf break there are currently no protected areas along this entire Green Belt. Given how little we understand about deep sea ecosystems or the connections between seafloor habitats and commercially important species, it is extremely risky not to set aside representative portions of the shelf break as a buffer against uncertainty.

As prudent stewards of one of our nation's most valuable marine resources please lead the nation forward this June by initiating a formal process to protect our most sensitive habitats, including the vulnerable coral and sponge communities in Zhemchug and Pribilof canyons, that support the long-term productivity of our fisheries.

Sincerely,  
Eric Grote  
1243 morstein rd  
West chester, Pa 19380 United States  
Email Address: egrotee@gmail.com

Source URL: <https://oceandoctor.org/action-alert-grand-caynons-of-the-bering-sea/>  
User IP: 72.94.150.148



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

May 31, 2013

Eric Olson, Chair  
North Pacific Fishery Management Council  
605 W. 4<sup>th</sup> Avenue, Suite 306  
Anchorage, Alaska 99501-2252

Dear Mr. Olson:

In April of 2012, the North Pacific Fishery Management Council adopted a formal policy for Essential Fish Habitat (EFH) consultation. As part of the policy the Council requested regular reports from the National Marine Fisheries Service (NMFS) on EFH consultations on non-fishing actions that may be of interest to the fishing industry, or that may affect habitats of direct concern to the Council. NMFS will provide reports on a biannual basis and these reports will focus on major consultations and briefly summarize activities with minor effects on EFH. Additionally, the Council has requested that NMFS provide advance notice for those activities that could have major effects on EFH, so that the Council can decide whether to consult on the activity. The enclosed documents respond to the Council's request. We look forward to discussing this with the Council during the NMFS Management Report (agenda item B-2) at the June meeting.

Sincerely,

James W. Balsiger, Ph.D.  
Administrator, Alaska Region

Enclosures (2)



# **Biannual Overview of the Interagency Consultations of Actions that May Adversely Affect Essential Fish Habitat in Alaska**

Prepared for the North Pacific Fishery Management Council  
by the National Marine Fisheries Service  
Alaska Region, May 2013

## **Background**

In 1996 Congress added new habitat provisions to the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Section 303(a)(7) of the amended MSA required that every fishery management plan (FMP) describe and identify EFH<sup>1</sup> for federally managed species, minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH.

Section 305(b) of the MSA requires federal agencies to consult with the Secretary regarding all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. NMFS is required to provide conservation recommendations regarding any federal or state agency action that would adversely affect EFH. Action agencies do not have to follow NMFS's recommendations. As specified by Section 305(b)(4) of the MSA, federal agencies must respond in writing to any NMFS EFH conservation recommendations, and in the case of a decision that is inconsistent with NMFS's advice, the action agency must explain its reasons for not following the recommendations. The EFH regulations establish the procedures for coordination, consultations, and recommendations regarding proposed actions that may adversely affect EFH (50 CFR Part 600, Subpart K).

Under section 305(b)(3)(A) of the MSA, Councils may comment on and make recommendations to the Secretary and any federal or state agency concerning any activity or proposed activity authorized, funded, or undertaken by the agency that, in the view of the Council, may affect the habitat, including EFH, of a fishery resource under its authority. In addition, under section 305(b)(3)(B) of the MSA, Councils must provide such comments and recommendations concerning any activity that, in the view of the Council, is likely to substantially affect the habitat, including EFH, of an anadromous fishery resource under Council authority. The EFH regulations at 50 CFR 600.930(a) state that each Council should establish procedures for reviewing federal or state actions that may adversely affect the habitat, including EFH, of a species under its authority.

The North Pacific Fishery Management Council has adopted a formal policy and process to receive regular reports from NMFS, and has identified specific criteria to guide NMFS in determining whether an activity is likely to be of interest to the Council. NMFS uses the

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<sup>1</sup> EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." "Waters" include aquatic areas and their associated physical, chemical, and biological properties. "Substrate" includes sediment underlying the waters. "Necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem. "Spawning, breeding, feeding, or growth to maturity" covers all habitat types utilized by a species throughout its life cycle. (50 CFR 600.10)

following criteria to guide the agency in determining whether the activity is likely to be of interest to the Council:

- The extent to which the activity would adversely affect EFH;
- The extent to which the activity would adversely affect Habitat Areas of Particular Concern or other areas established by the Council to protect sensitive habitat features;
- The extent to which the activity would be inconsistent with measures taken by the Council to minimize potential adverse effects of fishing on EFH; and
- The extent to which the activity would conflict with Council-managed fishing operations.

### EFH Consultations January – May 2013

The NMFS Alaska Region receives notification on a variety of non-fishing actions proposed by federal and state agencies that have the potential to affect living marine resources. Reviews are focused on only those activities that may adversely affect EFH. This includes a wide range of activities such as harbor development, navigation and port dredging, offshore disposal of materials, pollutant and seafood discharges, coastal construction, mining, forestry, oil and gas exploration, Naval training exercises, hydropower development, and transportation infrastructure projects (highways, bridges, airport expansions, etc.). NMFS staff provides written comments at various stages of projects including: project scoping, project permitting, during environmental impact statement comment periods, and at other times as requested. The table below provides a brief summary of activities where NMFS provided comments and/or EFH Conservation Recommendations, including actions involving anadromous fish during this time frame.

Table 1.

Subject of Correspondence	Date	COE Permit Review or other COE Review	Recommendations Made	Hydro Project FERC	Other Agency
Revised Study Plan for Susitna-Watana Hydroelectric Project	1-2-2013		yes	x	
Greens Creek Mine Tailings Expansion POA-1988-269-M5	1-22-2013	x	yes		
Supplemental EIS for Navy training activities in the GOA – Request to be a cooperating agency	2-6-2013		no – requested to review draft & final documents		X U.S. Navy
General Permit for Aquatic Farm Structures within the State of Alaska (GP 91-7); Nationwide Permit 48 – Commercial Shellfish Aquaculture Activities	2-19-2013	x	yes		
Project No. 14241-000 Susitna Hydropower Project – Notice of Study Dispute	2-20-2013		yes	x	
Bristol Bay Marine Characterization; U.S. Environmental Protection Agency	2-22-2013		yes – report edits		X EPA

POA-2012-920, Women's Bay; intertidal and subtidal fill, and pier	2-25-2013	x	yes		
Invitation to become a Participating Agency on Kake Access EIS	2-27-2013		no – declined, but will participate as a reviewing agency		X FHWA
Bruce Jack Gold Mine Project, Invitation to Participate in an Advisory Working Group (response to the Environmental Assessment Office, British Columbia, Canada)	3-1-2013		no - provided input on resources.		X EAO, B.C.
Izembek National Wildlife Refuge Land Exchange/Road Corridor Final Environmental Impact Statement	3-7-2013		no – information provided on previous consultations		USFWS
Alaska Energy Authority's Revised Study Plan for the Susitna-Watana Hydroelectric Project No. 14241-000	3-18-2013		yes	x	
Gravina Access Project Supplemental Environmental Impact Statement Essential Fish Habitat Assessment Addendum for Federal Highway Admin.	3-21-2013		yes		X FHWA
POA-2013-30, Hawk Inlet Hecla Greens Creek Mining Co., barge landing facility replacement (piles, dredging & fill)	3-21-2013	x	yes		
EFH Assessment for British Petroleum Exploration, Inc.'s 2013 Ancillary Activities; BOEM	3-28-2013		yes – concurred that EFH conservation recommendations offered were sufficient		X DOI, BOEM
AKG374000 Large Suction Dredging General Permit in Norton Sound	5-24-2013		yes		ADEC

## Update on Current Actions of Interest to the Council

### Norton Sound Red King Crab (NSRKC) and Marine Mining Operations

At the December 2012 Council meeting, NMFS specifically called attention to marine mining operations in Norton Sound and the potential for adverse effects on red king crab. Specifically NMFS provided information in support of two issues of concern:

- Cumulative Impacts of increased recreational mining
- Impacts from large scale operations

In response, the Council asked NMFS to brief the Council's Ecosystem Committee. NMFS briefed the Committee at the February 2013 Council meeting. The Committee also took additional information from the Alaska Department of Fish and Game (ADF&G) in March and reaffirmed its February with respect to this issue, namely that the Council take two actions to address these concerns.

1. First, the Council moved to have the issue brought before the Crab Plan Team at their next meeting, and tasked them with providing further input on the status of knowledge regarding Norton Sound red king crab habitat, and its distribution. NMFS made a presentation to the Crab Plan Team on May 2, 2013. The Crab Plan Team has considered this issue and will provide recommendations at the June 2013 Council meeting.
2. Secondly, the Ecosystem Committee recommended the Council exercise its authority, under Section 305 of the MSA, and comment directly to the Corps of Engineers (Corps) on concerns related to permitting of commercial mining operations in waters deeper than 30 feet in Norton Sound, as well as concerns regarding the cumulative impacts of the increasing number of recreational mining activities in the area (copying the Alaska Department of Environmental Conservation [ADEC] as appropriate). The Ecosystem Committee also wanted to ensure community interests were heard. On May 14, 2013 the Council did provide a letter to the Corps outlining their concerns on the issue.

Note: On April 25, 2013, ADEC issued a Public Notice for a General Permit that would authorize the discharge of wastewater from mechanical dredges, suction dredges with intake diameters greater than 10 inches, and suction dredge operations with a combination of intake hoses that have a combined intake area greater than 78 square inches. NMFS comment to ADEC included specific recommendations and provided ADEC with a copy of the Council's recent letter to the Corps . (Enclosure 2)

To address concerns from the Crab Plan Team, NMFS Habitat Conservation Division secured funds from NMFS Headquarter's Office of Habitat Conservation to develop a strategy including a survey method to assess NSRKC juvenile (< 2 years) habitat. Once we have this information it can be overlaid with the information on offshore mining areas. This will enable the Council and NMFS to better assess mining activities within NSRKC habitat, and offer science-based conservation recommendations. NMFS welcomes input or suggestions from the Crab Plan Team, Ecosystem Committee, and/or Council in developing the study. Dr. Robert Foy will provide oversight and HCD will keep the Crab Plan Team informed as this develops.

#### Bristol Bay and Mining Issues

NMFS provided information on this project at the December 2012 Council meeting. To re-cap, NMFS staff initially briefed Council staff in 2009. Staff jointly determined that the proposal had not yet advanced to the point that it should be brought to the Council, and agreed to keep in communication about this issue in the future. In 2011, the Environmental Protection Agency (EPA) requested that NMFS assist EPA with their assessment of the effects of large scale mining

on water quality and salmon ecosystems in the Bristol Bay watershed. NMFS contributed a synthesis of relevant literature regarding the ecological processes that support spawning and rearing habitat for salmon in these watersheds; drafted a section of the assessment which discussed the contributions of salmon from the watershed to fish and marine mammal populations in Bristol Bay; and supported EPA's development of a predictive risk assessment.

EPA issued their Draft Bristol Bay Watershed Assessment in May 2012 for public comment. As a result of the EPA's public comment and internal peer review process, the EPA requested NMFS expand on the importance of estuary habitat to salmon in these watersheds. In February 2013, NMFS delivered an amended report to the EPA entitled *Biological Characterization: Bristol Bay Marine Estuarine Processes, Fish and Marine Mammal Assemblages*. The amended report included descriptions of the following characteristics of the estuary habitat and their importance to salmon species at various life history stages: 1) Estuary Habitat Condition; 2) Fresh Water Influence in the Estuary; 3) Salmon, Food Habits in the Estuary; 4) Salmon, Critical Size in the Estuary; and 5) Trophic Condition. In April of 2013, EPA released their revised draft assessment. The public comment period closed May 31, 2013. EPA has not made any decisions with respect to the assessment. NMFS will keep Council staff informed, as appropriate, on Bristol Bay mining issues.



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

May 24, 2013

Nick Dallman  
Environmental Program Specialist  
Alaska Department of Environmental Conservation  
Wastewater Discharge Authorization Program  
Engineering/Mining Technical Services  
610 University Ave  
Fairbanks, AK 99709

RE: Large Suction Dredging  
General Permit in Norton Sound  
Permit No. AKG374000

Dear Mr. Dallman:

The Alaska Department of Environmental Conservation (ADEC) proposes to issue an Alaska Pollutant Discharge Elimination System (APDES) General Permit for offshore large dredge operations in Norton Sound. The General Permit would authorize the discharge of wastewater from mechanical dredges, suction dredges with intake diameters greater than 10 inches, and suction dredge operations with a combination of intake hoses that have a combined intake area greater than 78 square inches. The coverage area would include marine waters of Norton Sound up to three nautical miles offshore between Cape Rodney at 166°24'09" west longitude and Cape Darby at 162°46'54" west longitude, with certain restrictions in the permit.

In a letter dated February 15, 2012, the National Marine Fisheries Service (NMFS) provided scoping comments to ADEC on the proposed General Permit. On April 25, 2013, ADEC published a draft General Permit for the proposed activities. After reviewing the draft General Permit and related documents, (Fact Sheet, and Ocean Discharge Criteria Evaluation developed by ADEC), we offer the following information in support of our earlier comments and in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

Background

On September 28, 2011, the Alaska Department of Natural Resources held a competitive sale for offshore mineral leases in Norton Sound. The lease sale offered a total acreage of 23,793 acres and is reported to have brought in \$7.6 million in sales. Mineral leases were purchased by a range of bidders, from local residents to global mining companies. As of September 18, 2012, the lease sale, combined with media coverage and record gold prices, had resulted in 17 new or proposed permit applications for large gold dredge operations in Norton Sound (ADEC April 25,



2013). Although not all proposed operations are anticipated to reach development, ADEC anticipates that many will become operational. To accommodate new operations and streamline the permitting process for operations in Norton Sound, ADEC initiated development of this General Permit.

Although state agencies are not required to consult with NMFS on actions that may adversely affect Essential Fish Habitat (EFH), as ADEC notes, under section 305(b)(4)(A) of the MSA, NMFS is required to provide EFH Conservation Recommendations to federal and state agencies for actions that would adversely affect EFH. NMFS will not recommend that state or federal agencies take actions beyond their statutory authority. The Environmental Protection Agency approved the State of Alaska's application to administer and enforce the APDES program in Alaska, and ADEC committed to use the program's coordination procedures to provide NMFS with information necessary to identify actions that may adversely affect EFH.

#### Essential Fish Habitat

EFH within the project area has been described for red king crab, Alaska plaice, yellowfin sole, and all five Pacific salmon species. All of these species are found in nearshore waters of Norton Sound during certain stages of their life history. For example, adult yellowfin sole use shallow water substrates for spawning areas. Red king crab concentrate along shallow-water depth contours to form mating pairs, release eggs, or form clusters. Red king crab also migrate along these shallow contours. Juvenile and adult salmon use areas of Norton Sound to grow to maturity. All species are dependent on prey resources in this area. The specific habitat associations for these species are described on our website at <http://www.alaskafisheries.noaa.gov/habitat/>.

#### Potential Impacts

Offshore dredging and the discharge of spoils have the potential to affect marine invertebrates (including red king crab) by altering their habitat through turbidity, entrainment of organisms, and exposure to trace metals, fuel spills, and noise disturbances (Minerals Management Service 1990). Previous mining operations off Nome resulted in considerable localized substrate alteration. Sediment fines destabilized by mining operations were redistributed by local currents and sea conditions (Jewett 1999). It is not known how long it takes for a community to fully recover, that is, to re-colonize dredged sites and return to comparable density, biomass, and number of taxa as before disturbance from mining. However, studies associated with the Nome Offshore Placer Project showed that even seven years after mining operations cease, seafloor habitats and species assemblages had not recovered to pre-disturbance conditions (Gardner, Jewett 1994). Further, evidence suggests that benthic communities may not ever re-colonize to their original structure after mining disturbance; instead, a somewhat different assemblage may result.

The studies from the Nome Offshore Placer Project documented that those waters deeper than 20 feet support more biodiversity and higher numbers of animals, especially in the cobble habitats. The studies also suggest that significant storm events and longshore currents cause extensive mixing of nearshore sediments and alteration of the sea floor. These natural events occur within

nearshore waters less than 25 feet in depth (Jewett 1999). The studies concluded that mining disturbances (including impacts from the associated discharge) to benthic substrate in water depths greater than 30 feet are distinguishable and the areas are slow to recover. Additionally, suspended sediments can travel well outside the disturbed area and settle on other undisturbed marine substrates. Also, sediment was found in red king crab stomachs, but whether this was due to an increase in suspended sediment or associated with a food source is not known. Some sediment is probably ingested while feeding on tube worms, starfish, and sea urchins. Fine sediments may inhibit growth in some species and smother benthic organisms (Jewett 1999).

In spring, sexually mature female crab migrate into relatively shallow water (less than 50 meters deep), upstream from prevailing currents, where they release planktonic larvae to drift passively for 2-5 months before settling into benthic habitats. Young of the year king crab (late age 0 to age 1+) select complex habitats (e.g. rocky rubble habitat) and are not found on homogeneous mud or silt bottom (Loher and Armstrong 2000). Survival of juvenile crab is primarily dependent on the availability and quality of cover from predators (Armstrong et al. 1987, Stone et al. 1992, Stone et al. 1993, Loher and Armstrong 2000); thus, their habitat requirements are driven by anti-predator strategy (Loher and Armstrong 2000), with profound effects on juvenile population dynamics and recruitment. Jewett et al. (1999) demonstrated that suction dredge mining in Norton Sound decreases habitat complexity and diversity. Again, recovery is slow, particularly for waters deeper than 30 ft.

Additionally, in its own studies on the effects of disturbance on benthic substrates and their inhabitants, NMFS found that many seafloor organisms are slow growing and reach their age of maturity (spawning age) later in their life history (NMFS 2005).

#### Essential Fish Habitat Conservation Recommendations

The North Pacific Fishery Management Council (NPFMC) is one of eight regional Fishery Management Councils established by the MSA to manage the fisheries of the United States. Each Council is responsible for the area adjacent to its constituent states, called the Exclusive Economic Zone (EEZ). Councils develop fishery management plans and management measures for the fisheries within their EEZ. NMFS approves and implements these plans and measures. Under section 305(b)(3)(A) of the MSA, Councils may comment on and make recommendations to the Secretary of Commerce and any federal or state agency concerning any activity or proposed activity authorized, funded, or undertaken by the agency that, in the view of a Council, may affect the habitat, including EFH, of a fishery resource under its authority. Recently the NPFMC provided comments to the Corps of Engineers (copy enclosed) on their concerns regarding the impacts of mining operations in Norton Sound. NMFS shares these concerns.

We note that the Corps of Engineers, the Environmental Protection Agency, and now ADEC all issue (or have issued) permits for dredging activities and the discharges associated with those activities in waters of the United States. Since 2000, NMFS has recommended that such permits restrict mining operations to waters less than 30 ft deep, based on increased benthic habitat complexity (benthic species diversity and habitat structure) in deeper waters, mediated by

differences in disturbance regimes (frequency and intensity of winter storms and sea ice). Our concerns have not changed about adverse effects of offshore dredging and the discharge of spoils on living marine resources, including EFH. We offer the following recommendations pursuant to Section 305(b)(4)(A) of the MSA:

1) The highest plankton production in spring is associated with the retreating ice edge and provides a seasonally important feeding habitat in Norton Sound that would be disrupted by the proposed dredging and associated discharge. Also, RKC associate with the ice edge and its movement through break-up and migrate into shallow nearshore areas for reproductive associations during this time. These associations include reproductive pair bonding, molting, and egg extrusion, all of which would be affected by dredging.

As currently written, the General Permit excludes dredging when sea ice is present or from March 1 to May 31. We applaud ADEC for including this restriction. However, we note that the General Permit allows the applicant to request an exception to the seasonal limitations. We recommend that any such request be authorized through the individual APDES permit process, rather than under the General Permit.

2) NMFS has previously recommended that operations not take place from June 1 through July 15, within a radius of one nautical mile from the mouth of anadromous streams identified in the Alaska Department of Fish & Game's Anadromous Waters Catalog. This is because turbidity plumes from dredge operations have the potential to create a barrier to out-migrating juvenile salmon. ADEC has recognized this concern and included the recommendation as a condition of the General Permit.

3) Mining activities should be limited to water depths less than 30 ft. Environmental studies of offshore mining (specifically studies from the Nome Offshore Placer Project) have concluded that, in depths greater than 30 ft., mining disturbances (including the associated discharge) can adversely affect benthic substrate through turbidity, entrainment of organisms, exposure to trace metals, noise disturbances, and fuel spills (Minerals Management Service 1990).

The General Permit does not restrict mining operations to less than the 30-ft. contour. Instead it includes several Best Management Practices meant to address concerns related to habitat alteration. Unfortunately, these practices, although intended to minimize turbidity and limit the discharge to the footprint of the area to be physically dredged, still cause adverse effects to EFH. We therefore maintain that mining activities should be limited to water depths less than 30 ft.

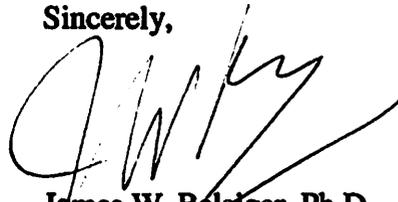
4) In addition, we would argue that, for large scale mining operations, a permittee would find it difficult to comply with the Best Management Practice that states:

**Red king crab mating pairs and clusters must be avoided. If red king crab mating pairs or clusters are observed, mining operations must move to an alternate location where no crabs are observed or cease operation until the crabs move away on their own.**

We recommend that this Best Management Practice be expanded to include information on how it is to be enforced.

Should you have any questions regarding EFH please contact Brian Lance at 907-271-1301 or [brian.lance@noaa.gov](mailto:brian.lance@noaa.gov).

Sincerely,



James W. Balsiger, Ph.D.  
Administrator, Alaska Region

Enclosure

cc:

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## **References:**

- Alaska Department of Environmental Conservation. April 25, 2013. Norton Sound Large Dredge Placer Miners General Permit. Permit Fact Sheet – Draft. Permit Number: AKG374000. Wastewater Discharge Authorization Program. 555 Cordova Street. Anchorage, AK 99501**
- Armstrong, D. A., L. S. Incze, D. L. Wenker, and J. L. Armstrong. 1986. Distribution and abundance of decapod crustacean larvae in the southeastern Bering Sea with emphasis on commercial species. Pages 479-856 in Outer Continental Shelf Environmental Assessment Program 53. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, Ocean Assessments Division Alaska Office, Anchorage Alaska, USA.**
- Gardner, L.A. and S.C. Jewett. 1994. To Evaluate the Suitability of a Coarse-Grain Hydraulic Bucket Sampler for Marine Placer Deposits and Mine Tailings Sites. 1993 Benthic Monitoring Results Final Report. Document No. 6938-001-400 Box :16.**
- Jewett, S.C., H.M. Feder, A. Blanchard. Assessment of the benthic environment following offshore placer gold mining in the northeastern Bering Sea. Marine Environmental Research 48 (1999) 91-122.**
- Jewett, S.C. Assessment of Red King Crabs Following Offshore Placer Gold Mining in Norton Sound. Reprinted from Alaska Fishery Research Bulletin. Vol. 6 No. 1, Summer 1999.**
- Lober, T. L. and D. A. Armstrong. 2000. Effects of habitat complexity and relative larval supply on the establishment of early benthic phase red king crab (*Paralithodes camtschaticus*, 1815) populations in Auke Bay, Alaska**
- Minerals Management Service. 1990. Alaska Outer Continental Shelf (OCS) Mining Program. Norton Sound lease sale: Second draft environmental impact statement. U.S. Department of the Interior, Minerals Management Service, OCS EIS/EA, MMS 90-0032, Anchorage, Alaska.**
- Minerals Management Service. March 1991. Alaska Outer Continental Shelf (OCS) Mining Program. Norton Sound Lease Sale. Final Environmental Impact Statement. OCS EIS/EA. MMS 90-0009 Anchorage, Alaska**
- National Marine Fisheries Service. Final Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska. Appendix B, Evaluation of Fishing Activities That May Adversely Affect EFH. April 2005.**
- Stone, R. P., C. E. O'Clair, and T. C. Shirley. 1992. Seasonal migration and distribution of female red king crab in a southeast Alaskan estuary. Journal of Crustacean Biology 12: 546-560.**

Stone, R. P., C. E. O'Clair, and T. C. Shirley. 1993. Aggregating behavior of ovigerous female red king crab, *Paracalithodes camtschaticus*, in Auke Bay, Alaska. *Canadian Journal of Fisheries and Aquatic Sciences* 50: 750-758.

# North Pacific Fishery Management Council

Eric A. Olson, Chairman  
Chris Oliver, Executive Director



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May 14, 2013

Col. Christopher D. Lestochi  
U.S. Army Corps of Engineers, Alaska District  
P.O. Box 6898  
JBER, Alaska 99506-0898

Dear Col. Lestochi:

On behalf of the North Pacific Fishery Management Council (Council), I hereby submit this letter under Section 305 of the Magnuson Stevens Fishery Conservation and Management Act to comment directly to the U.S. Army Corps of Engineers Regulatory Division (Corps) on the Council's concerns with respect to permitting of commercial mining operations in waters deeper than 30 feet in Norton Sound, and the cumulative impacts of the increasing scale of recreational mining in the area. The Council is concerned about a recently issued exploratory permit for a large scale commercial dredging operation in deeper water near the 3 nm State water boundary, the potential for commercial dredging in the area, and the increasing popularity of smaller scale "recreational" dredging. This letter is in support of the concerns of both the National Marine Fisheries Service' (NMFS) and the State of Alaska Department of Fish and Game's (ADFG) concerns about disturbance in habitats deeper than 30 feet.

The Council's Ecosystem Committee (Committee) heard briefings about consultations between the National Marine Fisheries Service (NMFS) and the Corps on nearshore mining activity in North Sound at a February, 2013 meeting and again at a March, 2013 meeting. In the past, the Corps has included an EFH stipulation to dredging permits as recommended by both NMFS and the State of Alaska Department of Fish and Game (ADFG). These stipulations prohibited dredging in waters deeper than 20 feet. However, recently NMFS modified its advice and began recommending that the Corps prohibit dredging in waters deeper than 30 feet, based on research that suggested natural disturbance was high in waters shallower than 30 feet relative to the scale of dredging operations, and that in deeper waters the increase in presence and diversity of benthic organisms posed more serious risk to damage of biogenic habitats from dredging operations. The Committee was informed of a dredging operation that occurred in deeper (60 ft) water in the 1980s that used the Bima bucket dredge, and resulted in persistent changes to the seafloor sediment and topography, and smothering of infaunal and epibenthic organisms by disturbed silt.

More recently, during its meetings last week in Anchorage, the Council's Crab Plan Team also discussed this issue and expressed its similar strong concerns regarding potential impacts to essential fish habitat (EFH) for juvenile and adult red king crab. The Team indicated that these areas appear to be very important as a nursery area for red king crab. Additional analyses should be conducted to verify this prior to any increased disturbance, such as an assessment of the cumulative impact of varying scales of recreational and commercial dredging on life-history stages of red king crab. Important considerations would include the timing of larval release, nearshore larval drift studies, and ontogenetic movement. If the area is a critical nursery or mating area then the footprint of the dredging operations cumulatively could extend well beyond an estimate of the operational footprint as environmental disturbance such as plumes and vibration may grow exponentially.

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May 14, 2013  
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Based on recommendations from our Ecosystem Committee and Crab Plan Team, the Council remains concerned about the potential impacts of these activities on EFH for red king crab, and about the potential cumulative impacts of these activities and other activities in Norton Sound on red king crab EFH. To address these concerns, the Council recommends that the Corps fully scope and address both the impacts of dredging in deeper (>30 ft) water, and the cumulative impacts of recreational mining in the area. The results of this scoping process will inform the Corps as to whether an Environmental Assessment or Environmental Impact Statement is the appropriate analysis to evaluate the potential impacts of issuing permits for dredging in Norton Sound. The Council also recommends that the Corps fully engage the communities of the Norton Sound region, stakeholders from the Norton Sound region, and the Council in their evaluation process.

Thank you for this opportunity to communicate the Council's concerns about new commercial scale dredging and increasing interest in recreational dredging in Norton Sound. We look forward to working with you as you evaluate the potential impacts of these and other activities on Essential Fish Habitat in Norton Sound.

Sincerely,



Chris Oliver  
Executive Director

CC: Jim Balsiger, NMFS Regional Administrator  
Cora Campbell, ADF&G Commissioner

# **Biannual Overview of the Interagency Consultations of Actions that May Adversely Affect Essential Fish Habitat in Alaska**

Prepared for the North Pacific Fishery Management Council  
by the National Marine Fisheries Service  
Alaska Region, May 2013

## **Background**

In 1996 Congress added new habitat provisions to the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Section 303(a)(7) of the amended MSA required that every fishery management plan (FMP) describe and identify EFH<sup>1</sup> for federally managed species, minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH.

Section 305(b) of the MSA requires federal agencies to consult with the Secretary regarding all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. NMFS is required to provide conservation recommendations regarding any federal or state agency action that would adversely affect EFH. Action agencies do not have to follow NMFS's recommendations. As specified by Section 305(b)(4) of the MSA, federal agencies must respond in writing to any NMFS EFH conservation recommendations, and in the case of a decision that is inconsistent with NMFS's advice, the action agency must explain its reasons for not following the recommendations. The EFH regulations establish the procedures for coordination, consultations, and recommendations regarding proposed actions that may adversely affect EFH (50 CFR Part 600, Subpart K).

Under section 305(b)(3)(A) of the MSA, Councils may comment on and make recommendations to the Secretary and any federal or state agency concerning any activity or proposed activity authorized, funded, or undertaken by the agency that, in the view of the Council, may affect the habitat, including EFH, of a fishery resource under its authority. In addition, under section 305(b)(3)(B) of the MSA, Councils must provide such comments and recommendations concerning any activity that, in the view of the Council, is likely to substantially affect the habitat, including EFH, of an anadromous fishery resource under Council authority. The EFH regulations at 50 CFR 600.930(a) state that each Council should establish procedures for reviewing federal or state actions that may adversely affect the habitat, including EFH, of a species under its authority.

The North Pacific Fishery Management Council has adopted a formal policy and process to receive regular reports from NMFS, and has identified specific criteria to guide NMFS in determining whether an activity is likely to be of interest to the Council. NMFS uses the

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<sup>1</sup> EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." "Waters" include aquatic areas and their associated physical, chemical, and biological properties. "Substrate" includes sediment underlying the waters. "Necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem. "Spawning, breeding, feeding, or growth to maturity" covers all habitat types utilized by a species throughout its life cycle. (50 CFR 600.10)

following criteria to guide the agency in determining whether the activity is likely to be of interest to the Council:

- The extent to which the activity would adversely affect EFH;
- The extent to which the activity would adversely affect Habitat Areas of Particular Concern or other areas established by the Council to protect sensitive habitat features;
- The extent to which the activity would be inconsistent with measures taken by the Council to minimize potential adverse effects of fishing on EFH; and
- The extent to which the activity would conflict with Council-managed fishing operations.

### EFH Consultations January – May 2013

The NMFS Alaska Region receives notification on a variety of non-fishing actions proposed by federal and state agencies that have the potential to affect living marine resources. Reviews are focused on only those activities that may adversely affect EFH. This includes a wide range of activities such as harbor development, navigation and port dredging, offshore disposal of materials, pollutant and seafood discharges, coastal construction, mining, forestry, oil and gas exploration, Naval training exercises, hydropower development, and transportation infrastructure projects (highways, bridges, airport expansions, etc.). NMFS staff provides written comments at various stages of projects including: project scoping, project permitting, during environmental impact statement comment periods, and at other times as requested. The table below provides a brief summary of activities where NMFS provided comments and/or EFH Conservation Recommendations, including actions involving anadromous fish during this time frame.

Table 1.

Subject of Correspondence	Date	COE Permit Review or other COE Review	Recommendations Made	Hydro Project FERC	Other Agency
Revised Study Plan for Susitna-Watana Hydroelectric Project	1-2-2013		yes	x	
Greens Creek Mine Tailings Expansion POA-1988-269-M5	1-22-2013	x	yes		
Supplemental EIS for Navy training activities in the GOA – Request to be a cooperating agency	2-6-2013		no – requested to review draft & final documents		X U.S. Navy
General Permit for Aquatic Farm Structures within the State of Alaska (GP 91-7); Nationwide Permit 48 – Commercial Shellfish Aquaculture Activities	2-19-2013	x	yes		
Project No. 14241-000 Susitna Hydropower Project – Notice of Study Dispute	2-20-2013		yes	x	
Bristol Bay Marine Characterization; U.S. Environmental Protection Agency	2-22-2013		yes – report edits		X EPA

POA-2012-920, Women's Bay; intertidal and subtidal fill, and pier	2-25-2013	x	yes		
Invitation to become a Participating Agency on Kake Access EIS	2-27-2013		no – declined, but will participate as a reviewing agency		X FHWA
Bruce Jack Gold Mine Project, Invitation to Participate in an Advisory Working Group (response to the Environmental Assessment Office, British Columbia, Canada)	3-1-2013		no - provided input on resources.		X EAO, B.C.
Izembek National Wildlife Refuge Land Exchange/Road Corridor Final Environmental Impact Statement	3-7-2013		no – information provided on previous consultations		USFWS
Alaska Energy Authority's Revised Study Plan for the Susitna-Watana Hydroelectric Project No. 14241-000	3-18-2013		yes	x	
Gravina Access Project Supplemental Environmental Impact Statement Essential Fish Habitat Assessment Addendum for Federal Highway Admin.	3-21-2013		yes		X FHWA
POA-2013-30, Hawk Inlet Hecla Greens Creek Mining Co., barge landing facility replacement (piles, dredging & fill)	3-21-2013	x	yes		
EFH Assessment for British Petroleum Exploration, Inc.'s 2013 Ancillary Activities; BOEM	3-28-2013		yes – concurred that EFH conservation recommendations offered were sufficient		X DOI, BOEM
AKG374000 Large Suction Dredging General Permit in Norton Sound	5-24-2013		yes		ADEC

### **Update on Current Actions of Interest to the Council**

#### **Norton Sound Red King Crab (NSRKC) and Marine Mining Operations**

At the December 2012 Council meeting, NMFS specifically called attention to marine mining operations in Norton Sound and the potential for adverse effects on red king crab. Specifically NMFS provided information in support of two issues of concern:

- Cumulative Impacts of increased recreational mining
- Impacts from large scale operations

In response, the Council asked NMFS to brief the Council's Ecosystem Committee. NMFS briefed the Committee at the February 2013 Council meeting. The Committee also took additional information from the Alaska Department of Fish and Game (ADF&G) in March and reaffirmed its February with respect to this issue, namely that the Council take two actions to address these concerns.

1. First, the Council moved to have the issue brought before the Crab Plan Team at their next meeting, and tasked them with providing further input on the status of knowledge regarding Norton Sound red king crab habitat, and its distribution. NMFS made a presentation to the Crab Plan Team on May 2, 2013. The Crab Plan Team has considered this issue and will provide recommendations at the June 2013 Council meeting.
2. Secondly, the Ecosystem Committee recommended the Council exercise its authority, under Section 305 of the MSA, and comment directly to the Corps of Engineers (Corps) on concerns related to permitting of commercial mining operations in waters deeper than 30 feet in Norton Sound, as well as concerns regarding the cumulative impacts of the increasing number of recreational mining activities in the area (copying the Alaska Department of Environmental Conservation [ADEC] as appropriate). The Ecosystem Committee also wanted to ensure community interests were heard. On May 14, 2013 the Council did provide a letter to the Corps outlining their concerns on the issue.

Note: On April 25, 2013, ADEC issued a Public Notice for a General Permit that would authorize the discharge of wastewater from mechanical dredges, suction dredges with intake diameters greater than 10 inches, and suction dredge operations with a combination of intake hoses that have a combined intake area greater than 78 square inches. NMFS comment to ADEC included specific recommendations and provided ADEC with a copy of the Council's recent letter to the Corps . (Enclosure 2)

To address concerns from the Crab Plan Team, NMFS Habitat Conservation Division secured funds from NMFS Headquarter's Office of Habitat Conservation to develop a strategy including a survey method to assess NSRKC juvenile (< 2 years) habitat. Once we have this information it can be overlaid with the information on offshore mining areas. This will enable the Council and NMFS to better assess mining activities within NSRKC habitat, and offer science-based conservation recommendations. NMFS welcomes input or suggestions from the Crab Plan Team, Ecosystem Committee, and/or Council in developing the study. Dr. Robert Foy will provide oversight and HCD will keep the Crab Plan Team informed as this develops.

#### Bristol Bay and Mining Issues

NMFS provided information on this project at the December 2012 Council meeting. To re-cap, NMFS staff initially briefed Council staff in 2009. Staff jointly determined that the proposal had not yet advanced to the point that it should be brought to the Council, and agreed to keep in communication about this issue in the future. In 2011, the Environmental Protection Agency (EPA) requested that NMFS assist EPA with their assessment of the effects of large scale mining

on water quality and salmon ecosystems in the Bristol Bay watershed. NMFS contributed a synthesis of relevant literature regarding the ecological processes that support spawning and rearing habitat for salmon in these watersheds; drafted a section of the assessment which discussed the contributions of salmon from the watershed to fish and marine mammal populations in Bristol Bay; and supported EPA's development of a predictive risk assessment.

EPA issued their Draft Bristol Bay Watershed Assessment in May 2012 for public comment. As a result of the EPA's public comment and internal peer review process, the EPA requested NMFS expand on the importance of estuary habitat to salmon in these watersheds. In February 2013, NMFS delivered an amended report to the EPA entitled *Biological Characterization: Bristol Bay Marine Estuarine Processes, Fish and Marine Mammal Assemblages*. The amended report included descriptions of the following characteristics of the estuary habitat and their importance to salmon species at various life history stages: 1) Estuary Habitat Condition; 2) Fresh Water Influence in the Estuary; 3) Salmon, Food Habits in the Estuary; 4) Salmon, Critical Size in the Estuary; and 5) Trophic Condition. In April of 2013, EPA released their revised draft assessment. The public comment period closed May 31, 2013. EPA has not made any decisions with respect to the assessment. NMFS will keep Council staff informed, as appropriate, on Bristol Bay mining issues.



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

May 24, 2013

Nick Dallman  
Environmental Program Specialist  
Alaska Department of Environmental Conservation  
Wastewater Discharge Authorization Program  
Engineering/Mining Technical Services  
610 University Ave  
Fairbanks, AK 99709

RE: Large Suction Dredging  
General Permit in Norton Sound  
Permit No. AKG374000

Dear Mr. Dallman:

The Alaska Department of Environmental Conservation (ADEC) proposes to issue an Alaska Pollutant Discharge Elimination System (APDES) General Permit for offshore large dredge operations in Norton Sound. The General Permit would authorize the discharge of wastewater from mechanical dredges, suction dredges with intake diameters greater than 10 inches, and suction dredge operations with a combination of intake hoses that have a combined intake area greater than 78 square inches. The coverage area would include marine waters of Norton Sound up to three nautical miles offshore between Cape Rodney at 166°24'09" west longitude and Cape Darby at 162°46'54" west longitude, with certain restrictions in the permit.

In a letter dated February 15, 2012, the National Marine Fisheries Service (NMFS) provided scoping comments to ADEC on the proposed General Permit. On April 25, 2013, ADEC published a draft General Permit for the proposed activities. After reviewing the draft General Permit and related documents, (Fact Sheet, and Ocean Discharge Criteria Evaluation developed by ADEC), we offer the following information in support of our earlier comments and in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

**Background**

On September 28, 2011, the Alaska Department of Natural Resources held a competitive sale for offshore mineral leases in Norton Sound. The lease sale offered a total acreage of 23,793 acres and is reported to have brought in \$7.6 million in sales. Mineral leases were purchased by a range of bidders, from local residents to global mining companies. As of September 18, 2012, the lease sale, combined with media coverage and record gold prices, had resulted in 17 new or proposed permit applications for large gold dredge operations in Norton Sound (ADEC April 25,



2013). Although not all proposed operations are anticipated to reach development, ADEC anticipates that many will become operational. To accommodate new operations and streamline the permitting process for operations in Norton Sound, ADEC initiated development of this General Permit.

Although state agencies are not required to consult with NMFS on actions that may adversely affect Essential Fish Habitat (EFH), as ADEC notes, under section 305(b)(4)(A) of the MSA, NMFS is required to provide EFH Conservation Recommendations to federal and state agencies for actions that would adversely affect EFH. NMFS will not recommend that state or federal agencies take actions beyond their statutory authority. The Environmental Protection Agency approved the State of Alaska's application to administer and enforce the APDES program in Alaska, and ADEC committed to use the program's coordination procedures to provide NMFS with information necessary to identify actions that may adversely affect EFH.

#### Essential Fish Habitat

EFH within the project area has been described for red king crab, Alaska plaice, yellowfin sole, and all five Pacific salmon species. All of these species are found in nearshore waters of Norton Sound during certain stages of their life history. For example, adult yellowfin sole use shallow water substrates for spawning areas. Red king crab concentrate along shallow-water depth contours to form mating pairs, release eggs, or form clusters. Red king crab also migrate along these shallow contours. Juvenile and adult salmon use areas of Norton Sound to grow to maturity. All species are dependent on prey resources in this area. The specific habitat associations for these species are described on our website at <http://www.alaskafisheries.noaa.gov/habitat/>.

#### Potential Impacts

Offshore dredging and the discharge of spoils have the potential to affect marine invertebrates (including red king crab) by altering their habitat through turbidity, entrainment of organisms, and exposure to trace metals, fuel spills, and noise disturbances (Minerals Management Service 1990). Previous mining operations off Nome resulted in considerable localized substrate alteration. Sediment fines destabilized by mining operations were redistributed by local currents and sea conditions (Jewett 1999). It is not known how long it takes for a community to fully recover, that is, to re-colonize dredged sites and return to comparable density, biomass, and number of taxa as before disturbance from mining. However, studies associated with the Nome Offshore Placer Project showed that even seven years after mining operations cease, seafloor habitats and species assemblages had not recovered to pre-disturbance conditions (Gardner, Jewett 1994). Further, evidence suggests that benthic communities may not ever re-colonize to their original structure after mining disturbance; instead, a somewhat different assemblage may result.

The studies from the Nome Offshore Placer Project documented that those waters deeper than 20 feet support more biodiversity and higher numbers of animals, especially in the cobble habitats. The studies also suggest that significant storm events and longshore currents cause extensive mixing of nearshore sediments and alteration of the sea floor. These natural events occur within

nearshore waters less than 25 feet in depth (Jewett 1999). The studies concluded that mining disturbances (including impacts from the associated discharge) to benthic substrate in water depths greater than 30 feet are distinguishable and the areas are slow to recover. Additionally, suspended sediments can travel well outside the disturbed area and settle on other undisturbed marine substrates. Also, sediment was found in red king crab stomachs, but whether this was due to an increase in suspended sediment or associated with a food source is not known. Some sediment is probably ingested while feeding on tube worms, starfish, and sea urchins. Fine sediments may inhibit growth in some species and smother benthic organisms (Jewett 1999).

In spring, sexually mature female crab migrate into relatively shallow water (less than 50 meters deep), upstream from prevailing currents, where they release planktonic larvae to drift passively for 2-5 months before settling into benthic habitats. Young of the year king crab (late age 0 to age 1+) select complex habitats (e.g. rocky rubble habitat) and are not found on homogeneous mud or silt bottom (Loher and Armstrong 2000). Survival of juvenile crab is primarily dependent on the availability and quality of cover from predators (Armstrong et al. 1987, Stone et al. 1992, Stone et al. 1993, Loher and Armstrong 2000); thus, their habitat requirements are driven by anti-predator strategy (Loher and Armstrong 2000), with profound effects on juvenile population dynamics and recruitment. Jewett et al. (1999) demonstrated that suction dredge mining in Norton Sound decreases habitat complexity and diversity. Again, recovery is slow, particularly for waters deeper than 30 ft.

Additionally, in its own studies on the effects of disturbance on benthic substrates and their inhabitants, NMFS found that many seafloor organisms are slow growing and reach their age of maturity (spawning age) later in their life history (NMFS 2005).

#### Essential Fish Habitat Conservation Recommendations

The North Pacific Fishery Management Council (NPFMC) is one of eight regional Fishery Management Councils established by the MSA to manage the fisheries of the United States. Each Council is responsible for the area adjacent to its constituent states, called the Exclusive Economic Zone (EEZ). Councils develop fishery management plans and management measures for the fisheries within their EEZ. NMFS approves and implements these plans and measures. Under section 305(b)(3)(A) of the MSA, Councils may comment on and make recommendations to the Secretary of Commerce and any federal or state agency concerning any activity or proposed activity authorized, funded, or undertaken by the agency that, in the view of a Council, may affect the habitat, including EFH, of a fishery resource under its authority. Recently the NPFMC provided comments to the Corps of Engineers (copy enclosed) on their concerns regarding the impacts of mining operations in Norton Sound. NMFS shares these concerns.

We note that the Corps of Engineers, the Environmental Protection Agency, and now ADEC all issue (or have issued) permits for dredging activities and the discharges associated with those activities in waters of the United States. Since 2000, NMFS has recommended that such permits restrict mining operations to waters less than 30 ft deep, based on increased benthic habitat complexity (benthic species diversity and habitat structure) in deeper waters, mediated by

differences in disturbance regimes (frequency and intensity of winter storms and sea ice). Our concerns have not changed about adverse effects of offshore dredging and the discharge of spoils on living marine resources, including EFH. We offer the following recommendations pursuant to Section 305(b)(4)(A) of the MSA:

1) The highest plankton production in spring is associated with the retreating ice edge and provides a seasonally important feeding habitat in Norton Sound that would be disrupted by the proposed dredging and associated discharge. Also, RKC associate with the ice edge and its movement through break-up and migrate into shallow nearshore areas for reproductive associations during this time. These associations include reproductive pair bonding, molting, and egg extrusion, all of which would be affected by dredging.

As currently written, the General Permit excludes dredging when sea ice is present or from March 1 to May 31. We applaud ADEC for including this restriction. However, we note that the General Permit allows the applicant to request an exception to the seasonal limitations. We recommend that any such request be authorized through the individual APDES permit process, rather than under the General Permit.

2) NMFS has previously recommended that operations not take place from June 1 through July 15, within a radius of one nautical mile from the mouth of anadromous streams identified in the Alaska Department of Fish & Game's Anadromous Waters Catalog. This is because turbidity plumes from dredge operations have the potential to create a barrier to out-migrating juvenile salmon. ADEC has recognized this concern and included the recommendation as a condition of the General Permit.

3) Mining activities should be limited to water depths less than 30 ft. Environmental studies of offshore mining (specifically studies from the Nome Offshore Placer Project) have concluded that, in depths greater than 30 ft., mining disturbances (including the associated discharge) can adversely affect benthic substrate through turbidity, entrainment of organisms, exposure to trace metals, noise disturbances, and fuel spills (Minerals Management Service 1990).

The General Permit does not restrict mining operations to less than the 30-ft. contour. Instead it includes several Best Management Practices meant to address concerns related to habitat alteration. Unfortunately, these practices, although intended to minimize turbidity and limit the discharge to the footprint of the area to be physically dredged, still cause adverse effects to EFH. We therefore maintain that mining activities should be limited to water depths less than 30 ft.

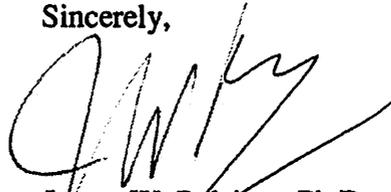
4) In addition, we would argue that, for large scale mining operations, a permittee would find it difficult to comply with the Best Management Practice that states:

Red king crab mating pairs and clusters must be avoided. If red king crab mating pairs or clusters are observed, mining operations must move to an alternate location where no crabs are observed or cease operation until the crabs move away on their own.

We recommend that this Best Management Practice be expanded to include information on how it is to be enforced.

Should you have any questions regarding EFH please contact Brian Lance at 907-271-1301 or [brian.lance@noaa.gov](mailto:brian.lance@noaa.gov).

Sincerely,



James W. Balsiger, Ph.D.  
Administrator, Alaska Region

Enclosure

cc:

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# North Pacific Fishery Management Council

Eric A. Olson, Chairman  
Chris Oliver, Executive Director



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May 14, 2013

Col. Christopher D. Lestochi  
U.S. Army Corps of Engineers, Alaska District  
P.O. Box 6898  
JBER, Alaska 99506-0898

Dear Col. Lestochi:

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More recently, during its meetings last week in Anchorage, the Council's Crab Plan Team also discussed this issue and expressed its similar strong concerns regarding potential impacts to essential fish habitat (EFH) for juvenile and adult red king crab. The Team indicated that these areas appear to be very important as a nursery area for red king crab. Additional analyses should be conducted to verify this prior to any increased disturbance, such as an assessment of the cumulative impact of varying scales of recreational and commercial dredging on life-history stages of red king crab. Important considerations would include the timing of larval release, nearshore larval drift studies, and ontogenetic movement. If the area is a critical nursery or mating area then the footprint of the dredging operations cumulatively could extend well beyond an estimate of the operational footprint as environmental disturbance such as plumes and vibration may grow exponentially.

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Based on recommendations from our Ecosystem Committee and Crab Plan Team, the Council remains concerned about the potential impacts of these activities on EFH for red king crab, and about the potential cumulative impacts of these activities and other activities in Norton Sound on red king crab EFH. To address these concerns, the Council recommends that the Corps fully scope and address both the impacts of dredging in deeper (>30 ft) water, and the cumulative impacts of recreational mining in the area. The results of this scoping process will inform the Corps as to whether an Environmental Assessment or Environmental Impact Statement is the appropriate analysis to evaluate the potential impacts of issuing permits for dredging in Norton Sound. The Council also recommends that the Corps fully engage the communities of the Norton Sound region, stakeholders from the Norton Sound region, and the Council in their evaluation process.

Thank you for this opportunity to communicate the Council's concerns about new commercial scale dredging and increasing interest in recreational dredging in Norton Sound. We look forward to working with you as you evaluate the potential impacts of these and other activities on Essential Fish Habitat in Norton Sound.

Sincerely,



Chris Oliver  
Executive Director

CC: Jim Balsiger, NMFS Regional Administrator  
Cora Campbell, ADF&G Commissioner



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

June 5, 2013

Chairman Olson  
North Pacific Fishery Management Council  
605 W. 4th Avenue, Suite 306  
Anchorage, AK 99501

**RE: Alaska Department of Fish and Game real-time VMS access**

Dear Chairman Olson,

Thank you for your letter dated April 17, 2013 regarding the Alaska Department of Fish and Game (ADFG) access to VMS data via the current software (vTrack). Though we have resolved the issue at hand, it is important for you and the Council to have the following background information and timeline which highlights the complexity of the issue.

#### **BACKGROUND**

VMS real-time data identifies the current location of a vessel. Though there is some ability to surmise the activity of a vessel by observing the on-screen depiction of the data, it does not identify the vessel's activity with any certainty and does not capture catch data. The functionality of the VMS software (vTrack) in conjunction with landings data and observer data may assist with management decisions. Absent other data, VMS real-time data simply identifies a vessel and its current location. The VMS real-time data can and has been used with platforms other than vTrack with success.

NOAA Office of Law Enforcement (OLE) offers direct access to VMS data, by way of vTrack accounts, to personnel in the fisheries law enforcement offices of our Joint Enforcement Agreement (JEA) partner States. We make VMS data available to State fisheries management offices by request without providing direct access to the System. This differentiated data-sharing practice holds true for all of our JEA partner states.

- In June 2012, OLE conducted an audit of all JEA vTrack user accounts.
- NOAA identified five ADFG accounts that appeared to fall outside of the national data access policy. It was determined that the users were not sworn law enforcement personnel and not employed by the Cooperative Enforcement Program (CEP) partner organization. An email was sent on 10/23/2012 to give the affected account-holders notice that their accounts had been disabled.



- Director Buckson received a letter from the Commissioner of ADFG, dated 12/19/2012, which requested reinstatement of the disabled vTrack accounts. Director Buckson denied the reinstatement of the accounts in his response letter dated 01/24/2013.
- In preparing a response for the ADFG Commissioner, OLE made additional inquiry into ADFG's uses of and need for VMS data. After discussions with the AK Troopers, our AK Divisional leadership, and also after a 01/07/2013 call with Karla Bush of ADFG, it was not made evident to OLE that real-time data was especially critical to AK's management efforts so as to warrant an exception to our policy and to give special allowance to the state of Alaska.
- ADFG has a need for vTrack functionality for use with landings data and observer data to manage AK fisheries in-season.
- The details of the original agreement that was made to create the ADFG accounts is vague. The request from ADFG for an agreement in 2007 is documented, though there is no record of an MOU or other final agreement. Nicole Kimball from ADFG indicated in an 07/06/2012 email, that it was her "understanding thus far is that there was no formal signed MOU/agreement,..." ADFG access was granted via a memo from OLE serving as an agreement.
- OLE's national data policy is intended to ensure the system is optimized and available for law enforcement purposes while providing the data to other users as requested.

While the Office of Law Enforcement's long standing VMS data access policy does not provide for real-time VMS access to the nation's State fishery managers, we have determined that the development and management of the Bering Sea and Aleutian Islands King and Tanner Crabs Fishery Management Plan and the Scallop Fishery off Alaska Fishery Management Plan create a unique management structure that will allow us to provide the requested access to VMS data for Alaska Department of Fish and Game employees who are responsible for FMP development and monitoring.

We have concluded an exhaustive examination of the unique state versus federal fisheries management relationship for those Alaska Region, federal FMPs that delegate/defer management of their subject fisheries to the State of Alaska. The result is OLE's conclusion that the affected State employees are managing these federal fisheries to an extent that, in effect, situates them as federal fishery managers. By policy, we do give real time VMS data access to federal fishery managers, and so we will reinstate the affected State employees' vTrack accounts.

We will provide Commissioner Campbell, Alaska Department of Fish and Game a copy of this letter with instructions on the process to reactivate the ADFG employee VMA accounts.

Sincerely,



Bruce Buckson

Director, NOAA Office of Law Enforcement

cc: Tracy Dunn, Kelly Spalding, Jim Balsiger, Matt Brown

other fisheries, such as the salmon troll fishery and any state waters pacific cod fishery, if it is possible they will land IFQ species.

#### Review of EM Strategic Plan:

Martin provided an overview of national EM initiatives and the recent NMFS Policy Directive. Major highlights include further work at national level to finalize white papers, coordinate with specific regional efforts, and interact with Council Coordination Committee (Dan Hull is member of CCC subcommittee for EM). The Council's work is well aligned with the Policy Directive, which is enabling rather than prescriptive.

Farron Wallace and Martin provided the OAC with the EM Strategic Plan. Farron noted low rate of volunteers for pilot project – this is an issue the agency and industry will continue to address (see further discussion below).

OAC identified SWOT aspects of the operational environment in which the EM Plan is being developed and implemented. Weaknesses identified are that the Plan does not adequately reflect the objectives and priorities already expressed by the Council, and is focused more on capacity building than on actual implementation. Some members felt that opportunities which are not adequately detailed in the Plan include existing outside expertise from previous EM projects, including the Canadian program and others. Regarding costs, rather than be passive (measuring costs) the Plan should attempt to identify a more specific cost target and identify measures to achieve it, including how to balance costs with objectives and priorities. The OAC did acknowledge that the pending EM workgroup can work further on those issues.

OAC members provided a variety of over arching comments about the Strategic Plan that indicated an understanding that it is a big picture view of developing and integrating EM into the Observer Program across fisheries, and that this is appropriate. However, the connection between the big picture view and the specific steps to achieve the initial EM priority (to develop EM for the small boat IFQ fleet) of the Council are not as clear. The Strategic Plan should include specific discussion of how to prioritize among various (potentially competing) monitoring objectives and specify timelines for each; i.e., more specific information on 'where the rubber meets the road', and a clearly defined funding stream for the EM component. **The OAC believes catch estimation should be the EM priority, at least for sablefish and halibut fisheries, noting that the Canadian (logbook) model might be more appropriate for fixed gear cod fisheries and other (more PSC driven) fisheries.** This is likely to be an iterative implementation process, with decision points along the way. Plan ideally should have a more specific 'phase-in' component to allow initial, limited, on-the-water implementation which would allow for resolution of incremental aspects rather than wait until everything is deemed workable. For example, it is difficult to discern a specific definition of the 2013 pilot project, although it is discussed in the text and appendices of the Strategic Plan. This could also be a primary task for the EM workgroup.

Regarding the EM Workgroup – 1) OAC supports the Council's original focus for the workgroup to evaluate alternative EM approaches, with a consideration of tradeoffs between achieving monitoring objectives, timelines, and other factors (e.g. costs, disruption to fishing practices) (see April 2013 council motion); 2) Work group should identify performance standards, operational procedures, sampling and deployment plan appropriate for these vessels (for QS vessels) and also look at implementation vehicles and potential phase-in approaches; 3) Sections of the strategic plan that can guide the workgroup are shown on page 14 (Goal II, Objective 1, Strategy C) and page 16 (Goal III, Objective 1, Strategy A); 4)

Work group should focus on developing a catch estimation based program for the IFQ fisheries rather than a logbook audit approach;5) Regarding composition, the workgroup should be a subgroup of OAC along with a couple other industry members with technical expertise and broad outreach connections, and include appropriate agency personnel. Broad outreach connections could help to increase interest and participation in the EM pilot projects, which are necessary to develop performance standards in regulation and move EM forward as a regulatory alternative. The workgroup members could also include vessels greater than 57.5' and representatives of other fixed gear types (pot and jig). Regarding timing, the workgroup should meet this fall (perhaps in conjunction with October Council meeting) and again prior to the beginning of the 2014 season.

Regarding the lack of participation in the current voluntary program, the OAC encourages the Council to consider vehicles to effect this implementation (perhaps through an EFP process, including a process for specifically testing system operations, as well as incentives for vessels to participate (such as a waiver/release from observer coverage when carrying EM). Offering a release from carrying an observer might be a different question if under an EFP vs under the current pilot project structure (which would be a specific regulatory change and guidance to date has suggested performance standards are necessary in regulation). Other incentives to carry EM should also be considered if release from the observer requirement is not possible. These could include financial incentives, such as direct compensation.

Regarding timing and urgency, most OAC members reiterated their desire to see some form of EM implemented ASAP. Other members were more concerned with making sure we 'get it right', and resolve data quality issues, and receive at least some observer data from the previously unobserved fleets prior to implementation.

Two committee members were concerned that we are not discussing VMS specifically in the context of potential EM applications. It was noted that the Council intends to revisit the overall VMS issue once the EM Strategic Plan is more fully realized.

At least one member expressed concern with the possible management tool of crew collecting data, and with statements in the strategic plan about EM replacing observers.

Regarding the potential use of an EFP (appendix H), one advantage could be that vessels would be more eager to join a voluntary program, particularly if they would have an incentive...i.e., be exempt from carrying a human observer. An EFP could also include a clear way to test equipment and attainment of objectives, but an application for an EFP would have to be received in order for the specific design to be evaluated.

#### Review of Regulatory Amendment Proposals:

##### Major Discussion Points:

Chris summarizes proposals received to date, noting that some are regulatory proposals, some could be addressed through the ADP, and some are separate initiatives.

OAC consensus is that criteria of highest importance by which to evaluate regulatory proposals are: bias in data quality, cost equity, cost savings, and enforcement. Then ask "can this be addressed through ADP rather than reg amendment process?". Examples: tendering issue may be addressed through ADP. Cost equity related to the method of fee collection for IFQ fleet. Council has already asked for discussion (in ADP) about allowing vessels to choose to be in either trip selection or vessel selection pool.

**Discussion of specific proposals:**

UCB proposal to allow them to be in 100% coverage – they could continue to sign a compliance agreement and not need reg amendment in short term. But, enforcement wants reg requirement for 100% coverage. Payment of fee, in addition to direct-pay, implies cost equity issue (250k approximately at 1.25%). Request is to be exempt from fee, which would require reg amendment. OAC supports moving forward with this proposal.

Vessels that act as both CVs and CPs – raises cost equity issue, likely inadvertent impact. OAC supports moving forward with this reg amendment change, looking at changing control date, and an option to choose on annual basis.

Allow choice between trip and vessel selection pool – already requested by Council in 2014 ADP, and supported by OAC for future consideration. In June 2014 there should be more information to inform this issue. Noting that under the ADP there is a recommendation to consider changing from two month to one month deployment obligation.

Changing method of fee collection for IFQ fleet (i.e. use standardized, current-year price rather than standardized price based on previous year; and bill vessel (rather than processors/registered buyers) for entire fee) – raises cost equity issue, was analyzed in original restructuring analysis. OAC supports moving forward for additional consideration as reg amendment.

EM performance measures – no action, being addressed through existing channels.

AGDB proposals – tendering being addressed (potentially) through the 2014 ADP. May require reg amendment in future. Regarding the 72 hour issue, it is not a priority problem at this point, so not necessary to pursue a fix yet.

Proposal to use tonnage as basis for observer coverage selection: raises a data quality/bias issue. To be addressed through information in 2014 performance review.

**Review of 3<sup>rd</sup> Party Issue:**

Chris provided overview of previous 3<sup>rd</sup> party efforts, and the range of possibility for the role and responsibilities of a 3<sup>rd</sup> party entity, and requested further clarity on what we mean today when we say ‘3<sup>rd</sup> party’, prior to devoting additional staff resources to this issue. The type of 3<sup>rd</sup> party construct currently envisioned will affect liability and contracting questions, as well as potential cost savings.

From the perspective of the OAC, the 3<sup>rd</sup> party concept has particular potential for implementation of the EM component specifically (perhaps through the EFP vehicle), which could potentially integrate all aspects of EM implementation under a single operational and administrative structure. The OAC would like to see further consideration of this concept within the work of the EM workgroup. Potential cost savings (application of federal procurement rules, labor law, etc) could still be explored within this more refined 3<sup>rd</sup> party construct.

## Observer Advisory Committee

June 3-4 2013 Juneau, Alaska

Committee members present: Dan Hull (Chair), Bob Alverson, Julie Bonney, Michael Lake, Dan Falvey, Kathy Hansen, Stacey Hansen, Anne Vanderhoeven, Paul MacGregor, Jerry Bongon, Joel Reyfuss, Todd Loomis, Brent Paine

Agency Staff: Chris Oliver, Glenn Merrill, Martin Loeffled, Craig Fonce, Jennifer Modragon, Megan Peterson, Nicole Kimball, Jim Balsiger, Tom Meyer, Mary Furuness, Gretchen Harrington, Gregg Williams, Diana Evans, Michael Camacho, Nathan Logerway, Frank Bonadona, Jason Gasper

Others attending: Liz Mitchell, Linda Behnken, George Hutchings, Peggy Parker, Jeff Farvour, Brian Lynch, Luke Szymanski, Dale Kelly, Megan Pasternack

### Review of first year implementation (and annual deployment plan)

Overall, the OAC recognized that the restructured program was functioning largely as intended in the 2013 ADP. While some specific concerns were raised (see more detail below), full coverage was achieved for all full coverage vessels, nearly all non-AFA pollock deliveries, and coverage rates were as expected.

The OAC recognizes that major changes for 2014 are not practical, including changes in coverage rates for specific fisheries, and there is a need to continue to collect information on newly observed sectors. However, there might be minor changes to the deployment plan that we could make for 2014, which could be pursued this fall (based on issues raised in this report and/or information we may receive this fall). This report focuses on deployment of coverage in the first 4 months of the program, rather than the data resulting from that deployment (which could be used in the future for informing changes to coverage rates by fishery).

The program review raised concerns with regard to tendering and the 'observer effect' which may be occurring. There appear to be differential effects by area. Addressing the concern raised about tenders may require a regulatory amendment or may be addressed to some extent through the 2014 deployment plan. There was a request to identify both trips (leave port- return to port) and deliveries (offloads to tenders) in future presentations about tenders. The agency will consider ways to address tenders over the summer, collect more information, and may have recommendations in this regard for the 2014 annual deployment plan (ADP).

The OAC recommended that future annual performance reports about the observer program include information on the volume of catch observed in both vessel and trip selection pools, recognizing we need to be clear as to the definition of observed catch (catching vs delivering). Also, the OAC would like to know in trip selection how many vessels were picked for sequential trips and how many trips they took.

Regarding the vessel release process, the OAC noted that more than half of the vessels selected in the vessel selection pool were 'released' (most of these due to crew size problems), highlighting difficulty for small vessels to carry observers. Once released, need to clarify how long the release is good for (just the trip or the quarter?). Need to clarify that vessel modification is not a requirement (some vessels seem to be getting conflicting information in this regard from NMFS). Regarding releases for life raft capacity, we should monitor how big a problem this is or becomes. Some release requests are taking too long to get

processed, or get repeated when a vessel is selected multiple times. There should be some way to store this information, recognizing that changes could have occurred changing the vessel's status. Need to consider allowing 'de minimus catch' as a criterion to receive a release, for very small 'cleanup' trips. Should consider allowing EM as a condition for release (though guidance to date has suggested this would be a regulatory change – see further discussion under EM Strategic Plan).

RE departures from intended sampling design (bias) the OAC would like to get agency recommendations on how significant each of them are and how best to proceed in addressing them.

Regarding program costs, a number of issues were raised which could inform future iterations of the deployment plan and/or coverage levels, and inform relative to cost efficiencies/priorities. These include: more specific information on why the current program costs twice as much per day as direct-pay observers; number of vessels which were repeat selected; how much volume or how many sets were sampled relative to overall vessel activity (what percentage); how much catch was actually observed; how many stand by days are included in billable days vs actual days observing at sea for vessel selected pool; what were the reasons for the stand by days; regarding the two month deployment for vessel selection, consider shortening to one month; consider logistics/location of debriefing process. The OAC hopes to have further discussion of these cost issues, and overall program costs, as previously requested by the Council in December 2012, during the annual performance review in June 2014.

As a longer term project, the OAC would like to consider that it may be useful to tease out potential observer effect between trip and vessel selection pools and help determine whether there really is the need for two pools. The OAC would like the Council, at some point, to consider whether and how to base coverage on tonnage of catch (or anticipated catch). The full year's data provided in the annual performance review in June 2014 will further inform these issues and assist the Council in understanding whether the current deployment sufficiently tracks effort and volume.

Other information requests or recommendations include the following: (1) Include in a questionnaire, or voluntary post-trip report by skippers information on the impacts/costs of having an observer onboard (logistical issues/challenges and in terms of cost); (2) consider, in the 2014 ADP, that the vessel selection timeframe be 1 month instead of 2 months. However, there was some concern with vessels being more easily able to avoid coverage by not fishing during the one month period. So perhaps there is a way to address the observer effect of vessels choosing not to fish in the shorter time period, if you get automatically selected for next time period? (3) Figures 5 and 6 (the heat maps) should be broken out by BSAI and GOA separately; (4) what/where is the information from halibut vessels being used and is IPHC using the basic discard info in any way yet? (5) comparison of shoreside monitoring pre and post implementation; (6) identification of any contracting issues with current contractor; (7) number and nature of violations being pursued by OLE; (8) how many observers available for each pool; (9) how many trips to tenders in 610 and 620 (pre restructure vs after); (10) 'stranding' of observers if trip canceled; (11) non-compliance issues should be further specified; (12) projection of total observer fees being collected in 2013.

OAC members reiterated that the conditional release from the observer requirement is important and that the conditions for release should not change in the 2014. Two additional conditions for release were requested to be considered: 1) release for vessels fishing very small amounts of quota held by an IFQ holder; and 2) release for participating in the voluntary EM projects (see EM Strategic Plan discussion below). In the first case, vessels holding IFQ are required to carry an observer when they participate in

**NOAA Office of the General Counsel**  
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Prepared for June 2013 Council Meeting

## **REPORT**

To the North Pacific Fishery Management Council

- A) Cases referred to GCES/AK by NMFS/OLE from April 1, 2012 through May 17, 2013: 19
- B) Settlements/Dispositions - Aggregate Penalties (including forfeited amounts, but not including suspended amounts) paid, promised or defaulted from April 1, 2012 through May 17, 2013: \$478,242.98 (10 cases)
- C) NOVAs - Aggregate Penalties ( including seized proceeds) assessed from April 1, 2012 through May 17, 2013: \$2,913,686.52 (18 cases)
- D) Description of Notices of Violation and Assessment issued from May 1, 2012 through April 30, 2013:
1. AK0804849; F/V BLUE PACIFIC, Respondent charged with multiple counts of failing to notify the NMFS observer at least 15 minutes prior to fish being harvested on board, NOVA issued with \$24,000.00 proposed assessed penalty. (Settled)
  2. AK0900589; F/V ALPINE COVE, Respondents charged with fishing for 30 days in the first calendar quarter of 2009, but carried an observer for only five of those days, which was four days short, is charged with failing to ensure the communication equipment used by observers to enter and transmit data is fully functional and operational, and is also charged with engaging in directed fishing for Pacific cod within the 10 nautical mile no-fishing zone at Tigalda/Rocks NE. NOVA issued with \$15,911.00 proposed assessed penalty.

3. AK1000315; F/V ALPINE COVE, Respondents charged with engaging in directed fishing for Pacific cod within the Sea Lion Rocks (Shumagin) 3 nautical mile no fishing zone. NOVA issued with \$18,494.00 proposed assessed penalty.
4. AK1001309; F/V KASATKA, Respondent charged with fishing for and landing Pacific cod when said vessel was authorized under its Federal Fisheries Permit (FFP) to fish with hook-and-line gear in the directed fishery for Pacific cod, without an operable VMS because he had failed to pay all charges levied by SkyMate, the communication service provider. NOVA issued with \$8,264.00 proposed assessed penalty.
5. AK1003465; F/V ALPINE COVE, Respondents charged with engaging in directed fishing for Pacific cod within the Unalaska Island/Cape Izigan 10-nautical-mile no fishing zone. NOVA issued with \$20,223.00 proposed penalty.
6. AK1003469; F/V REAGAN, Respondent charged with acting for himself and on behalf of Regan LLC, engaged in directed fishing for Pacific cod within the Pacific cod no fishing zone in the Rootok Steller Sea Lion Protection Area, NOVA issued with \$26,602.00 proposed assessed penalty and \$3,296.40 in seized proceeds. (Paid)
7. AK1102181; Sidney Bouschor, Respondent charged with operating an unpermitted charter halibut operation, NOVA issued with \$30,300.00 proposed assessed penalty. (Settled)
8. AK1102931; F/V CLIPPER SURPRISE, Respondents charged with forcibly assaulting, opposing, impeding, or interfering with an observer. Respondents caused an explosive device to detonate close to NMFS fishery observer, which affected the observer's hearing and interfered with work performance. NOVA issued with \$4,500.00 proposed assessed penalty. (Hearing held 3/4/13)
9. AK1101557; F/V OCEAN ROVER, Respondent charged with acting for himself and on behalf of Ocean Rover LLC and American Seafoods Company LLC, with processing pollock, and other groundfish that were not weighed on a NMFS-approved scale that meets the Maximum Permissible Error of plus or minus 3 percent, and which was not maintained in proper operating condition throughout its use, providing inaccurate information in the DCPL, and adjusting the scale to bring the performance errors away from a zero value. NOVA issued with \$848,000.00 proposed assessed penalty.

10. AK1101259; F/V PROVIDENCE, Respondent charged with fishing for and harvesting approximately 10,344 pounds of IFQ halibut in International Pacific Halibut Commission Regulatory Area 3A and reporting in the IFQ Landing Report as having caught said halibut in IPHC Regulatory Area 3B. NOVA issued with \$64,260 proposed assessed penalty. (Settled)
11. AK1103859A; F/V LETUN, Respondent charged with violating the requirement that an IFQ fisherman be aboard the harvesting vessel during harvesting operations and with falsely reporting the IFQ credited to IFQ account. NOVA issued with \$89,713.96 proposed assessed penalty. (Settled for IFQ permit sanction)
12. AK1103859B; F/V LETUN, Co-respondent (vessel owner) charged with submitting false PNOL and making a false statement to NOAA enforcement officers in furtherance of above violation (conspiracy) by reporting on PNOL that IFQ owner had been aboard vessel during harvesting operations and when asked by NMFS agents stating the same, when IFQ permit owner had not been aboard harvesting vessel. NOVA issued with \$30,000 proposed assessed penalty. (Settled for IFQ permit sanction)
13. AK1103886; F/V CATITA, Respondent charged with acting for himself and on behalf of Aquatic Edge Expeditions, LLC, with operating in regulatory area 2C with one or more charter vessel anglers on board who caught and retained halibut without an original valid charter halibut permit for the regulatory area and is also charged with possessing halibut on board a vessel that had been filleted mutilated, or otherwise disfigured. NOVA issued with \$19,750.00 proposed assessed penalty. (Hearing requested)
14. AK1104789; Troy Quinlan, Techsea International, Respondent charged with deploying an observer on the same vessel for more than 90 days in a 12-month period, NOVA issued with \$10,000.00 proposed assessed penalty. (Settled)
15. AK1200005; F/V IFICIENCY, Respondent charged with conducting a fishing trip for Pacific cod, a LLP species, in federal waters in the Gulf of Alaska without the vessel being named on (possessing) a License Limitation Program permit as required, NOVA issued with \$2,000.00 proposed assessed penalty and \$4,627.40 in seized proceeds. (Settled)
16. AK1200300; F/V PACIFIC CHALLENGER, Respondent charged with conducting directed fishing for Pacific cod in Western Gulf area of the Gulf of

Alaska without having a License Limitation Permit, NOVA issued with \$325,441.76 proposed assessed penalty (\$12,500 penalty + \$312,941.76 [value of unlawfully harvested fish]). (Hearing requested)

17. AK1200532; F/V NORTHERN EAGLE, Respondent charged with acting for himself and on behalf of Northern Eagle LLC and American Seafoods Company LLC, with processing pollock, and other groundfish that were not weighed on a NMFS-approved scale that meets the Maximum Permissible Error of plus or minus 3 percent, and which was not maintained in proper operating condition throughout its use, and providing inaccurate information in the DCPL. NOVA issued with \$1,337,000.00 proposed assessed penalty.
18. AK11200570; F/V AUTOMATIC, Respondent charged with falsely claiming to have harvested 171 pounds of sablefish in IFQ area CG. VMS demonstrates the vessel never entered IFQ area CG during fishing report. Respondent is also charged with harvesting 171 pounds of IFQ sablefish without sablefish IFQ in area WY. NOVA issued with \$31,303.00 proposed assessed penalty.

Written Warnings issued: 12

Cases Dismissed: 2

To achieve this challenging goal we propose that the Council undertake a process to set aside a swath of representative habitat from the top of the shelf edge to the depths in the canyon for conservation and modification of fishing effort.

Let's think about this unique complex of canyon/shelf ecosystems as a great asset in which to INVEST. Just as one would do with a big pot of capital – let's set it aside and invest in it with care and precaution. Rather than drawing down on the capital; we will benefit from the dividend.

**\*\*Conclude\*\***

Also: brochure on the Pribilof Domain submitted to Council members.

clear that this is distressing to the fishermen and industry. WWF feels that an approach to protect a portion of the shelf edge that has been consistently productive would help to sustain fish for the future.

We must look now ahead, and plan for ecosystem resilience in the face of major change. We can do that by ensuring viability of the VERY ENGINES that power THE ecological integrity of the Bering Sea.

The first engine is productivity - which allows the ecosystem to encourage growth of harvestable living things and biodiversity.

The second engine is diversity. Larger numbers of different kinds of life and habitats help complex ecosystems to respond and adapt to environmental change while remaining largely intact.

WWF is often recognized for its charismatic panda logo. And indeed, we help protect pandas in China, and tigers in India. But these species are really just indicators of their broader ecosystems and ecological functions. Similarly, Skate nurseries, corals, and FMP species are key components for conservation but we musn't overlook the broader ecosystem.

The Magnuson Stevens Fisheries Conservation Act directs us to sustain the nation's fisheries resources and the ecosystems that support them.

The Council can do that.

WWF has been impressed with the Council's willingness to take aggressive stands for conservation. Among the most striking of these is the development of an FMP for the Arctic. That decision was applauded around the world as a proactive management measure. Now it is time to do that for the canyon-slope-shelf complex.

marine mammals and seabirds, including rare species such as the Short-tailed Albatross, gather are attracted to the green belt, and concentrate especially near the canyons.

The NRC — pointed clearly to the significance of the physical contours of the shelf break and associated canyons. The NRC described :

“important mesoscale variability in patterns of primary productivity and upwellings at the edge of the continental shelf” as critical processes that supply nutrients to the euphotic zone during the summer and thus extend the growing season well beyond the period of the spring bloom.”

In 1997, the State of Alaska launched its own Bering Sea Ecosystem project, which recognized a number of species declines and SHOWED the importance of the central Bering Sea for wildlife and people, particularly the people of the Pribilof Islands, a vibrant ecosystem -nfs, seabirds - fed by that GREEN FACTORY —AND HAD EARNED THE NICKNAME GALAPAGOS OF THE NORTH.

In 2004, the Pribilof Islands Collaborative, a group composed of industry, NGOs, and representatives from both Pribilof Islands worked together to understand a host of changes in the Pribilof ecosystem.

Indeed, despite the region’s high productivity, we **know this is not a static state**. It is no longer a pristine place.

We could debate for years, as we have, the extent to which regime shifts or HUMAN CAUSES, are to blame for some of the declines and changes in the Bering Sea. But we cannot debate the fact that the world’s oceans are changing. Temperatures are rising. For the first time in 800,000 years, we now have 400 ppm of carbon dioxide in the atmosphere. The oceans are absorbing that carbon through a process called ocean acidification. Alaska’s waters are not immune, as Dr. Jeremy Mathis of UAF/PMEL has demonstrated over the last few years. It is

June 10, 2013

Mr. Chairman, members of the Council, my name is Margaret Williams, and I represent World Wildlife Fund, where I direct the Arctic Field Program. To achieve its international conservation goals, WWF acts through partnerships – with communities, scientists, NGOs, and the private sector, including the fishing industry.

In my testimony, I would like to:

- 1) Recollect the more than 20-year history of research and discussion of the unique qualities of the Bering Sea canyons and shelf edge. The idea for implementing conservation measures in this ecosystem is not new.
- 2) Reiterate that decades of research have shown the canyon-shelf break system to be an engine of vitality of the Bering Sea.
- 3) Suggest that conservation action now on the canyons and shelf break will benefit marine life and humans alike for decades to come. Conserving this ecosystem asset --- as though it were a windfall of capital -- will accrue ecosystem benefits and generate significant dividends for the entire food web....and that is MONEY IN THE BANK.

**So, bit of history:**

In 1995, in an analysis called the Global 200, hundreds of scientists from around the world identified the Bering Sea as one of the most important marine ecoregions in the world, selected for its remarkable productivity.

In 1996 the National Research Council completed a study which highlighted to the world the truly astounding qualities of the Bering Sea.

The NRC report followed seminal research in the 1980's by University of Alaska's Alan Springer, and others who described the role of the Bering Sea shelf edge as a so-called green belt, a virtual GREEN FACTORY of nutrients and plankton that support our fisheries today. The "green belt" brings gray whales from Mexico, and birds from the southern hemisphere. Millions of

**Subject:** Agenda Item RE: C7- Bering Sea Canyons  
**From:** Kathleen Henley <henleyjks@att.net>  
**Date:** 5/13/2013 12:13 PM  
**To:** npfmc.comments@noaa.gov

Dear North Pacific Fishery Management Council members,

It is critical that the North Pacific Fisheries Management Council act immediately to protect the Bering Sea Canyons. I urge the council to make protections for keystone cold-water coral and sponge habitat in Alaska a priority, starting with the Pribilof and Zhemchug canyons. If current fishing practices continue, the loss of deep-sea coral and sponge habitat will have devastating impacts on Alaska's fisheries.

Alaskan fisheries are still relatively vibrant, but the council should consider the fate of other fisheries when making management decisions in order to avoid making the same costly mistakes. Evidence from other formerly productive fisheries shows a strong correlation between loss of coral habitat and collapse of major fish and invertebrate stocks. For example, the collapse of the North Atlantic cod fishery has been linked to trawling damage of cold-water corals. It is important to prevent initial destruction of benthic habitat by restricting fishing activities, rather than attempting to protect coral areas after they have already been devastated by bottom-contact fishing gear, especially trawling.

The council must recognize that this is a critical time for fisheries management in Alaska. Marine environments worldwide are facing serious threats from anthropogenic greenhouse gas emissions. They are at the brink of serious and lasting changes in productivity due to ocean acidification processes, increasing water temperatures and changes in seawater circulation patterns. Human actions over the next 10 years will be critical to the fate of fisheries and marine ecosystems throughout the world.

Please be a leader in ensuring the long-term productivity of Alaska's fisheries by initiating a formal process to protect our most sensitive habitats, including the vulnerable coral and sponge communities in the Zhemchug and Pribilof canyons.

Thank you for your consideration of this important issue.

Kathleen Henley  
4715 NE 13th Ave  
Portland, OR 97211  
US

**Received approximately 23,000 copies of  
this letter.**

**Subject:** Grand Canyons of the Bering Sea  
**From:** "Bill Zager" <wfzager@wispertel.net>  
**Date:** 5/24/2013 9:38 AM  
**To:** <npfmc.comments@noaa.gov>

Dear North Pacific Fishery Management Council:

The Bering Sea Canyons are rare features occurring along the, as yet, unprotected Bering Sea shelf break - a highly productive marine zone known as the Green Belt.

As public stakeholders, we urge you make the adoption of protections for the Bering Sea Canyons and the fragile coral and sponge habitat within them a top priority. Especially important is protecting the area from damage by bottom-tending fishing gear—especially trawl nets—that destroys ancient corals and sponges that provide this essential habitat, including spawning and nursery areas for fish, crab, skates and other marine species.

Despite the ecological and commercial importance of the Bering Sea shelf break there are currently no protected areas along this entire Green Belt.

As prudent stewards of one of our nation's most valuable marine resources, please lead the nation forward this June by initiating a formal process to protect our most sensitive habitats, including the vulnerable coral and sponge communities in Zhemchug and Pribilof canyons, that support the long-term productivity of our fisheries. Thank you.

Sincerely,

Bill Zager  
Golden, CO

# TRADER JOE'S

Matt Sloan, V.P. of Marketing  
800 South Shamrock Avenue  
Monrovia, CA 91016  
(626) 599-2813 • msloan@traderjoes.com

May 15, 2013

Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252

RECEIVED  
MAY 17 2013

RE: Upcoming Agenda Item C-7: Bering Sea Canyons & Research Related to Fishery Management Plans in the Bering Sea Canyons Area

Mr. Olson and Council members,

As a grocery retailer, Trader Joe's works to offer seafood options that fit our customers' needs—ranging from food safety and taste, to concern over the environment. In support of our work on behalf of our customers, we established a goal to make all our seafood purchases from sustainable sources.

It is our intent to have this goal function as a seafood policy that addresses customer concerns including issues of over-fishing, destructive catch or production methods, and the importance of marine reserves. We aim to use our purchasing power to leverage change within the seafood supply community.

To that end, I am writing to convey our opinion of the importance and necessity of research and in-depth analysis of the best available science on the Bering Sea Canyons to establish protections for canyon habitats (Zhemchug and Pribilof). We've heard similar feedback and support for NPFMC research from our seafood suppliers.

Commercial fisheries must be both biologically and economically sustainable, and we count on the NPFMC to develop management options for the vital fisheries of the Bering Sea.

Thank you for your time and consideration.

Sincerely,



Matt Sloan  
VP of Marketing  
Trader Joe's

May 27, 2013

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252  
RE: C7 - Bering Sea Canyons

Dear Chairman Olson and Council Members,

We are the Luke and Nolan Zotter from Avon grove school district in Avondale, Pa. Mrs. Sciotto talked to us about the Bering Sea Canyons and how overfishing affects us. We are concerned with the overfishing because that is where 50% of our fish comes from. We are willing to sacrifice getting less fish so future generations have a thriving fish industry. We also want to enjoy eating fish with our children. We also care that natives of Alaska need to these fish to survive. We would like you to take action to curb fishing and create a no fishing zone. So we ask you please to consider our request to protect the Bering Sea.

Sincerely,

Printed name: Luke and Nolan Zotter

Address: Avon Grove School District

Email: [zottermichelle@comcast.net](mailto:zottermichelle@comcast.net)

May 27, 2013

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252  
RE: C7 - Bering Sea Canyons

Dear Chairman Olson and Council Members,

I am Samantha Sciotto 10 years old and in 4<sup>th</sup> grade. One of my favorite things to do is play in the ocean. My mom told me about the Bering Sea Canyons and I want to help protect. I want to help the whales, walrus, polar bears, seals and all marine life that live there. I want to make sure they always have enough food to eat and me too. Thank you for reading my letter and I hope you create a no fishing zone in the Bering Sea Canyons. Maybe I could help take care of them one day when I get older. I can't wait until I hear that it is protected a no fishing zone. Peace!

Love,

Printed name: Samantha Sciotto

Address: 1114 Thunder Hill Rd Lincoln University, Pa 19352

Email: Cindysciotto@comcast.net

May 27, 2013

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252  
RE: C7 - Bering Sea Canyons

Dear Chairman Olson and Council Members,

I am Nicky Sciotto 11 in 5<sup>th</sup> grade. I have been researching articles about the Bering Sea Canyons with my mom. I can't believe they do bottom trawling to those amazing Canyons. Corals and sponges in the deep canyons are critical to the ecosystem and all the fish that live there too. I am asking to protect marine reserves that restrict fishing gear that damages vital habitat. I am 11 years old and want these canyons to be around so one day I can visit them and see all the amazing marine life. I ask that you protect these by creating a no fishing zone. Please take care of Bering sea canyons so future generations can enjoy them too. Thank you so much for protecting these canyons and marine life.

Sincerely,

Printed name: Nicky Sciotto

Address: 1114 Thunder Hill Rd Lincoln University, Pa 19352

Email: cindysciotto@comcast.net

Date:  
Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252  
RE: The Bering Sea, Agenda Item ( ) C7-b

Dear Chairman Olson and Council Members,

DON'T Fish in the  
Bering sea! Fish and other marine  
life need the space to live, and  
produce more fish. I don't eat fish  
because I don't support you fishing  
in this area. Fish are friends we  
need to respect them!  
We want protection  
of the habitat to  
keep the population and  
ocean full of life.

Sincerely,

Printed name: Jessica Haggard

Address: 959 Pepper RD

Email: jessicahaggard@yahoo.com

Date: May 23, 2013  
Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252  
RE: The Bering Sea, Agenda Item (C7-b)

Dear Chairman Olson and Council Members,

Please could you help to protect the Bering Sea, the plants, animals, fish and birds within and the communities that rely on it by declaring the canyons within the Bering Sea as no-catch zones.

You have the ability to choose the future of the Bering Sea fisheries and ecosystems. I ask that you make that choice with future generations in mind and protect the Bering Sea canyons.

Sincerely,

Printed name: DANIEL MCGREGOR

Address: 6554 25<sup>TH</sup> Ave NW  
SEATTLE, WA 98117

Email: dannymcgp@gmail.com

Date: May 23, 2013  
Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252  
RE: The Bering Sea, Agenda Item (C7b)

Dear Chairman Olson and Council Members,

Please could you help to protect the Bering Sea, the plants, animals, fish and birds within and the communities that rely on it by declaring the canyons within the Bering Sea as no-catch zones.

You have the ability to choose the future of the Bering Sea fisheries and ecosystems. I ask that you make that choice with future generations in mind and protect the Bering Sea canyons.

Sincerely,

Printed name: DANIEL MCGREGOR

Address: 6554 25<sup>TH</sup> Ave NW  
SEATTLE, WA 98117

Email: dannymcgp@gmail.com

May 23, 2013

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252  
RE: C7 - Bering Sea Canyons

Dear Chairman Olson and Council Members,

As you may know we are limited in fish. There are lots of places in the world that you can fish at. McDonalds and one of the largest fishing companys in the world fish in the Bering sea. That means millions of fish are killed at taken away to be eaten. When the fish are taken away other animals loose their food such as whales and polar bears. Then if they don't have as much food as they need, they would die. Fifty percent of our fish come from the Bering sea, so we should not let people fish in the Bering sea, for our health and theirs. Please help keep clean our oceans.

Sincerely,

Caroline Short  
age-11

Caroline Short  
412 Bobs Lane  
Lincoln University, PA 19352

Date:

Mr. Eric Olson

Council Members

North Pacific Fishery Management Council

605 West 4<sup>th</sup> Avenue, Suite 306

Anchorage, AK 99501-2252

RE: The Bering Sea, Agenda Item ( ) C7-b

Dear Chairman Olson and Council Members,

As a concerned citizen I am writing to ask that you create a no-fishing zone in the Bering Sea.

This is a unique ecosystem that lies within one of the most productive and fished areas on the planet. These canyons are not only unique they are largely unexplored and provide a wealth of learning possibilities for future generations and are home to a wealth of sea life.

Current fishing practices, including trawling, are damaging this habitat before it has been explored. We have done enough damage to our planet by moving forward before we understand the effects of our actions. Please create a no fish zone so that this area can be preserved & the effects of our

Sincerely,

Marcia Caldwell

Printed name:

Marcia Caldwell

Address:

800 Evergreen Ln. MI. WA

Email:

Letter 5.pdf ☆

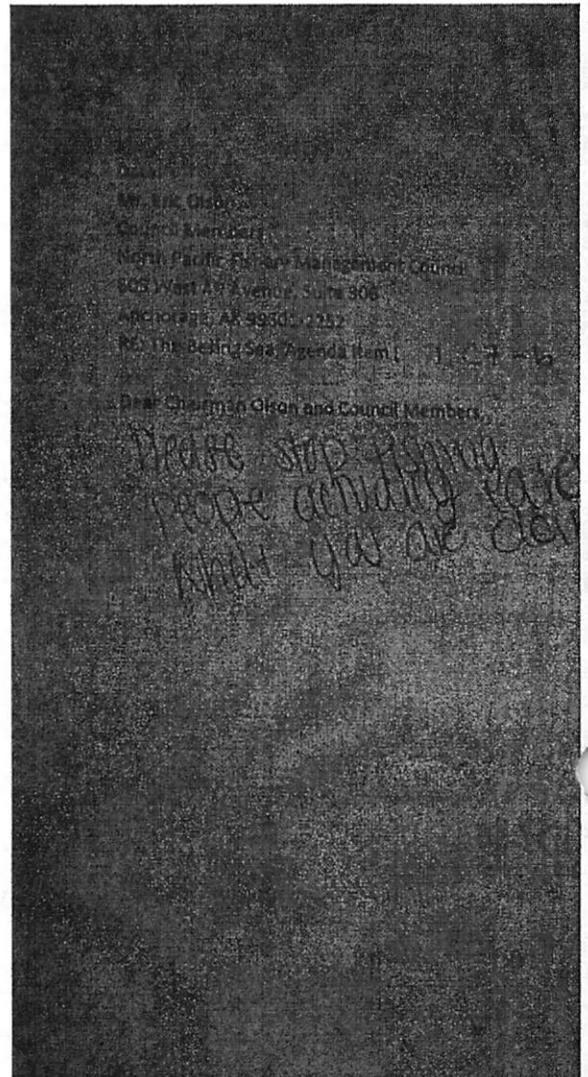
File Edit View Help

Comments Share

↓ ↻ ⏪ ⏩ 🔍



1



Date:

Mr. Eric Olson

Council Members

North Pacific Fishery Management Council

605 West 4<sup>th</sup> Avenue, Suite 306

Anchorage, AK 99501-2252

RE: The Bering Sea, Agenda Item ( ) C7-b

Dear Chairman Olson and Council Members,

My name is Sarah Watkins, and I am writing to you as a concerned citizen for the future of the Bering Sea Canyons and the countless species of fish and wildlife endemic to this region. By promoting industrial fishing in the canyon zone, you are quite possibly destroying entire ecosystems not found anywhere else on the planet, and with those ecosystems are also dying advancements in bioindustries such as medicine, food science and ecology. I believe that by working with organizations which promote sustainable fishing and consumerism, the American public can be moved to invest in a more healthful fish industry, both for themselves, the economy, and the planet.

Thank you for helping to protect our undiscovered habitats for our future generations.

Sincerely,

*Sarah Watkins*

Printed name:

Sarah Watkins

Address:

Email:

**From:** Darrell & Cindy Birkhimer <oakfronts@yahoo.com>  
**Date:** 5/28/2013 11:37 AM  
**To:** "npfmc.comments@noaa.gov" <npfmc.comments@noaa.gov>

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4th Avenue, Suite 306  
Anchorage, AK 99501-2252  
[npfmc.comments@noaa.gov](mailto:npfmc.comments@noaa.gov)

**RE: C7 - Bering Sea Canyons**

Dear North Pacific Fishery Management Council,

Despite the ecological and commercial importance of the Bering Sea shelf break there are not currently any protected areas along this entire Green Belt. I request the adoption of protections for the Bering Sea Canyons and the fragile coral and sponge habitat within them a top priority.

So little is understood about deep sea ecosystems or the connections between seafloor habitats and commercially important species, it is irresponsible not to set aside portions of the shelf break as a buffer. The Bering Sea Canyons are rare features occurring along the, as yet, unprotected Bering Sea shelf break - a highly productive marine zone known as the Green Belt. Bottom-tending fishing gear--especially trawl nets--destroys ancient corals and sponges that provide this essential habitat, including spawning and nursery areas for fish, crab, skates and other marine species.

As the stewards of one of our nation's most precious marine resources, please learn from the past and look towards the future this June by initiating a formal process to protect our most sensitive habitats (including the largest underwater canyons in the world, the vulnerable coral and sponge communities in Zhemchug and Pribilof Canyons) that support the long-term productivity of our fisheries. Once lost.....they will be gone forever.

Sincerely,

Cindy Birkhimer  
Homer, AK 99603



# SELDOVIA VILLAGE TRIBE

Tradition Integrated with Technology

RESOLUTION #2013-07

## RESOLUTION FOR ZHEMCHUG AND PRIBILOF CANYONS BERING SEA ALASKA

RECEIVED  
MAY 28 2013

**WHEREAS:** The Pribilof Island Communities of St. Paul and St. George Islands are uniquely situated in close proximity to both the Zhemchug and Pribilof Canyons, (Canyons) both located on the shelf break in the Bering Sea on the World's richest fishing grounds, often referred to as the "Greenbelt": AND

**WHEREAS:** The Pribilof Islands were home to the largest Northern Fur Seal breeding populations, until recent declines of up to six percent has decimated the populations to their lowest numbers in recorded history: AND

**WHEREAS:** The Aleut people of the Pribilof Islands have always considered it their God-given responsibility to protect the fur seal populations: and available evidence indicates that food stress may be the cause of these declines: AND

**WHEREAS:** It is the common belief amongst the Aleut people of the Pribilof Islands that whole sale trawling in the Bering Sea, in general, and in both the Canyons in particular is impacting the food web and increasing difficulty in finding available foods for the fur seal and the millions of birds on these Islands: AND

**WHEREAS:** These Canyons provide critical habitat to many of the species of fish and other marine life which forage, reproduce, and inhabit the Bering Sea: AND

**WHEREAS:** The overall health of the Bering Sea is critical to the survival of both St. Paul and St. George Island Aleut, who were relocated to these Islands by Russian fur hunters in the late eighteenth century from the Aleutian Islands to harvest the rich populations of fur bearing mammals found to inhabit these Islands never before inhabited by humans:

**NOW THEREFORE BE IT RESOLVED:** That it is the consensus of St. Paul and St. George Island Communities, that the Bering Sea is currently experiencing a "heart attack" due to industrial fishing and climate changes: that all areas within the Bering Sea regime necessary to protect the health of the fish and the foods both marine mammals, birds and the Aleut populations are dependent upon need critical attention:

**BE IT FURTHER RESOLVED:** That the Pribilof Island Communities of St. Paul and



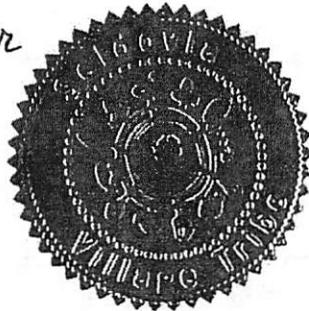
St. George requests that the North Pacific Fishery Management Council (NPFMC) take immediate steps to ensure, not only the recovery of the Northern Fur Seal populations, and the marine birds and fishes dependent upon food provided by the Canyons, but more importantly the health and cultural survival of the people inhabiting these Islands by protecting these Canyons.

This resolution was duly adopted at a Seldovia Village Tribe Council meeting held, May 15, 2013 by the following vote: 9 Ayes 0 Nays 0 Abstain

APPROVED:

*Crystal Collier*

Crystal Collier  
President



ATTEST:

*Trinket Gallen*

Trinket Gallen  
Secretary



March 25, 2013

**RECEIVED**

APR 29 2013

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252

RE: BS Canyons: Updated AFSC Report, Fishing activities and management discussion paper – June, 2013

Dear Chairman Olsen and Council members:

We are writing to convey our interest in ensuring that Zhemchug and Pribilof canyons in the Bering Sea are adequately protected given their important role in the ecosystem that supports our valuable fisheries. As a leading provider of commercial seafood in the US, we are an important stakeholder in US fisheries and we appreciate the opportunity to provide these comments with regards to the Canyons and the shelf break habitat that the Council is considering for potential management measures. We note that this agenda item is tentatively scheduled for June 2013 NPFMC meeting; however, should this agenda item be rescheduled we request our comments be held until that time.

The canyons are known to contain diverse corals and sponges that provide valuable habitat for commercially important fish and other marine species<sup>1</sup>. These two canyons harbor some of the most dense coral and sponge communities in the world, second only to the Aleutian Islands. Numerous fish and crab species utilize Canyon terrain at various life stages including as spawning and nursery areas, making these habitats potentially critical for recruitment and to sustain species populations. According to NOAA, commercially important species that utilize the canyons for essential fish habitat include rockfish, Pacific cod, halibut, pollock and several species of crab.

Due to their biology, benthic corals and sponges are extremely vulnerable to climate change and ocean acidification. Commercial fishing also threatens these invertebrates and recent studies have verified that bottom tending fishing gear has caused damage to coral and sponge habitat in the Canyons. Deep-sea corals and sponges are marine animals that do not require sunlight for nourishment and growth, but instead rely on the currents in the deep ocean to drive their productivity. Deep-sea corals are long-lived and slow growing; some Alaskan corals are more than 1,000 years old. When they are ripped from ocean substrate or crushed by fishing gear they are unlikely to recover, causing a habitat deficit that is difficult if not impossible to repay.

Sustainable fisheries maintain the diversity, structure and function of healthy ecosystems, which depends, in part, on minimizing fishing gear interactions with essential fish habitat. NOAA has stated "reducing bycatch and protecting habitat are two of the fundamental standards that drive the management of all fisheries."<sup>2</sup> Indeed, commercial fisheries cannot be biologically and economically sustainable in the absence of a robust and healthy ecosystem, and we depend upon NOAA and the NPFMC to ensure that fisheries in Alaska do not jeopardize the ecosystems that produce our seafood supply.

We wish to commend the Council for your leadership on this issue. In directing the Alaska Fisheries Science Center and Council staff to provide an in depth analysis of the best available science on the

<sup>1</sup> Miller RJ, Hocevar J, Stone RP, Fedorov DV (2012) Structure-Forming Corals and Sponges and their Use as Fish Habitat in Bering Sea Submarine Canyons. *PLoS One* 7(3): e33885.

doi:10.1371/journal.pone.0033885

<sup>2</sup> NOAA, Fishwatch U.S. Seafood Facts, [http://www.fishwatch.gov/wild\\_seafood/what\\_is\\_a\\_fishery.htm](http://www.fishwatch.gov/wild_seafood/what_is_a_fishery.htm)

Canyons and the historical fishing record in those areas you have set the stage for establishing new protections for vulnerable canyon habitats. With this action you have taken a strong first step towards realizing NOAA's number one stated objective for deep-sea coral and sponge conservation and management: protect areas containing known deep-sea coral or sponge communities from impacts of bottom-tending fishing gear<sup>3</sup>.

As a seafood business that is committed to building a market for sustainable seafood, we have a strong interest in insuring the health of ecosystems that harbor and nurture that seafood. We entrust you to make choices that will produce sustainable seafood for this and future generations. We urge you to move swiftly to begin developing management options that will protect America's Grand Canyons of the sea and the vital fisheries of the Bering Sea.

Sincerely,



Pete Pearson  
Director of Sustainability  
SUPERVALU Inc.



Martin Delinski  
Corporate Seafood Sourcing Manager  
SUPERVALU Inc.

---

<sup>3</sup> National Oceanic and Atmospheric Administration, Coral Reef Conservation Program. 2010. NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation. Silver Spring, MD: NOAA Coral Reef Conservation Program. NOAA Technical Memorandum CRCP 11. 67 pp.

## PETITION: RE: C7 - Bering Sea Canyons

To: North Pacific Fishery Management Council

The majority of the fish caught in the United States comes from the Bering Sea. Home to whales, seals, polar bears and underwater canyons teeming with life, the Bering Sea is one of our most productive ecosystems. Just like our national parks, we must protect ecosystems like the Bering Sea whose underwater canyons are larger than the Grand Canyon itself.

Fish depend on essential habitat for their survival. You have scientific evidence that fishing gear has destroyed the coral and sponge habitats in the Bering Sea Canyons. If destructive fishing practices continue in the Bering Sea Canyons we will lose more of the fragile and long-lived coral species that provide critical habitat in this vital ecosystem.

Besides providing deep-sea refuges and nursery areas for fish and marine life in the Bering Sea, Zhemchug and Pribilof Canyons are rare ocean features that fuel the Bering Sea food web through nutrient upwelling, seeding the Green Belt. Submarine canyons like these are found in only 4 percent of the world's oceans – and these are the largest anywhere. They are the "Grand Canyons" of the sea.

Protection of these unique canyons will play a critical role in sustaining our fisheries and will provide a buffer against the scientific uncertainty that is inherent in fishery science, and insure us against costly mistakes. Marine reserves are a powerful tool for ecosystem-based management and the conservation of ocean wildlife – they have consistently proven to increase the abundance, size, and diversity of fish.

We are not the first to ask you to conserve and protect these invaluable canyons. We urge you to act swiftly now to begin a process to identify measures to protect Zhemchug and Pribilof Canyons – a national treasure that belongs to all of us.

## 40,680 SIGNATURES

	NAME	COUNTRY	POSTAL CODE	DATE SIGNED
1	Laura Saxon	United States	32668	Mar 18, 2013
2	James Windon	United States	94117	Mar 18, 2013
3	Danii Montez Arellano	Mexico	27019	Mar 18, 2013
4	Ximena Montes Arellano	Mexico	27019	Mar 18, 2013
5	Edna Case	United States	18080	Mar 18, 2013
6	Robert Travis	United States	44139	Mar 18, 2013
7	Marilyn Cook	Australia	4124	Mar 18, 2013
8	Anna Patterson	United States	33414	Mar 18, 2013
9	Julie Ostoich	United States	95826	Mar 18, 2013
10	Leayne Steinback	United States	33625	Mar 18, 2013
11	Kellie Grimes	United States	12528	Mar 18, 2013
12	Leslie Rizzuto Dyer	United States	38305	Mar 18, 2013
13	Diane Carbo	United States	92708	Mar 18, 2013

**Subject:** Comments on Protecting the Bering Sea  
**From:** Darrell & Cindy Birkhimer <oakfronts@yahoo.com>  
**Date:** 5/28/2013 11:45 AM  
**To:** "npfmc.comments@noaa.gov" <npfmc.comments@noaa.gov>

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4th Avenue, Suite 306  
Anchorage, AK 99501-2252  
[npfmc.comments@noaa.gov](mailto:npfmc.comments@noaa.gov)

RE: C7 - Bering Sea Canyons

Dear North Pacific Fishery Management Council,

Despite the ecological and commercial importance of the Bering Sea shelf break there are not currently any protected areas along this entire Green Belt. I request the adoption of protections for the Bering Sea Canyons and the fragile coral and sponge habitat within them a top priority.

So little is understood about deep sea ecosystems or the connections between seafloor habitats and commercially important species, it is irresponsible not to set aside portions of the shelf break as a buffer. The Bering Sea Canyons are rare features occurring along the, as yet, unprotected Bering Sea shelf break - a highly productive marine zone known as the Green Belt. Bottom-tending fishing gear—especially trawl nets—destroys ancient corals and sponges that provide this essential habitat, including spawning and nursery areas for fish, crab, skates and other marine species.

As the stewards of one of our nation's most precious marine resources, please learn from the past and look towards the future this June by initiating a formal process to protect our most sensitive habitats (including the largest underwater canyons in the world, the vulnerable coral and sponge communities in Zhemchug and Pribilof Canyons) that support the long-term productivity of our fisheries. Once lost.....they will be gone forever.

Sincerely,

Cindy Birkhimer  
Homer, AK 99603

Protecting the Living Environment of the Pacific Rim

THE EARTH'S BEST DEFENSE

COOPERATION FOR THE OCEAN

FOUNDED 1892

SEAWARD BOUND

Protecting life on earth.

SYLVIA EARLE ALLIANCE

May 27<sup>th</sup>, 2013

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252

RECEIVED  
MAY 28 2013

RE: C7 – Bering Sea Canyons

Dear Chairman Olsen and Council members:

The organizations signed on to this letter, representing more than a million supporters, wish to convey our strong interest in seeing management measures adopted as soon as possible to protect the Bering Sea Canyons. Zhemchug and Pribilof Canyons (the Canyons) are important drivers along the highly productive Green Belt, fueling a vibrant Bering Sea ecosystem where diverse marine life including whales, fish, fur seals and millions of sea birds flourish.

The science is clear; we can no longer fish as if the sea is inexhaustible; common sense must prevail now to protect healthy ocean ecosystems for the future. Anthropogenic pressures on our ocean are putting more stress on marine ecosystems than ever before. Trawling and other bottom-contact fishing gears damage seafloor habitat. Ecosystems are complex and in need of progressive management that moves beyond the single-species management of the past, and utilizes multiple tools that prioritize the health of the whole ecosystem. Climate change and ocean acidification further threaten fisheries and marine productivity, and make it even more difficult for fishery managers to make accurate projections.

Protecting representative portions of our most productive marine areas – such as the Green Belt – benefits fishermen and the fishing industry by helping ecosystems thrive. Recent findings confirm that the Canyons contain unusually high densities of corals and sponges – animals that can live hundreds of years and provide important habitat for fish and crab species, and other marine life. Preliminary analysis conducted by NOAA indicates that the canyons contain a majority of the projected coral habitat in the Bering Sea. The canyons also stand out in NOAA's risk assessment for Bering Sea coral habitats. Marine protected areas, especially fully protected no-take reserves, are proven and cost effective management tools that increase the amount, size and diversity of fish populations and preserve biodiversity.

There is an urgent need to protect the Bering Sea Canyons, their commercially important fish and crab species, and fragile habitats from fishing impacts. The Canyons are essential habitat for spawning and juvenile fish species including pollock, skates and rockfish, and they provide refuge for adult fish. Protecting the canyons will benefit other species as well, from fur seals to seabirds. Given the many challenges facing fish and crab species, marine mammals, sea birds, and habitat forming invertebrates in the Bering Sea, it is essential to manage the Canyons' fisheries resources in a manner that provides for the greatest protection.

Besides providing lucrative fishing grounds for the commercial fishing industry, the eastern Bering Sea has supported a way of life for thousands of years and generations of Alaska native coastal communities which is now in danger of collapsing. Subsistence harvesting is key to the cultural identity and survival of these communities. The canyons are bountiful source waters for native foods. Protecting the canyons will help preserve the health of the wider Bering Sea ecosystem and a healthy food web that can continue to provide native foods. Any analysis must consider the health and well-being of these communities as key components of the ecosystems.

The Council process offers a promising way to achieve balance among the differing needs and concerns of conservation, industry, and Alaska native communities in a region undergoing profound and rapid changes. Local and Traditional Knowledge from Alaska native communities must be considered together with other scientific information informing policy decisions for these waters.

Stakeholders have been urging the North Pacific Fishery Management Council to protect the Canyons for over a decade. In that time, new research has added urgency to this issue. Considerable damage has been done to vulnerable coral and sponge habitats, and the number and range of stakeholders urging protection for the canyons has grown dramatically. With this letter we add our voices together with the many thousands of citizens, including those who represent seafood business, who are calling on you anew to protect the Grand Canyons of the Bering Sea. We now ask the Council and NMFS Alaska Regional administrators to initiate a full impact analysis that considers a range of alternatives and begin scoping options for protecting the Canyons.

Sincerely,

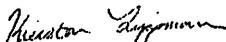
John Hovear,  
Oceans Campaign Director,  
Greenpeace



Vicki Nichols Goldstein,  
Founder,  
Colorado Ocean  
Coalition



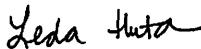
Kiersten Lippmann,  
Conservation Biologist,  
Center for Biological Diversity



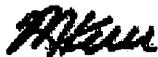
David E. Guggenheim, Ph.D.,  
President,  
Ocean Doctor



Leda Huta,  
Executive Director,  
Endangered Species Coalition



Marcie Keever,  
Oceans & Vessels Program Director,  
Friends of the Earth



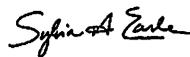
Cindy Shogan,  
Executive Director,  
Alaska Wilderness League



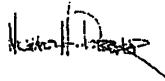
Tina Brown,  
President,  
Alaska Wildlife Alliance



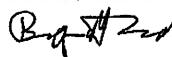
Dr Sylvia Earle,  
Founder, Sylvia Earle Alliance,  
Mission Blue



Mike Dessner,  
Director of Operations,  
Waitt Institute



Bradford H. Sewell,  
Senior Attorney,  
Natural Resources  
Defense Council



Kevin Harun,  
Arctic Director,  
Pacific Environment



David Helvarg,  
President,  
Blue Frontier Campaign



Dan Ritzman,  
Alaska Program Director,  
Sierra Club



Melanie Bahnke,  
President,  
Kawerak





Audubon



PEW



OCEANA

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World's Oceans

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**Oceana  
Ocean Conservancy  
Audubon Alaska  
The Pew Charitable Trusts**

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May 28, 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: C7 – Bering Sea Canyons

Dear Chairman Olsen, Dr. Balsiger, and Council members:

Thank you for considering options for management of Bering Sea canyons at the June North Pacific Fishery Council meeting in Juneau. Consideration of ecosystem-based management measures specific to the Bering Sea canyons is warranted at this time. On behalf of our hundreds of thousands of members, Oceana, Ocean Conservancy, The Pew Charitable Trusts, and Audubon Alaska urge you to develop and implement management measures designed to protect Pribilof and Zhemchug Canyons and representative habitat along the Bering Sea slope. These management measures should include, but are not limited to, area closures, reduced fishing rates, effort reduction, and gear modifications.

Located on the Bering Sea shelf break, Pribilof and Zhemchug canyons are two of the largest underwater canyons in the world. Research indicates that the canyons have important effects on ocean circulation and nutrient transport to the continental shelf. The canyons contain vulnerable corals and sponges, are essential fish habitat for a large number of species (see Appendix 1), and are important foraging habitat for a number of protected species, including northern fur seals and endangered short-tailed albatross.

Habitat conservation options for the Bering Sea slope, including the submarine canyons along this slope, are past due. Of the major, broad habitat types in the Bering Sea, the Bering Sea slope and shelf-break are the only ones that contain no year-round permanent protection measures. There exists no control study area of representative slope, canyon, and shelf-break habitat. Zhemchug and Pribilof Canyons are excellent candidates for implementing protection measures and establishing scientific control areas.

Further, Bering Sea slope habitat, including the essential fish habitat in the canyons, is predicted to become more and more altered due to fishing impacts over the long term. The Bering Sea slope is predicted to have the largest reductions in habitat structure of any of the habitat types in the Bering Sea. Living structure in all of the slope habitat in the Bering Sea is predicted to be

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permanently reduced 4-19% from fishing impacts.<sup>1</sup> Most of this reduction is due to impacts from trawling by the pollock fishery.<sup>2</sup> This reduction in habitat features is calculated over the entire Bering Sea slope, comprising huge areas of habitat. Localized impacts, including in regions of the Canyons, are more severe. Examined on a finer spatial scale, some areas like the southern end of Pribilof Canyon are predicted to lose 50-75% of its living structure over the long term due to fishing impacts.<sup>3</sup> This distribution of impacts was re-confirmed in the recent Alaska Fisheries Science Center (AFSC) canyons report.<sup>4</sup>

The AFSC canyons report is useful in that it shows that representative Bering Sea slope habitat exists both inside and outside Zhemchug and Pribilof Canyons<sup>5</sup>, making the Canyons excellent candidates for establishing scientific control areas. The report, however, incorrectly implies that Pribilof and Zhemchug Canyons are not biologically unique. The AFSC report acknowledges many features unique to the canyons including:

- deep-sea coral habitat concentrated in Pribilof Canyon
- skate nursery sites in Pribilof and Zhemchug Canyon
- endangered short-tailed albatross foraging hotspot in Zhemchug Canyon (Piatt et al. 2006).

Yet, in an attempt to broadly characterize the canyons, the AFSC report fails to account for the direct observation of important features of the canyons documented by several studies. For example, the principal component analysis did not include the inclusion of boulder and bedrock substrate and associated habitat, although this habitat type has been observed in and around Zhemchug and Pribilof Canyon (Rooper et al. 2010, Miller et al. 2012, Busby et al. 2005). This type of habitat is clearly important to consider. The Zhemchug Ridges, located along the southern Zhemchug Canyon shelf break, are a significant nursery location for what may be a distinct stock of Pacific Ocean perch (Rooper et al. 2010, Paloff et al. 2011), but this important habitat area is not included in the analysis. Ultimately, the AFSC report acknowledges some failings in its approach, such as predicting an absence of sea whip habitat in Pribilof canyon in a location where indeed sea whip groves have been clearly documented.<sup>6</sup>

Some current fishery removals in the canyon areas<sup>7</sup> may be a conservation concern. For example, high catches of rockfish in the canyon areas, particularly Pribilof canyon,<sup>8</sup> indicate a risk of localized depletion of rockfish. However, the canyons do not appear to be a particularly

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<sup>1</sup> NMFS. 2005. Final EFH EIS: Appendix B. Table B.2-9. April 2005

<sup>2</sup> NMFS. 2005. Final EFH EIS: Appendix B. Table B.2-10. April 2005

<sup>3</sup> NMFS. 2005. Final EFH EIS: Appendix B. Figure B.2-3a. April 2005

<sup>4</sup> Sigler et al. 2013. Are Bering Sea canyons unique habitats within the eastern Bering Sea? Draft for review by NPFMC. [AFSC Canyon Report]

<sup>5</sup> Sigler et al. 2013. AFSC Canyon Report

<sup>6</sup> Brodeur, R.D. 2001. Habitat-specific distribution of Pacific ocean perch (*Sebastes alutus*) in Pribilof Canyon, Bering Sea. Continental Shelf Research 21: 207-224.

<sup>7</sup> NPFMC. May 2013. Pribilof and Zhemchug canyons: fishing activity, protection measures and process for future action. [NPFMC Canyon Discussion Paper]

<sup>8</sup> NPFMC Canyon Discussion Paper, May 2013. Table 5, pg. 20

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important harvest area for the groundfish fisheries.<sup>9</sup> This means that alternatives that exclude or limit fisheries to protect the Canyons while minimizing economic impacts to the commercial fleet are feasible.

Protective measures in the canyons would bring many ancillary benefits. For example, protective measures could mitigate hotspots for bycatch of salmon and squid that occur off Pribilof Canyon.<sup>10</sup> Protective measures could aid conservation of Northern fur seals, the endangered short-tailed albatross, baleen whales, and many other species that use the canyons as important foraging habitat. The area south and west of St. George Island, including Pribilof Canyon, is an internationally recognized Important Bird Area that is home to a high proportion of several seabird populations, totaling well over 1 million birds.<sup>11</sup> With 75% of the world's red-legged kittiwakes nesting on St. George Island, over 20% of them forage here, along with globally significant abundances of northern fulmar, fork-tailed storm-petrel, horned puffin, parakeet auklet, and black-legged kittiwake.

Protective measures could also benefit the small rockfish populations that survive along the narrow band of the Bering Sea slope. These rockfish, some of which exist at the northern tip of their ranges, are susceptible to local extirpation due to preventable bycatch. Pribilof Canyon is also a known spawning location for Pacific halibut in the region of the Pribilofs, so protective measures could benefit Pacific halibut populations in this area, as well.

More broadly, protecting the canyons through ecosystem-based management measures will help preserve the health of the Bering Sea ecosystem as a whole, from invertebrates and fish to marine mammals and seabirds. This will benefit fishermen who depend on productive Bering Sea fisheries, and it will help ensure that Native Alaskans continue to have opportunities to harvest marine resources as part of a subsistence way of life that dates back thousands of years.

We commend the Council on its previous actions to protect important habitat. It is now time to take action to protect Bering Sea canyons. After over 50 years of industrial groundfish fishing in the Bering Sea, the Bering Sea slope and shelf break continue to be the only major habitat types to contain no permanent, year-round habitat protection measures or set-asides. The Council's previous management actions have shown that it is possible to balance the interests of industry, Alaska Native communities, and conservation interests. By developing and implementing conservation measures to protect the submarine canyons of the Bering Sea, the Council can continue to demonstrate its leadership. To that end, we urge the Council to protect Pribilof and Zhemchug Canyons by developing and implementing protective, ecosystem-based management measures including area closures, reduced fishing rates, effort reduction, and gear restrictions.

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<sup>9</sup> NPFMC Canyon Discussion Paper, May 2013. Table 2, pg. 17.

<sup>10</sup> NPFMC. May 2013. Pribilof and Zhemchug canyons: fishing activity, protection measures and process for future action. [NPFMC Canyon Discussion Paper]

<sup>11</sup> Smith, M., N. Walker, C. Free, M. Kirchhoff, N. Warnock, A. Weinstein, T. Distler, and I. Stenhouse. 2012. Marine Important Bird Areas in Alaska: Identifying Globally Significant Sites Using Colony and At-sea Survey Data. Audubon Alaska: Anchorage.

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Thank you for your commitment to this issue.

Sincerely,

Susan Murray



Deputy Vice President, Pacific  
Oceana

Andrew Hartsig



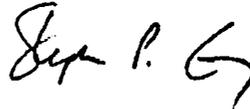
Director, Arctic Program  
Ocean Conservancy

Eric Meyers



Policy Director  
Audubon Alaska

Steve Ganey



Senior Director, Lands and Ocean  
The Pew Charitable Trusts

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## **Appendix 1:**

### *Essential Fish Habitat Designation*

#### **Pribilof Canyon**

Pribilof Canyon comprises essential fish habitat for many species. The species lists below are drawn from NOAA Fisheries EFH Interactive Map (<http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html>). The EFH Interactive Map allows users to determine the presence of EFH for species at specific lat/long points. The information below is gathered from points in several depth strata within the canyon area:

**Latitude: 56° 20.017' N**

**Longitude: 169° 3.726' W**

**Depth Stratum: Outer Shelf (101-200m)**

Essential Fish Habitat for the following species: Alaska plaice, arrowtooth flounder, Atka mackerel, blue king crab, capelin, Chinook salmon, chum salmon, coho salmon, dover sole, dusky rockfish, eulachon, flathead sole, golden king crab, Greenland turbot, northern rockfish, Pacific cod, Pacific Ocean perch, pink salmon, red king crab, rex sole, rock sole, sablefish, sculpin, skate, shark, shortraker and roughey rockfish, snow crab, sockeye salmon, squid, tanner crab, thornyhead rockfish, walleye pollock, weathervane scallop.

**Latitude: 56° 14.507' N**

**Longitude: 169° 41.849' W**

**Depth Stratum: Upper Slope (301-500m)**

Essential Fish Habitat for the following species: Arrowtooth flounder, Chinook salmon, chum salmon, coho salmon, dover sole, dusky rockfish, flathead sole, golden king crab, greenland turbot, northern rockfish, octopus, pacific cod, Pacific ocean perch, pink salmon, rex sole, sablefish, sculpin, shark, shortraker and roughey rockfish, skate, sockeye salmon, squid, tanner crab, thornyhead rockfish, walleye pollock

**Latitude: 56° 0.27' N**

**Longitude: 169° 12.463' W**

**Depth Stratum: Intermed Slope (701-1000m)**

Essential Fish Habitat for the following species: Arrowtooth flounder, Chinook salmon, chum salmon, coho salmon, dover sole, flathead sole, golden king crab, greenland turbot, octopus, Pacific cod, Pacific ocean perch, pink salmon, rex sole, sablefish, sculpin, shark, shortraker and roughey rockfish, skate, sockeye salmon, squid, tanner crab, thornyhead rockfish, walleye pollock

**Latitude: 56° 6.882' N**

**Longitude: 169° 6.991' W**

**Depth Stratum: Lower Slope (1001-3000m)**

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Essential Fish Habitat for the following species: Arrowtooth flounder, Chinook salmon, chum salmon, coho salmon, flathead sole, golden king crab, Greenland turbot, octopus, Pacific ocean perch, pink salmon, rex sole, sablefish, sculpin, shark, shortraker and rougheye rockfish, skate, sockeye salmon, squid, thornyhead rockfish, walleye pollock

### **Zhemchug Canyon**

Zhemchug Canyon comprises essential fish habitat for many species. The species lists below are drawn from NOAA Fisheries EFH Interactive Map (<http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html> ). The EFH Interactive Map allows users to determine the presence of EFH for species at specific lat/long points. The information below is gathered from points in several depth strata within the canyon area:

**Latitude: 58° 37.167' N**

**Longitude: 175° 14.734' W**

**Depth Stratum: Upper Slope (201-300m)**

Essential Fish Habitat for the following species: Alaska plaice, arrowtooth flounder, Chinook salmon, chum salmon, coho salmon, dover sole, dusky rockfish, eulachon, flathead sole, golden king crab, greenland turbot, octopus, pacific cod, Pacific ocean perch, pink salmon, rex sole, rock sole, sablefish, sculpin, shark, shortraker and rougheye rockfish, skate, sockeye salmon, squid, tanner crab, thornyhead rockfish, walleye pollock

**Latitude: 57° 46.998' N**

**Longitude: 173° 49.925' W**

**Depth Stratum: Intermed Slope (501-700m)**

Essential Fish Habitat for the following species: Arrowtooth flounder, Chinook salmon, chum salmon, coho salmon, dover sole, dusky rockfish, flathead sole, golden king crab, greenland turbot, northern rockfish, octopus, Pacific cod, Pacific ocean perch, pink salmon, rex sole, sablefish, sculpin, shark, shortraker and rougheye rockfish, skate, sockeye salmon, squid, tanner crab, thornyhead rockfish, walleye pollock, yelloweye rockfish

**Latitude: 58° 14.098' N**

**Longitude: 175° 10.531' W**

**Depth Stratum: Lower Slope (1001-3000m)**

Essential Fish Habitat for the following species: Chinook salmon, chum salmon, coho salmon, golden king crab, greenland turbot, octopus, Pacific ocean perch, pink salmon, sablefish, sculpin, shark, shortraker and rougheye rockfish, skate, sockeye salmon, squid, thornyhead rockfish, walleye pollock



GREENPEACE



May 28, 2013

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

Via: email at [npfmc.comments@noaa.gov](mailto:npfmc.comments@noaa.gov) and delivered directly in hard-copy

**RE: Agenda Item C-7, Bering Sea Canyons**

Dear Chairman Olson and Members of the Council:

Thank you for this opportunity to provide comments for inclusion in the June 2013 Council meeting notebooks under Agenda Item C-7, the Bering Sea Canyons. On behalf of Greenpeace, World Wildlife Fund, and the Center for Biological Diversity, we submit this request for the Council to—at this meeting—initiate its public scoping process, develop of a statement of purpose and need, and begin drafting alternatives and options for the conservation of the Pribilof and Zhemchug Canyons (the Canyons). Although our organizations vary in mission and scope, we are united in our goal to conserve the ecosystems of the Eastern Bering Sea, and ensure the continuation of sustainable fisheries in the North Pacific.

In its April 2012 motion on the Canyons, the Council acknowledged that it has received numerous proposals requesting the conservation of the Canyons and representative portions of the highly productive shelf break zone in the Bering Sea, the "Green Belt," as essential fish habitat (EFH) and protection for deep-sea corals, sponges, and other benthic habitat important to FMP-managed species. A rigorous body of scientific information now exists which points to the unique role these deep sea Canyons play in harboring rare and representative species of corals, sponges, and marine invertebrates. Additionally, in the canyons along the Bering Sea shelf break, which itself is an engine of primary productivity, high concentrations of marine organisms are likely contributing to the overall productivity in the Bering Sea.

It is the view of these organizations that special management and conservation measures are needed to ensure the long-term viability of the ecosystem processes in these canyons. By doing so, the Council will contribute to conserving the ecological integrity of one of the world's most productive seas, while also supporting the engine for a valuable commercial resource, the Bering

Sea fishery. Thus, we call on the Council anew to protect the Pribilof and Zhemchug Canyons, and ask that the Council:

(1) Draft a statement of purpose and need for the protection and conservation of the Pribilof and Zhemchug Canyons in the Eastern Bering Sea; and

(2) Initiate a full FMP amendment analysis, beginning with a public scoping process to consider a full range of alternatives and options to protect and conserve the Canyons, from harvest and fishing gear restrictions to fully protected, no-take "marine reserves."<sup>1</sup>

The conservation organizations signed on to these comments represent millions of stakeholders across the United States and many more around the world, including thousands in Alaska who benefit from the vibrant and productive Bering Sea fishery, and the knowledge that this remains a highly productive and rich marine ecosystem. For this reason we support the Council's immediate initiation of the scoping process and adoption of appropriate management measures to protect the Canyons.

Our organizations urge the Council to delay no further in initiating the process to identify and analyze appropriate conservation measures. As you know, the request to protect canyon habitat has been brought to the Council, repeatedly, for more than a decade. Since then, we have more information about ocean change, the importance of deep sea canyons, and some of the specific traits that characterize the Bering Sea canyons as well. We represent the stakeholder view, backed by sound science and thousands of years of local and traditional knowledge, that conserving a representative portion of the vital shelf break zone, including the world's largest deep sea canyons, is a reasonable and prudent management tool to help ensure the health of the Bering Sea ecosystem and the abundant fisheries it sustains, for generations to come.

Support for our requested action has grown substantially amongst public stakeholders since the last time the Council reviewed the canyons in 2006. In 2012, the Council received nearly 29,000 letters supporting the conservation of the canyons signed by concerned citizens and stakeholders. At this meeting, you will likely receive more than three times as many comments from public stakeholders vocalizing their strong support for canyons protection, together with letters from a diverse group of NGOs, scientists, tribal groups, and major seafood buyers.

Certain key representatives of the corporate sector have also expressed their interest in responsible management of the Bering Sea canyons. For example, in a letter dated May 15, 2013, from the VP of Marketing for Trader Joes – a major food retailer in the US – endorsed the "importance and necessity of research and in-depth analysis of the best available science" on the canyons. Furthermore, this VP of Marketing, Mr Matt Sloan, wrote that Trader Joe's has established a goal to make all of our seafood purchases from sustainable sources."

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<sup>1</sup> Here, we use the term "marine reserves" to refer specifically to no-take areas, where removing or destroying natural or cultural resources is prohibited. This is similar to the definition of a "fishery reserve" created by the Ocean Studies Board of the National Research Council, and as used by the Pacific Fishery Management Council: "Zoning that precludes fishing activity on some or all species to protect critical habitat, rebuild stocks (long term, but not necessarily permanent closure), provide insurance against overfishing, or enhance fishery yield" (Ocean Studies Board, 2001).

These public comments and our continuing participation in the Council process offer a promising way to inform policy makers and their decisions, and achieve balance among the differing needs and concerns of conservation, industry, and native and coastal communities in this region.

The urgency for action should be informed by the Council's understanding that ocean systems -- including the Bering Sea and Arctic Ocean -- are changing, with respect to anthropogenic-driven climate-change and ocean acidification, regime changes and Pacific decadal oscillation. Pacific decadal oscillation, a pattern of changes in the Pacific Ocean's climate, has also affected fisheries production in the Bering Sea. These climate patterns correspond to dramatic shifts in salmon production regimes in the North Pacific Ocean, and is another reason why the Council should consider additional protections for the canyons.<sup>2</sup>

Impacts such as rising ocean temperatures, declining sea-ice and invasive species coupled with progressing ocean acidity are expected to cause significant changes in marine life in the Bering Sea (Fabry, Mathis, et. Al. 2009). These regime changes can impact the rich productivity of many organisms that are an integral part of the Bering Sea food chain for many fish species, such as plankton and other benthic organisms. It is increasingly essential to conserve those resources and drivers of productivity with ultra-precautionary measures

## HISTORY & COUNCIL PRIORITY

In 2006, the Council considered whether to initiate a proposal process and set priorities for designating Habitat Areas of Particular Concern (HAPC) in the undersea canyons of the Bering Sea. Then, as now, the Council tasked the Alaska Fisheries Science Center (AFSC) with writing a white paper summarizing the scientific information available at that time. The document produced was structured as an inventory of available data and applicable information on the Pribilof, Pervenets, and Zhemchug Canyons as of fall 2006.

The Council received that paper at its December 2006 meeting. The AFSC paper stated that each of the available studies on the Canyons did "express concern about possible consequences of destructive fishing practices and losses of important habitat." However; the Council decided not to act, arguing that the available information did not make the case for immediate protection and the area was viewed as important fishing grounds for the trawl fleet. In another case, though, concerning the Arctic FMP, the Council concluded that more data was needed before a commercial fishery could be sustainably managed and therefore closed the U.S. waters of the Arctic to commercial fisheries until more information is available. We commend this example of precautionary management and recommend that approach for the Bering Sea canyons as well.

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<sup>2</sup> Mantua, Nathan J. et al. (1997). "A Pacific interdecadal climate oscillation with impacts on salmon production". *Bulletin of the American Meteorological Society* 78 (6): 1069–1079.

Though the Council cited insufficient ecological information to take action to protect the canyons, it did, however, list the Bering Sea canyons as a research priority. Although we understand that the Council has no authority over the expenditure of research funds, the Council's strong voice could go a long way toward encouraging research bodies, such as the North Pacific Research Board (NPRB) to prioritize research in this field. It is not clear from the Council staff discussion paper (Agenda Item C-7 (b)) whether any government-funded or NPRB research on the Bering Sea Canyons resulted from the research priority listing.

In response to the Council's call for further research, Greenpeace launched a major scientific study, bringing together independent and government scientists, to conduct the sort of research the Council cited it lacked—to survey the seafloor habitat of the Eastern Bering Sea Canyons and determine whether fishing activities have damaged seafloor habitat. Greenpeace's 2007 expedition was the first in situ exploration of Zhemchug Canyon, and the first manned submersible exploration of the Pribilof Canyon. A second research expedition was completed in 2012. The results of the two submersible studies demonstrated that fishing activities are impacting the canyons, and that there are areas with high coral density that can still be preserved.

#### PROTECTING THE CANYONS NOW MEANS PROTECTING FISHERIES AND BIODIVERSITY INTO THE FUTURE

The canyons of the Eastern Bering Sea are unique as the largest submarine canyons in the world; they play a major role in ocean circulation along the shelf and serve as vital habitat for a diverse assemblage of benthic and pelagic fauna. Commercially important species of fish use these areas for shelter from predators at multiple life stages, and to forage for prey. Significantly, the canyons are known to contain high densities of corals and sponges, distinct from those in the Aleutian Islands (AI) or Gulf of Alaska, that provide important habitat for commercially important species and other marine species in the ecoregion.

The food web of the Bering Sea is sustained by the vital shelf break zone, including marine mammals, seabirds and the Alaska native communities who have subsisted on the region's resources for thousands of years. There are habitat impacts to spawning grounds and to a host of incidentally caught bycatch species such as commercially and culturally valuable salmon and halibut. Skate nurseries have been identified in the canyons as well, as reported by Gerry Hoff (2010) and by Greenpeace (2012) with data shared with the Alaska Fishery Science Center in 2013. Fisheries science is inherently uncertain, and in this case the science of fishing impacts on the biology and ecology of deep sea canyons in the Bering Sea is rudimentary and immature. NMFS has expressly stated, "We do not know the full effects of commercial fishing on the environment, nor do we understand the effects of fishing on the ecosystem and its processes," (NMFS PSEIS, 2004).

In 2012 Greenpeace submitted a white paper to the Council, Pribilof and Zhemchug Canyon Habitat Conservation Areas: An Updated Review with Implications for Management (March 2012). That paper offered a multitude of scientific and legal reasons e.g., obligations under the MSA, ESA, MMPA, NEPA, etc. to provide protections for the Canyons. For example, new research shows that rockfish such as Pacific ocean perch have a highly localized stock structure, are long-lived, and extremely vulnerable to fishing mortality. We now know that managing the

entire BS/AI Pacific ocean perch population as one “stock” is inadequate. Research also shows that the region likely contains discrete spawning aggregations of pollock, yet the assessment assumes that EBS pollock are all one stock for management purposes. Similarly, “given how little is known about the true extent of the biodiversity in the Bering Sea Canyons or the long-term impacts of fishing on deepwater corals, sponges and epibenthic fauna in the canyons the Council’s policy should be to manage explicitly for habitat diversity and complexity now, while research on “essential” habitat continues.” (Stump, 2012, pp. 46). We are providing the 2012 paper as an addendum to these comments as part of the administrative record and to provide a record at this meeting specifically of just some of the many scientific justifications and legal mandates supporting our renewed request.

#### ALASKA FISHERIES SCIENCE CENTER REVIEW

The draft Alaska Fisheries Science Center review requested by the Council summarizes some of the available information on the canyons, relying most heavily on NOAA trawl survey data (Agenda Item C-7 (b)). The title of the paper is an indication of the emphasis on the first of the five questions asked by the Council. The emphasis on uniqueness has forced the authors to rely heavily on trawl survey data, which is most relevant for comparison purposes given its wider scope. However, this approach has several significant limitations, which make it difficult to adequately address the Council’s questions. Questions about habitat associations cannot be answered using the trawl survey data, for example, and are not addressed in the review, despite available analysis showing that fish have been reported to be associated with corals elsewhere and in the canyons in particular. The trawl survey appears to have some sampling bias, as some types of corals (and presumably some sponge species as well) were more frequently observed in visual surveys than collected in trawls. Notably, 17% of Zhemchug Canyon, a 25 km long area of the southeast wall—“the portion most likely to contain the highest coral and sponge density”—was too steep and bumpy to be assessed using the trawl survey

The Council received testimony not just from environmental groups, as noted in the review, but also from tribal organizations, and tens of thousands of public stakeholders. Much of this testimony refers not only to benthic habitat, but to pelagic habitat as well. Numerous mentions are made of the fact that coral density is higher in the Aleutians than the canyons, which is well known and undisputed. Depth is one of the primary drivers of coral distribution, but the review omits this context from the Aleutian comparison. The emphasis provided through repetition and lack of comparison with other more similar areas seems arbitrary and misleading.

The review determined that the canyons are unique in terms of physical characteristics. The trawl survey data used for comparative analysis showed no biological difference between the canyons and the surrounding shelf break, but the review notes that “one unique feature of the focal canyons is that about one third of the coral habitat predicted for the eastern Bering Sea slope occurs in Pribilof Canyon,” greater than any other area assessed. Pribilof Canyon is the only known location for a recently discovered species of sponge, *Aaptos kanuux*, which may be endemic.

The review also reports additional evidence that the canyons are biologically distinct, noting that ten of fourteen known skate nurseries in the eastern Bering Sea are located in canyons, with four

of them occurring in Zhemchug and Pribilof. "The reason for the strong association with undersea canyons is believed to be correlated with oceanographic conditions ..."

The authors report that trawling has been found to reduce species diversity, niche breadth, and mean body size of invertebrates on the inner shelf, which is less vulnerable than the shelf break or the canyons. Further, "trawl effects studies in Alaska have found that large epifaunal invertebrates were removed or damaged by a single trawl pass, sponges were slow to recover from trawling effects, and chronic bottom trawling affected the abundance and diversity of epibenthos."

This adds urgency to the Council's consideration of protections for the Canyons, as the reviewers found them to be vulnerable and at risk. In general, slope risk indices (overlapping fishing effort and habitat vulnerability) were highest for pelagic trawl and longlines. Pribilof Canyon has the highest average vulnerability index in the eastern Bering Sea, and the highest risk index for pelagic trawl gear. There was considerable overlap with longline and pot gear in Pribilof Canyon as well. The vulnerability index for Zhemchug Canyon is higher than most other areas assessed. Zhemchug has the second highest risk index for longline gear, slightly lower than the portion of the shelf break between Pribilof and Zhemchug.

#### DEEP SEA CORALS: A NATIONAL RESOURCE

We are not alone in recognizing the importance of deep sea corals as a marine resource of national significance. In recent years, worldwide understanding of the role of corals in protecting juvenile fisheries, biodiversity and primary productivity, has greatly increased. The U.S. government has also acknowledged the high ecological value of deep sea corals. In March 2008, NOAA's Deep Sea Coral Research and Technology Program (DSCRTP) submitted its first MSA-required report to Congress, in consultation with fishery management Councils, on the steps taken by the agency to identify, monitor, and protect deep sea coral areas, including summaries of the results of mapping, research and data collection performed under the program.<sup>3</sup>

#### Key findings of the report included:

- Research over the past decade revealed deep sea corals form habitats of high biological diversity in the deeper ocean (50 to 2,000 m) on continental slopes, canyons, and seamounts;
- Deep sea coral assemblages are vulnerable to damage from bottom-tending fishing gears, and recovery from damage may take decades to centuries after disturbance has ceased;
- NMFS has research expertise and statutory authority to protect and manage deep sea coral communities in waters under the 2006 MSA and the National Marine Sanctuaries Act;
- Gaps in knowledge about deep sea corals remain, including the location of many deep sea coral assemblages and most aspects of their biology and ecology;

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<sup>3</sup> Called for in the reauthorization of the MSA, and designed to provide ocean resource managers with scientific studies to inform conservation actions.

- E.g., questions about why deep sea corals occur where they do, their role as habitat for other species (including managed fish stocks and protected species), their vulnerability and resilience to human impacts, and their responses to climate change and ocean acidification.

Subsequently, in 2012 Congress received the latest report on the Deep Sea Coral Research and Technology Program, which details the 2012-2014 field study in the Alaska region and, as in the two previous reports, clearly identifies the Canyons as having coral and sponge habitat awaiting protection.<sup>4</sup> Sponges and corals form complex habitat for commercially valuable fish and crabs, and are a significant component of bycatch in certain Alaskan bottom-trawl fisheries. The importance of deep sea corals as habitat for commercially important fish and crab species is known. NOAA researchers have identified the likelihood that additional corals exist in parts of the areas with the greatest threats to Alaskan deep sea corals.

In addition, NMFS and the Coral Program have undertaken major habitat conservation efforts with the New England and South Atlantic Fishery Management Councils, and the North Pacific through the Alaska Coral and Sponge Initiative Research. Thus far, the Councils have primarily been relying on EFH authority to recommend habitat protection measures and have not yet used their new discretionary authority under the MSA to recommend designating zones to protect deep sea corals from the impacts of fishing. However, the Mid-Atlantic Council is poised to do so as early as 2014 in efforts to protect similar deep sea canyon habitat in those waters.

In February 2012, the Council's Ecosystem Committee received an update and report on the status of the Strategic Plan for Deep Sea Coral and Sponge Ecosystems, and the DSCRTP on its Alaska Deep Sea Coral and Sponge Initiative Research Program (AKCSI).<sup>5</sup> Considering these reports, the Committee discussed the importance of deep sea corals and sponges, the essential habitat they provide for commercially valuable fish and crab species, and that these coral and sponge species are found in the Canyons, as confirmed by NOAA scientists and reported to Congress. Given these facts, we urge your action to protect this valuable habitat.

The U.S. government, under successive administrations, and the United Nations, have taken steps to identify vulnerable marine ecosystems and address fishing practices that may significantly harm them, including developing effective conservation and management measures to prevent harm to these systems. (U.N. General Assembly Resolution 61/105, 2006). NOAA's *Strategic Plan for Deep Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation* contains a useful list of major statutory authorities, executive orders, and other policy drivers applicable to the conservation and management of deep sea coral and sponge ecosystems. (pp. 9-11)

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<sup>4</sup> Deep Sea Coral Research and Technology Program 2012 Report to Congress, available at: [http://www.habitat.noaa.gov/protection/corals/deepseacorals/report/deep-sea\\_coral\\_research\\_and\\_technology\\_program/files/assets/downloads/fy12DSCrtc.pdf](http://www.habitat.noaa.gov/protection/corals/deepseacorals/report/deep-sea_coral_research_and_technology_program/files/assets/downloads/fy12DSCrtc.pdf).

<sup>5</sup> Alaska Coral and Sponge Initiative - Project Update, February 2013, available at: [http://alaskafisheries.noaa.gov/nfmcPDFdocumentsconservation\\_issuesAKCSI\\_FY12summary\\_213.pdf](http://alaskafisheries.noaa.gov/nfmcPDFdocumentsconservation_issuesAKCSI_FY12summary_213.pdf)

## MANAGING AND CONSERVING AMERICA'S DEEP SEA CANYONS FOR THE FUTURE

All of these considerations, taken together, make a compelling and reasonable position in support of establishing large offshore Marine Protected Areas (MPA) to achieve multiple legal and societal objectives -- the sum of which is what "ecosystem-based management" is all about. The fact that no such MPAs have been formally established for the Canyons' "Green Belt" is all the more reason to establish precautionary buffers and hedges against the multiple scientific and management uncertainties associated with conservation of the marine resources in this ecologically, economically, and culturally important region of the Bering Sea.

The absence of habitat protections for the Pribilof and Zhemchug Canyons or the Green Belt is difficult to justify because of its ecological importance to the region's diverse fish, mammal and bird fauna, its value as a source of replenishment that sustains fisheries, and its cultural significance to indigenous communities. A wider, ecosystem-based approach to habitat protection is needed to address all the important features of the Bering Sea Green Belt, including deep sea canyon habitats.

Executive Order 13158 on Marine Protected Areas (2000) was enacted to strengthen the management and protection of MPAs. The Order requires the Secretaries of Commerce and the Interior, in consultation with other agencies and affected states and territories, to develop a national system of MPAs, to share information, to develop an MPA website, and to publish a list of MPAs.

The Order also requires each federal agency to take appropriate steps to enhance protection for existing MPAs or to recommend, if appropriate, new MPAs. For years, a Council staff discussion paper on MPAs in the North Pacific sat in the proverbial Council issue "batter's box," on the Council's Three Meeting Outlook without meaningful Council follow-up. The Council has the opportunity here to take the national lead on establishing and coordinating official MPAs in the North Pacific, starting with the Canyons. It is widely recognized that MPA's are a potential management tool that can help conserve the abundance of fisheries, biodiversity and habitat for fish and marine life.<sup>6</sup> They do not necessarily ban all fishing; different policies on an MPA can ensure the long term health and well-being of fisheries. For this reason, MPAs must be considered in a council analysis of potential conservation measures.

### CONCLUSION

More than a year has passed since the Council directed its staff and the AFSC to provide more information that would "help the Council understand what is known about issues related to the protection of the canyons." (April 2012 Council motion). During that time, additional research has expanded the case for protecting the canyons, and the urgency to protect the canyons has intensified. Unmitigated and unknown fishing gear impacts on long-lived and fragile corals are

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<sup>6</sup> <http://www.pcouncil.org/habitat-and-communities/marine-protected-areas/>

allowed to continue, and climate change and ocean acidification increasingly take their toll. No areas of the currently fished Green Belt are protected, or can serve to buffer commercial fisheries from the inherent uncertainties found in stock assessment models and management decisions.

The time has come for the Council to again show national leadership in exercising the precautionary approach through the implementation of ecosystem-based management measures.. This region is vital to maintaining our nation's "fish basket" in the Bering Sea; providing resources for Alaskan Native communities, and supporting rich populations of marine mammals and seabirds that utilize the area as foraging habitat. NOAA data shows a relatively minimal amount of pollock and Pacific cod (less than 4%) is extracted from the Canyon areas proposed for conservation. Setting aside the Canyons as representative portions of the ecologically rich and commercially important shelf break will also provide a buffer against uncertainty that will help the Council avoid costly management missteps. The time to act is now.

It is our intent within these comments to highlight our continued interest in working through this process with the Council in a collaborative manner. Postponing action to protect the Canyons, however, through an EFH review or HAPC proposal process in 2015 is neither acceptable nor the most appropriate vehicle to bring about meaningful and long-lasting conservation and protection of the Pribilof and Zhemchug Canyons.

Recognizing the vast knowledge and expertise of stakeholders and Council members and staff, we are eager to see significant momentum by the Council in planning for sound management and conservation of these remarkable canyons. Again, on behalf of the millions of supporters of Greenpeace, World Wildlife Fund, and the Center for Biological Diversity, we thank you for your consideration of these comments. We look forward to attending the June Council meeting and providing the Council with public testimony during its review of the AFSC and Council staff discussion papers.

Sincerely,

Jackie Dragon  
Senior Ocean Campaigner  
Greenpeace

Kirsten Lippmann  
Conservation Biologist  
Center for Biological Diversity

Margaret Williams  
Managing Director, Arctic Field Program  
World Wildlife Fund

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*promoting sustainable fisheries to feed the world*

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Alaska Bering Sea Crabbers

Alaska Longline Co.

Alaska Whitefish Trawlers Association

Alaska Groundfish Data Bank  
International Seafoods of Alaska, North Pacific Seafoods, Trident Seafoods, Western Alaska Fisheries

Alaska Scallop Association

Aleutian Pribilof Island Community Development Association  
Akutan, Atka, False Pass, Nelson Lagoon, Nikolaki, St. George

Arctic Storm Management Group

Bristol Bay Economic Development Corporation  
Aleknagik, Clark's Point, Dillingham, Egegik, Ekwik, King Salmon, Livolock, Manokotak, Naknek, Pilot Point, Port Heiden, Portage Creek, South Naknek, Toggak, Twin Hills, Ugashik

Central Bering Sea Fishermen's Association  
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Northern Victor Fleet  
Peter Pan Fleet Cooperative  
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Waterfront Associates

May 24, 2013

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

RE: Agenda Item C.7 Bering Sea Canyons

Dear Mr. Olson,

The Marine Conservation Alliance (MCA) appreciates the opportunity to comment on Agenda Item C.7, Bering Sea Canyons. Our comments here include a brief set of remarks along with an attached study we funded on Bering Sea canyons that was completed early this year. Our intent in providing the attached report is to help provide as much relevant information as possible as the Council family deliberates next steps on the matter of Bering Sea canyons.

We believe the attached study corroborates much of what was found in the AFSC paper on canyons. However, it also provides additional information on canyons which has not been discussed to any great length in neither the Miller et al paper, nor the AFSC paper. We would point you to a few points in particular:

- The average size of corals in the Pribilof and Zhemchug canyon
- The associations of fish and coral in these canyons
- The density of coral in the canyons compared to other areas in Alaska and the west coast
- The association between coral and substrate type

We look forward to discussing this matter with the Council and the Council Advisory Bodies in more detail at the June Council meeting.

Sincerely,

Merrick Burden  
Executive Director