

Aleutian Pribilof Island Community Development Association

302 Gold Street, Suite 202 | Juneau, Alaska 99801 | Phone: (907) 586-0161 | Fax: (907) 586-0165 717 K Street | Anchorage, Alaska 99501 | (907) 929-5273 | Fax: (907) 929-5275 | www.apicda.com

November 7, 2016

Mr. William Douros, West Coast Regional Director NOAA Office of National Marine Sanctuaries 90 Pacific Street, Suite 100F Monterey, Calif. 93940

Dear Mr. Douros:

I write on behalf of APICDA (the Aleutian Pribilof Island Community Development Association) in regards to the proposed St. George Unangan Heritage National Marine Sanctuary nomination. APICDA is one of six community quota development (CDQ) groups in the Bering Sea/Aleutian Islands formed pursuant to the Magnuson Stevens Act. APICDA is composed of six communities including Akutan, Atka, False Pass, Nelson Lagoon, Nikolski and St. George. Our purpose is to foster development of stable local economies and sustainable communities.

The APICDA Board of Directors, which is represented by members from each of our six communities, including St. George, has voted unanimously to oppose the sanctuary proposal. Our board has tremendous respect for the residents of St. George, and for the threats that face their community, their culture and traditions, and their economic and social future. Our board also cares deeply for the entire ecosystem throughout the Bering Sea/Aleutian Islands and has always supported strong conservation principles when it comes to the management of our fishery resources and our marine mammal and bird populations. Our board, as well as the City of St. George, are greatly concerned with potential impacts of climate change on our environment. For the following reasons APICDA does not support the proposal:

Economic Development

As stated above, APICDA's mission is to develop stable local economies and sustainable communities in each of our six member communities in the Aleutian-Pribilof region. To this end, APICDA has worked alongside the residents of St. George to try to build their local economy for many years; however, many of our joint initiatives have been stymied due to the lack of a safe and usable harbor. A functioning harbor is of critical importance for the residents of St. George to actively participate in the seafood harvesting and processing industry, and bring jobs and tax revenue to the community. A safe and functioning harbor is also critical to the development of an enduring and stable tourism industry.

As you are aware, the economy of St. George is nearly non-existent. Commercial fishing for halibut for the small-boat local fleet is limited to a few months during the summer when weather conditions allow the vessels to leave the harbor. Due to the small amount of available halibut quota there is no seafood processing plant in operation in St. George and, instead, the harvest is tendered to St. Paul for processing.

Most maritime insurance companies will not provide coverage for vessels that enter the harbor; hence, rarely do larger vessels visit. Consequently, all food stuffs and freight must be flown to the community, resulting in extremely high prices. There is little sales tax revenue generated – not enough to allow the City to function the way it needs to. Without a safe and functioning harbor, it is only a matter of time until the situation on St. George become untenable. Conversely, with a safe and functioning harbor the City can be sustainable.

We have worked closely, for much more than a decade, with the City, the St. George Tanaq Corporation, and the St. George Traditional Council to secure the funding and authority necessary to construct the harbor. We are closer now than we have ever been. In fact, we have been going through the planning process with the Army Corps of Engineers for the past year and expect to complete that process in the next few years. We still need Congressional authorization and funding for actual construction, but believe that construction may commence as early as 2019.

A significant part of the justification for the harbor is the economic benefits to be accrued through the construction of a seafood processing plant resulting from participation in the commercial fishing industry. A viable seafood processing plant will need to have access to millions of pounds of seafood. The creation of a sanctuary, or even the possibility that one might be created, brings great uncertainty to the decision making process necessary to justify the investment of several million dollars. While it is true that a sanctuary will not necessarily impact commercial fishing, we do believe that the sanctuary process will open up the door to agendas that would expand fishing closures in the Bering Sea, and that the process will be lengthy and divisive.

It is our board's belief that supporting both a harbor initiative and a sanctuary initiative sends an extraordinarily contradictory message and could, in fact, jeopardize the harbor project.

Community Support

It is our understanding that a sanctuary nomination must demonstrate support from a wide breadth of community interests. While the St. George City Council, consisting of seven individuals, supported and sponsored the submission of the proposal, there is notably a lack of formal support from any other local entity. The St. George Traditional Council, the Tribe, has neither voted to support or oppose the proposal. Reportedly this is because there are deep divisions within the Tribe regarding this issue. The lack of a vote reflects the desire to maintain neutrality rather than to force into the open the divisions within the Tribe.

It is also clear that there is a considerable amount of formal opposition to the proposal

- The St. George Tanaq Corporation, the local Alaska Native Village Corporation for the community, has unanimously opposed the proposal;
- A resolution in opposition to adopting the proposal was approved by the Aleut Villages Conference (an annual conference sponsored by the Aleut Corporation of all the Aleutian Pribilof villages) in October of this year, by a vote of 56 to one; and,
- The Alaska Federation of Natives, Alaska's largest organization of Alaska Natives, also approved a resolution in opposition to the adoption of any sanctuary in Alaska during their convention last month.
- The APICDA resolution in opposition to the sanctuary is attached to this letter

Additional resolutions of opposition from other pertinent entities may be forthcoming.

While there is obviously some support for the proposal from the City Council, we are concerned about the lack of clarity that exists on how far this support extends into the community. Perhaps the only real way to determine the extent of support is to put the proposal on hold pending a municipal election addressing the topic. The community is small and diverse and we believe that it is important for the agency to provide suggestions back to the City on how to better assess how much local support exists, particularly considering the significant level of formal opposition from various community entities.

The Existing MSA Process is Sufficient

The fishing management system in effect in the Bering Sea/Aleutian Islands is one of the most robust and respected management systems in the world. It is an open and transparent process, one accessible by every entity and individual. The cast of entities and people who participate in this process is huge, and ranges from fishery associations to environmental groups, to individuals, communities, and Alaska Native interests. The fishery resources managed are huge in scope – more than half our country's harvest occurs off Alaska – and the complexities of the decision making process, and the decisions themselves, are equally huge.

If this proposal is adopted and moves forward there will be considerable pressure from various interest groups to significantly expand the size of the sanctuary from the original proposal – and it is clear the sanctuary process allows, and probably requires, that the size and scope of the proposal be reviewed to determine whether or not it is sufficient to address the stated desires of the proposal.

This is where the insertion of the sanctuary process into fishery management in Alaska potentially becomes a significant challenge. The sanctuary process invites, if not encourages, rehashing issues that have already been addressed or are in the process of being addressed – by a new government entity operating under a new framework. It will inevitably be a divisive, expensive, time consuming, and redundant process. And, most of all, unnecessary.

With regard to sea birds and marine mammals, the US Fish & Wildlife Service and the National Marine Fisheries Service already spend millions of dollars annually on St. George focused on sea bird and marine mammal research. The National Marine Fisheries Service already spends millions of dollars on fishery management in the North Pacific, including the small area around St. George initially requested for sanctuary status – the fishery management efforts already include focus on areas to prohibit or limit commercial fishing by gear type, by component, by species, by area, and by time. The insertion of a new process is simply not necessary.

The attached testimony by Chris Oliver, Executive Director of the North Pacific Fishery Management Council, before US House of Representatives Subcommittee on Water, Power, and Oceans (<u>http://docs.house.gov/meetings/II/II13/20150929/103986/HHRG-114-II13-Wstate-OliverC-</u> <u>20150929-U2.pdf</u>) is a fine description of the fishery management process in the North Pacific with particular relevance to marine protected areas.

Conclusion

First, there is no doubt that there is "significant" opposition to the proposal, however it is very unclear how much local support exists. We believe that this question needs to be resolved before moving the proposal forward.

The existing process under the North Pacific Fisheries Management Council has proven to be effective at protecting fishery resources, habitat and community interests. We do not believe that the outcome of the sanctuary process will be any different than what would be accomplished under the existing North Pacific Council process, however, we are concerned with the additional amount of time, money and energy that will need to be spent. We believe that the existing Council process works well and the sanctuary process will inevitably be divisive, expensive, time consuming and potentially redundant.

Finally, and most important, the future of St. George truly is at stake. The very best chance to save the community and provide it with the opportunity to survive and thrive is through the construction of a safe and usable harbor. At the very least, moving forward with the sanctuary proposal poses an existential threat to the harbor and, thus, the community.

Sincerely, Larry Cotter

Testimony of Mr. Chris Oliver, Executive Director

North Pacific Fishery Management Council

Before the United States House of Representatives, Committee on Natural Resources

Subcommittee on Water, Power, and Oceans

"The Potential Implications of Pending Marine National Monument Designations"

Tuesday, September 29, 2015, Washington, D.C.

Introduction

The North Pacific Council, one of eight regional fishery management Councils established by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), manages fisheries in the U.S. EEZ off Alaska. Widely recognized as one of the most successfully managed fisheries in the world, the fisheries off Alaska provide over half of the Nation's annual seafood production, are the largest employer in the State of Alaska, are second only to oil in revenues, and have been sustained between 3 and 5 billion pounds annually for over 30 years. These fisheries occur within the 1.3 million square nautical mile area managed by the North Pacific Council, of which approximately two-thirds, or 66%, is closed to all or some fishing activities, many of which qualify as marine protected areas.

Our ecosystem based management approach is not focused on fisheries extraction alone, but includes explicit consideration of numerous related components of the marine ecosystem, including: seabird, Steller sea lion, and other marine mammals and protected species; predator-prey relationships and a ban on fishing for forage fish species; conservative exploitation rates for target species; aggressive bycatch reduction measures for species like halibut, salmon, and crab; comprehensive observer and catch accounting system; and, importantly, the use of geographic/area closures to fishing activities throughout the Gulf of Alaska, Bering Sea and Aleutian Islands, and into the Arctic. Management decisions, including designation of closed areas, are informed by detailed staff analyses, review by our Scientific and Statistical Committee, recommendations from our industry Advisory Panel, and input from a wide variety of stakeholders.

Development of Closure Areas in the North Pacific

Closure areas in the North Pacific have been implemented for a variety of reasons, including: essential fish habitat designation, or further designation as habitat areas of particular concern (particularly deep sea coral concentrations); specific protections for crab, halibut or rockfish nursery areas; minimizing bycatch of prohibited species; Steller sea lion protection (critical habitat or foraging areas); or simply as a precautionary measure in the face of limited information (such as the Arctic FMP). The attached maps provide a visual representation of the scope and magnitude of some of these closed areas. The attached Table provides more descriptive details on major closed areas. A few of the most important examples include:

The U.S. Arctic EEZ – nearly 150,000 square nautical miles closed to all commercial fishing as a
precautionary measure, pending better scientific information on resources within that area.

- Steller sea lion protection zones over 73,000 square nautical miles, throughout the Gulf of Alaska, Aleutian Islands, and Bering Sea, closed to fishing for major sea lion prey species (pollock, Pacific cod, and Atka Mackerel) and/or to protect haulouts and rookeries.
- Coral gardens and seamounts in the Gulf of Alaska and Aleutian Islands over 10,000 square nautical miles closed to all bottom contact fishing gear, to protect deep sea coral concentrations.
- Bottom trawl closures developed to protect Essential Fish Habitat (EFH) over 400,000 square nautical miles in the Northern Bering Sea and throughout the Aleutian Islands management area closed to bottom trawling, to protect pristine habitat and to 'freeze the footprint' of existing bottom trawling.
- Crab protection zones over 31,000 square nautical miles, in the Gulf of Alaska, Bristol Bay, and Pribilof Islands, closed to trawling to protect vulnerable crab habitat.
- Southeast Alaska trawl closures nearly 60,000 square nautical miles closed to bottom trawling to protect crab and rockfish habitat.

What these closed areas have in common is that they were all implemented based on careful consideration of available scientific information, detailed analysis of biological, economic, and social impacts, and with extensive input from all affected or interested stakeholders, as well as the State of Alaska. The Council process, operating through the authorities of the Magnuson-Stevens Act (MSA) and subject to approval by the Secretary of Commerce, has demonstrated over and over that it is by far the best equipped to manage fishing activities within the U.S. EEZ, including identification and designation of areas appropriate for protection. The North Pacific region in particular benefits from some of the most extensive and robust scientific information available to inform its decision making. Extensive analyses of the biological impacts to the marine resources, as well as the social and economic impacts to affected stakeholders, are conducted prior to any designations. This process includes outreach to, and input from, fishing industry participants, local, coastal residents, and environmental organizations. This ensures that when an area is identified for closure to fishing activities, we have confidence that the intended beneficial consequences to the ecosystem will indeed occur, and confidence that we have minimized unintended, and potentially adverse, consequences to the extent possible.

Aleutian Islands Habitat Conservation Areas

I would like to specifically highlight the Aleutian Island habitat conservation area closures, which were established as part of the Council's EFH process mandated by the Magnuson-Stevens Act reauthorization. The Council process to identify and designate these areas (including NMFS and the State of Alaska) resulted in several hundred pages of detailed analysis of available scientific information, including information on coral concentrations and other benthic habitat features, as well as analysis of fishing patterns in the area. After a lengthy process of scientific analysis and stakeholder review, including input from local, coastal residents, fishing industry representatives, and environmental organizations, the Council ultimately developed a plan to protect known coral concentrations from fishing activities, and essentially 'freeze the footprint' of bottom trawling activity throughout the entire area. The result is that only about 6% of the entire area remains open to bottom trawling; however, it is that 6% which was identified through the Council process which is most critical to the continued viability of economically and socially valuable commercial fishing activities in this management area. Attachment 4 illustrates the careful balancing achieved by this process, and the necessary complexity resulting from consideration of numerous management objectives— this map shows the closed and open areas for only a single target species, Pacific cod. Unilateral closure of such an area would be unnecessarily devastating to the fishing

industry, to numerous remote, coastal communities who are heavily dependent upon fishing activities in this region, and to the U.S. as a whole.

I would also note that we have developed an Aleutian Islands Fishery Ecosystem Plan (FEP), which serves as an overarching guide to our long-standing Fishery Management Plan (FMP). The FEP provides an explicit ecosystem context for management considerations, and includes a series of ecosystem indicators which can be periodically assessed to help inform whether further protections are warranted, and specifically guide decision-makers as to specifically where and how such protections make the most sense. Our Council is now in the process of developing a similar overarching FEP for the Bering Sea management area. These processes will dovetail in 2016 as the Council will also be conducting a 5-year review of our Essential Fish Habitat provisions, which could inform consideration of additional, or alternative, closure areas.

Bering Sea Canyons

An additional area of intense focus for our Council over the past few years has involved consideration of protection measures for canyon areas adjacent to the vast Bering Sea slope area, specifically Pribilof and Zemchug Canyons, the so-called 'grand canyons of the Bering Sea". These canyons are small parts of the much larger Bering Sea slope, which is an area of extremely high productivity and importance to commercial fisheries. While relatively little fishing effort occurs in the two canyon areas (and most trawl effort occurs at depths far shallower than where most deep sea corals occur), the Council has been petitioned to prohibit fishing in these canyons, or in areas within the canyons, to protect areas of coral concentration or other benthic habitat. Beginning in 2012, based on initial video transect surveys (Miller et al 2012) and numerous proposals from ENGO organizations, the Council began to specifically examine the necessity of special protection for these canyon areas, as important habitat for deep-sea corals, sponges, and certain life history stages of fish and crab species. Based on examination of trawl survey and other available information, NMFS scientists concluded that while Pribilof canyon in particular does contain areas of coral concentration, neither area contains unique physical characteristics which distinguish them from other areas of the Bering Sea slope.

Additional, underwater camera transect surveys were conducted in 2014, and the report of that research will be reviewed by our Council at our upcoming October meeting. Among the results of the recent camera drops are that about 97% of the images captured were classified as "*containing only unconsolidated substrate (mud, sand, gravel, pebble, or mixed course material*)". However, this work also did verify areas of the Pribilof canyon with deep-sea coral concentrations. While relatively little commercial fishing occurs in these canyon areas currently (less than 3% of total Bering Sea catch), and most trawling occurs at depths much shallower than most deep-sea coral concentrations, it can be an important area for certain species at certain time. The important point is that careful consideration of the available scientific information, and the involvement of the numerous stakeholders, is necessary in order to make informed, responsible decisions regarding proposed closures of large areas of the ocean. Similar to the development of the Aleutian Islands Habitat Conservation Area, it is likely that, in the case of the Bering Sea canyons, a more surgical resolution could result in appropriate protections, without unnecessarily closing large areas of the ocean which are, or may be in the future, important to fisheries, but which would provide little marginal habitat protection. This is not only possible through the Council process, it is precisely what the Council process was designed to accomplish.

Examples from Other Regions

Other regional Councils around the country have implemented similar closures for habitat protection, through very similar processes.

<u>New England:</u> New England Council Chairman, Terry Stockwell, outlined in a recent statement numerous habitat protections developed by their Council over the years, some of which apply to areas which are currently being considered for National monument designation – for example, through the New England Council process fishing activities have been restricted in the Cashes Ledge and adjacent areas, an area of 520 square nautical miles, for over 15 years. The NEFMC just completed a multi-year review of its closure system. This included the innovative development of the Swept Area Seabed Impact model to evaluate the impacts of fishing on habitat. Some measures to protect deep-sea corals were first adopted in 2007. In 2013, the three east coast Fishery management Councils signed a Memorandum of Understanding to coordinate protection of deep sea corals. The NEFMC is now moving forward with plans to adopt additional protections in many offshore canyons.

<u>Mid-Atlantic</u>: The Mid-Atlantic Council earlier this year took action to designate 'deep sea coral zones' which will prohibit the use of any bottom-tending gear over an area of more than 38,000 square nautical miles – an area nearly the size of Virginia. Reflective of the science-base, participatory process used in the North Pacific and other Council regions, and the need to appropriately balance habitat protections with fishing opportunities, Council Chairman Rick Robbins was quoted – "*This historic action by the Council was made possible by the cooperation of a broad group of fishermen, advisors, coral researchers, conservation groups, Council members, and staff......Many people deserve credit for their collaborative efforts to refine the coral protection areas in a way that protects deep sea corals in our region while accommodating current fishing practices."*

The Mid-Atlantic Council took this action under the discretionary provisions of the Magnuson-Stevens Act which allow regional fishery management councils to designate zones where, and periods when, fishing may be restricted in order to protect deep sea corals. The success of this action hinged on a cooperative effort to define the proposed coral protection areas in order to protect deep sea corals in the region while accommodating current fishing practices and minimizing the potential negative economic impacts. Over the course of the amendment's development, the Council engaged with of a broad group of fishermen, advisors, coral researchers, and conservation groups.

A particularly successful element of this collaborative process was a workshop that the Council held in April 2015, in order to refine proposed boundaries for fifteen "discrete coral zones," which are areas of known or highly likely coral presence. This workshop included participants from the Council's advisory panels, deep sea coral experts, industry members, and other stakeholders. During the interactive workshop, boundaries were refined and negotiated in real time, allowing the participants the opportunity to provide feedback on key areas of importance for both coral conservation and for fishing communities. This participation was critical to reconciling multiple boundary proposals, for which small-scale spatial modifications may have led to large differences in impacts, and where fine-scale fishery and coral data were often lacking. Workshop participants were able to reach consensus on alternative boundaries for all fifteen proposed discrete areas, all of which were ultimately recommended by the Council for implementation.

<u>Pacific</u>: The Pacific Fishery Management Council (Pacific Council) has a long and collaborative history of protecting habitat and unique natural areas. The West Coast currently has extensive conservation areas in place. In 2005, the Pacific Council set aside over 130,000 square miles of essential fish habitat conservation areas for species in its Pacific Coast Groundfish Fishery Management Plan. Additionally, there are five National Marine Sanctuaries on the West Coast, the California Coastal National Monument, and numerous State water marine protected areas in California, Oregon, and Washington. A new National Monument designation for marine areas would presumably be for the purpose of protecting objects of historic or scientific interest and the West Coast has both existing protected areas and an open Pacific Council process to address current and potential future needs.

The Pacific Council is currently considering further geographic protections and conservation areas. The Pacific Council has been engaged for the last five years in an extensive review of groundfish essential fish habitat. This collaborative and transparent process between stakeholders, environmental organizations, and government agencies has resulted in proposals to add an additional 120,000 square miles of essential fish habitat conservation area designations. The Pacific Council also works closely with West Coast treaty tribes to ensure that protective measures are consistent with treaty trust responsibilities in the tribal usual and accustomed fishing areas. The establishment of a National Monument would, in many ways, be duplicative of ongoing efforts, but would lack the Pacific Council's valuable public process.

Fisheries are import to our nation in many ways; socially, culturally, and economically. The management of our natural resources through the National Monument process can be seen as a blunt tool that causes controversy, resistance, and conflict. The Pacific Council believes that the management of our Nation's fisheries, fish stocks, and the habitats they rely on should continue to occur under the authorities of the Magnuson-Stevens Act and its collaborative processes through the regional fishery management councils. Our nation's marine resources and fisheries are national treasures, treasures that are adequately protected under existing conventions.

Western Pacific – a flip-side story: A stark contrast to these examples of deliberative, science-based closure designations can be found in the Western Pacific Region, where U.S. fishermen governed by the Magnuson-Stevens Act and managed by the Western Pacific Council have lost 30 percent (665,000 square miles) of fishing waters to monument and sanctuary designations, which equates to more than 100 times the proposed Atlantic marine national monument in the Gulf of Maine and off Cape Cod, which together would total about 6,000 square miles. Created under executive proclamation without the science and collaboration described above, marine monument designations can subvert the socioeconomic and cultural importance of fishing to coastal communities (Hawaii is the 47th smallest state in the Union, with 6,459 square miles of land), which depend on the ocean for food, natural resources, cultural identity and social cohesiveness. Combined with prohibited areas established under the Council process (which are based on a scientifically informed, public process), currently 44 percent of the US EEZ waters in the Pacific Islands are closed to U.S. longline and purse-seine vessels. Purported reasons for the creation of the monument in the Northwestern Hawaiian Islands (NWHI), e.g., protection of endangered monk seals from fishing and protecting fish stock recruitment areas for the main Hawaiian Islands (MHI), have proved unfounded. Somewhat ironically, monk seals increasingly migrate from the NWHI to the heavily populated MHI where they fare better (and which is exactly where displaced fishing effort occurs), and scientific research indicates that "connectivity between the MHI and NWHI is limited; thus, the MHI will not receive substantial subsidy from the Papahanaumokuakea Marine National Monument". (Toonen et al. 2011).

Summary

In summary, area closures to fishing or other activities are indeed an important natural resource management tool and have been applied extensively in the North Pacific region, and in other regions of the U.S. The Council process, guided by the provisions of the Magnuson-Steven Act and other applicable laws and subject to approval by the Secretary of Commerce, is uniquely positioned to most effectively implement this management tool, using the best available science and with the collaboration and input of affected stakeholders, and the affected, adjacent State(s). This process has resulted in the implementation of significant protection areas throughout the North Pacific and the rest of the U.S., and has done so in a way to minimize potentially adverse impacts to other components of the ecosystem, including region-wide habitat, bycatch encounters, coastal economies, and fishermen. Unilateral closure designations represent a tremendous destabilizing force which place significant investments at risk – ongoing investments in vessel replacement, processing facilities, and coastal community infrastructure, along with

the thousands of jobs attendant to these activities, can be wiped out with a single, unanticipated, relatively uniformed action.

Successful use of this resource management tool requires a careful balancing of multiple considerations which is not possible under unilateral actions such as monument designations. In late 2014 the North Pacific Council, at the request of Senator Lisa Murkowski, submitted a comment letter on draft legislation titled "Improved National Monument Designation Process" (similar to legislation, HR330, just introduced by Congressmen Jones and Young). Quoting from this letter, Council Chairman Dan Hull stated "Your legislation would indeed improve upon the existing process, and would require deliberative consideration of consequences, rather than unilateral Executive Action.....Further, we note that the Regional Fishery Management Council process provides an open and transparent forum to consider potential impacts of monument designation relative to fishing and related activities within any proposed monument site... and that, if an area is designated, any fishing regulations within that area should be accomplished through the authorities of the relevant Regional Fishery Management Council, and the processes of the Magnuson-Steven Act".

Year-round Area Closures Established by NPFMC off Alaska Summary Table

Name	Location	Number of sites	Total Size (nm²)	Closed to	Reason for closure
Arctic EEZ	Chukchi and Beaufort Seas	1	148,393	All commercial fishing	Precautionary management given limited data on fish stocks
Steller sea lion protection measures	Federal and state waters by rookeries and haulouts throughout BSAI and GOA	149	60,000*	Trawling up to maximum of 20 nm; All vessel traffic to 3 nm in some areas.	Protect SSL foraging areas around rookeries and major haulouts
	Large foraging areas in federal waters of Aleutian Islands and GOA	2	13,427	Fishing for pollock, cod, Atka mackerel	Protect SSL prey base
Essential fish habitat	Coral gardens and pinnacles in GOA and AI	12	131	All bottom contact gear (marine reserves)	Preserve special areas of dense fragile deep sea corals and sponges
	Seamounts and Bowers Ridge	18	10,615	All mobile bottom contact gear	Precautionary protection for deep sea coral and other mostly pristine habitat
	GOA slope habitat areas	10	1,892	All bottom trawl	Protect deep sea corals and other habitat on slope
	BS island and nearshore habitat areas	3	20,866	All bottom trawl	Protect vulnerable nearshore habitat
	Northern BS research area	1	65,559	All bottom trawl	Protect mostly pristine habitat given limited data
	AI and BS freezing the footprint/ untrawled areas	2	326,235	All bottom trawl	Precautionary management to protect mostly pristine deepwater habitat
Crab protection areas	Kodiak, Bristol Bay, Pribilof Islands	6	31,000*	All bottom trawl, also pelagic trawls (Pribs)	Protect vulnerable crab habitat and minimize bycatch mortality
GOA trawl closures	SE Alaska, Cook Inlet	2	58,294	All bottom trawl	Protect habitat for rebuilding rockfish and crab stocks

*estimate; not precisely calculated from GIS mapping.

Year-round area closures established by the North Pacific Fishery Management Council. Note that closures to protect Steller sea lion prey are not included in this figure.





