

NATIONAL MARINE
SANCTUARY NOMINATION

ALAĠUM KANUUĠ: HEART OF THE OCEAN
PRIBILOF ISLANDS MARINE ECOSYSTEM
(PRIME) INITIATIVE



*Submitted by the Aleut Community of St. Paul Island
Tribal Government*





SECTION I – THE NOMINATION OF ALAĠUM KANUUĠ¹

- Nomination title: Alaġu KanuuĠ (Heart of the Ocean; Pribilof Islands Marine Ecosystem (PRIME) Initiative; pronounced *ahl-ah-GOOM ka-NOH*)
- Name and affiliation of proposal nominator: Amos Philemonoff, President, Aleut Community of St. Paul Island Tribal Government (ACSPI)
- Nomination Point of Contact: Lauren Divine, Director, Ecosystem Conservation Office Aleut Community of St. Paul Island; 907-257-2636; lmdivine@aleut.com; 4720 Business Park Blvd., Suite G-42, Anchorage, AK 99503



SECTION II – INTRODUCTION

Narrative Description | UnangaĠ Values

- **Alaġum agliiladakuĠ.** *The ocean is to be protected.*
- **Aniqdun ngiin aqaagān aġnangin qulingiin akuġgumalgakuĠ.** *For the coming generations that we don't see yet, for their time here.*
- **Tanaġnangin lġayuusalix anġaġiimchin aġnaġtxichin.** *Live with and respect the land, sea, and all nature.*
- **QaqamiigūĠ qalgadam ukulganaa ngiin ugutaasakun.** *Subsistence is sustenance for life.*
- **Tuman tanaġ agliisaaġtan.** *Take care of the land.*
- **Tuman alaġuĠ agliisaaġtan.** *Take care of the ocean.*



We are UnangaĠ. The Pribilof Islands of Tanaġ Amiġ (St. Paul) and AngāaxchaluĠ (St. George) are among the most unique and important places in the world. To us, the marine waters surrounding our islands are alaġu kanuuĠ, *heart of the ocean*.

UnangaĠ (*the People of the Sea*, or the Aleut Peoples) connections to the marine resources in the Pribilof Islands marine ecosystem predate historic records. The Pribilof Islands were known and used but not permanently inhabited by humans until Russian fur traders enslaved 137 UnangaĠ from the Aleutian Islands and forced them to settle on St. Paul and St. George (Torrey and Krukoff 1978, Black 1983). They became an enslaved workforce for commercial northern fur seal harvesting operations that ended in 1972 on St. George and in 1984 on St. Paul. Even though commercial sealing, and thus our original and primary cash economy, ended, our UnangaĠ communities remained. As it has been for centuries, our cultures, economies, and food security on St. Paul and St. George are inextricably tied to the health of the animals, birds, fish – the overall ecosystem and everything within it.

¹Our communities of St. Paul and St. George will engage in the naming of this nomination; that coming together is critical to officially providing an Unangan Tunuu (Aleut language) name for the nominated area. Until that time, “Alaġu KanuuĠ” will hold space for the name of our nomination.

The Pribilof Islands provide vital breeding and feeding habitat for more than half of the world's population of laaquadan, or northern fur seals (NFS; *Callorhinus ursinus*), as well as important habitat for qawan, or Steller sea lions (*Eumetopias jubatus*) and isugĩn or harbor seals (*Phoca vitulina*), and are used by many whale species. More than three million seabirds flock to the islands during the summer months. Seaducks and gulls, such as king, spectacled and common eiders (*Somateria spp.*), use the islands for overwintering habitat. By virtue of their position straddling the continental shelf and deeper waters, the islands play a central role in creating the productive ocean zone that supports some of the world's largest and most profitable commercial fisheries.

Today, our tribal communities self-identify as 'People of the Seal' and live with the knowledge that, "If they're [seals] not here, then we won't be either" (A.D. Lestenkof, Goldman et al. 2020). All of our marine resources are vital to our cultural health and wellbeing, too. The connection to chagiġ, or Pacific halibut (*Hippoglossus stenolepis*), for example, is evident:

”

“Prior to the invention of the cotton line, my ancestors used strong lengths of kelp for their handlines. The smell, taste, and feel of this wondrous place in the middle of the Bering Sea were the same as what my ancestors experienced. This Sea is my experiential history book and a personal link to my ancestors. ... Like the kayak to the Sea, I had to intimately connect with the halibut in order to feel her every nuance and intention, in order to succeed in bringing her on board. This connection is the foundation for what is often termed by native peoples as our Traditional Knowledge and Wisdom. I witnessed how the men would take information in through use of all their senses, about the clouds, color of water, direction of drift, speed of drift, timing between tides, movement of wind, cloud formations, type of sea bottom, and shape and movement of the Sea in the areas we were in. I began to understand the value of self-awareness and necessity of remaining connected to the Sea, the air, and the land for success in catching halibut and to be safe. I was learning an ancient language of communication with the Bering Sea, Mother Earth, and Father Sky, one that allowed our people survive and thrive in one of the most challenging of conditions for hundreds of generations.”

—Ilarion Larry Merculieff (NFPMC, September 2021)

Currently, our Unangaġ communities are directly experiencing a rapidly transforming marine ecosystem, including harmful declines of fur seals, sea lions, seabirds, fish and invertebrates. These changes are having real costs to wildlife, human and ecosystem health, local economies, and culture (Lestenkof et al. 2013, Lyons et al. 2016). The spectacular natural resources, cultural and historical significance and threats in the region warrant designation and a comprehensive management approach centered on tribal co-management, Indigenous, Traditional and local knowledge, and equitable representation.

As demonstrated by its January 2017 addition to the inventory of successful nominations, the existing “Unangan Heritage National Marine Sanctuary (UHNMS)” nomination meets the 11 evaluation criteria considered by the Office of National Marine Sanctuaries. The City of St. George is to be congratulated for its leadership and foresight in advancing its nomination. There is no question that the Pribilof Islands are an ecologically, socioeconomically, and culturally important area warranting a designation and inclusive management approach. A National Marine Sanctuary (NMS) that includes the entire Pribilof Islands archipelago and introduces a new form of Indigenous co-management to the National Marine Sanctuaries system is necessary to meet this moment, to comprehensively and holistically conserve the ecosystems on which Unangaġ and our neighbors and colleagues depend, to preserve our culture, and to elevate our institutions to the levels of co-equal governance. In return, the addition of the Pribilof Islands region to the NMS system will provide immeasurable benefit to our communities and the nation.

The nomination of Alaġu Kanuuġ incorporates and expands upon the UHNMS nomination. Here we provide information consistent with the extensive body of empirical science and Traditional, Indigenous and Local Knowledge gathered and documented from our islands, supporting an expansion of the nomination to an appropriate ecosystem-focused scale and extent. This knowledge and information shows that the area within 100 nm (~185 km) around St. Paul and St. George is of central importance as an ecosystem that supports marine mammals, seabirds, fish and invertebrates, our communities, and other resources. There is an opportunity and need for truly comprehensive and integrated scientific and Indigenous knowledge-based management approaches that account for this wealth of information and consider this larger area as a critical and comprehensive unitary ecosystem with unified conservation and management needs.

Critically, our nomination also calls for the integration of a co-management structure for the Sanctuary, a new direction that is crucial for any NMS in our region. The establishment of Alaġu Kanuuġ would allow conservation actions to follow our communities' lead and ensure that tribal co-management is a central feature in the future of the Pribilof Islands marine ecosystem. Congress has clearly stated its intention for the NMS Program to "[employ] innovative management approaches to protect sanctuary resources or to manage compatible uses" (16 USC §1433(b)(1)(K)). The intentional embrace of new tribal co-management principles in the governance and conservation approaches of Alaġu Kanuuġ reflect a truly innovative vision, in direct alignment with numerous governance principles embraced by the federal government including Indigenous and community equity, the use of Traditional Indigenous Ecological Knowledge, and consultation with communities, fishermen and others.

Conforming to the spirit and the letter of the law, this approach is necessary to achieve meaningful and durable conservation in our region and beyond. It will also further the federal government's commitment to "...support and help advance the priorities of American Indian, Alaska Native, Native Hawaiian, and Indigenous leaders," in meeting the stated goal to protect 30% of U.S. oceans and lands by 2030. As the Biden-Harris Administration has made clear, "Efforts to conserve and restore America's lands and waters must involve regular, meaningful, and robust consultation with tribal nations. These efforts must respect and honor tribal sovereignty, treaty and subsistence rights, and freedom of religious practices." A NMS can prioritize those objectives and make meaningful advances toward equitable co-management and true tribal-led conservation and economic resilience. This is the central tenet of Alaġu Kanuuġ.


The Setting of Alaġum Kanuuġ

The bounty of diversity and richness of the Bering Sea has sustained Unangaġ throughout our region for millennia. Virtually every archeologist and ethnographer of the Aleuts has described what was hunted and how people used sea mammals, birds, fish and shellfish (Corbett 2016). Prehistoric culture across the Aleutian Islands, the original home of Pribilofian Unangaġ, was based almost entirely on marine resources, including hunting every kind of sea mammal found around the Aleutian chain and Pribilof Islands, fishing the offshore and coastal waters, foraging for fish and shellfish on rocky intertidal and subtidal reefs, and hunting birds on land and sea (Dall 1877, 1878; Hrdlička 1945; Jochelson 1925; Lantis 1970, 1984; Laughlin 1980; McCartney 1984; Veniaminov 1984). The wealth of resources supported dense human populations estimated




to total at least 20,000 individuals expressing a rich, strong culture. The prehistoric inhabitants of the Aleutian and Pribilof Islands created the world's most specialized and successful maritime hunter-gatherer traditions, lasting from roughly 4,000 YBP to the time of Russian contact in 1741 (Veniaminov 1984).

Although the Pribilof Islands were not permanently inhabited until the 18th century, they were used extensively for hunting and harvesting. Unanga̋ oral tradition indicates that Unangan communities had known of their existence long before and had visited the islands for hunting purposes (Elliott 1882; Osgood et al. 1915; Veniaminov 1984). An Unangan legend identifies St. Paul Island as Tana̋ Ami̋, or “*The Island-Uncle*” or “*The land of Mother’s Brother*” (Jochelson 2003), the name that is still used today for the island.



The Pribilof Islands have a complex history of exploitation and colonization tied to the maritime fur trade of the 1700s and 1800s. After searching for decades for the islands they believed to harbor large populations of NFS, Russian fur traders finally located them 45 years after arrival in Alaska (Elliott 1882; Veltre and Veltre 1988). The connections between the islands' natural resources and Unanga̋ was dramatically altered in 1788, when the Russians forcibly removed 137 Unanga̋ hunters from their permanent villages in the Aleutian Islands and relocated them to the Pribilof Islands to harvest NFS for their pelts as a source of income for the Russian government (Torrey and Krukoff 1978). Rival Russian fur-hunting companies established seasonal sealing camps on both St. Paul and St. George (Eldridge 2016). The companies were so relentless in the NFS harvest that they nearly exterminated the NFS populations by 1796 (Elliott 1882). With some mitigation, NFS populations were saved from extermination. The Russian-American Company (RAC) was established in 1799 and drove other companies out of the Pribilofs (Black 2004); year-round settlements on St. Paul and St. George soon followed (Eldridge 2016).



The U.S. purchased Alaska from Russia in 1867, and the federal government continued operating the commercial NFS harvest, relying on Unanga̋ laborers. Forced commercial harvests continued on the Pribilofs after the purchase of Alaska by the U.S., first under the Alaska Commercial Company, then the Northern Commercial Company, and finally under the U.S. Department of Fisheries (Rubicz 2007). Enough NFS were killed in the first several years of American ownership to pay for the entire purchase of Alaska. The U.S. government forced all residents of St. Paul and St. George to evacuate to Southeast Alaska during WWII, but still required men to return to the islands in the summer to harvest NFS for the commercial enterprise. Commercial harvest ended in 1972 on St. George and 1984 on St. Paul. To compensate for this loss of livelihoods on the islands, the U.S. government promised sustainable, fishing-based economies that would provide a modern standard of living for the Unanga̋ communities of St. Paul and St. George. This promise echoed one made when the U.S. purchased Alaska; neither has been kept.

Today, despite more than two centuries of colonial exploitation, Unanga̋ on St. Paul and St. George remain inextricably interconnected with the ocean and marine resources; our individual identities are rooted in the Bering Sea and its rich resources. Traditional use (or “subsistence”) continues to be a cornerstone of Unanga̋ culture and livelihood, as is characteristic of Indigenous cultures across the Arctic. As has been true for millennia, seals, birds, sea lions, halibut, crabs, and other marine resources are the cornerstone of life, including food, economy, and culture, on the Pribilof Islands.

This interconnected system is once again threatened today as the Unangǎ communities on St. Paul and St. George experience dramatic declines of marine mammals, seabirds, fish and invertebrates, with observed negative impacts and real economic and ecological costs to wildlife, human and ecosystem health, local economies, and our culture. Worsening and unpredictable climate change and the residual impacts of historic and contemporary overexploitation of marine resources (e.g. Pribilof Island blue king crab, Bristol Bay red king crab, Pacific halibut, NFS) are contributing factors to these declines.

Innovative and inclusive approaches are needed to recognize the importance of this area and address management challenges in a comprehensive way centered on tribal co-management and Indigenous Knowledge. Designation as a NMS is an important first step toward the following goals.

Our Goals for Alǎum Kanuǔ

1. Designate a National Marine Sanctuary that includes the extent of the Pribilof Islands Marine Ecosystem (PRIME) with a 100 nm boundary around St. Paul and St. George Islands in order to promote environmental and economic resilience through the responsible co-management of our cultural keystone species including laaquadan (*NFS*), qawan (*Steller sea lions*), san (*seabirds*), qimgiitan (*crab*), and chagin (*halibut*).
2. Design and implement a co-management governance framework between the tribal governments of St. Paul and St. George and the United States government with equitable consensus-driven management decision-making authority and shared responsibilities for the co-management of Alǎum Kanuǔ.
3. Promote tribal-led research and monitoring and collaborations with research institutions to incorporate an inclusive understanding of the PRIME, grounded in Indigenous, Traditional and Local Knowledge and empirical science, that will facilitate tribal-led stewardship and sciences and restore Indigenous connections to the marine ecosystem.
4. Enhance and rebuild the economic vitality of the Pribilof Islands communities through responsible co-management of Alǎum Kanuǔ grounded in Unangǎ knowledge and empirical science.
5. Develop a Sanctuary Management Plan based on co-equal partnership between the federally recognized tribes of the Pribilofs and US federal governments, and establish a collaborative Advisory Council with broad community and fishing industry participation & a visionary problem-solving culture, ensuring successful, diverse resource-dependent economies and the sustainability and productivity of a healthy ecosystem for future generations.
6. Study, document, interpret, and protect the region's unique Unangǎ history, maritime traditions, practices, and cultural heritage, establishing this cultural legacy and exploration of knowledge as central to the Sanctuary's research and education programs.
7. Advance co-management in the PRIME to provide food security for those who rely upon traditional (or subsistence) harvesting of seafood, and to advance sustainability of the nation's fisheries through collaborative approaches to responsible management in a rapidly changing climate.
8. Implement monitoring and timely analysis of the impacts that climate change is having on the PRIME and identify opportunities to improve co-management and promote resilience in this uniquely productive region.
9. Enhance community resilience by ensuring that the Pribilof Islands are able to readily and quickly adapt to changing environmental and economic conditions, via new approaches to education, scientific research, and Indigenous Knowledge generation.

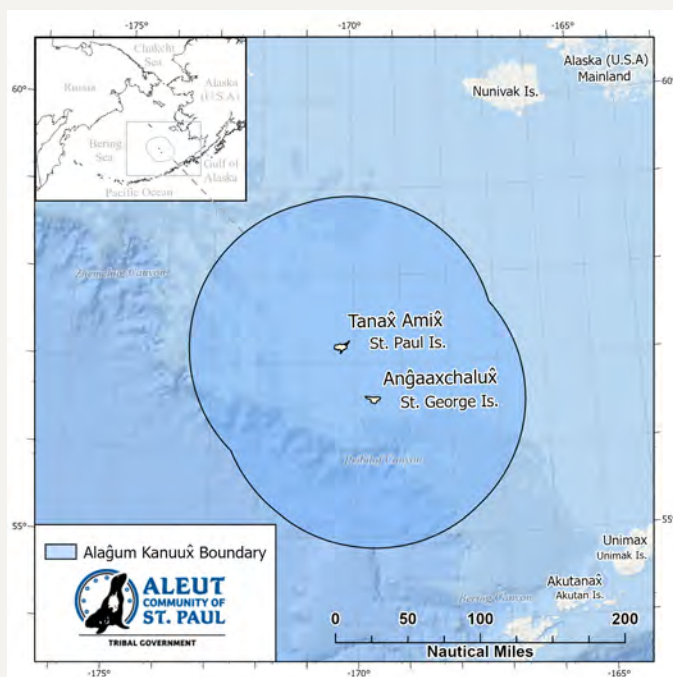


Location Description

The Pribilof Islands are centrally situated in the eastern Bering Sea (EBS), 30 miles (48 km) north northeast from the EBS continental shelf break, roughly 500 mi (805 km) off the Siberian Coast, Russia, and about 750 mi (1207 km) west of Anchorage, Alaska. St. Paul is about 44 mi² (114 km²) and St. George is 35 mi² (91 km²) in size. Otter and Walrus islands and Sea Lion Rock are uninhabited and make up about 0.8 mi² (2 km²) in size collectively.

We define the PRIME as the area encompassing 100 nm (~185 km) centroid boundaries around the two inhabited islands of St. Paul and St. George; and encompasses approximately 52,910 mi² (137,036 km²). The size of this area and distance from the islands is based on Indigenous, Traditional and Local Knowledge, physical oceanography and ecosystem modeling (Sinclair et al. 1994, Brodeur et al. 2002, Hunt et al. 2002, 2008, Ciannelli et al. 2004, Huntington et al. 2013, Lestenkof et al. 2013).

The proposed boundary of Alaġu Kanuuġ would include the PRIME and exclude a quarter-mile buffer zone around the St. George and St. Paul Harbors and all shoreside and submerged industrial facilities on both islands. The shoreward boundary of Alaġu Kanuuġ is the mean high tide line.



SECTION III – NATIONAL SIGNIFICANCE CRITERIA FOR THE DESIGNATION OF ALAĠUM KANUUĠ

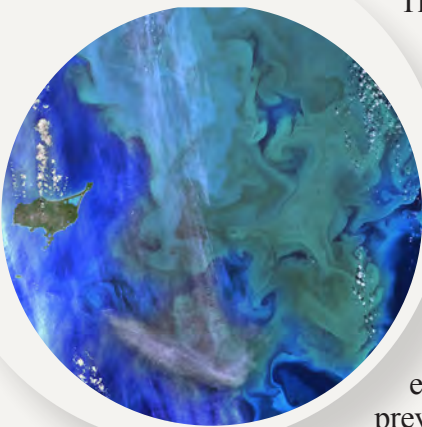
Criterion 1. The area's natural resources and ecological qualities are of special significance and contribute to: biological productivity or diversity; maintenance or enhancement of ecosystem structure and function; maintenance of ecologically or commercially important species or species assemblages; maintenance or enhancement of critical habitat, representative biogeographic assemblages, or both; or maintenance or enhancement of connectivity to other ecologically significant resources.

The marine waters surrounding the Pribilof Islands support globally significant populations of marine mammals, birds, and fish that are integral to the communities of St. Paul and St. George; these waters are also central to some of the most valuable commercial fisheries in the world.

The St. George UHNMS nomination document includes substantial information demonstrating the significance of the natural resources and ecological qualities of the PRIME, as it is contained completely within the proposed boundary of Alaġum KanuuĠ. Here, we incorporate, augment, and broaden that information.

The PRIME is situated in a highly productive location near the eastern Bering Sea (EBS) shelf, which creates a unique oceanography around the islands. Framing this area are the northwestern Zhemchug Canyon (2,600 m; 8,530 ft depth) and southern Pribilof Canyon (1,829 m; 6,000 ft depth). These submarine canyons feed nutrient rich water (e.g. chlorophyll, nitrates, silicates, ammonium, iron and phosphates), from shelf-slope water mass exchange to the Bering shelf and are some of the richest waters in the broader Bering Sea (Brodeur et al. 2001, Aguilar-Islas et al. 2007). The Pribilof Canyon makes up 10% of the Bering shelf slope and is a hotspot of structure-forming invertebrate habitat, containing more than 50% of estimated high-quality gorgonian (or soft coral) habitat and 45% of sponge habitat within the Bering Sea shelf edge area deeper than 100 m (Miller et al. 2015). These foundational species are the basis of benthic or bottom habitat that attracts higher trophic level consumers ocean-wide (Dayton 1972, Ellison et al. 2005).

The PRIME encompasses a highly productive zone that is functionally and biologically distinct from adjacent waters (Ciannelli et al. 2004). The Pribilof Domain (0-50 nm of the PRIME) is uniquely characterized by the clockwise flow of currents around the Pribilof Islands; heightened primary and secondary productivity; and increased advection and mixing of the water column (Stabeno et al. 1999, Ciannelli et al. 2004, Hunt et al. 2008). The addition of the 50-100 nm area accommodates the minimum energetic requirements of central place forager species such as NFS and seabirds that breed on the Pribilof Islands (Ciannelli et al. 2004). The 100 nm boundary is also roughly equal to the median foraging distance (~97 nm) for lactating NFS (Robson 2001, Robson et al. 2004). Thus, each summer and fall, lactating NFS are dependent on prey resources in the PRIME to provide food to provision their pups.





The nutrient-rich water of the PRIME provides for seasonally high productivity of phytoplankton and zooplankton. This productivity in turn drives EBS ecology through bottom-up processes and supports small- and large-scale commercial fisheries and traditional activities (Hunt et al. 2008). The PRIME supports many key Bering Sea commercial fisheries including walleye pollock (*Gadus chalcogrammus*), the largest commercial fisher in the nation, as well as Pacific halibut (*Hippoglossus stenolepis*), snow crab (*Chionoecetes opilio*) and red king crab (*Paralithodes camtschaticus*). These commercial fisheries in turn provide job opportunities and revenue opportunities for coastal Alaskan communities and increase regional and national food security via seafood production.



The abundance of forage fish species in the PRIME drives one of the highest densities of seabirds on the planet (Hood and Calder 1981). During summer, seabirds return to the region from places as far as Antarctica and Australia to take advantage of available food abundance in the PRIME. The significance of the region is apparent in the substantial populations of murres, auklets, puffins, fulmars, petrels, phalaropes, kittiwakes, shearwaters, and others that congregate in the area in significant numbers. For instance, nearly 80% of the global population of red-legged kittiwakes (*Rissa brevirostris*) breeds on St. George Island alone, contributing to the island's recognition as a globally significant "Important Bird Area (IBA)".

The seabird colonies on St. Paul Island are also designated as IBAs by Audubon (Smith et al. 2012). Designation as an IBA means that a site has a significant number of threatened bird species or a large proportion of the global population of a species. The proposed area of PRIME has both. Continued protection of seabird breeding and foraging habitat through a NMS would further conservation of these IBAs. The US Fish and Wildlife Service (USFWS) Migratory bird program recently released its 2021 list of *Birds of Conservation Concern* and of the species listed, the red-legged kittiwake, red-faced cormorant and tufted puffin all breed on the Pribilof Islands.

Almost 30 marine mammal species live in or use the waters around the Pribilof Islands at various times of the year (O'Hara 2005). Historically, sea otters, seals, sea lions and NFS were abundant; however, the overexploitation of the Pribilof Islands' resources by Russians, and later Americans, took its toll on certain marine mammal populations. The Pribilofs once supported a population of approximately 10,000 to 15,000 Steller sea lions (SSL) (Elliott 1880), including rookeries. Between 1867 and 1914 both St. George rookeries were exterminated by a combination of hunting and culling to clear breeding space for NFS (Loughlin et al. 1984). The St. Paul rookery was similarly reduced to less than 150 animals during this time. Walrus Island is currently the sole remaining breeding rookery and is currently in danger of extinction. Over the last 50 years, sea lion pup production on Walrus Island has declined by over 98%, from 2,866 pups born in 1960 to only 48 in 2015 (Fritz et al. 2015a, b). The population is listed as endangered under the Endangered Species Act (ESA), and it remains of cultural and subsistence importance to Unangan.

The PRIME also supports an abundance of rare and/or ESA- or IUCN-listed cetacean species. Gray and humpback whales travel thousands of miles from their breeding grounds in the waters near Baja, Mexico and Hawaii, respectively, to feed in the PRIME (Kim and Oliver 1989; Muto et al. 2016). The endangered North Pacific right whale is heavily dependent on the waters of the Pribilof Domain. The population is estimated to have declined to 30 individuals, and the Bering Sea shelf waters from east of the Pribilof Islands south to the Alaska Peninsula have been designated as critical habitat for them (Allen and Angliss 2015). Killer whales (*Orcinus orca*), beluga whales (*Delphinapterus leucas*), Dall's porpoise (*Phocoenoides dalli*), sperm whales (*Physeter macrocephalus*), Baird's beaked whales (*Berardius bairdii*, "tsuchi-kujira"), Stejneger's beaked whales (*Mesoplodon stejnegeri*), humpback whales (*Megaptera novaeangliae*), fin whales (*Balaenoptera physalus*), and minke whales (*Balaenoptera acutorostrata*) (Allen and Angliss 2015) are all known or likely to inhabit the PRIME waters transiently. Thus, there is extraordinary regional and global significance to the biological connectivity of the entire PRIME with other Pacific, North Pacific, and Arctic ecosystems, and those connections will be conserved and enhanced via the designation of Alagû Kanuux̂.

Northern fur seals (NFS) are perhaps the most important species to the Pribilofian Unangan and most famous to the rest of the world throughout the islands' known existence. The islands and surrounding waters provide breeding and feeding habitat for 50% of the world's NFS population, and the lives of the Unanga communities have been, and remain, tied to NFS.

The Eastern Pacific stock of NFS once numbered more than 2 million animals; more recently the species was listed as depleted under the Marine Mammal Protection Act (MMPA) in 1988 after declining to less than 50% of the population levels of the late 1950s (NOAA 1993, 2007). Commercial harvests of NFS during the 18th to 20th centuries contributed to long-term fluctuation in the abundance of the Pribilof Islands NFS population (Scheffer 1970, NOAA 2007). During the peak of commercial harvesting in the 1940s-1968, up to 126,000 animals were harvested annually (NOAA 2007). An experimental commercial harvest of nearly 300,000 females on the Pribilof Islands from 1956 to 1968 combined with scientific pelagic collections of approximately 16,000 female NFS from 1958 to 1974 led to a dramatic decline of the Pribilof NFS population through the 1970s (York and Hartley 1981, Roppel 1984). After a brief period of stability and recovery from the early 1980s to mid-1990s, the population entered a new period of decline that continues today. This decline is described as 'unexplained', and is currently unmitigated by current management measures (Trites 1992, Towell et al. 2006).



The Pribilof Islands NFS stock is currently estimated at ~ 458,500 animals, less than ¼ of the estimated maximum historic population from the late 1950s (Towell et al. 2019; Muto et al. 2020). Currently more 100,000 pups are produced across the Pribilof Islands annually (Allen and Angliss 2014; Testa 2016). In recent decades, declines in pup production have continued on St. Paul Island, but no significant trend has been observed across St. George rookeries since approximately 2002 (Muto et al. 2020). NFS are central place foragers (CPF; Orians and Pearson 1979, Gentry and Coulson 1998). Females give birth to a single pup at terrestrial breeding rookeries (the central place), and then undertake foraging trips at sea, interspersed with regular visits to the central breeding site on land to nurse their dependent offspring (Robson et al. 2004, Ream et al. 2005, Zeppelin and Ream 2006, Call et al. 2008, Antonelis 2009, Kuhn et al. 2014). NFS foraging behaviors include high use of walleye pollock (*Gadus chalcogrammus*), gonatid

squid (*Gonatus spp.*), sand lance (*Ammodytes hexapterus*), herring (*Clupea pallasii*), Northern smoothtongue (*Leuroglossus schmidtii*), Atka mackerel (*Pleurogrammus monopterygius*), and salmon (*Oncorhynchus spp.*). This behavior continues from July to November annually, prior to NFS overwintering migrations to the broader North Pacific (Ream et al. 2005). NFS satellite tracking and diet studies suggest that “rookery complexes” associated with distinct at-sea foraging areas exist on the western and eastern coasts of St. Paul, and to a lesser extent on the northern and southern coasts of St. George (Robson et al. 2004, Zeppelin and Ream 2006, Call et al. 2008, Kuhn et al. 2014).

Criterion 2. The area contains submerged maritime heritage resources of special historical, cultural, or archeological significance, that: individually or collectively are consistent with the criteria of eligibility for listing on the National Register of Historic Places; have met or which would meet the criteria for designation as a National Historic Landmark; or have special or sacred meaning to the indigenous people of the region or nation.

The marine waters around the Pribilof Islands provide food, income, knowledge, community, personal health and wellbeing, and Unanga̋ cultural heritage. From an Unanga̋ perspective, natural resources are a highly complex living network of “relatives.” Unanga̋ cannot be separated from these components of the larger network (Merculief et al. 2018), and the Priblovia Unanga̋ communities have always lived with the wildlife that live on and around the islands. Without the islands’ rich marine resources there would be no community; the fate of the Pribilof Island communities, materially and spiritually, hangs in the balance as marine mammal and seabird populations continue to decline. The marine waters around St. Paul and St. George are vital to this belief system and central to Unanga̋ personal and collective identities. The designation of Alaġu Kanuű will ensure that the preservation of these critical cultural resources become interconnected with the conservation and management of the entire marine region around us in a visionary new way.

As is well known in the communities of St. Paul and St. George and documented in the St. George UHNMS nomination (incorporated here by reference), there is extensive evidence of maritime heritage resources on and around all of the islands in our archipelago. Three areas of St. Paul and St. George were designated as a National Historic Landmark District in 1962 as part of the “Seal Island Historic District” and listed on the National Register of Historic Places in 1966 (National Park Service 2008). About 10% of the land area of St. Paul is included in the district and includes nine separate fur seal rookery areas and five historic village sites. On St. George, the district encompasses historic elements of the current town site, nine fur seal rookeries, a historic seal kill site, and the remains of one of the early Russian-built villages, Staraya Artil. Historic structures include industrial processing facilities as well as worker housing. These sites are part of the historical connection between land and sea on the Pribilof Islands. In addition, Russian Orthodox churches in both communities, St. Peter and Paul Church in St. Paul and St. George the Great Martyr Orthodox Church in St. George, also contribute to the area’s historic significance and are separately listed on the National Register of Historic Sites.



There have been a number of shipwrecks in and around the Pribilof Islands. Government records identify wrecks dating back to 1789 and as recently as February 2017, when the *F/V Destination* capsized after it became weighed down by an estimated 340,000 pounds of ice and sank near St. George Island.

It is locally understood that there are submerged sites around St. Paul and St. George of substantial historical and cultural significance that have not yet been discovered or explored. Alaġu Kanuuġ research programs will bring new resources and renewed focus that will enable us to learn more about these sites and to interpret and share them with all Americans.

More recently, an analysis of archaeofauna at St. Paul's Zapadni site revealed insights into traditional Unangaġ food systems, including the significance of NFS pups during a period of intense Russian-American colonialism (Eldridge 2016). Additional analyses of archaeofaunal assemblages from Russian-American sites in the Pribilof Islands will bring additional understanding of this crucial period of history (Eldridge 2016). Designation of Alaġu Kanuuġ will enable us to better understand the submerged sites of Unangan significance throughout the nearshore areas of the entire Pribilof Archipelago, such as potential artifacts of migration or hunter-gathering activities in the area. The potential for exploration of these biologically and culturally important areas through the co-equal frames of Indigenous Knowledge and empirical science make the establishment of Alaġu Kanuuġ particularly compelling, enabling this critical new approach to archaeology and paleoarchaeology to be practiced here.

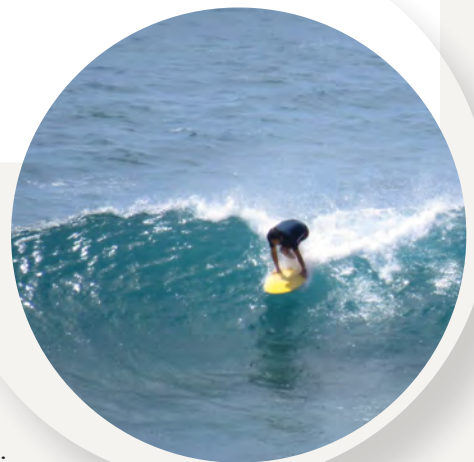
Criterion 3. The area supports present and potential economic uses, such as: tourism; commercial and recreational fishing; subsistence and traditional uses; diving; and other recreational uses that depend on conservation and management of the area's resources.

The designation of Alaġu Kanuuġ will provide significantly enhanced opportunities for business enterprise, commercial and traditional fisheries education and research, tourism, and other services to both St. Paul and St. George island communities. The establishment of Sanctuary Management Plan goals and objectives that uplift our communities, connect our Unangaġ heritage to the region, and positively feature our traditional lifeways will also enhance the social and cultural wellbeing of our people. And the opportunities to sustainably develop tourism opportunities centered around Alaġu Kanuuġ and our islands' cultural and natural resources will be enhanced by the structure and function of the Sanctuary process itself. These benefits will accrue locally, and they will also spread regionally and nationally.

The Aleut Community of St. Paul Island Tribal Government prefers the term "traditional" to "subsistence", but it has adopted the following definition of "subsistence" based on and adapted from the ICC – Alaska (2015) and Raymond-Yakoubian et al. 2017:



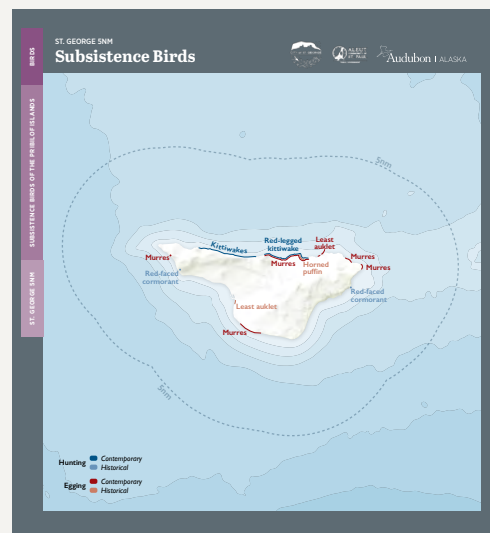
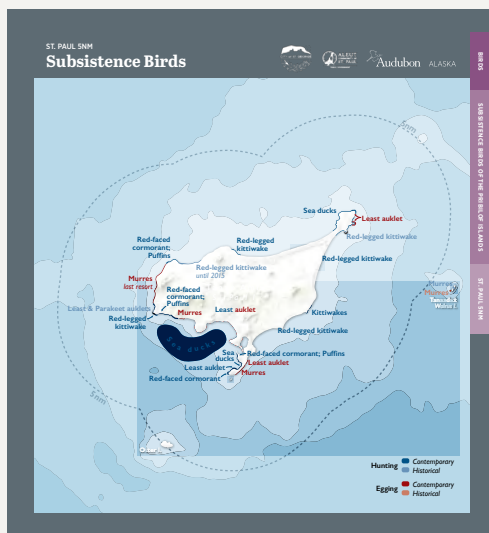
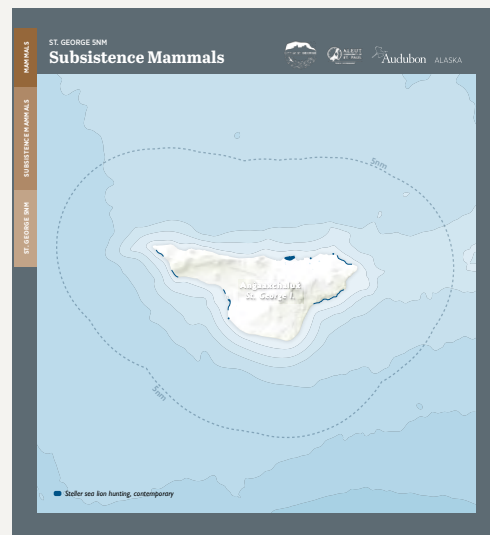
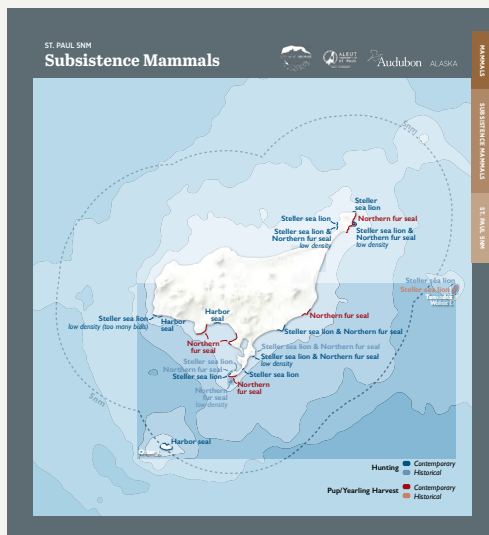
"Subsistence means the natural right of all Unangan as a part of the larger ecosystem, to access food and be caretakers, protect and respect all of life, land, water and air. It allows for all Unangan to obtain, process, store and consume sufficient amounts of healthy and nutritious preferred food – foods physically and spiritually craved and needed from the land, air and water, which provide for families and future generations



”

through the practice of Unangaċ customs and spirituality, language, knowledge, policies, management practices and self-governance. It includes the responsibility and ability to pass on knowledge to younger generations, the taste of traditional or wild foods rooted in place and season, knowledge of how to safely obtain and prepare traditional foods for medicinal use, crafts, clothing, housing, nutrients and, overall, how to be within one’s environment. It means understanding that food is a lifeline and a connection between the past and today’s self and cultural identity.”

As has been introduced above and in the St. George UHNMS nomination and documented extensively in the scientific literature, the importance of the marine waters around the Pribilof Islands to subsistence and traditional uses cannot be overstated. These waters have been hunting and fishing grounds for Unangaċ for millennia and the communities of St. George and St. Paul continue to rely on marine mammals, seabirds, and fish. Historically, this dependence included walrus, hair and bearded seals, whales, and even polar bears.



Today, NFS and SSLs continue to be vitally important subsistence marine mammals. Seabirds also remain a significant subsistence resource, as they have been for centuries. They are used for food, ceremonial regalia, and for other cultural purposes. The consumption of traditional foods helps

sustain the connection between our people and environment and with our cultural and personal histories.

As is true for many communities in Alaska, traditional use and economic wellbeing are intertwined. The recognition of traditional subsistence activities as a vital cultural and economic resource on the islands is necessary and can best be achieved by co-managing Alagû Kanuuû as proposed here. Our halibut fisherie are an example of this interdependence that has been recognized by federal agencies:

“

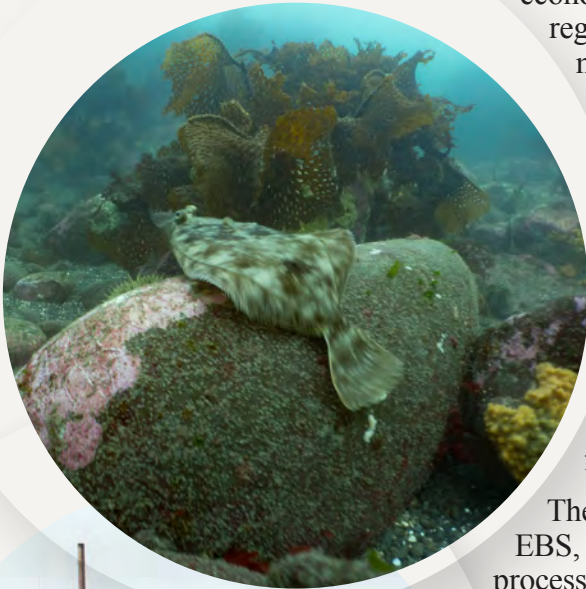
The ability to pursue subsistence activities, including halibut fishing, is vital to the health and wellbeing of communities and individuals. Halibut is also an important subsistence resource with deep cultural connections for residents of St. George and St. Paul (AECOM 2015). As described by community leaders, the phasing out of the commercial fur seal harvest in early 1980s forced a transition to commercial halibut fishing that now involves a high proportion of residents in both communities either directly or indirectly. The unique history of settlement in the Pribilof Islands, and the abrupt end to the commercial fur seal harvest which supported the St. Paul economy is the cornerstone to understanding the community's contemporary relationship and dependence of our communities on halibut as a commercial and subsistence resource (Torrey and Krukoff 1978). When the commercial fur seal harvest ended, there was a transition toward commercial fishery engagement and dependence which was natural progression for Unangan culture and community. However, prior to the beginning of the commercial halibut fishery in the Pribilofs, halibut fishing was a key subsistence activity through which traditional practices and TK was passed down from one generation to another (NFPMC September 2021).



Tran and Divine (2021) identify our “Unanga perspective that halibut and humans are connected in a larger network of kin relationships.” Halibut are a key traditional part of Unanga culture and diet, a critical commercial and subsistence resource for our community, and are shared widely by local fisherme across the island and far beyond.

For generations, Unangan fisherme of St. Paul have fished for halibut from small boats in the waters of the Bering Sea surrounding the Pribilof Islands. This subsistence fisher experience was the basis for the successful development of the commercial halibut fisher that exists today. In fact, prior to the advent of large-scale commercial fishing in the region, individual tribal members from St. Paul established the halibut fisher with support from the Tribal Government. Local communities are also similarly dependent on snow crab and red king crab fisheries which have declined significantly in recent years.

Overall, creating a co-management framework for Alagû Kanuûx would anchor Unangâx cultural values and Traditional Indigenous Ecological Knowledge within the process for enhanced conservation and management to promote economic and ecological resilience. This framework would facilitate economic development in close partnership with local and regional stakeholders and in coordination with important management organizations including the National Marine Fisheries Service, the North Pacific Fishery Management Council, and the State of Alaska.



In addition to subsistence and local commercial activities, and within the context of rapid recent environmental changes, the region around the Pribilof Islands is at the center of some of the largest and most profitable commercial fisheries in the world. In addition to flatfish Pacific cod (*Gadus macrocephalus*) and crab fisheries the EBS is also home to the walleye pollock (*Gadus chalcogrammus*) fishery, the largest trawl fishery in the world.

The pollock fishery has an expansive footprint in the EBS, and pollock fish wholesale value (first sale after initial processing) averaged \$1.34 billion annually from 2015-2018. From 2004-2018, an estimated total of 18.8 million tons of pollock were harvested in the EBS (annual average 1.25 million tons; Ianelli et al. 2020).



Under the Community Development Quota (CDQ) fishery management program, a portion of the profit from these fisheries are earmarked specifically for the benefit of Bering Sea Communities. The Central Bering Sea Fishermen's Association (CBSFA), the CDQ group for St. Paul, is a cornerstone of our tribe and community, investing in our youth, workforce development, infrastructure, tribal government programs and overall community sustainability. CBSFA provides harvesting opportunities for the local fleet through its CDQ halibut allocation. Each year, 70 to 100 people in our community participate in the halibut fishery, from the skippers, boat crews and young onshore baiters

to support services for the fleet. In 2019, 15 vessels participated in the fishery and employed 75 people. In addition, CBSFA also provides support services for the fishery through its Local Fleet Support Program.

There are extensive opportunities for tourism in and around St. Paul and St. George. Most of the existing tourism on the islands centers on birding, with birders from all around the globe traveling to the islands to view the more than 240 species that can be found here. Today well-established birding tourism operations bring travelers to St. Paul; these operators provide packages for long-term trips lasting around a week, or shorter stays as part of a regional tour. Birders who visit us contribute hundreds to thousands of dollars to the local economy. The establishment of Alagû Kanuûx will enhance national and international awareness of the conservation value of PRIME and its avian fauna, which will attract additional visitors and provide important economic productivity to our remote communities.

All told, the designation of Alagû Kanuuû promises to enhance opportunities for local enterprise while anchoring development and management of established and new economic activity in the Unangaû way of life along with the most advanced science-based approaches to conservation and community partnership. These benefit would strengthen the cultural connection between St. Paul and St. George while also providing cultural and economic value to communities throughout Alaska, the Pacific Northwest, and the nation.

Criterion 4. The publicly-derived benefits of the area, such as aesthetic value, public recreation, and access to places depend on conservation and management of the area's resources.

The communities of St. Paul and St. George depend on a healthy marine ecosystem for food security, culture, and economic wellbeing. These benefit are derived by local residents from the conservation and management of the area's resources via public institutions governed by legal systems and frameworks of the municipal, Alaska, and US governments, as well as the cultural and legal systems and institutions of the federally recognized tribes of St. Paul and St. George. The waters and animals, birds, and fish these systems and institutions support are central to Unangaû culture, history, and the recognition of tribal sovereignty, and they will be central to the conservation and management of Alagû Kanuuû.

There is immeasurable value in these benefit for the physical, emotional, and cultural wellbeing of the people of St. Paul and St. George. Our tribal values and connections can be recognized and incorporated into co-management of Alagû Kanuuû. For example, we intend for Alagû Kanuuû to preserve Unangaû heritage by recognition and widespread use of Unangam Tunuu language. The Tribal Government supports the use of Unangam Tunuu in the naming of places and wildlife, including Alagû Kanuuû. The preservation of language continues and reinforces our cultural and material connection to the marine ecosystem.

Alagû Kanuuû will also provide myriad benefit to the public living outside of the Pribilof Islands. There are extraordinary threats to the vital breeding and feeding habitat for the migratory animals that live here. Since they return each year to the Pribilof Islands and depend on the marine ecosystem, the benefit of co-management in the PRIME are carried throughout many other areas of the world's oceans through the energetic transfer that accompanies these migrations. For example, observations from the people of the Pribilof Islands, combined with data collected by scientists, point to dramatic declines in seabird populations on St. Paul and St. George Islands, threatening the connections the Pribilof Island communities have to their seabird communities. Because birds are critical components within their ecosystems, and their presence signals a healthy and functioning system, the declines are a cause of concern and requires further research to better understand the underlying causes. Declining abundance of these migratory species make it clear to us that enhanced conservation, through the designation of Alagû Kanuuû, is necessary to ensure that these benefit continue into the future.

Our Tribal Elders often recall the white guano-stained cliffs of our islands, which have become brown as nesting birds have dwindled in number. Enhanced conservation of seabirds through our



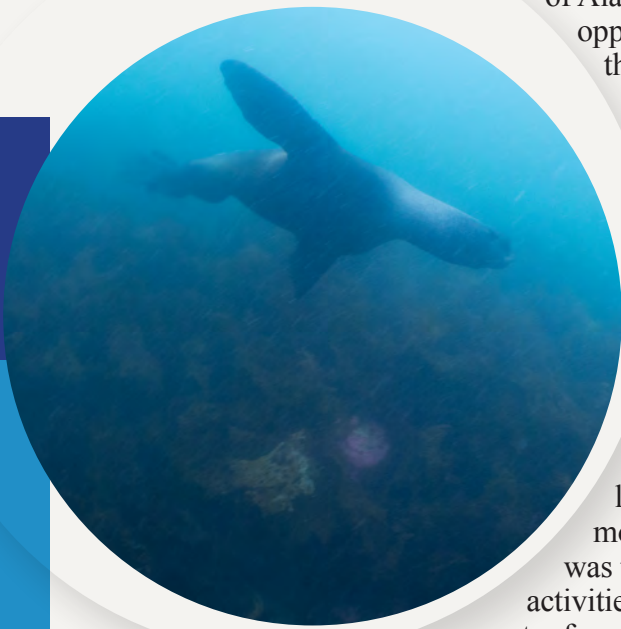
collaborative efforts in Alaġu Kanuuġ would return this important and iconic symbol of the ecological integrity of our islands to its rightful place.

Scientists from around the world have visited the Pribilof Islands to conduct research on our seabird populations. Seabirds are important environmental sentinels - when scientists conduct studies to better understand the health of seabird populations, they are also gaining insight into the health of the ocean on which they depend. Thus the opportunities for enhanced study of seabird populations provided by the establishment of Alaġu Kanuuġ is valuable not only to the place in which they breed but also to a global audience of passionate stakeholders.

Moreover, the PRIME provides necessary habitat and productivity to support some of the world's largest and most important commercial fisheries. The public derives benefit from the food and economic gains supported by these fisheries and effective management within Alaġu Kanuuġ can ensure that these benefits continue and grow, and indeed they are central to the continued cultural and economic viability of St. Paul and St. George.

SECTION IV – MANAGEMENT CONSIDERATIONS FOR THE DESIGNATION OF ALAĠUM KANUUĠ

Consideration 1. The area provides or enhances opportunities for research in marine science, including marine archaeology.



The Pribilof Islands are perfectly situated, via the designation of Alaġu Kanuuġ, to provide world-class field research opportunities and to serve as a cultural and education hub for the conservation of nature and the preservation and sharing of Indigenous knowledge. NOAA currently maintains research laboratories and staff housing facilities on both St. Paul and St. George that could be expanded with cultural and archaeological research facilities complemented by the significant resources of ACSPI. St. Paul is also the site for crew changes on the annual eastern Bering Sea bottom trawl survey, creating a nexus for additional research opportunities focused on enhanced fisheries conservation.

The NOAA-owned seal skin plant building overlooking the St. George waterfront could serve as an excellent location for a visitor center as well as research and monitoring infrastructure. For many years, the building was the site of seal skinning, tanning and export packaging activities, making it very well suited to become an interpretive center focused on St. George's history, culture, natural resources and conservation goals.

The ongoing population declines of NFS and other marine mammals, and the expectation of increased climate change impacts to important terrestrial and marine ecosystems make it clear that research isn't enough for our communities: we must couple scientific research with Indigenous knowledge and conservation action. Establishment of Alaġu Kanuuġ would provide opportunities to study and evaluate the efficacy of using Indigenous Knowledge and conservation action based on our cultural experiences and lifeways, applied at the seascape scale. The body of research focusing

on the intersectionality of Indigenous Knowledge and conservation governance is relatively limited at this time, and the opportunity to focus this important emerging branch of social science on a dynamic ecosystem like the PRIME is unique and highly valuable.

One artifact of the intensive economic exploitation of NFS is very precise records of harvest going back more than a century. The scientific literature focusing on NFS and the oceanography and fisheries resources of the PRIME is extensive. Seabirds similarly have a long history of long-term monitoring through the US Fish and Wildlife Service on both islands as part of the Alaska Maritime National Wildlife Refuge. The commercial fisheries centered in the Bering Sea have long attracted academic, agency, and independent research projects on everything from crabs to flatfish and groundfish, skates and rays, to whole food web and interaction studies.

In recognition of the need to provide opportunities for a variety of research to be possible on site, ACSPI has been working to strengthen and expand infrastructure and capacity for applied and laboratory research projects, including the completion of a multimillion-dollar facility adjacent to the local harbor that is equipped as a wet lab, and a Bering Sea Campus that has laboratory equipment. Development of research facilities in Alagû Kanuuᖃ will build on centuries of existing scientific data and Indigenous Knowledge and would take advantage of more recent and growing interest in the region. For example, ACSPI was a collaborator on the 2008-2013 multi-agency, multi-million dollar “Bering Ecosystem Project”.

Thus, a strong foundation already exists on St. Paul and St. George for enhancing opportunities for marine science, especially critically needed climate change science, and marine archeological research. The designation of Alagû Kanuuᖃ will allow us to focus these existing capacities and opportunities on critical emerging conservation needs, leveraging transformative new partnerships that are required to meaningfully anchor these new approaches in federal governance systems and Indigenous cultural systems.



Consideration 2. The area provides or enhances opportunities for education, including the understanding and appreciation of the marine and Great Lakes environments.

The Pribilof Islands communities have a strong connection to marine science and environmental education, and designation of Alagû Kanuuᖃ as a NMS will greatly enhance and broaden educational opportunities on St. Paul and St. George, as a live and virtual space for place-based education and outreach.

ACSPI has long been recognized as a leader in creating and facilitating education opportunities for Pribilof Islands youth and classrooms across Alaska and beyond. On St. Paul Island, annual events like Bering Sea Days and Summer Science Camp have become widely known for their size and scope, providing diverse and immersive educational opportunities to students from near and far. These programs use the Pribilof Islands as a classroom, connecting experts, educators, students,

and career pathways to one another. Thus far, educational events and opportunities have developed and expanded through word of mouth; designation of Alagû Kanuuû would enhance recognition among educators and partners for these events. For example, designation would increase opportunities to leverage the summer field research season through partnerships with researchers traveling to the islands during educational programming. Doing so would make these programs integrated and immersive, allowing Indigenous and visiting youth to gain invaluable experience and education.

The St. George Island Institute's Marine Science Summer Camp discovered and first described new species of beaked whale and kelp. This camp is no longer operating, but it could provide a model for future educational opportunities under the National Marine Sanctuary program.



Through partnerships with researchers and educators, we have developed numerous curricula and lesson plans that are publicly available to other educators and could be further integrated with regional and national education systems through designation of Alagû Kanuuû. ACSPI has developed the “Laaqudaû: northern fur seal” in partnership with the NOAA Alaska Fisheries Science Center and an invasive species and seabirds curriculum in partnership with the Seabird Youth Network. ACSPI has created other curricula related to gardening, reindeer, salmon and marine debris, which have all been utilized in the Pribilof School District over many years. Additionally, we have partnered with other scientists and educators to deliver short courses on St. Paul Island's berries, reindeer, geology, fungi, weather, and archeology. These kinds of place-based learning opportunities would be greatly enhanced by the designation of Alagû Kanuuû, which will add visibility to this body of work, updating it with modern techniques and technologies, and further integrating the Islands' education missions and services with the research taking place here.



Enhanced programs and increased capacity will allow students to advance from learning about individual organismal groups to understanding how entire ecosystems function, and how ecosystems contain diverse communities of organisms, and the overall importance of diversity for ecosystem health. These programs will benefit other members of the community as well, including adults and

Elders. Educating the community in all steps of the research and monitoring programs helps ACSPI meet our objectives to strengthen local marine knowledge and stewardship and build our long-term monitoring capacity. This additional level of educational engagement will provide lifelong benefit to all community members and help to anchor the Marine Sanctuary within the community.

A Sanctuary designation would further expand our network of educators and researchers. New connections can help us build a framework for co-managed spaces, which can inspire others to pursue similar avenues to conserve their ecosystems.

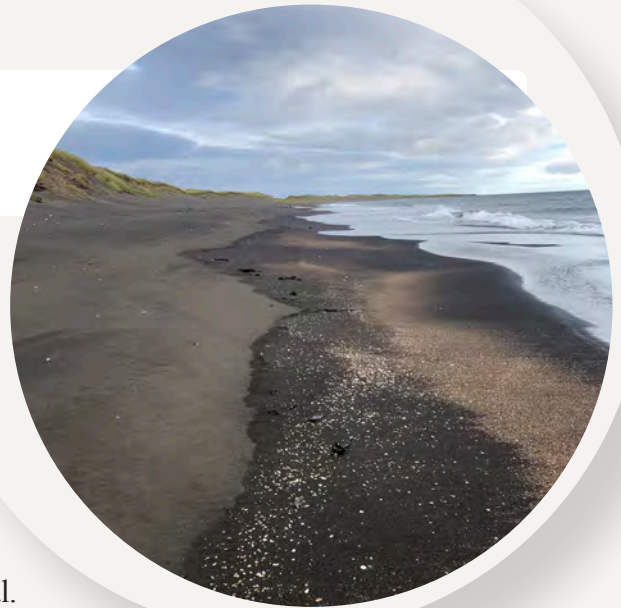
Consideration 3. Adverse impacts from current or future uses and activities threaten the area's significance, values, qualities, and resources.

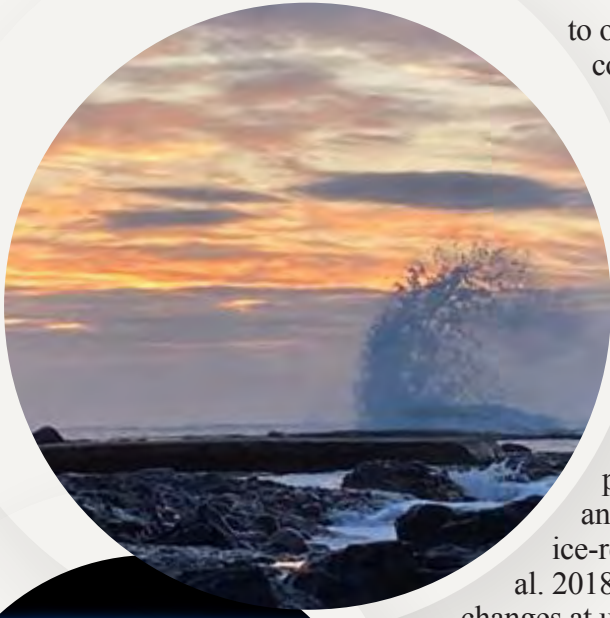
Empirical science defines our current understanding and management of marine ecosystems generally, and science-based systems have governed resource use within the PRIME through modern extraction (e.g. commercial NFS harvest, industrial fisheries and management policy (e.g. the CDQ program; Torrey and Krukoff 1978, Lyons et al. 2016). These empirical science metrics show that the Eastern Bering Sea (EBS) in general, including PRIME, is undergoing ecological transformations as the climate changes (Hunt et al. 2002, Stabeno et al. 2007, Thoman et al. 2020). Some studies predict that by 2040-50 conditions may no longer support EBS commercial fisheries a major industry in the global economy (Hunt et al. 2011, Mueter et al. 2011). Environmental changes also have long been observed by residents of the Pribilof Islands communities, from decline of the NFS; distribution changes of Pacific halibut; warmer temperatures resulting in a loss of the duration, quality and extent of sea ice; and stormier conditions (Huntington et al. 2013, Lestenkof et al. 2013). Indicators of productivity and functionality of the PRIME are important indicators of the overall health of the Bering Sea ecosystem.

Taken together, these indicators highlight the urgent need for additional conservation action for the PRIME. These actions also require partnerships across agencies and jurisdictions, which do not exist today. The designation of Alagû Kanuux̂ will establish a new platform for dialogue across jurisdictions with participation from our Tribal Governments and stakeholder groups.

The PRIME has experienced centuries of anthropogenic disturbances that have steadily shifted the ecosystem away from its natural stability. With record warm years, movement toward a less frozen and biologically changed region is well underway (Thoman et al. 2020). Cascading impacts from sea ice retreat due to climate change have resulted in large-scale community-wide shifts at all trophic levels of the EBS food web (Mueter and Lizlow 2008). In addition, commercial fisheries are overlapping and competing in resource-heavy areas in the EBS (Mueter et al. 2011, McHuron et al. 2020). The successive warm years 2014-2020 and predicted warming trends in the EBS suggest that overall ecosystem productivity and food web dynamics are changing (Siddon 2021). In addition to the ongoing decline in NFS and other keystone species, the 2021 Bering Sea Ecosystem Status Report (ESR), produced annually by the Alaska Fisheries Science Center, highlights some regional concerns (Siddon 2021): declines in Chinook salmon; persistent negative trends in fish condition indices for nearly all groundfish declined in overall forage availability in both the EBS and the northern Bering Sea; an Unusual Mortality Event in the gray whale population; snow and king crab collapses. Ultimately, food security and culture are at risk for many Alaska Native communities in Alaska.

There are also uncertainties about the complex ecological and localized interactions in the PRIME. Knowledge gaps include benthic and infauna life histories and dynamics; marine invasive species dynamics; and increased coastal erosion from extreme weather events. Further research is needed to identify the underlying causes of declines of marine mammals from threats resulting from vessel traffic predation, invasive species, pollutants, harmful algal blooms, and marine debris, among other unanticipated threats. The St. George UHNMS specifically detailed the following threats





to our ecosystem: climate change, ocean acidification commercial (specifically industrial destructive) fisheries shipping (although all vessel traffic should be considered), invasive species, oil and gas, and marine debris. Strengthening and expanding research with external entities will be greatly enhanced by the designation of a NMS.

Impacts of climate change in the Pribilof Islands

In recent years, a combination of factors including decreased sea ice extent and density, as well as changing seawater temperatures, have had substantial impacts on the timing and intensity of the spring productivity bloom, resulting in diminished primary and secondary productivity, recruitment, and fecundity of ice-reliant animal populations (Leu et al. 2015; Pollom et al. 2018). The PRIME has been experiencing biotic and abiotic changes at unprecedented rates. Knowledge holders from the Pribilof Islands have described changes in terms of extremes: warmer summers, reduced sea ice extent, longer and colder winters, and stronger storms in winter (Huntington et al. 2013, Lestenkof et al. 2013). For example, sea ice extent in the Bering Sea in 2018 and 2019 was at the lowest levels on record and exhibited warming trends not predicted to occur by regional climate models for another 10-15 years (Siddon and Zador 2019). These exceptional warming conditions are impacting species at all trophic levels and are occurring at an order of magnitude capable of reorganizing ecosystems (Hunt et al. 2002, Stabeno et al. 2007, Karp et al. 2019).

Climate change has been directly linked to changes in distribution, abundance or body condition of marine mammals, seabirds and some fish species (Holsman et al. 2019, Karp et al. 2019, Barbeaux et al. 2020, Aars 2021, Arimitsu et al. 2021).

However, these linkages are not as well-established for NFS, a cultural keystone species for Pribilof Islands Unanga tribal members (Torrey and Krukoff 1978).

Research and education programs enabled by the designation of Alaga Kanuu will allow the communities of St. George and St. Paul to better understand the impacts of climate change to their communities and cultural lifeways. These programs will also inform co-management decisions that will enhance community resilience to climate change and economic or environmental fluctuations

Commercial fishing in the Pribilof Islands

Commercial fisheries are central to the social and economic wellbeing of the Pribilof Islands in modern times. The designation of Alaga Kanuu will enable our community members to work closely with those who come from other parts of the country to apply a new place-based focus on conserving our marine resources for the benefit of all for the very first time here. This new approach is deeply necessary. Historical depletion of crab fisheries particularly the commercially important Pribilof Islands blue king crab (*Paralithodes platypus*), resulted in an overfished population declaration in the late 1990s. In 1995, fishery managers implemented the Pribilof Islands Habitat Conservation Zone, prohibiting blue king crab harvest in commercial fisheries in the area (50 CFR §679). The species has not recovered in over two decades and remains depleted. In 2021, Bristol Bay red king crab, snow (or opilio) crab and Tanner (or bairdii) crab all experienced precipitous declines; snow crab was declared 'overfished', and the 2022 season has been closed.

Partnerships across fishin sectors, including those developed during the designation of Alaġu Kanuuġ, are critical to the implementation of conservation measures across jurisdictions and through fisherie management hierarchies. We envision a holistic consensus-seeking model for sanctuary advisory processes, with representation for all stakeholder groups who depend on our Islands and the PRIME for their livelihoods. We seek to establish a process for Indigenous and non-indigenous business interests to work cooperatively with co-managers and experts. This collective work will achieve the design and advancement of measures to address the challenges in fisherie governance that we collectively face. Through this model, we will establish partnership-based dialog and understanding that will allow all interested parties to shape governance based on knowledge and information specificall informed by this special place.

Consideration 4. A national marine sanctuary would provide unique conservation and management value for this area or adjacent areas.

In the modern era, “management” is something that has largely been done *to* Unangaġ of the Pribilof Islands, not something that has been done *for* and especially not *by* Unangaġ. NFS were managed for commercial purposes and then under an emergency rule to “allow” subsistence harvests using the foreign commercial harvest methods, but never by Unangan for the wellbeing of Unangan based on Unangan values, knowledge, culture, stewardship and tradition. There is now the chance to change this inequitable historic pattern. The wellbeing of the PRIME and the people of the Pribilof Islands depends on creating a new management system that looks to co-management approaches that have been successful in Alaska for several marine mammal species. A model could be built on those examples and centered on tribal co-management and Indigenous Knowledge and representation. Creating a new co-management approach as a component of Alaġu Kanuuġ would address vital conservation needs in the PRIME and establish a model that could be adapted to other places in Alaska and beyond.

There are examples of Indigenous-led marine stewardship in Canada and other parts of the world. Yet it is still a relatively new idea in the United States. After careful consideration and research, ACSPI determined that a NMS designation is the best available way to advance tribal capacity and representation through co-management, strengthen the overall resilience of the marine ecosystem, enhance economic opportunities, and reduce anthropogenic stressors. The federal government now has the opportunity to be a partner and follow that lead.

The designation of Alaġu Kanuuġ as a NMS would establish co-management that elevates tribal and Indigenous marine stewardship and expertise. The federal government regularly enters agreements with state agencies to effectuate management of sanctuaries under the National Marine Sanctuaries Act; establishing a new model for tribal co-management of a NMS on a government-to-government basis with the federally recognized Tribal Governments of St. Paul and St. George would create a visionary new approach to Sanctuary governance, as called for in §303(b) of the National Marine Sanctuaries Act. Such a co-management framework would help foster an inclusive, adaptive, and comprehensive approach to management of Alaġu Kanuuġ; indeed, the establishment of a NMS within the PRIME without such principles at its core risks being inconsistent with federal commitments to facilitate Indigenous leadership and to anchor



conservation action within communities and across resource-dependent stakeholder groups from other places. Our proposed co-management approach for Alagû Kanuuû will foster open dialogue and new thinking about our marine mammals, birds, and fish

Consideration 5. The existing regulatory and management authorities for the area could be supplemented or complemented to meet the conservation and management goals for the area.

The existing federal management measures in the region largely focus on commercial fisheries and they have not successfully met the communities' conservation and management goals, resulting in an ongoing and urgent need for innovative and adaptable local solutions. An inclusive scientific understanding that is grounded in traditional (Indigenous) and local knowledge is essential to facilitate Indigenous leadership, conserve important marine resources, and restore and protect Indigenous connections to the marine ecosystem.

There are no specific management or regulatory measures currently taken to address impacts to NFS from anthropogenic threats other than disturbance and subsistence takes, which are not factors in the population decline (NMFS 2007, Muto et al. 2020). While the mechanisms for such measures exist, they are not being applied. The designation of the species as depleted under the MMPA required development and implementation of a Conservation Plan. The Plan was originally created in 1993 and last updated in 2007; it has failed to stop or reverse the decline of the population, a result that is hardly surprising given the absence of measures addressing the likely causes of the decline.

Similarly, the declines in seabird populations on the Pribilof Islands mirror global trends. Seabird ecologists are working to better understand the mechanisms of seabird declines, and the Pribilof Islands have been, and will continue to be, a site well-suited to conduct research and gain a better understanding of declines such that wildlife managers can make well-informed decisions to protect and conserve remaining seabird populations

In addition to these population declines and the impacts described above, the Pribilof Islands beaches accumulate marine debris at nearly inconceivable rates. Over the past 25 years, hundreds of thousands of pounds of debris have been removed from beaches on St. Paul and St. George. This debris is largely plastic and over the last decade 87% of all debris was categorized as fishing gear, such as nets, line, and buoys.

Besides fisheries harvest control measures, the only major spatial approach to conservation within the PRIME is the Pribilof Islands Habitat Conservation Zone (PIHCZ), established in 1995 to the north and east of the archipelago to protect areas that are biologically important to certain crab stocks and, as a secondary objective, to reduce potential fishery interference with seabird and marine mammal populations (50 CFR 679). The PIHCZ has not been formally evaluated since its implementation to determine if any conservation benefits have been realized for NFS.



These ongoing issues—population declines, vessel-related impacts, marine debris, climate change—show clearly that existing management measures are insufficient and that a community-supported co-management based approach to conservation is warranted. Establishing a co-management system for Alaġu Kanuuġ will not by itself solve all of these problems, but it is an important step in elevating the position and concerns of Unangaġ and beginning to take real management measures to address the all-too-evident failures of the current system.

Consideration 6. There are commitments or possible commitments for partnership opportunities such as cost sharing, office space, exhibit space, vessel time, or other collaborations to aid conservation or management programs for the area.



The communities of St. Paul and St. George are small and geographically isolated from the rest of Alaska and the rest of the United States. Partnerships with federal agencies, other tribes and communities, industry, NGOs, academic institutions, and others help bridge that geographic distance, and the designation of Alaġu Kanuuġ would enhance these partnerships. Under a NMS framework based on co-management, our Tribal governments will continue to work closely with NMFS and USFWS to manage subsistence use and conduct research focused on marine mammals and seabirds. We will also continue to coordinate with the NOAA Office of Marine Debris to secure funding for marine debris removal and to elevate the issue of marine debris and add visibility to its impacts to the PRIME and our islands.

There are significant opportunities to base new collaborative scientific enterprise and Indigenous knowledge creation in Alaġu Kanuuġ on both St. Paul and St. George Islands. On St. George, there is a facility that has been identified for use as a NMS office and visitor center. Similarly, St. Paul has significant infrastructure that will support a NMS office visitor center, research programs, cultural and maritime heritage, education and outreach, and other associated services and needs.

St. Paul has worked for more than three decades to establish an island-based research center. In the most recent Economic Development Plan for 2017-2022 (ACSPI 2017) a research center was identified as the #2 community goal followed only by the #1 goal to, “Support, protect, and create new fishing opportunities.”

From 2017-2021, the ACSPI with local partner Central Bering Sea Fishermen's Association (CBSFA) completed major infrastructure projects necessary to support a Bering Sea research center in St. Paul. In total and with some federal assistance more than \$20M was invested into shoreside facilities, docks, vessels, housing and STEM education. With this critical infrastructure in place, ACSPI is now focusing our efforts on furnishing, equipping and operating a Bering Sea Research Center including finding partners and funding to support sustainable operations. There are thousands of square feet of offices, a flowing seawater lab, and operations facilities available, as well as the tribe's research vessel Lunaġ and fully equipped SCUBA diving operations capacity. Additionally, NOAA already owns and maintains infrastructure on both islands that may be utilized to accomplish future NMS goals and objectives. The designation of Alaġu Kanuuġ could leverage past and recent investments to build a world-class support center for the long-term operation of NMS research programs and operations.

Consideration 7. There is community-based support for the nomination expressed by a broad range of interests, such as: individuals or locally-based groups (e.g., friends of group, chamber of commerce); local, tribal, state, or national elected officials; or topic-based stakeholder groups, at the local, regional or national level (e.g., a local chapter of an environmental organization, a regionally-based fishing group, a national-level recreation or tourism organization, academia or science-based group, or an industry association).

As the governing body for St. Paul Island tribal members (about 93% of the island's population are enrolled tribal members), ACSPI is uniquely positioned to nominate, implement, and co-manage a NMS around the Pribilof Islands. ACSPI is a federally recognized tribe as listed and recognized by the United States under 84 CFR §1200. ACSPI is the largest Aleut community in the United States and has over 1,800 enrolled tribal members living on the Pribilof Islands and throughout the country.



ACSPI is a co-managing partner with the US Department of Commerce for the management of northern fur seals and Steller sea lions, as authorized by the Marine Mammal Protection Act. This government-to-government co-management partnership was established in 1999 and has consistently demonstrated the capacity and ability of the ACSPI Tribal Government to represent and balance the best interests of Unangan of St. Paul and NFS and Steller sea lions. This co-management relationship can be the foundation for enhanced co-management of Alagû Kanuuû between the US Government, St. George, and St. Paul.


The St. Paul and St. George Tribal Governments, through our Tribal Councils, lead efforts to ensure and strengthen political sovereignty, economic self-sufficiency, continued cultural practices, tribal self-determination and self-governance, and the overall health, safety, and welfare of tribal members. Tribal Governments actively exercise the full range of sovereignty and self-governance possible and enjoy a government-to-government relationship with the United States government. ACSPI has been a leader in cooperative efforts with the State of Alaska and the local municipal government to address the unmet social service and justice needs of St. Paul Island; these cooperative relationships are formalized through unprecedented memorandums of agreements and understandings. As the federally recognized tribe for St. Paul, ACSPI is ultimately responsible for ensuring economic stability, environmental resilience and providing leadership to decision-making that impacts the Pribilofs and its ecosystem.

A co-management framework for the conservation and governance of Alagû Kanuuû that engages the St. Paul and St. George Tribal Governments will ensure durable and robust engagement between our communities and will provide the NMS program with partners who will never leave, nor waver in our commitments to the conservation and stewardship of this extraordinary place.

The nomination has the unanimous support of both the elected seven-member Tribal Council and the elected seven-member Council for the City of St. Paul, the local municipal government that represents 100% of the island's population. The ACSPI Tribal Government is able to demonstrate, with confidence the ability to represent the desires of the Pribilovian Unanga through this nomination.

In addition to the full support of the Tribal Government and City of St. Paul, there is extensive support from other federally recognized tribes and tribal organizations in Alaska and in the lower 48 for the co-management approach proposed in our nomination. This support is reflected in the letters attached to the nomination. Letters of support have also been submitted by: other island organizations stretching from Puerto Rico and Virgin Islands to Maine, advocating for a novel approach to ecosystem-based management that will facilitate achieving climate and economic resilience in which islands face special unique challenges; sustainable business owners and other commercial fishing operations, highlighting the need for community-led management of resources and research; and state and national conservation organizations, recognizing the unique values of the Pribilof Islands marine ecosystem and that marine stewardship is best led by local and Indigenous voices.

Support for a designation that includes the full extent of PRIME has been enthusiastically expressed by tribes and conservation organizations in the comment period for the 5-year review of the St. George UHNMS.

Building partnerships and collaborations is one of our primary goals in the PRIME Initiative and one of the ways Alagû Kanuu will succeed. To further those goals, we expect growing support as this effort advances. 



Resolution 2022-06

A RESOLUTION TO ADVANCE THE PRIME INITIATIVE THROUGH NOMINATION INTO THE NOAA NATIONAL MARINE SANCTUARY PROGRAM

WHEREAS, the Aleut Community of St. Paul Island (the Tribe), is the federally recognized tribe for St. Paul Island, as listed and recognized by the United States under 84 CFR 1200; and,

WHEREAS, the Tribal Government of St. Paul is the representative sovereign government for the Aleut Community of St. Paul Island; and,

WHEREAS, the Tribal Council is the legislative body for the Tribal Government of St. Paul; and,

WHEREAS, the Tribal Government, through the Tribal Council, is determined to lead efforts to ensure and strengthen political sovereignty, economic self-sufficiency, continued cultural practices, tribal self-determination and self-governance, and the overall health, safety, and welfare of Tribal Members; and,

WHEREAS, the Pribilof Islands marine ecosystem is among the most unique and important places in the world and provides vital breeding and feeding habitat for more than half of the world's population of northern fur seals, habitat for Steller sea lions and harbor seals, is home to more than three million seabirds flock to the islands during the summer months, and plays a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries; and

WHEREAS, the Pribilof Islands communities of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture; and

WHEREAS, northern fur seals have historical and cultural significance to the communities of St. Paul and St. George and have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals; and

WHEREAS, current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions; and

WHEREAS, the Tribal Government is leading the Pribilof Islands Marine Ecosystem (PRIME) Initiative with the goal of designating a 100nm co-managed marine area that will adequately address our conservation concerns while ensuring the sustainability of our local economies and provide continued fishing opportunities; and

WHEREAS, the PRIME 100nm around both islands is justified and based on substantial western scientific data and Indigenous, traditional and local knowledge, and will be an economic resilience area supporting tribal and resource-dependent businesses while ensuring that Indigenous and local knowledge is used for decision-making around resource use and conservation; and

WHEREAS, a governance framework that reflects co-management between the federally recognized tribal governments of St. Paul and St. George and the federal government is necessary and critical to accomplish timely and meaningful regulations, policies and management actions for our essential cultural, environmental and economic resources; and

WHEREAS, the Tribal Government has determined that utilizing the existing National Marine Sanctuary Act, which includes existing processes for federal fishery management actions through the North Pacific Fishery Management Council, provides the needed flexibility to achieve co-management of PRIME, and allows for a balance of cultural, environmental and economic priorities; and

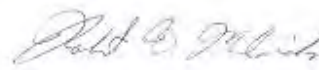
NOW THEREFORE BE IT RESOLVED, the Tribal Government, through the Tribal Council, authorizes a nomination of the PRIME Initiative into the Department of Commerce, National Oceanic and Atmospheric Agency, National Marine Sanctuary Program on behalf of the Aleut Community of St. Paul Island.

Adopted through a vote of Tribal Council on this 10 day of December 2021 of 7 in favor, ___ opposed, ___ abstain, and ___ absent.

Attested by:



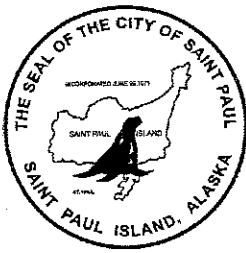
Amos Philemonoff, Sr.
President



Robert Melovidov, Sr.
Secretary

Poll Vote conducted on December 10, 2021 by Roxana Kashatok

Council Members	Yes	No	Abstain	Absent
Amos T. Philemonoff, Sr.	X 1:00 p.m.			
Myron Melovidov	X 9:35 a.m.			
Robert Melovidov, Sr.	X 10:02 a.m.			
Michael R. Zacharof	X 9:35 a.m.			
Jacob Merculief	X 12:59 p.m.			
John W Melovidov	X 12:49 p.m.			
Shiona Melovidov	X 11:38 a.m.			



CITY OF SAINT PAUL

ALASKA

RESOLUTION 21-21

A RESOLUTION TO SUPPORT ADVANCING THE PRIME INITIATIVE THROUGH NOMINATION INTO THE NOAA NATIONAL MARINE SANCTUARY PROGRAM

WHEREAS, the City of Saint Paul, Alaska is a second-class city organized under the State of Alaska; and,

WHEREAS, the Pribilof Islands marine ecosystem is among the most unique and important places in the world and provides vital breeding and feeding habitat for more than half of the world's population of northern fur seals, habitat for Steller sea lions and harbor seals, is home to more than three million seabirds flock to the islands during the summer months, and plays a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries, and;

WHEREAS, the Pribilof Islands communities of Saint Paul Island and Saint George Island are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture, and;

WHEREAS, northern fur seals have historical and cultural significance to the communities of Saint Paul Island and Saint George Island and have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals, and;

WHEREAS, current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions, and;

WHEREAS, the City of Saint Paul is aware that the Tribal Government of St. Paul is leading the Pribilof Islands Marine Ecosystem (PRIME) Initiative with the goal of designating a 100nm co-managed marine area that will adequately address our conservation concerns while ensuring the sustainability of our local economies and provide continued fishing opportunities, and;

WHEREAS, the PRIME 100nm around both islands is justified and based on substantial western scientific data and Indigenous, traditional and local knowledge, and will be an economic resilience area supporting tribal and resource-dependent businesses while ensuring that Indigenous and local knowledge is used for decision-making around resource use and conservation, and;

WHEREAS, a governance framework that reflects co-management between the federally recognized tribal governments of Saint Paul Island and Saint George Island and the federal government is necessary and critical to accomplish timely and meaningful regulations, policies and management actions for our essential cultural, environmental and economic resources, and;

WHEREAS, the City supports utilizing the existing National Marine Sanctuary Act, which includes existing processes for federal fishery management actions through the North Pacific Fishery Management Council, provides the needed flexibility to achieve co-management of PRIME, and allows for a balance of cultural, environmental and economic priorities; and


NOW THEREFORE BE IT RESOLVED, the Council of the City of Saint Paul, supports authorizing a nomination of the PRIME Initiative into the Department of Commerce, National Oceanic and Atmospheric Agency, National Marine Sanctuary Program on behalf of the City of Saint Paul, Alaska.

PASSED AND ADOPTED BY APPROVAL OF THE COUNCIL OF THE CITY OF SAINT PAUL
THIS 15TH DAY OF DECEMBER 2021 BY 7 IN FAVOR 0 OPPOSED AND 0 ABSTAIN.

ATTEST:



Monique Baker, City Clerk



Jason Bourdukofsky, Vice Mayor
in absence of Mayor

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

December 12, 2021

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

As the owner of the St. Paul commercial halibut vessel, F/V Wind Dancer, I would like to provide strong support to the Aleut Community of St. Paul Island Tribal Government in their effort to build and implement a co-management governance structure for our Pribilof marine ecosystem. This effort is in response to our local voices calling for the need for something to be done quickly for our unique Pribilof marine ecosystem, and done in a way that elevates and empowers our Unangan (Aleut) voices in the federal decision-making over our resources.

Our islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. Because of our location, our Pribilof Islands are in the middle of some of the world's most profitable and important commercial fisheries, including our local commercial and subsistence halibut fishery.

Our communities of St. Paul and St. George are in trouble. We are experiencing huge declines of fur seals, sea lions, seabirds, fish, crab and invertebrates, with real costs to our survival in the Pribilofs. Current federal management measures and processes have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an urgent need for innovative and flexible local solutions. Our directed halibut fishery remains under threat of elimination due to the lack of appropriate management measures over the last decade to regulate halibut bycatch use by trawlers -- the larger fishing industries. We are fighting for the survival of our 10,000-year culture on every possible front, and achieving the goals that our Tribal Government is advancing through this nomination is critical to the success of that fight.

As a local commercial halibut fishing vessel owner, I support the designation of the proposed 100 nm region around the Pribilof Islands and a co-management structure between the St. Paul and St. George federally recognized tribes and the federal government.

I urge you to review the Aleut Community of St. Paul Island Tribal Government's nomination and advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Simeon Swetzof Jr.", is written over a horizontal line.

Simeon Swetzof, Jr.
Owner/Captain, F/V Wind Dancer
Box 147
St. Paul Island, AK 99660

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

As the owner of the St. Paul commercial halibut F/V Esther C, I would like to provide strong support to the Aleut Community of St. Paul Island Tribal Government in their effort to build and implement a co-management governance structure for our Pribilof marine ecosystem. This effort is in response to our local voices calling for the need for something to be done quickly for our unique Pribilof marine ecosystem and done in a way that elevates and empowers our Unangan (Aleut) voices in federal decision-making over our resources.

Our islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals and seabirds. Because of our location, our Pribilof Islands are in the middle of some of the world's most profitable and important commercial fisheries, including our commercial and subsistence halibut fishery.

Our communities of St. Paul and St. George are in trouble. We are experiencing rapid declines of fur seals, sea lions, seabirds, fish, crab and invertebrates, with real costs to our survival in the Pribilofs. Current federal management measures and processes have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an urgent need for innovative and flexible local solutions. Our directed halibut fishery remains under threat of elimination due to the lack of appropriate management measures over the last decade to regulate halibut bycatch use by the trawlers - the larger fishing industries. We are fighting for the survival of our 10,000-year culture on every possible front and achieving the goals that our Tribal Government is advancing through this nomination is critical to the success of that fight.

As a local commercial halibut fishing vessel owner, I support the designation of the proposed 100 nm region around the Pribilofs and a co-management structure between the St. Paul and St. George federally recognized tribes and the federal government.

I urge you to review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,



Neon Krukoff Sr.
Owner/Captain, F/V Esther C
Box 53
St. Paul Island, AK 99660



Muscogee (CREEK) Nation

Executive Office

December 15, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

We write to support the Aleut Community of St. Paul Island, a federally recognized tribe, in their effort to build and implement a co-management governance structure for their ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration.

As you know, the Biden-Harris Administration *"Has taken historic steps to support Tribal communities... and help Tribal Nations overcome new and long-standing challenges. The Administration's work is rooted in the President's respect for the unique Nation-to-Nation relationship, commitment to the country's trust and treaty responsibilities, and desire to strengthen Tribal sovereignty and advance Tribal self-determination."*¹ President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations. The creation and implementation of a co-management structure between the local federally recognized tribes and the federal government around a marine ecosystem, as proposed by the Aleut Community of St. Paul Island, is an opportunity for this Administration to make substantial progress towards fulfilling these commitments.

Additionally, the Biden-Harris Administration recognizes *"Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation."* Empowering a sovereign tribal government to lead research that guides the federal management decisions over the environmental, cultural and economic resources central to Indigenous community will allow for the informed decision-making this Administration strives to achieve. Any proposal for conservation action by a federally recognized tribe that is founded on co-management, Indigenous knowledge and locally-led research should be earnestly validated and executed by this Administration. We unequivocally support such efforts led by a Tribal Nation, and we believe that the

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance your agency's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to accept it into inventory pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "David W. Hill". The script is cursive and fluid, with the first letters of each word being capitalized and prominent.

David W. Hill
Principal Chief



IGIUGIG VILLAGE COUNCIL

P.O. Box 4008

Igiugig, AK 99613

Phone: (907) 533-3211 Fax: (907) 533-3217

www.igiugig.com

e-mail: Igiugig.vc@gmail.com

December 16, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

We write to support the Aleut Community of St. Paul Island, a federally recognized tribe, in their effort to build and implement a co-management governance structure for their ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration.

As you know, the Biden-Harris Administration “*Has taken historic steps to support Tribal communities... and help Tribal Nations overcome new and long-standing challenges. The Administration’s work is rooted in the President’s respect for the unique Nation-to-Nation relationship, commitment to the country’s trust and treaty responsibilities, and desire to strengthen Tribal sovereignty and advance Tribal self-determination.*”¹ President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations. The creation and implementation of a co-management structure between the local federally recognized tribes and the federal government around a marine ecosystem, as proposed by the Aleut Community of St. Paul Island, is an opportunity for this Administration to make substantial progress towards fulfilling these commitments.

Additionally, the Biden-Harris Administration recognizes “*Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.*” Empowering a sovereign tribal government to lead research that guides the federal management decisions over the environmental, cultural and economic resources central to Indigenous community will allow for the informed decision-making this Administration strives to achieve. Any proposal for conservation action by a federally recognized tribe that is founded on co-management, Indigenous knowledge and locally-led research should be earnestly validated and executed by this Administration. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government’s visionary approach will enhance your agency’s ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to accept it into inventory pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in purple ink that reads "AlexAnna Salmon". The signature is written in a cursive, flowing style.

AlexAnna Salmon
President, Igiugig Village Council
PO Box 4008
Igiugig, AK 99613

**Asa'carsarmiut Tribal Council
P. Box 32249
Mountain Village, Alaska 99632
(907) 591-2814 Telephone
(907) 591-2934 Temp. Facsimile**

December 15, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor;

We write to support the Aleut Community of St. Paul Island, a federally recognized tribe, in their effort to build and implement a co-management governance structure for their ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration.

As you know, the Biden-Harris Administration *"Has taken historic steps to support Tribal communities... and help Tribal Nations overcome new and long-standing challenges. The Administration's work is rooted in the President's respect for the unique Nation-to-Nation relationship, commitment to the country's trust and treaty responsibilities, and desire to strengthen Tribal sovereignty and advance Tribal self-determination."*¹ President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations. The creation and implementation of a co-management structure between the local federally recognized tribes and the federal government around a marine ecosystem, as proposed by the Aleut Community of St. Paul Island, is an opportunity for this Administration to make substantial progress towards fulfilling these commitments.

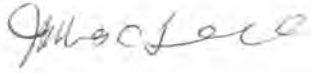
Additionally, the Biden-Harris Administration recognizes *"Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation."* Empowering a sovereign tribal government to lead research that guides the federal management decisions over the environmental, cultural and economic resources central to Indigenous community will allow for the informed decision-making this Administration strives to achieve. Any proposal for conservation action by a federally recognized tribe that is founded on co-management, Indigenous knowledge and locally-led research should be earnestly validated and executed by this Administration. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

your agency's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to accept it into inventory pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "James C. Landlord". The signature is fluid and cursive, with the first name "James" being more prominent.

James C. Landlord

First Chief



ANCC
ALASKA NANNUT CO-MANAGEMENT COUNCIL

P.O. Box 2027
400 Bering Street, Suite 205
Nome, Alaska 99762

Dr. Rick Spinard
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

December 17, 2021

Dear Dr. Spinrad and Mr. Armor,

The Alaska Nannut Co-Management Council (ANCC) would like to provide strong support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

The Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unanga^x (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

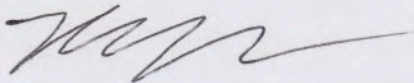
The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. The Biden-Harris

Administration recognizes *"Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation."*¹ Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations.¹ Thus the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

The nomination for the PRIME has a strong foundation in both western science and Indigenous Traditional Ecological Knowledge, which will ensure effective co-governance, enact substantial legislation, and restore Indigenous connections to the Pribilof Islands marine ecosystem. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance your agency's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,



Katya Gray, Executive Director

Alaska Nannut Co-Management Council

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>



ASSOCIATION ON AMERICAN INDIAN AFFAIRS

Protecting Sovereignty • Preserving Culture
Educating Youth • Building Capacity
SINCE 1922

December 15, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Re: Support for the Aleut Community of St. Paul Island Co-Management under the National Marine Sanctuaries program

Dear Dr. Spinrad and Mr. Armor,

The Association on American Indian Affairs supports the Aleut Community of St. Paul Island in their effort to build and implement a co-management governance structure for their ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it strengthens the goals nationally for Tribal Nations and for the Biden-Harris Administration that support Tribal sovereignty and self-determination and the government-to-government relationship.

The Association on American Indian Affairs is the oldest non-profit serving Indian Country protecting sovereignty, preserving culture, educating youth, and building capacity. Since its earliest beginnings assisting Pueblo Peoples defend their aboriginal land and water rights in 1922, the Association was formed to change the destructive path of federal policy from assimilation, termination, and allotment—to sovereignty, self-determination, and self-sufficiency. For 99 years, the Association has worked tirelessly to protect Native American cultural sovereignty - the things that make us who we are as Indigenous Peoples. Land and the environment is central to our cultural sovereignty, health and welfare.

As you know, the Biden-Harris Administration is taking historic steps with Tribal Nations.

The Administration's work is rooted in the President's respect for the unique Nation-to-Nation relationship, commitment to the country's trust and treaty responsibilities, and desire to strengthen Tribal sovereignty and advance Tribal

DONATE AT WWW.INDIAN-AFFAIRS.ORG

6030 Daybreak Circle, Suite A150-217, Clarksville, MD 21029
(240) 314-7155 General@Indian-Affairs.org

self-determination.¹

President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations. The creation and implementation of a co-management structure between the local federally recognized Tribes and the federal government around a marine ecosystem, as proposed by the Aleut Community of St. Paul Island, is an opportunity for this Administration to make substantial progress towards fulfilling these commitments.

Additionally, the Biden-Harris Administration recognizes "Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation." Empowering a sovereign Tribal government to lead research that guides federal management decisions over the environmental, cultural and economic resources central to Indigenous Peoples will allow for the informed decision-making this Administration strives to achieve.

Any proposal for conservation action by a federally recognized Tribe that is founded on co-management and collaboration, Indigenous sciences and locally-led research must be taken seriously. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance your agency's ability to integrate Indigenous sciences and Traditional Ecological Knowledge (and other forms of knowledge), and Tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous Peoples since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to accept it into inventory pursuant to designation. Thank you for your consideration.

Sincerely,



Frank Ettawageshik (Odawa)
President

BOARD OF DIRECTORS

Frank Ettawageshik (Odawa), President
Jonathan Perry (Wampanoag), Vice-President
Joseph Daniels, Sr. (Potawatomi), Treasurer
Dee Ann DeRoin (Ioway), Secretary
Alfred R. Ketzler, Sr. (Athabaskan)
John Echohawk (Pawnee)
Bradford R. Keeler (Cherokee)
Sandy White Hawk (Lakota)
Rory Wheeler (Seneca)

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

DONATE AT WWW.INDIAN-AFFAIRS.ORG

6030 Daybreak Circle, Suite A150-217, Clarksville, MD 21029
General@Indian-Affairs.org



Bering Sea Elders Group

December 16, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave. NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Re: Letter of Support for Pribilof Islands Marine Ecosystem (PRIME) Initiative

Dear Administrator Spinrad and Director Armor:

Quyanaq for the opportunity to provide this letter of support for the Pribilof Islands Marine Ecosystem (PRIME) Initiative. We write to support the Aleut Community of St. Paul Island, a federally recognized Tribe,¹ in its effort to build and implement a co-management governance structure for the Pribilof ecosystem under the National Marine Sanctuaries program.

The Bering Sea Elders Group (BSEG) is an association of Elder Representatives appointed by 38 Tribal governments in the Yukon-Kuskokwim and Bering Strait regions of Western Alaska. BSEG's mission is to work together to protect the traditional ways of life and the ocean web of life that supports the resources that we and future generations depend on.

The incredibly productive Bering Sea region, including countless species of seabirds, marine mammals, fish, and invertebrates, have sustained our Tribal communities for millennia. Our oceans have critical cultural and subsistence value for our coastal communities, and we are committed to protecting them for future generations. The Bering Sea is part of our identities as Yup'ik, Cup'ik, St. Lawrence Island Yupik, and Inupiaq people, and is as important to us as the land.

The Unangan of the Pribilof Islands are our Bering Sea neighbors and the Islands are among the most unique and important places in the world. The Pribilofs and surrounding waters provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as

¹ *Indian Entities Recognized by and Eligible To Receive Services From the United States Bureau of Indian Affairs*, 86 Fed. Reg. 7554, 7558 (Jan. 29, 2021).

well as important habitat for Steller sea lions, harbor seals, and seabirds. Yet like our communities on the mainland, our relatives on St. Paul and St. George Islands are experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. These changes and the dramatic effects they are having demonstrate the ongoing and urgent need for innovative and adaptable local solutions that incorporate traditional knowledge and honor traditional stewardship and sovereignty.

This Administration's approach to Tribal Nations "is rooted in the President's respect for the unique Nation-to-Nation relationship, commitment to the country's trust and treaty responsibilities, and desire to strengthen Tribal sovereignty and advance Tribal self-determination."² President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations. The creation and implementation of a co-management structure between the local federally recognized Tribes and the federal government around a marine ecosystem, as proposed by the Aleut Community of St. Paul Island, is an opportunity for this Administration to make substantial progress towards fulfilling these commitments.

Additionally, this Administration recognizes our Traditional Knowledge "as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation."³ Any proposal for conservation action by a federally recognized Tribe that is founded on co-management, Traditional Knowledge, and locally-led research should be earnestly validated and executed by this Administration. BSEG and other tribal organizations have long advocated this approach.⁴ We believe that the Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance your agency's ability to integrate Traditional Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

There is no question that the Pribilof Islands are an ecologically, socio-economically, and culturally significant area warranting a designation and inclusive management approach. We urge

² The White House, Fact Sheet: Building A New Era of Nation-to-Nation Engagement (Nov. 15, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement>.

³ *Id.* See also Office of Science and Technology Policy, Memorandum for the Heads of Departments and Agencies re: Indigenous Traditional Ecological Knowledge and Federal Decision Making (Nov. 15, 2021), <https://www.whitehouse.gov/wp-content/uploads/2021/11/111521-OSTP-CEQ-ITEK-Memo.pdf>.

⁴ Bering Sea Elders Group, Resolution 2019-2, Resolution Requiring Researchers and Funders to Engage Western Alaska Communities in a Co-Production of Knowledge Approach on All Research Activities and to Directly Fund Knowledge Holders, Tribes, and Native Organizations for Such Efforts (2019); National Congress of American Indians, Resolution #PDX-20-044, Supporting Tribal Communities that Utilize a Co-Production of Knowledge Approach in Research Engagement (2020).

you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to accept it into inventory pursuant to designation. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration.

If you have any questions, please do not hesitate to contact me at director@beringseaelthers.org.

Quyanaq,

A handwritten signature in dark ink, appearing to read 'Mellisa Johnson', with a stylized flourish at the end.

Mellisa Johnson
Executive Director



KUSKOKWIM RIVER

INTER-TRIBAL FISH COMMISSION

OUR RIVER, OUR PEOPLE, OUR FISH

P.O. Box 190 Bethel, AK 99559-190 | (907) 545-6206 | info@kritfc.org | kuskosalmon.org

December 15, 2021

Paul E. Michel
Regional Policy Coordinator
NOAA Sanctuaries West Coast Region
99 Pacific Street, Bldg. 100F
Monterey, CA 93940

Dear Mr. Michel:

The Kuskokwim River Inter-Tribal Fish Commission, representing the 33 federally recognized Tribes of the Kuskokwim River watershed in fisheries management and research, appreciates the opportunity to provide comments on the Office of National Marine Sanctuaries (ONMS) five-year review of the St. George Unangan Heritage National Marine Sanctuary nomination.

The Pribilof Islands are among the most unique and important places in the world. The islands and surrounding waters provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

The Pribilof Islands were used, but not permanently inhabited, by Unangan (or Aleuts) until Russian fur traders enslaved hundreds of Unanga from the Aleutian Islands and forced them to settle on St. George and St. Paul as an enslaved workforce for commercial seal harvesting operations. This economic endeavor continued under the Department of Commerce and ended in 1978 on St. George and in 1983 on St. Paul. Currently, the communities on St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Large-scale commercial fisheries, climate change, and the residual impacts of overexploitation of marine resources (e.g., blue and red king crab, halibut, fur seals) are contributing factors to these declines. These changes and the dramatic effects they are having demonstrate the ongoing and urgent need for innovative and adaptable local solutions.

As demonstrated by the January 2017 decision to add it to the inventory of successful nominations, the existing Unangan Heritage National Marine Sanctuary nomination clearly

TELIDA | NIKOLAI | TAKOTNA | MCGRATH | LIME VILLAGE | STONY RIVER | SLEETMUTE | RED DEVIL
GEORGETOWN | CROOKED CREEK | NAPAIMUTE | CHUATHBALUK | ANIAK | UPPER KALSKAG | LOWER KALSKAG | TULUKSAK
AKIAK | AKIACHAK | KWETHLUK | BETHEL | OSCARVILLE | NAPASKIAK | NAPAKIAK | KASIGLUK | ATMAUTLUAK
NUNAPITCHUK | TUNTUTULIAK | EEK | QUINHAGAK | KONGIGANAK | KWIGILLINGOK | KIPNUK | CHEFORNAK

meets the “11 evaluation criteria” considered by ONMS. The City of St. George is to be congratulated for its foresight in furthering this nomination, and there is no question that the Pribilof Islands are an ecologically, socio-economically, and culturally significant area warranting a designation and inclusive management approach.

Indigenous and Traditional Knowledge gathered and documented from the islands highlights that the marine waters extending at least as far as 100 nm around St. Paul and St. George are of central importance to the communities, marine mammals, seabirds, and other resources. This knowledge is verified by extensive western science that includes studies of fur seal foraging areas, bathymetry, oceanography, primary productivity, and other disciplines. There is an opportunity and need for comprehensive, science and knowledge-based management approaches that account for this information and consider the larger area.

As the federal government considers designation and management in the Pribilof Islands marine ecosystem, there is also an important opportunity to further the Biden-Harris Administration’s commitment “to support and help advance the priorities of American Indian, Alaska Native, Native Hawaiian, and Indigenous leaders,” in meeting 30x30 goals. As the Administration has made clear: “Efforts to conserve and restore America’s lands and waters must involve regular, meaningful, and robust consultation with Tribal Nations. These efforts must respect and honor Tribal sovereignty, treaty and subsistence rights, and freedom of religious practices.” By following the communities’ lead and working to further co-management with the federally recognized tribal governments of St. Paul and St. George in the Pribilof Islands, ONMS can make substantial progress toward fulfilling these commitments.

In summary, the Pribilof Islands marine ecosystem is a large area of vital ecological, economic, and cultural importance. This larger area, which fully encompasses the St. George Unangan Heritage NMS nomination area, clearly satisfies the evaluation criteria based on significant amounts of western science, Traditional, Indigenous and Local Knowledge. The designation of an area of at least 100nm around both Pribilof Islands will ensure successful outcomes that are rooted in tribal co-management and centered on Indigenous values.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Williams Sr.", with a stylized flourish at the end.

Mike Williams Sr.
Chair, Kuskokwim River Inter-Tribal Fish Commission

First Alaskans Institute

December 13th, 2021

Mr. John Armor, Director
Office of National Marine Sanctuaries
1305 East-West Hwy
Silver Springs, MD 20910

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Silver Springs, MD 20910

Dear Dr. Spinrad and Mr. Armor,

Sangáay 'láa, Ugheli Dzaen (good day),

First Alaskans Institute is a statewide Alaska Native nonprofit that works to educate key decision makers about our peoples, amplify the voices of our communities, and advance our ways of life. It is for this reason that we write this letter of support for the Aleut Community of St. Paul Island in their effort to build and implement a co-management governance structure for their ecosystem under the National Marine Sanctuaries program.

Unanga̋ of St. George and St. Paul Islands along with Alaska Native communities throughout the state represent diverse knowledge systems which exemplify over 10,000 years of best practices. The PRIME initiative is an opportunity for existing management systems to tap into this vast archive of ecological, scientific, traditional, and cultural knowledge and learn from the Alaska Natives who have spent thousands of years carefully cultivating, nourishing, and sustaining reciprocal relationships with the land. This is a monumental chance to institutionalize co-management systems that amplify the critical importance of Tribal leadership and stewardship over their homelands once again.

Additionally, the creation of a co-management framework which advances tribal sovereignty, builds relationships between governments, and institutes Indigenous-led decision-making, aligns with the Biden-Harris administration's commitment to consult with Tribal communities, uplift Tribal sovereignty, and overcome challenges stemming from federal management decisions that directly impact our Tribal Nations. The rapid transformation of marine ecosystems within and surrounding St. George and St. Paul Island is an example of the kind of relationship building and advancement of Indigenous sovereignty that our state and country are moving toward.

As we look to the future, we see co-management of lands and waters as an opportunity to achieve this transformation.

Founding Board

William L. (Iggiagruk) Hensley
Inupiaq

Julie E Kitka
Chugach Eskimo

Sam Kito, Jr.
Tlingit

Janie Leask
Haida-Tsimshian

Oliver Leavitt
Inupiaq

Albert Kookesh
Tlingit

Byron I. Mallott
Tlingit

Morris Thompson
Athabaskan

Mission

True to identity, heritage, and values, Alaska Natives are informed and engaged in leading the decisions that shape the future.

606 E Street,
Suite 200
Anchorage, Alaska 99501

P 907.677.1700

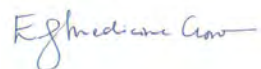
F 907.677.1780

info@firstalaskans.org

firstalaskans.org

If you have any questions or would like to discuss this further with us, please do not hesitate to contact us at: waahlaalgidaak@firstalaskans.org

Respectfully,



La quen náay (Elizabeth) Medicine Crow (Haida/Tlingit)
President/CEO



Wáahlaal Gíidaak (Barbara) Blake (Haida/Tlingit/Ahtna)
Director, Alaska Native Policy Center



Post Office Box 1229 / Sitka, Alaska 99835 / 907.747.3400 / alfafishak@gmail.com

December 17, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

RE: Supporting the Aleut Community of St. Paul Island Tribal Government's vision of Indigenous co-management and community-based business engagement under the National Marine Sanctuaries program

Dear Dr. Spinrad and Mr. Armor,

On behalf of the Alaska Longline Fishermen's Association, I write to express strong support for the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. We view this effort as wholly compatible with fisheries conservation and management as well as the Magnuson-Stevens Act's commitments to community support and your Administration's commitments to equity and climate justice. This sanctuary nomination is to be commended, as it furthers national goals for inclusive engagement with communities, resource-dependent businesses, and Indigenous communities under the America the Beautiful program.

The Pribilof Islands, where the nomination is centered, may be far away from large commercial centers, but in many ways they typify areas where front-line businesses with high exposure to climate risks and environmental change operate. The islands are home to dozens of commercial enterprises and hundreds of people, and they provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters. Along with the seabirds, many tourists flock to the islands for extraordinary bird watching opportunities, providing the islands with important economic support. The ocean ecosystem around the islands also creates an extraordinarily productive ocean zone that supports some of the world's most profitable commercial fisheries, including small-scale fishermen based on the islands whose livelihoods depend entirely on the productivity and integrity of sustainable fisheries.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. Also important from our perspective, the designation of a Marine Sanctuary under this vision would enfranchise the business community on the islands, enabling small-scale businesses in this rural area to thrive. This approach would set a tremendous precedent for Indigenous and resource-dependent businesses, whose participation in the governance of this Marine Sanctuary would be fundamental and critical. Thus, the designation proposed by the Aleut Community of St.

Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments to working with local business.

We therefore urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "Linda Behnken". The signature is fluid and cursive, with the first name "Linda" being more prominent than the last name "Behnken".

Linda Behnken

Executive Director



December 17, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

RE: Supporting the Aleut Community of St. Paul Island Tribal Government's vision of Indigenous co-management and community-based business engagement under the National Marine Sanctuaries program

Dear Dr. Spinrad and Mr. Armor,

We the Steering Committee of Businesses for Conservation and Climate Action (BCCA) write to express our strong support for the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers national goals for inclusive engagement with communities, resource-dependent businesses, and Indigenous communities under the America the Beautiful program.

BCCA is a national coalition of Indigenous-led and community-based businesses supporting conservation approaches that enhance sustainable businesses and community access to resources for the benefit of all. The Pribilof Islands, where these efforts are centered, may be far away from large commercial centers, but in many ways they typify areas where front-line businesses with high exposure to climate risks and environmental change operate. The islands are home to dozens of commercial enterprises and hundreds of people, and they provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters. Along with the seabirds, many tourists flock to the islands for extraordinary bird watching opportunities, providing the islands with important economic support. The ocean ecosystem around the islands also creates an extraordinarily productive ocean zone that supports some of the world's most profitable commercial fisheries, including small-scale fishermen based on the islands whose livelihoods depend entirely on the productivity and integrity of sustainable fisheries.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. Also important from our perspective, the designation of a Marine Sanctuary under this vision

would enfranchise the business community on the islands, enabling small-scale businesses in this rural area to thrive. This approach would set a tremendous precedent for Indigenous and resource-dependent businesses, whose participation in the governance of this Marine Sanctuary would be fundamental and critical. Thus, the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments to working with local business.

We therefore urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

The BCCA Steering Committee

Amos Philemonoff, Sr.
President
Aleut Community of St. Paul Island Tribal
Government

Joana "JJ" Orloff
Tribal Administrator
Native Village of Afognak

Dune Lankard
President
The Native Conservancy

David Levine
Cofounder & President
American Sustainable Business Council

Thomas Barr
Vice President, Business Development
Local First Arizona

Linda Behnken
Executive Director
Alaska Longline Fishermen's Association

Eric Bill
Chief Economist
Autocase

Sarah Schumann
Principal
Shining Sea Fisheries Consulting

Tim Bristol
Executive Director
Salmon State

Frank Knapp, Jr.
President & Chief Executive Officer
South Carolina Small Business Chamber
of Commerce

Bob Rossi
Director
New York Sustainable Business Council

Steve Klass
Executive Director
P3 Utah

Vicki Lee Parker-High
Executive Director
North Carolina Business Council



The Climate Strong Islands Network
1320 19th St, NW, Suite 500, Washington, DC 20036
202-318-3178

THE CLIMATE STRONG ISLANDS NETWORK

Letter of Support

December 16, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

The Climate Strong Islands Network (CSIN) would like to provide strong support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

The Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unangaġ (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. The Biden-Harris Administration recognizes *“Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.”* Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations.¹ Thus the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

The nomination for the PRIME has a strong foundation in both western science and Indigenous Traditional Ecological Knowledge, which will ensure effective co-governance, enact substantial legislation, and restore Indigenous connections to the Pribilof Islands marine ecosystem. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government’s visionary approach will enhance your agency’s ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

The Aleut Community of St. Paul is a member of the [Climate Strong Islands Network](#), and as a part is a signatory to the [Climate Strong Islands Declaration](#), calling on government agencies, foundation, corporations, environmental groups, and others to:

- Recognize the potential of islands to develop and perfect transformative approaches to energy, transportation, solid waste, agriculture, ocean, and coastal management.
- Support efforts to make island economies more sustainable, self-sufficient, and resilient.
- Review existing policies, practices, and priorities to determine if they disadvantage or marginalize island communities.
- Collaborate in a respectful and participatory way with island communities to develop new initiatives, programs, and projects that help them respond effectively to the growing climate crisis and other environmental challenges.
- Increase the level of funding and technical support available to island communities as they work to transform the critical systems on which they depend.
- Ensure that island communities are able to more meaningfully participate in funding and policy-making activities that affect their future.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government’s nomination and to advance the nomination into scoping pursuant to designation as it will not only positively affect this unique and special community, but bolster support for other US island communities.

1

<https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

Thank you for your consideration.

Sincerely,



Brenda Torres

Co-Chair, CSIN Steering Committee

Executive Director, San Juan Estuary Program



Austin J. Shelton III, Ph.D.

Co-Chair, CSIN Steering Committee

Director, University of Guam Center for
Island Sustainability and Sea Grant



December 14, 2021

Dear Dr. Spinrad and Mr. Armor,

As a member of the Climate Strong Islands Network (CSIN), the Island Institute would like to provide strong support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program.

The Island Institute is a 38-year-old nonprofit organization based in Rockland, Maine, working to sustain Maine's island and coastal communities. Our work focuses on ensuring that Maine's island and coastal communities have resilient economies, are equipped to adapt to climate change, and have leadership in place to navigate change.

As a member of CSIN the Island Institute recognizes that islands are culturally distinctive, ecologically diverse, and especially vulnerable to the adverse impacts of climate change. Islands experience various challenges that are difficult to address through "one-size fits all" policies due to their geographic isolation and other unique circumstances. The approach proposed by Aleut Community of St. Paul Island is an excellent example of the kind of approaches that can support island communities.

Over the years, we have witnessed the benefits to island communities in Maine from participating in co-management processes. The spirit of co-management outlined in the proposal is similar to our State's successful lobster co-management system. Focusing on island specific access to the marine environment has also been successfully implemented in Maine.

As the United States begins the process of building back from the economic devastation brought on by the COVID-19 pandemic, and the impacts of climate change are being highlighted like never before, there is an incredible opportunity to re-invest in communities with climate resilient solutions through sustainable development practices. Island communities can lead by example, providing innovative, community driven solutions that can be applied to mainland communities, particularly in rural areas that face similar infrastructure and logistical challenges.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

Nick Battista, Senior Policy Officer, Island Institute



To:
Dr. Rick Sinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

13 December 2021

Dear Dr. Spinrad and Mr. Armor,

Thank you for the opportunity to register our support for the Aleut Community of St. Paul Island in their pursuit of a co-management structure to govern the conservation of the Pribilof Island Marine Ecosystem. We also provided a letter of support from the seabird research community for the St. George Unangan Heritage National Marine Sanctuary (attached) which we see as being a complimentary initiative. The St. George Sanctuary provides protection for the primary and most extensive seabird nesting habitat in the Pribilofs, but it falls short of providing protections for the foraging habitat that sustains their breeding efforts. The 100 nautical mile boundary proposed by the Aleut Community of St. Paul Island would cover most of the shelf and slope foraging habitat used by breeding seabirds on the Pribilof Islands.

Research done by our team and our colleagues who signed the St. George letter, has documented the habitat use of kittiwakes (red- and black-legged) and murres (thick-billed) breeding on St. Paul and St. George Islands during both cold and warm conditions (see reference list). These studies show that foraging locations change depending on preferred prey, ocean conditions, time of day and breeding stage. Red-legged kittiwakes consume primarily myctophids, found only in the ocean basin, and their foraging trips reflect consistent use of the basin regardless of ocean conditions. During warm years when sea ice retreat is early, black-legged kittiwakes and murres from both islands forage primarily on the continental shelf, while in cold years when sea ice retreat is later there is a shift, and birds make more trips to the slope. In all species we documented differences between foraging trips made during the day, and those made at night, with the latter often being more extensive trips made to the ocean basin. Similarly, trips made prior to egg-laying (data available for the Pribilofs) and during incubation (studies at other colonies) are longer and cover larger areas of ocean than those made during chick-rearing. This dynamic, and species-specific use of the ocean habitat highlight the importance of using a knowledge-based approach to managing a more extensive area around the Pribilofs to ensure that seabirds, fur seals, and commercial fisheries are able to co-exist.

P.O. Box 757000, Fairbanks, AK 99775-7500 | 907-474-5179 | 907-474-7666 fax | askitaysky@alaska.edu | www.uaf.edu

UAF is an AA/EO employer and educational institution and prohibits illegal discrimination against any individual: www.alaska.edu/nondiscrimination/.

Naturally Inspiring.

Although the 100 nm boundary was defined primarily with the goal of protecting lactating female fur seal foraging habitat it does cover the majority of daytime foraging trips made by chick-rearing black-legged kittiwakes and thick-billed murres as well as some foraging locations recorded for chick-rearing red-legged kittiwakes. Although data are lacking, this distance is also likely sufficient to cover foraging areas used by planktivorous species such as crested and least auklets. Least auklets are documented to forage an average of 12 km from shore at the Pribilofs, though are capable of making longer trips, 55-75 km (Hunt 1997), which may become necessary as the region experiences ongoing warming and fewer years of extensive winter ice that support the presence of copepods near the Pribilof island colonies. Similarly, estimated crested auklet foraging ranges fall within the proposed boundary; they have been documented traveling up to 80 km from their breeding colonies in the Northern Bering Sea (Will et al. 2020).

Declines in food availability is a primary threat to seabird populations worldwide, whether due to conflicts with fisheries, or climate associated changes in the marine environment. Expanding the stakeholder group involved in managing the Pribilof Island Marine Ecosystem would provide benefits to the marine life whose foraging areas intersect with those of interest to commercial fisheries. We think that the Tribal Governments of St. Paul and St. George are uniquely situated to lead the establishment of a co-management framework that works towards the well-being of the Pribilof Island Marine Ecosystem.

We urge NOAA to take swift action in establishing a complimentary system of protective measures that include the St. George Unangan Heritage National Marine Sanctuary nomination, and a co-governance framework for implementing conservation measures in the greater Pribilof Island Marine Ecosystem.

Sincerely,



Alexander Kitaysky, PhD
Professor of Integrative Animal Physiology
Institute of Arctic Biology
University of Alaska Fairbanks



Alexis Will, PhD
Research Scientist II
Institute of Arctic Biology
University of Alaska Fairbanks

References

- Orben, R. (unpublished) Data on pre-laying movements of red-legged kittiwakes. Rachael.Orben@oregonstate.edu
- Harding, A., Paredes, R., Suryan, R., Roby, D., Irons, D., Orben, R., Renner, H., Young, R., Barger, C., Dorresteijn, I., Kityasky, A. (2013). Does location really matter? An inter-colony comparison of seabirds breeding at varying distances from productive oceanographic features in the Bering Sea. *Deep-Sea Research II*, 94, 178-191.
- Hunt, G. L. Jr. 1997. Physics, zooplankton, and the distribution of least auklets in the Bering Sea - a review. - *ICES Journal of Marine Science*, 54: 600-607.
- Kitaysky AS and Hunt GL. 2018. Seabird responses to a changing Bering Sea. *Marine Ecology Progress Series*. 593:189-194.
- Kokubun N., Takahashi A., Paredes R., Young R.C., Sato N.N., Yamamoto T., Kikuchi D.M., Kitaiskaia E.V., Ito M., Watanuki Y., Will A.P., Lauth R., Romano M.D., Kitaysky A.S. (2018). Inter-annual climate variability affects foraging behavior and nutritional state of thick-billed murre breeding in the southeastern Bering Sea. *Marine Ecology Progress Series*. 593:195-208.
- Kokubun, N., Yamamoto, T., Sato, N., Watanuki, Y., Will, A., Kitaysky, A.S., Takahashi, A. (2016). Foraging segregation of two congeneric diving seabird species (common and thick-billed murres) breeding on St. George Island, Bering Sea. *Biogeosciences* 13, 2579-2591. doi:10.5194/bg-13-2579-2016.
- Paredes, R., Orben, R.A., Suryan, R.M., Irons, D.B., Roby, D.D., Harding, A.M.A., Young, T.C., Benoit-Bird, K., Ladd, C., Renner, H., Heppell, S., Phillips, R.A., Kitaysky, A. (2014) Foraging Responses of Black-Legged Kittiwakes to Prolonged Food-Shortages around Colonies on the Bering Sea Shelf. *PLoS ONE* 9(3): e92520. doi:10.1371/journal.pone.0092520
- Paredes, P. Orben, R. A., Roby, D.D., Irons, D.B., Young, R., Renner, H., Tremblay, Y., Will, A., Harding, A.M.A., Kitaysky, A.S. (2015). Foraging ecology during nesting influences body size in a pursuit-diving seabird. *Marine Ecology Progress Series*. 533:261-276.
- Will, A., Kitaysky, A. (2018). Variability in trophic level and habitat use in response to environmental forcing: isotopic niche dynamics of breeding seabirds in the southeastern Bering Sea. *Marine Ecology Progress Series*. 593:247-260.
- Will, A., Takahashi, A., Thiebot, J.B., Martinex, A., Kitaiskaia, E., Britt, L., Nichol, D., Murphy, J., Dimond, A., Tsukamoto, S., Nishizawa, B., Niizuma, Y., Kitaysky, A. (2020) The breeding seabird community reveals that recent sea ice loss in the Pacific Arctic does not benefit piscivores and is detrimental to planktivores. *Deep Sea Research II*. 181-182: 104902.
- Yamamoto, T., Kokubun, N., Kikuchi, D. M., Sato, N., Takahashi, A., Will, A.P., Kitaysky, A. S., and Watanuki, Y. (2016). Differential responses of seabirds to environmental variability over 2 years in the continental shelf and oceanic habitats of southeastern Bering Sea, *Biogeosciences*, 13, 2405-2414



Attachments:

2021 Letter of Support for Continued Nomination of the St. George Unangan Heritage National Marine Sanctuary

2016 Letter of Support for the Nomination of the St. George Unangan Heritage National Marine Sanctuary

**Address**

PO Box 202022, Anchorage, AK 99520

Email

nicole@akwildlife.org

Phone

907-917-WILD (9453)

Website

www.akwildlife.org

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

December 16, 2021

Dear Dr. Spinrad and Mr. Armor,

Alaska Wildlife Alliance submits this letter of support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program.

Alaska Wildlife Alliance is a non-profit organization founded by Alaskans in 1978. Our mission is to advocacy for healthy ecosystems in Alaska, ethically and scientifically managed to protect wildlife for present and future generations.

The Pribilof Islands (St. Paul and St. George) are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

The Pribilof Islands are experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, crab, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Of particular concern is the fact that Northern Fur Seals have declined to less than 25% of the peak historic population estimate of 2.1 million animals.

The central focus of the Pribilof Islands Marine Ecosystem (PRIME) Initiative is to designate a co-managed marine area that will address local conservation concerns while ensuring the sustainability of local economies and provide continued fishing opportunities, which are intricately tied to the marine environment. The governance framework of the PRIME will reflect co-management between

**Address**

PO Box 202022, Anchorage, AK 99520

Email

nicole@akwildlife.org

Phone

907-917-WILD (9453)

Website

www.akwildlife.org

the federally recognized tribal governments of St. Paul and St. George of the waters within 100 nm of the Pribilof Islands. The proposed mechanism for establishing this area would utilize the existing National Marine Sanctuary Act, which includes existing processes for fishery management actions through the North Pacific Fishery Management Council, but also includes the needed flexibility to achieve co-management of the PRIME ecosystem, while allowing for a balance of cultural, environmental and economic priorities.

The PRIME Initiative proposal is unique in that it is requesting co-management of the protected area, being tribal government-led vs. strictly Federal government managed. Co-management has the potential to provide substantial benefits to local people and wildlife, as well as technical and financial support in management activities. It can incorporate local and traditional knowledge into wildlife management decisions and facilitate approaches that are more culturally and ecologically appropriate. A meta-analysis of more than 130 community-based marine co-management arrangements worldwide found that, with strong leadership and support, co-management can contribute to the successful management and sustainability of aquatic resources (Gutierrez et al. 2011).

As a wildlife conservation organization, Alaska Wildlife Alliance shares concerns with many stakeholders on the health of marine mammals in the region and supports co-management as a mechanism for ensuring their continued survival. Northern Fur Seals (NFS) are protected under both the Fur Seal Act and the Marine Mammal Protection Act (MMPA). In 1988, NFS were designated as a depleted stock under the MMPA, meaning they are below their optimum sustainable population level. They are also protected under the Fur Seal Act.

Beginning in 1994, NOAA Fisheries and the tribal governments on both St. Paul Island and St. George Island began co-managing subsistence use of NFS, with formal co-management agreements developed in 2000 and 2001. The co-management agreement with the Aleut Community of St. Paul Island was modified in 2019 to reflect changes in the subsistence use regulations and increase cooperative management of subsistence use. The tribal governments of St. George and St. Paul share responsibility with NOAA Fisheries to cooperatively manage, monitor, and report their subsistence use of marine mammals. These tribal governments have also worked extensively with NOAA Fisheries to conduct disentanglement studies of NFS on the Pribilof Islands, which not only involves removing entangling debris from captured NFS, but also provide NOAA Fisheries with estimates of the number of NFS entangled in debris. Given the propensity of NFS to become entangled in marine debris, the tribal governments of St. Paul and St. George have also partnered with the NOAA Marine Debris Program to coordinate annual beach cleanup and derelict fishing debris removals at select locations on the Pribilof Islands. Finally, the Aleut Community of St. Paul has a formal stranding agreement with NOAA Fisheries to respond as needed to stranded marine mammals. These co-management and other formal agreements mean that the tribal governments of St. Paul and St. George already have a long-

**Address**

PO Box 202022, Anchorage, AK 99520

Phone

907-917-WILD (9453)

Emailnicole@akwildlife.org**Website**www.akwildlife.org

standing history and experience working with the federal government to manage local resources and support wildlife conservation.

This initiative presents an opportunity for the Aleut communities to steward local waters and to ensure the proper management of the PRIME, rather than an ecosystem that is solely managed, species by species, by the federal government. Indigenous-led conservation efforts in Canada and across the Arctic will provide guidance in successful co-management frameworks that: provide streamlined management from tribal to federal governments, and can accomplish timely and meaningful regulations and policies for the PRIME. We believe the PRIME Initiative will be successful because it will reflect an Indigenous-led, co-management framework that strengthens reconciliation with Indigenous Peoples of the Pribilof Islands and provides opportunity for locally-led ecosystem-based wildlife management.

The nomination for the PRIME has a strong foundation in both western science and Indigenous Traditional Ecological Knowledge, which will lend itself to effective co-governance and restore Indigenous connections to the Pribilof Islands marine ecosystem. We believe that the Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance your agency's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into your work to conserve wildlife and habitat. We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation.

Thank you for your consideration.

Nicole Schmitt
Executive Director

December 16, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Re: Aleut Community of St. Paul Island National Marine Sanctuary Nomination

Dear Dr. Spinrad and Mr. Armor:

We are writing on behalf of Audubon Alaska and the National Audubon Society to express our strong support for creating and implementing a co-management governance structure for the Pribilof Islands marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended as it furthers the Biden Administration's commitments to Tribal Nations and advances conservation goals outlined within "Conserving and Restoring America the Beautiful."¹

Audubon Alaska had the great fortune to partner with the City of St. George and the Aleut Community of St. Paul on the *Marine Ecological Atlas of the Pribilof Islands* (2020).² To create this document, a co-production approach was utilized to combine traditional knowledge, local observation, and western science. Information on lower trophic organisms, fishes, mammals, birds, and human uses were mapped at various scales around the Pribilof Islands. The atlas provides a comprehensive overview of the region's ecological values and cultural significance.

The Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the

¹ Department of the Interior, "Conserving and Restoring America the Beautiful," 2021, available at: <https://www.doi.gov/sites/doi.gov/files/report-conserving-and-restoring-america-the-beautiful-2021.pdf>.

² Goldman, M. S., L. M. Divine, E. J. Knight, V. M. Padula, and D. P. Huffman. 2020. *Marine Ecological Atlas of the Pribilof Islands*. Audubon Alaska, Anchorage, AK. Available here: <https://indd.adobe.com/view/08794bd0-bd7d-4dae-938b-6c83496a0ea5>.

continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unanga communities are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

Across the planet, seabird populations are in significant decline and their habitat requires greater protection and stewardship. A study examining the population trend of the world's seabirds found a ca. 70 percent decline between 1950 and 2010.³ The Pribilof's global importance for seabirds, particularly wide-ranging pelagic species, exemplifies the need for greater stewardship of the archipelago and surrounding marine environment. Improved stewardship through a meaningful co-management structure would play a constructive role in helping to reverse the troublesome global trend.

Designation of the Pribilof Islands Marine Ecosystem (PRIME) as a National Marine Sanctuary will create an effective co-management structure between the St. Paul and St. George tribes and the federal government for this vital marine ecosystem. The proposed 100 nautical mile extent around both St. Paul and St. George Islands is based on substantial western scientific data, local observation, and Indigenous knowledge.

The Biden Administration recognizes "*Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.*"⁴ Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact Tribal Nations.⁵ The designation proposed provides a clear opportunity for the Administration to make substantial progress towards fulfilling important policy commitments. Furthermore, we believe that the visionary approach proposed here will enhance the National Oceanic and Atmospheric Administration's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowing) and tribal co-management directly into the heart of the agency's work to conserve and steward marine resources.

³ Paleczny, Michelle et al. "Population Trend of the World's Monitored Seabirds, 1950-2010." PloS one vol. 10,6 e0129342. 9 Jun. 2015, doi:10.1371/journal.pone.0129342.

⁴ See: Memorandum for the Heads of Departments and Agencies re Indigenous Traditional Ecological Knowledge and Federal Decision Making. November 15, 2021. Available here: <https://www.whitehouse.gov/wp-content/uploads/2021/11/111521-OSTP-CEQ-ITEK-Memo.pdf>.

⁵ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your work on this important matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Natalie Dawson', with a stylized, cursive script.

Natalie Dawson
Vice President & Executive Director
Audubon Alaska
431 W. 7th Avenue, Suite 205
Anchorage, AK 99501
natalie.dawson@audubon.org

A handwritten signature in black ink, appearing to read 'Donald E. Lyons', with a stylized, cursive script.

Donald E. Lyons, Ph.D.
Director of Conservation Science
Audubon Seabird Institute
12 Audubon Road
Bremen, ME 04551
donald.lyons@audubon.org

750 W. 2nd Avenue
Suite 206
Anchorage, AK 99501



907.258.0224 Telephone
904.258.0223 Facsimile
www.oceanconservancy.org

December 16, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor:

Ocean Conservancy¹ fully supports the Aleut Community of St. Paul Island's (ACSPI) nomination for designation of a National Marine Sanctuary in the marine waters surrounding the Pribilof Islands. As the federally recognized Tribe for St. Paul Island, Alaska, ACSPI can further conservation, economic, cultural and other goals by building and implementing a co-management governance structure under the National Marine Sanctuaries program.

The Pribilof Islands marine ecosystem is a unique place of national significance. The islands and surrounding waters provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions and harbor seals. More than three million seabirds flock to the islands during the summer months. Straddling the continental shelf and deeper waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

As has been true for centuries, Unanga² on St. Paul and St. George remain inextricably interconnected with the ocean and these marine resources. This interconnected system is now threatened by rapid change, including declines of fur seals, sea lions, seabirds, fish and invertebrates, with real costs to wildlife, human and ecosystem health, local economies and culture.

Ocean Conservancy supports ACSPI's Pribilof Islands Marine Ecosystem (PRIME) Initiative, through which ACSPI seeks a designated, co-managed marine area that will adequately address conservation concerns shared by St. Paul and St. George while ensuring the sustainability of local economies. Designation of a National Marine Sanctuary can be an important step toward these goals and will help bring recognition to the importance of the Pribilof Islands marine ecosystem, ensure sustainability and advance Tribal co-management.

The 100nm boundary of the nomination is based on substantial western scientific data and Indigenous, traditional and local knowledge, and there is real opportunity to create and implement an effective co-management structure for this region among the St. Paul and St. George federally recognized Tribes and the federal government. Doing so will further the federal government's commitment "to support and help advance the priorities of American Indian, Alaska Native, Native Hawaiian, and Indigenous leaders"

¹ Ocean Conservancy is a non-profit organization working for healthy oceans protected by a more just world.

and “respect and honor Tribal sovereignty, treaty and subsistence rights, and freedom of religious practices” in meeting 30x30 goals.² It is also consistent with the Biden-Harris Administration’s recognition of “Indigenous Traditional Ecological Knowledge . . . as one of the many important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.”³

Ocean Conservancy supports ACSPI’s approach and believes that it will enhance the government’s ability to integrate Indigenous Knowledge (and other forms of knowledge) and Tribal co-management into decisions affecting resources that have been stewarded by Indigenous people since time immemorial.

Ocean Conservancy has supported local priorities related to marine conservation on St. Paul and St. George. Among other issues, we have worked with the Tribal and City governments to help remove marine debris, support the gathering and documentation of Indigenous Knowledge, and participate in education and outreach programs. These connections to the communities inform our support for the PRIME Initiative and designation of a new model for a national marine sanctuary in the region.

We fully support ACSPI’s nomination and urge the federal government to advance the nomination immediately into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, reading "Scott Highleyman". The signature is fluid and cursive, with the first name "Scott" and last name "Highleyman" clearly distinguishable.

Scott Highleyman
Vice President, Conservation Policy and Programs
Ocean Conservancy

² <https://www.doi.gov/sites/doi.gov/files/report-conserving-and-restoring-america-the-beautiful-2021.pdf>.

³ <https://www.whitehouse.gov/wp-content/uploads/2021/11/111521-OSTP-CEQ-ITEK-Memo.pdf>.

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine
Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

December 16, 2021

Dear Dr. Spinrad and Mr. Armor:

Oceana, as the largest international conservation organization solely focused on protecting the world's oceans with more than 1.2 million members and supporters in the United States, strongly supports the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

The Pribilof Islands are among the most unique and ecologically important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unanga^x (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social, and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative local solutions.

The proposed Pribilof Islands Marine Ecosystem (PRIME) sanctuary includes a 100 nautical mile region of the eastern Bering Sea surrounding both St. George and St. Paul Islands. Substantial western scientific data and Indigenous, traditional, and local knowledge confirm the great importance of this spectacular ocean region. A sanctuary here should be established along with a governance structure that allows for co-management between the St. Paul and St. George federally recognized tribes and the federal government. The Biden-Harris Administration recognizes "*Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic*

*advancements of our nation.*¹ Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations.¹ Thus the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

The nomination for the PRIME sanctuary will ensure effective co-management and restore Indigenous connections to the Pribilof Islands marine ecosystem. We support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government's approach will enhance your agency's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review and ultimately accept the Aleut Community of St. Paul Island Tribal Government's sanctuary nomination. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, reading "Susan J. Murray". The signature is fluid and cursive, with the first name "Susan" and last name "Murray" clearly legible.

Susan Murray,
Deputy Vice President, Pacific
Oceana

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>



Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

Pacific Environment would like to provide strong support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

The Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unangaġ (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Currently, limited protection measures and continued threats to the overall health of the Bering Sea have led to not successfully meeting the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. The Biden-Harris Administration recognizes "Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic

advancements of our nation.¹ Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations. Thus the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

The nomination for the PRIME has a strong foundation in both western science and Indigenous Traditional Ecological Knowledge, which will ensure effective co-governance, enact substantial legislation, and restore Indigenous connections to the Pribilof Islands marine ecosystem. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance your agency's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to be 'BM' followed by a long horizontal stroke.

Brihannala Morgan
Senior Arctic Campaigner
Pacific Environment

¹<https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>



CRAFTING
DEEPER
STORIES

oceanmediainstitute.org

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

14 December 2021

Dear Dr. Spinrad and Mr. Armor,

My name is Dr. Gianna Savoie and I am the Director of Ocean Media Institute (OMI), a US-based non-profit media collective that works with individuals and organizations around the world to expand the public's understanding of ocean science through the creation and open-distribution of innovative visual media. I am writing to express our organization's enthusiastic support of the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

OMI has worked closely with the Aleut Community of St. Paul Island through the development and production of the award-winning documentary, *Keepers of the Shy Place*, which shines a spotlight on the spectacular ecosystem of St. Paul Island and its stewardship by this dedicated community. As we learned in the making of our film, the Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unanga (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. The Biden-Harris Administration recognizes *“Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.”* Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations.¹ Thus the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government’s visionary approach will enhance your agency’s ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government’s nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

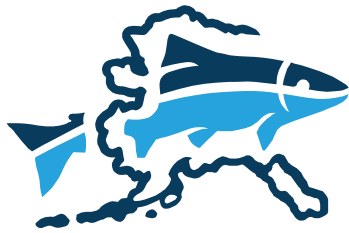
Warmest regards,

A handwritten signature in black ink, appearing to read "Gianna Savoie". The signature is fluid and cursive, with the first name "Gianna" being more prominent than the last name "Savoie".

Dr. Gianna Savoie

Executive Director, Ocean Media Institute

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>



SalmonState

December 15, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

On behalf of SalmonState, an Alaskan based effort to preserve and protect the health and abundance of Alaska's wild salmon runs and the ecosystems that sustain them, we offer our wholehearted support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

The Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unanga (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. The Biden-Harris Administration recognizes *"Indigenous Traditional Ecological Knowledge as one of the important bodies*

of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.” Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations.¹ Thus the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

The nomination for the PRIME has a strong foundation in both western science and Indigenous Traditional Ecological Knowledge, which will ensure effective co-governance, enact substantial legislation, and restore Indigenous connections to the Pribilof Islands marine ecosystem. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government’s visionary approach will enhance your agency’s ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government’s nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Bristol', with a stylized, flowing script.

Tim Bristol/Salmon State Executive Director

Tim@salmonstate.org

Homer, Alaska

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>



5032 Anchor Way, Suite 4, Christiansted, VI 00820 | (340) 773-1989
info.atsea@gmail.com | www.stxenvironmental.org

December 15, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

St. Croix Environmental Association would like to provide strong support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

The Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unanga^x (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. The Biden-Harris Administration recognizes "*Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.*" Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations.¹ Thus the

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

The nomination for the PRIME has a strong foundation in both western science and Indigenous Traditional Ecological Knowledge, which will ensure effective co-governance, enact substantial legislation, and restore Indigenous connections to the Pribilof Islands marine ecosystem. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government's visionary approach will enhance your agency's ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government's nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jennifer Valiulis".

Jennifer Valiulis
Executive Director



World Wildlife Fund
Arctic Program
406 G Street, Suite 301
Anchorage, AK 99501

Tel: (907) 279-5504
Fax: (907) 279-5509
www.worldwildlife.org

13 December 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

We are writing to support the initiative by the Aleut Community of St. Paul to build a co-managed sanctuary encompassing the Pribilof Island Marine Ecosystem (PRIME). We have also submitted a letter supporting the existing nomination made by St. George. These are two complementary, compatible efforts that illustrate the commitment of the Tribal Nations of the Pribilof Islands to take a more active role in the governance of the marine environment that their culture, economy, and well-being rely so heavily upon. Because these islands and their surrounding sea are also of regional, federal, and global importance this is a unique opportunity for the National Oceanic and Atmospheric Administration (NOAA) to establish a co-managed protected area which is guided by both Western and Indigenous ways of knowing.

Western science has long highlighted the importance of the Pribilof Islands to marine life. More than three million seabirds rely on the cliffs and talus slopes of the Pribilofs for nesting sites. Many of these species are endemic to the Bering Sea. Of these >70% of the world's population of red-legged kittiwakes breed on St. Paul and St. George (Byrd et al. 2008) and are considered vulnerable by the International Union for Conservation of Nature. These islands also provide rookeries for over half of the world's northern fur seal population (NMFS 2007), as well as important haulouts for Steller Sea Lions (part of the endangered Western population). The waters around the islands are critical habitat for juvenile red and blue king crab, halibut, and walleye pollock among other commercially important species.

This abundance of sea life is attributed to the unique oceanography of the Pribilof Domain (Hunt et al. 2008). The island's location near oceanic and shelf environments, combined with a circular current pattern create a productive environment where abundant marine life intersects with lucrative commercial fishing interests. To date, this area has been managed by government agencies far from the islands. Despite some protective measures, ongoing declines of seabird (Dragoo et al. 2019) and fur seal populations (Muto et al. 2020), and a failure of the Pribilof Island blue king crab stock to recover (Stockhausen 2020) are the more prominent signs that the current approach is not working. We agree with

the Tribal Governments on both islands, that it is time that the Aleut Community of St. Paul, and the Community of St. George are elevated as equals in the governance structure of the marine environment around their islands (Robards et al. 2018). It is critical that they co-lead the management of the marine ecosystem that their culture, economy, and well-being rely upon.

Co-management is key in securing a healthy future for the Pribilof Island Marine Ecosystem. The proposed 100 nautical mile (nm) boundary is based on indigenous and traditional knowledge as well as extensive studies into all aspects of the physical and biological marine ecosystem. These boundaries encapsulate over half of the foraging range of lactating northern fur seal females (Robson et al. 2004, Springer et al. 2008, Kuhn et al. 2010, Benoit-Bird et al. 2013), and the shelf and slope regions used by seabirds during the breeding season (Paredes et al. 2014, Yamamoto et al. 2016, Kokubun et al. 2018). It also overlaps with a large area of productive walleye pollock fishing grounds (e.g., Short et al. 2021), one of the most valuable fisheries in the world (NOAA, <https://www.fisheries.noaa.gov/species/alaska-pollock>). To avoid a possible stalemate in conservation efforts due to perceived contrary goals, we urge NOAA to design a co-governance framework for the PRIME so that it is jointly managed for all stakeholders.

Thank you for taking the time to consider our recommendation that the PRIME and St. George Unangan Heritage National Marine Sanctuary be expeditiously implemented as complimentary measures to conserve ecologically and culturally critical marine resources in cooperation with sovereign Tribal Nations and other stakeholders with a vested interest in the health of the marine ecosystem surrounding the Pribilof Islands.

Sincerely,

A handwritten signature in black ink, appearing to read "S. MacLean", with a stylized flourish at the end.

Steve MacLean
Managing Director
WWF-US Arctic Program

References

- Benoit-Bird, K.J., Battaile, B.C., Nordstrom, C.A., Trites, A.W. (2013). Foraging behavior of northern fur seals closely matches the hierarchical patch scales of prey. *Marine Ecology Progress Series*, 479, 283–302
- Byrd GV, Schmutz JA, Renner HM (2008a) Contrasting population trends of piscivorous seabirds in the Pribilof Islands: a 30-year perspective. *Deep-Sea Res II* 55: 1846–1855
- Dragoo, D.E., Renner, H.M., Kaler, R.S.A. (2019). Breeding status and population trends of seabirds in Alaska, 2018. U.S. Fish and Wildlife Service Report AMNWR 2019/03. Homer, Alaska.
- Hunt, G. L., Stabeno, P. J., Strom, S., and Napp, J. M. (2008). Patterns of spatial and temporal variation in the marine ecosystem of the southeastern Bering Sea, with special reference to the Pribilof Domain. *Deep Sea Research Part II: Topical Studies in Oceanography*, 55(16–17), 1919–1944. <https://doi.org/10.1016/j.dsr2.2008.04.032>
- Kokubun, rN., Takahashi, A., Paredes, R., Young, R.C., Sato, N.N., Yamamoto, T., Kikuchi, D.M., Kitaikaia, E.V., Ito, M., Watanuki, Y., Will, A.P., Lauth, R., Romano, M.D., Kitaysky, A.S. (2018). Inter-annual climate variability affects foraging behavior and nutritional state of thick-billed murres breeding in the southeastern Bering Sea. *Marine Ecology Progress Series*, 593, 195–208.
- Kuhn, C.E., Tremblay, Y., Ream, R.R., Gelatt, T.S. (2010). Coupling GPS tracking with dive behavior to examine the relationship between foraging strategy and fine-scale movements of northern fur seals. *Endangered Species Research*. 12, 125–139.
- Muto, M. M., Helker, V.T., Delean, B.J., Angliss, R.P., Boveng, P.L., Breiwick, J.M., Brost, B.M., Cameron, M.F., Clapham, M.F., Dahle, S.P., Dahlheim, M.E., Fadely, B.S., Ferguson, M.C., Fritz, L.W., Hobbs, R.C., Ivashchenko, Y.V., Kennedy, A.S., London, J.M., Mizroch, S.A. Ream, R.R., Richmond, E.L., Sheldon, K.E.W., Sweeney, K.L., Towell, R.G., Wade, P.R., Waite, J.M., Zerbini, A.N. (2020). Alaska marine mammal stock assessments, 2019. NOAA Tech. Memo. NMFS-AFSC-404, 395 p.
- National Marine Fisheries Service (NMFS). 2007a. Conservation plan for the Eastern Pacific stock of northern fur seal (*Callorhinus ursinus*). National Marine Fisheries Service, Juneau, AK, USA.
- Paredes, R., Orben R.A., Suryan, R.M., Irons, D.B., Roby, D.D., Harding, A.M.A., Young, R.C., Benoit-Bird, K., Ladd, C., Renner, H., Heppell, S., Phillips, R.A., Kitaysky, A. (2014). Foraging Responses of Black-Legged Kittiwakes to Prolonged Food-Shortages around Colonies on the Bering Sea Shelf. *PLoS ONE* 9(3): e92520. <https://doi.org/10.1371/journal.pone.0092520>
- Robards, M.D., Huntington, H.P., Druckenmiller, M., Lefevre, J., Moses, S.K., Stevenson, Z., Watson, A., Williams, M. (2018). Understanding and adapting to observed changes in the Alaskan Arctic: Actionable knowledge co-production with Alaska Native communities. *Deep Sea Research Part II: Topical Studies in Oceanography*, 152, 203–213.
- Robson, B.W., Goebel, M.E., Baker, J.D., Ream, R.R., Loughlin, T.R., Francis, R.C., Antonelis, G.A., Costa, D.P. (2004). Separation of foraging habitat among breeding sites of a colonial marine predator, the northern fur seal (*Callorhinus ursinus*). *Canadian Journal of Zoology*, 82, 20–29

- Short, J.W., Geiger, H.J., Fritz, L.W., Warrenchuk, J.J. (2021). First-year survival of northern fur seals (*Callorhinus ursinus*) can be explained by pollock (*Gadus chalcogrammus*) catches in the Eastern Bering Sea. *Journal of Marine Science and Engineering*. 9, 975.
- Springer, A.M., Ream, R.R., Iverson, S.J. (2008). Seasonal Foraging Strategies and Consequences for Northern Fur Seals at Colonies with Opposite Population Trends—Year 2; North Pacific Research Board Final Report Project 514; North Pacific Research Board: Anchorage, AK, USA; p. 79.
- Stockhausen, W. (2020). Stock assessment for the Pribilof Islands blue king crab fisheries of the Bering Sea and Aleutian Islands Regions. In: Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab fisheries of the Bering Sea and Aleutian Islands Regions. 2020 Final Crab SAFE. NPMFC. Anchorage, Alaska. 1-121.
- Yamamoto, T., Kokubun, N., Kikuchi, D.M., Sato, N., Takahashi, A., Will, A.P., Kitaysky, A.S., Watanuki, Y. (2016). Differential responses of seabirds to environmental variability over 2 years in the continental shelf and oceanic habitats of southeastern Bering Sea. *Biogeosciences*, 13, 2405-2414.
- Zeppelin, T., Pelland, N., Sterling, J., Brost, B., Melin, S., Johnson, D., Lea, MA., Ream, R. (2019). Migratory strategies of juvenile northern fur seals (*Callorhinus ursinus*): bridging the gap between pups and adults. *Scientific Reports*. 9, 13921.

THE VIEQUES
CONSERVATION
& HISTORICAL
TRUST



FIDEICOMISO
DE CONSERVACIÓN
& HISTORIA
DE VIEQUES

December 11, 2021

Dr. Rick Spinrad
Administrator, NOAA
1401 Constitution Ave NW
Washington, DC 20230

Mr. John Armor
Director, Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, MD 20910

Dear Dr. Spinrad and Mr. Armor,

The Vieques Conservation and Historical Trust would like to provide strong support to the Aleut Community of St. Paul Island, the federally recognized Tribe for St. Paul Island, Alaska, in their effort to build and implement a co-management governance structure for their marine ecosystem under the National Marine Sanctuaries program. This effort is to be commended, as it furthers the goals nationally for our Tribal Nations and for the Biden-Harris Administration under the America the Beautiful 30x30 Initiative.

The Pribilof Islands are among the most unique and important places in the world. These islands provide vital breeding and feeding habitat for more than half of the world's population of northern fur seals, as well as important habitat for Steller sea lions, and harbor seals. More than three million seabirds flock to the islands during the summer months, and by virtue of their position straddling the continental shelf and deeper ocean waters, the islands play a central role in creating the productive ocean zone that supports some of the world's most profitable commercial fisheries.

Unangǎ (Aleut) communities on the Pribilof Islands of St. Paul and St. George are directly experiencing a rapidly transforming marine ecosystem, including alarming declines of fur seals, sea lions, seabirds, fish, and invertebrates, with real costs to wildlife, human and ecosystem health, local economies, and culture. Northern fur seals have declined to roughly a quarter of the peak historic population estimate of 2.1 million animals. Current limited protection measures and continued threats to the overall health of the Bering Sea have not successfully met the environmental, social and economic resilience goals of the communities, resulting in an ongoing and urgent need for innovative and adaptable local solutions.

The designation of the proposed 100 nm region, based on substantial western scientific data and Indigenous, traditional and local knowledge, for the Pribilof Islands Marine Ecosystem (PRIME) will create and implement an effective co-management structure between the St. Paul and St. George federally recognized tribes and the federal government around this vital marine ecosystem. The Biden-Harris Administration recognizes *“Indigenous Traditional Ecological Knowledge as one of the important bodies of knowledge that contributes to the scientific, technical, social, and economic advancements of our nation.”* Further, President Biden has repeatedly committed to elevating the voices of Native Americans and Alaska Natives in all federal government management decisions that directly impact our Tribal Nations.¹ Thus the designation proposed by the Aleut Community of St. Paul Island provides a clear opportunity for the Administration to make substantial progress towards fulfilling important national commitments.

The nomination for the PRIME has a strong foundation in both western science and Indigenous Traditional Ecological Knowledge, which will ensure effective co-governance, enact substantial legislation, and restore Indigenous connections to the Pribilof Islands marine ecosystem. We unequivocally support such efforts led by a Tribal Nation, and we believe that the Aleut Community of St. Paul Island Tribal Government’s visionary approach will enhance your agency’s ability to integrate Indigenous Traditional Ecological Knowledge (and other forms of knowledge) and tribal co-management directly into the heart of the work that you do to conserve resources that have been stewarded by Indigenous people since time immemorial.

We urge you to thoughtfully review the Aleut Community of St. Paul Island Tribal Government’s nomination and to advance the nomination into scoping pursuant to designation. Thank you for your consideration.

Sincerely,



Lirio Márquez D’Acunti
Executive Director

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/15/fact-sheet-building-a-new-era-of-nation-to-nation-engagement/>

REFERENCES

- Aars, J. 2021. Polar Bear Behavior in Response to Climate Change. *In* Ethology and Behavioral Ecology of Sea Otters and Polar Bears, pp. 311-323. Springer, Cham.
https://doi.org/10.1007/978-3-030-66796-2_16
- AECOM. 2015. Revise Bering Sea/Aleutian Islands Halibut Prohibited Species Catch Limits.” Appendix C: Community Analysis. Anchorage: North Pacific Fishery Management Council. July 2015.
<https://npfmc.legistar.com/View.ashx?M=F&ID=3753881&GUID=D47366BD-B6B0-4B6A-864F-B67F9125CEF9>
- Aguilar-Islas, A.M., Hurst, M.P., Buck, K.N., Sohst, B., Smith, G.J., Lohan, M.C., and Bruland, K.W. 2007. Micro- and macronutrients in the southeastern Bering Sea: Insight into iron-replete and iron-depleted regimes. *Progress in Oceanography*, 73(2), 99–126.
<https://doi.org/10.1016/j.pocean.2006.12.002>
- Aleut Community of St. Paul Island (ACSPI). 2017. St. Paul Island Comprehensive Economic Development Strategy 2017-2022. St. Paul Island, Alaska.
https://media.rainpos.com/141/st_paul_island_ceds_7_13_17_20170908132525.pdf
- Allen, B.M., and Angliss, R.P. 2015. Alaska marine mammal stock assessments, 2014. U.S. Dept. Commerce, NOAA Tech Memo. NMFS-AFSC-301, 304 p., National Marine Fisheries Service, Seattle, WA.
- Antonelis, G.A. 2009. Rookeries. *In* Encyclopedia of marine mammals, pp. 986-988. Academic Press. <https://doi.org/10.1016/B978-0-12-373553-9.00225-X>
- Arimitsu, M.L., Piatt, J. F., Hatch, S., Suryan, R. M., Batten, S., Bishop, M.A., Campbell, R.W., Coletti, H., Cushing, D., Gorman, K., and Hopcroft, R.R. 2021. Heatwave induced synchrony within forage fish portfolio disrupts energy flow to top pelagic predators. *Global Change Biology*, 27(9), p.1859. <https://doi.org/10.1111/gcb.15556>
- Barbeaux, S.J., Holsman, K., and Zador, S. 2020. Marine heatwave stress test of ecosystem-based fisheries management in the Gulf of Alaska Pacific Cod Fishery. *Frontiers in Marine Science*, 7, p.703. <https://doi.org/10.3389/fmars.2020.00703>
- Black, L.T. 1983. Some Problems in interpretation of Aleut prehistory. *Arctic Anthropology*, 20(1), 49–78. <http://www.jstor.org/stable/40316039> Brodeur et al. 2002
- Black, L.T. 2004. Russians in Alaska, 1732-1867. Fairbanks: University of Alaska Press. [xv, 328p., illus., maps]
- Brodeur, R.D. 2001. Habitat-specific distribution of Pacific ocean perch (*Sebastes alutus*) in Pribilof Canyon, Bering Sea. *Continental Shelf Research*, 21, 207-224.
[https://doi.org/10.1016/S0278-4343\(00\)00083-2](https://doi.org/10.1016/S0278-4343(00)00083-2)
- Brodeur, R.D., Wilson, M.T., Ciannelli, L., Doyle, M., and Napp, J.M. 2002. Interannual and regional variability in distribution and ecology of juvenile pollock and their prey in frontal structures of the Bering Sea. *Deep Sea Research II*, 49(26), 6051–6067.
[https://doi.org/10.1016/s0967-0645\(02\)00333-8](https://doi.org/10.1016/s0967-0645(02)00333-8)
- Call, K.A., Ream, R.R., Johnson, D., Sterling, J.T., and Towell, R.G. 2008. Foraging route tactics and site fidelity of adult female northern fur seal (*Callorhinus ursinus*) around the Pribilof Islands. *Deep Sea Research II*, 55, 1883–1896.
<https://doi.org/10.1016/j.dsr2.2008.04.022>

- Ciannelli, L., Brodeur, R.D., and Napp, J.M. 2004. Foraging impact on zooplankton by age-0 walleye pollock (*Theragra chalcogramma*) around a front in the southeast Bering Sea. *Marine Biology*, 144, 515-526. <https://doi.org/10.1007/s00227-003-1215-4>
- Corbett, D. 2016. Saġdaġ—To Catch Birds. *Arctic Anthropology*, 53(2), 93–113. <https://doi.org/10.3368/aa.53.2.93>
- Coulson, T. and Gentry, R.L. 1998. Behavior and ecology of the Northern fur seal. Princeton University Press: Princeton, NJ. ISBN 0-691-03345-5 (hard cover). In *Animal Conservation forum* (Vol. 1, No. 3, pp. 227-227). Cambridge University Press. <https://doi.org/10.1515/9781400864720>
- Dall, W.H. 1877. On Succession in the Shell Heaps of the Aleutian Islands. *In Contributions to North American Ethnology* 1:41-91. U.S. Department of the Interior, Washington, D.C.
- Dall, W.H. 1878. On the remains of later prehistoric man obtained from caves in the Catherina archipelago, Alaskan territory and especially from the caves of the Aleutian Islands. Smithsonian Institution. Washington, D. C. 68pp.
- Dayton, P.K. 1972. Toward an understanding of community resilience and the potential effects of enrichments to the benthos at McMurdo Sound, Antarctica. *In Parker, B.C. (ed.), Proceedings of the Colloquium on Conservation Problems in Antarctica*. Allen Press, Lawrence, Kansas, 81–96.
- Eldridge, K. 2016. An analysis of Archaeofauna recovered from a russian period camp on St. Paul Island, Pribilof Islands, Alaska. *Arctic Anthropology*, 33-51 <https://doi.org/10.3368/aa.53.2.33>
- Elliott, H.W. 1881. History and Present Condition of Fishery Industries: Seal-Islands of Alaska. Washington D. C., US Government Printing Office. 179 pp.
- Elliott, H.W. 1882. A Monograph of the Pribylov Group, or Seal-Islands of Alaska. New York: Charles Scribner's Sons. 179 pp.
- Ellison, A.M., Bank, M.D., Clinton, B.D., Colburn, E.A., Elliott, K., Ford, C.R., Foster, D.R., Stone, K. K., Swan C.M., Thompson, J., Von Holle, B., and Webster, J.R. 2005. Loss of foundation species: consequences for the structure and dynamics of forested ecosystems. *Frontiers in Ecology and the Environment*, 3, 479–486. [https://doi.org/10.1890/1540-9295\(2005\)003\[0479:LOFSCF\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2005)003[0479:LOFSCF]2.0.CO;2)
- Fritz, L., Sweeney K., Lynn M., Gelatt, T., Gilpatrick, J., and Towell, R. 2015a. Counts of Alaska Steller Sea Lion Adult and Juvenile (Non-pup) Conducted on Rookeries and Haul-outs in Alaska Aleutian Islands, Bering Sea, and others from 1904-01-01 to 2014-07-09 (NCEI Accession 0128190). NOAA, National Centers for Environmental Information. Accessed at: <https://data.nodc.noaa.gov/cgi-bin/iso?id=gov.noaa.nodc:0128190>.
- Fritz, L., Sweeney, K., Lynn, M., Gelatt, T., Gilpatrick, J., and Towell, R. 2015b. Counts of Alaska Steller Sea Lion Pups Conducted on Rookeries in Alaska from 1961- 06-22 to 2014-07-09 (NCEI Accession 0128189). NOAA National Centers for Environmental Information. Accessed at: <https://data.nodc.noaa.gov/cgi-bin/iso?id=gov.noaa.nodc:0128189>.
- Graham, R.W., Belmecheri, S., Choy, K., Culleton, B.J., Davies, L.J., Froese, D., Heintzman, P.D., Hritz, C., Kapp, J.D., Newsom, L.A., Rawcliffe, R., Saulnier-Talbot, M., Shapiro, B., Wang, Y., Williams, J.W., and Wooller, M.J. 2016. Timing and causes of mid-Holocene mammoth extinction on St. Paul Island, Alaska. *Proceedings of the National Academy of Sciences*, 113(33), 9310–9314. <https://doi.org/10.1073/pnas.1604903113>

- Goldman, M.S., Divine L.M., Knight E.J., Padula, V.M., and Huffman, D.P. 2020. Marine Ecological Atlas of the Pribilof Islands. Audubon Alaska, Anchorage, AK. 36pp. <https://www.aleut.com/wp-content/uploads/2021/07/Pribilofs-Atlas-final-web.pdf>
- Holsman, K.K., Hazen, E.L., Haynie, A., Gourguet, S., Hollowed, A., Bograd, S.J., Samhour, J.F., and Aydin, K. 2019. Towards climate resiliency in fisheries management. ICES Journal of Marine Science, 76(5), 1368-1378. <https://doi.org/10.1093/icesjms/fsz031>
- Hood, D.W., and Calder, J.A. 1981. *Introduction*. Pp. iii-xviii in. *The Eastern Bering Sea Shelf: Oceanography and Resources*. University of Washington Press. Seattle, USA.
- Hrdlicka, A. 1945. The Aleutian and Commander Islands and their inhabitants. Philadelphia, PA: Wistar Institute of Anatomy and Biology. 630pp.
- Hunt, Jr., G.L., and Stabeno, P.J. 2002. Climate change and the control of energy flow in the southeastern Bering Sea. *Progress in Oceanography* 55, 5–22. [https://doi.org/10.1016/S0079-6611\(02\)00067-8](https://doi.org/10.1016/S0079-6611(02)00067-8)
- Hunt, Jr., G.L., Stabeno, P.J., Strom, S., and Napp, J.M. 2008. Patterns of spatial and temporal variation in the marine ecosystem of the southeastern Bering Sea, with special reference to the Pribilof Domain. *Deep Sea Research Part II: Topical Studies in Oceanography*, 55(16–17), 1919–1944. <https://doi.org/10.1016/j.dsr2.2008.04.032>
- Hunt, Jr., G.L., Coyle, K.O., Eisner, L.B., Farley, E.V., Heintz, R.A., Mueter, F., Napp, J.M., Overland, J.E., Ressler, P.H., Salo, S., and Stabeno, P.J. 2011. Climate impacts on eastern Bering Sea food webs: a synthesis of new data and an assessment of the Oscillating Control Hypothesis. *ICES Journal of Marine Science*, 68(6), 1230–1243. <https://doi.org/10.1093/icesjms/fsr036>
- Huntington, H.P., Braem, N.M., Brown, C.L., Hunn, E., Krieg, T.M., Lestenkof, P., Noongwook, G., Sepez, J., Sigler, M., Wiese, F.K., and Zavadil, P. 2013. Local and traditional knowledge regarding the Bering Sea ecosystem: Selected results from five indigenous communities. *Deep Sea Research Part II*, 94, 323–332. <https://doi.org/10.1016/j.dsr2.2013.04.025>
- Ianelli, J., Fissel, B., Holsman, K., Honkalehto, T., Kotwicki, S., Monnahan, C., Siddon, E., Stienesen, S., Thorson, J. 2020. 2020 Assessment of the Walleye Pollock Stock in the Eastern Bering Sea. Alaska Fisheries Science Center, National Marine Fisheries Service. 9,55,58 pp. <https://apps-afsc.fisheries.noaa.gov/refm/docs/2020/EBSPollock.pdf>
- Inuit Circumpolar Council Alaska (ICC Alaska). 2015. Alaskan Inuit Food Security Conceptual Framework: How to Assess the Arctic from an Inuit Perspective. Technical Report. Anchorage, AK. 11-33pp.
- Jochelson, W. 1925. Archeological Investigations in the Aleutian Islands. Publication 367, Carnegie Institution of Washington, Washington D.C. 117-120pp.
- Jochelson, W. 2003. History, Ethnology and Anthropology Of The Aleut (Anthropology of Pacific North America). University of Utah Press. 104pp.
- Karp, M.A., Peterson, J.O., Lynch, P.D., Griffiths, R.B., Adams, C.F., Arnold, W.S., Barnett, L. A., deReynier, Y., DiCosimo, J., Fenske, K.H., Gaichas, S.K. 2019. Accounting for shifting distributions and changing productivity in the development of scientific advice for fishery management. *ICES Journal of Marine Science*, 76(5), 1305-1315. <https://doi.org/10.1093/icesjms/fsz048>
- Kim, S.L., and Oliver, J.S. 1989. Swarming benthic crustaceans in the Bering and Chukchi seas and their relation to geographic patterns in gray whale feeding. *Canadian Journal of Zoology*, 67(6), 1531-1542. <https://doi.org/10.1139/z89-218>

- Kuhn, C. E. Ream, R.R., Sterling, J.T., Thomason, J.R., Towell, R.G. 2014. Spatial segregation and the influence of habitat on the foraging behavior of northern fur seals (*Callorhinus ursinus*). Canadian Journal of Zoology, 92(10), 861-873. <https://doi.org/10.1139/cjz-2014-0087>
- Lantis, M. 1970. The Aleut Social System, 1750 to 1810, from Early Historical Sources. In Ethnohistory in Southwestern Alaska and the Southern Yukon. M. Lantis (ed.), Lexington: University of Kentucky Press, 139–301.
- Lantis, M. 1984. Aleut. In: Handbook of North American Indians, Vol. 5, Arctic, David Damas (ed), Smithsonian Institution, Washington, D.C. 161-184.
- Laughlin, W.S. 1980. Aleuts: Survivors of the Bering Land Bridge. Wadsworth Publishing. New York: Holt, Rinehart, and Winston. 151pp.
- Lestenkof, P.M., Zavadil, Z.P., Zacharof, S.M., Melovidov, E.M. 2013. Subsistence Harvest Monitoring Results from 1999 to 2010 and Local and Traditional Knowledge Interview Results for St. Paul Island, Alaska. North Pacific Research Board, Project B69. 45pp. https://www.aleut.com/wp-content/uploads/2021/03/BSIERP-St-Paul-final-report_LTK-interviews-and-data.pdf
- Leu, E., Mundy, C.J., Assmy, P., Campbell, K., Gabrielsen, T.M., Gosselin, M. Juul-Pedersen, T., Gradinger, R. 2015. Arctic spring awakening—Steering principles behind the phenology of vernal ice algal blooms. Progress in Oceanography, 139, 151-170. <https://doi.org/10.1016/j.pocean.2015.07.012>
- Loughlin, T.R., Rugh, D.J., Fiscus, C.H. 1984. Northern sea lion distribution and abundance: 1956-80. Journal of Wildlife Management, 729-740.
- Lyons, C., Carothers, C., Reedy, K. 2016. A tale of two communities: Using relational place-making to examine fisheries policy in the Pribilof Island communities of St. George and St. Paul, Alaska. Maritime Studies, 15, 7, 23pp. <https://doi.org/10.1186/s40152-016-0045-1>
- McCartney, A.P. 1984. Prehistory of the Aleutian Region. In Handbook of North American Indians: Arctic, D. Damas (ed). Washington, D.C.: Smithsonian Institution Press, National Oceanographic and Atmospheric Administration. 119–135.
- McHuron, E.A., Luxa, K., Pelland, N.A., Holsman, K., Ream, R. R., Zeppelin, T., and Sterling, J.T. 2020. Practical Application of a Bioenergetic Model to Inform Management of a Declining Fur Seal Population and Their Commercially Important Prey. Frontiers in Marine Science, 7, 1. <https://doi.org/10.3389/fmars.2020.597973>
- Merculieff, I., G. Vladi, and L. Roderick. 2018. Perspectives on Indigenous Issues: Essays on Science, Spirituality and the Power of Words. GCILL. 98pp.
- Miller, R.J., C. Juska, C., Hocevar, J. 2015. Submarine canyons as coral and sponge habitat on the eastern Bering Sea slope. Global Ecology and Conservation, 4, 85–94. <https://doi.org/10.1016/j.gecco.2015.05.009>
- Mueter, F.J., Bond, N.A, Ianelli, J.N., Hollowed, A.B. 2011. Expected declines in recruitment of walleye pollock (*Theragra chalcogramma*) in the eastern Bering Sea under future climate change. ICES Journal of Marine Science, 68(6), 1284–1296. <https://doi.org/10.1093/icesjms/fsr022>
- Muto, M.M., Helker, V.T., Delean B.J., Angliss, R.P., Boveng, P.L., Breiwick, J.M, Brost, B.M., Cameron, M.F., Clapham, P.F., Dahle, S.P., Dahlheim, M.E., Fadely, B.S., Ferguson, M.C., Fritz, L.W., Hobbs, R.C., Ivashchenko, Y.V., Kennedy, A.S., London, J.M., Mizroch, S.A., Ream, R.R., Richmond, E.L., Shelden, K.E., Sweeney, K.L., Towell,

- R.G., Wade, P.R., Waite, J.M., and Zerbini, A.N. 2020. Alaska marine mammal stock assessments, 2019. NOAA Tech. Memo. NMFS-AFSC-404, 395 pp.
- National Oceanographic and Atmospheric Administration (NOAA). 1993. Final Conservation Plan for the northern fur seal (*Callorhinus ursinus*). Prepared by the National Marine Mammal Laboratory/ Alaska Fisheries Science Center, Seattle, Washington, and the Office of Protected Resources/National Marine Fisheries Service, Silver Spring, Maryland. 80 pp.
- National Oceanographic and Atmospheric Administration (NOAA). 2007. National Marine Fisheries Service. Conservation plan for the Eastern Pacific stock of northern fur seal (*Callorhinus ursinus*). Juneau, Alaska 137pp. Accessed at: <https://repository.library.noaa.gov/view/noaa/17351>
- North Pacific Fisheries Management Council (NPFMC). 2014. Final environmental assessment for proposed amendment 43 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs, and proposed amendment 103 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands to prevent overfishing and rebuild Pribilof Islands blue king crab. North Pacific Fisheries Management Council, 605 West 4th Avenue, Anchorage, AK. 202pp.
- North Pacific Fishery Management Council (NPFMC). 2021. Draft Environmental Impact Statement for the Bering Sea Aleutian Islands Halibut Abundance-Based Management of Amendment 80 Prohibited Species Catch Limit. 527pp. Accessed at: <https://www.regulations.gov/document/NOAA-NMFS-2021-0074-0002>
- National Park Service. 2008."Seal Island Historic District. National Historic Landmark summary National Register Information System: National Register of Historic Places. <https://www.nps.gov/places/seal-islands-historic-district.htm>
- Orians, G.H. and Pearson, N.E. 1979. On the theory of the central place foraging. *In* Analysis of Ecological Systems J. Horn, G.R. Stairs, and R.D. Mitchell (eds), Ohio State Press, Columbus, 155-177.
- Osgood, W.H., Preble, E.A., Parker, G. H. The Fur Seals and Other Life of the Pribilof Islands, Alaska, in 1914. Washington. D.C: Government Printing Office. 172 pp.
- Pollom, E.L., J.P. Gorey, J.P., Romano, M.D.2018. Biological Monitoring at St. George Island, Alaska in 2017. US Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge. 267pp.
- Raymond-Yakoubian, J.B., Raymond-Yakoubian, B., Moncrieff, C.. 2017. The Incorporation of Traditional Knowledge into Alaska Federal Fisheries Management. Marine Policy 78: 132–142. doi:10.1016/j.marpol.2016.12.024.
- Robson, B.W. 2002. Fur seal investigations. 1999. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center. 80pp.
- Ream, R.R., Sterling J.T., Loughlin, T.R. 2005. Oceanographic features related to northern fur seal migratory movements. Deep Sea Research Part II, 52(5-6), 823-843. <https://doi.org/10.1016/j.dsr2.2004.12.021>
- Robson, B.W., Goebel, M.E., Baker, J.D., Ream, R.R., Loughlin, T.R., Francis, R.C., Antonelis, G.A., Costa, D.P. 2004. Separation of foraging habitat among breeding sites of a colonial marine predator, the northern fur seal (*Callorhinus ursinus*). Canadian Journal of Zoology, 82(1), 20–29. <https://doi.org/10.1139/z03-208>

- Roppel, A.Y. 1984. Management of northern fur seals on the Pribilof Islands, Alaska, 1786-1981. 23pp. <https://spo.nmfs.noaa.gov/sites/default/files/tr4opt.pdf>
- Rubicz, R.C. 2007. Evolutionary consequences of recently founded Aleut communities in the Commander and Pribilof Islands. University of Kansas. 24pp.
- Scheffer, V.B. 1970. The year of the seal. Scribners, New York, 205 pp.
- Short, J. W., Geiger, H.J., Fritz, L.W., Warrenchuk, J. J. 2021. First-Year Survival of Northern Fur Seals (*Callorhinus ursinus*) Can Be Explained by Pollock (*Gadus chalcogrammus*) Catches in the Eastern Bering Sea. Journal Marine Science and Engineering. 9, 975.25pp <https://doi.org/10.3390/jmse9090975>
- Siddon, E., and Zador, S. 2018. Ecosystem Status Report 2018: eastern Bering Sea. In Bering Sea and Aleutian Islands Stock Assessment and Fisheries Evaluation report, North Pacific Fishery Management Council, 229 pp. Available at: <https://apps-afsc.fisheries.noaa.gov/REFM/REEM/ecoweb/pdf/2019EBSecosys.pdf>
- Siddon, E. 2021. Ecosystem Status Report 2021: eastern Bering Sea. In Eastern Bering Sea Stock Assessment and Fishery Evaluation Report, North Pacific Fishery Management Council. Available at: https://apps-afsc.fisheries.noaa.gov/Plan_Team/2021/EBSecosys.pdf
- Sinclair, E., Loughlin, T., Percy, W., 1994. Prey selection by northern fur seals (*Callorhinus ursinus*) in the eastern Bering Sea. Fisheries Bulletin 92, 144–156.
- Stabeno, P.J., Schumacher, J.D., Salo, S.A., Hunt, G.L., Flint, M. 1999. Physical environment around the Pribilof Islands. In Loughlin, T.R., Ohtani, K. (eds.), Dynamics of the Bering Sea. Alaska Sea Grant Press, 193–215.
- Stabeno P.J., Bond N.A., Salo S.A. 2007. On the recent warming of the southeastern Bering Sea shelf. Deep Sea Research Part II 54, 2599–2618. <https://doi.org/10.1016/j.dsr2.2007.08.023>
- Testa, J.W. 2016. Fur seal investigations, 2013-2014. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-AFSC-316, 124 pp.
- Thoman, R.L., Richter-Menge, J, Druckenmiller, M.J. 2020. Arctic Report Card: 2020, <https://doi.org/10.25923/mn5p-t549>. 4 pp.
- Torrey, B.B. and Krukoff, A. 1978. Slaves of the Harvest: The Story of the Pribilof Aleuts. St. Paul, Alaska: Tanadgusix Corporation. 191 pp.
- Tran, C.C., and Divine, L.M. 2021. Community connections to chagiġ (Pacific halibut, *Hippoglossus stenolepis*) and other marine resources on St. Paul Island, Alaska. Report to the North Pacific Fishery Management Council, March 2021. 14 pp. https://www.aleut.com/wp-content/uploads/2021/03/Halibut-ABM-white-paper_FINAL_10Mar21.pdf
- Veltre, D.W., and McCarthy, A.P. 2002. Russian Exploitation of Aleuts and Fur Seals: The Archaeology of Eighteenth and Early-Nineteenth Century Settlements in the Pribilof Islands, Alaska. Historical Archaeology, 36(3), 8–17.
- Veltre, D.W., Yesner D.R., Crossen, K.J., Graham, R. W., Coltrain, J. B.. 2008. Patterns of faunal extinction and paleoclimatic change from mid-Holocene mammoth and polar bear remains, Pribilof Islands, Alaska. Quaternary Research, 70(1), 40–50. <https://doi.org/10.1016/j.yqres.2008.03.006>
- Veltre, D.W., and Veltre, M.J. 1988. The Northern fur seal: a subsistence and commercial resource for Aleuts of the Aleutian and Pribilof Islands, Alaska. Etudes/Inuit/Studies, 11, 51–72.

- Veniaminov, I. 1984. Notes on the Islands of the Unalashka District. Kingston: Limestone Press. Vol. 27. 511 pp.
- York, A.E., and Hartley, J.R. 1981. Pup production following harvest of female northern fur seals. Canadian Journal of Fisheries and Aquatic Sciences, 38, 84–90.
<https://doi.org/10.1139/f81-011>
- Zeppelin, T.K., and Ream, R.R. 2006. Foraging habitats based on the diet of female northern fur seals (*Callorhinus ursinus*) on the Pribilof Islands, Alaska. Journal of Zoology, 270(4), 565–576. <https://doi.org/10.1111/j.1469-7998.2006.00122.x>