



St. George Unangan Heritage National Marine Sanctuary National Significance Criteria and Management Considerations

Submitted to NOAA Sanctuaries, November 22, 2021



Kayutuuxtin
(Be strong)

Tanagnangin Igayuusalix angagiimchin agnaxtxichin
(Live with and respect the land, sea, and all nature)

“Restoring and maintaining healthy marine ecosystems supports fisheries and recreation.”

“NOAA should expand the National Marine Sanctuaries System and National Estuarine Research Reserve System. Through broad public engagement, NOAA can establish national marine sanctuaries that protect natural and cultural marine and Great Lakes resources and promote sustainable uses.”

(From *Conserving and Restoring America the Beautiful*, National Climate Task Force 2021)

As was true when St. George submitted its nomination to create the St. George Unangan Heritage National Marine Sanctuary (the “Sanctuary”, “Nomination” or “Sanctuary Nomination”), there can be no question that the marine environment of St. George is of the highest national significance. Following is a discussion of St. George’s marine environment in relation to the 11 national significance criteria and management considerations set forth in 16 U.S.C. 1431 et seq.

National significance criteria

- 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 facts set forth in our Nomination regarding the special significance of the St. George marine ecosystem remain as true today as they were when we submitted our Nomination. As we stated:

In terms of productivity and ecosystem services, the marine waters in the vicinity of St. George Island are easily among the most important anywhere on earth. The Bering Sea shelf-break current drives an oceanic upwelling that carries inorganic nutrients to the surface waters and fuels phytoplankton growth, which in turn supports extraordinarily productive marine food webs. This rich band of marine productivity, often called the Bering Sea green belt (Springer et al., 1996), supports exceptionally dense aggregations of marine mammals, seabirds, fish and shellfish, and some of the most important commercial fisheries in the United States, including the Alaska walleye pollock fishery, the nation’s largest by volume.

Situated at the margin of the Bering Sea green belt, the Pribilof Islands provide essential habitat for marine mammals, sea birds and fish in three crucial ways. First, interaction of the islands with the Bering Sea shelf-break current generates a circular, clock-wise flow around the islands, generating a retention zone where planktonic organisms, which include the developing early life stages of myriad species of marine organisms, are densely concentrated. This retention zone, extending about 30 miles seaward of the Pribilof Islands (Fig. 5), provides a fundamental definition of the “Pribilof Domain” that supports spatially stable aggregations of marine life and hence relatively reliable feeding grounds for marine mammals, sea birds, fish and shellfish.

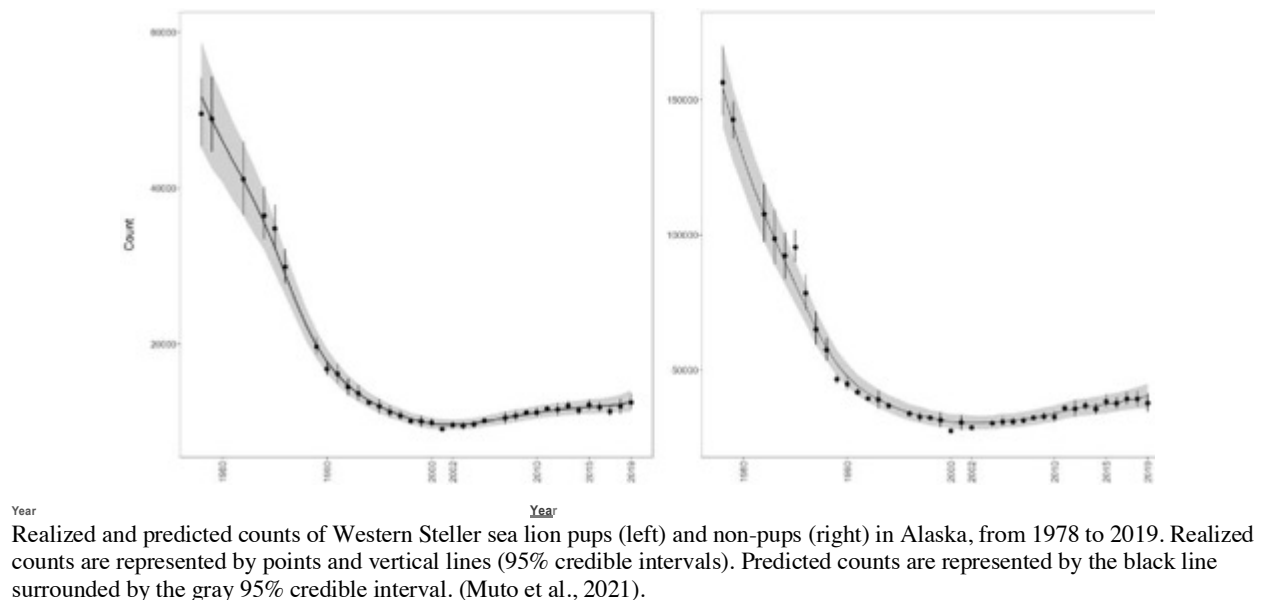
St. George also provides breeding and rearing habitat for marine mammals and seabirds, including convenient marine haul-outs and rookeries for Northern fur seals and Steller Sea Lions, and widespread nesting sites for seabirds. And finally, the islands are far from other landmasses. As a result, they remain free of rats and are well protected from most terrestrial predators that could otherwise decimate the breeding aggregations of marine mammals and seabirds. This combination of relatively safe breeding and rearing habitat

irregular times of the year. Our neighbors on St. Paul have witnessed similarly alarming reductions in stock health. Several recent publications confirm these declines and some point to possible causes including diminished availability of walleye pollock and other prey species, environmental change, marine debris, and others. (See, e.g., Short et al. 2021, McHuron et al. 2020, Muto et al. 2021, Zeppelin et al. 2019.)

Northern fur seals are essential to the culture of the Unangan people of the Pribilof Islands. They are an essential part of our lives and subsistence. We depend on them physically, emotionally and spiritually. They orient our lives, connect us with our ancestors and our families, and complete our landscape. Their struggle for survival and diminished population affects us deeply.

Creation of a national marine sanctuary and comprehensive management of the Pribilof Island marine ecosystem is urgent and essential if for no other reason than to reverse this tragic decline and revive Northern fur seals populations.

Steller sea lions (qawan): Steller Sea Lions use the Pribilof Islands for breeding habitat (Fritz et al. 2016). Sustaining these marine mammal adults and pups requires heavy concentrations of their prey species, primarily walleye pollock, squids, salmon, and capelin and smelts when abundant (NMFS, 2006, Sinclair et al., 2008). The western distinct population segment (DPS) of Steller sea lions, which ranges to Russia and Asia, is currently listed as endangered under the Endangered Species Act (ESA) and depleted under the MMPA (Muto et al., 2021). As NOAA's data show, since a precipitous decline started in the 1980s, the western DPS sea lion population has remained dramatically diminished.



Seabirds

As we stated in the Sanctuary Nomination:

St. George and the Pribilof Islands provide essential breeding and rearing habitat for seabirds numbering in millions. Remarkable in their diversity, many of these non-resident

birds arrive at St. George after having flown hundreds or thousands of miles from wintering habitat in Europe, Asia, remote Pacific islands and points south within the U.S., including sanctuary areas in California and Hawaii, making St. George's seabird population globally significant. The seabird breeding colonies of St. George and the Pribilof Islands include globally- or regionally-significant aggregations of kittiwakes (red legged and black), thick-billed murres, parakeet auklets, northern fulmars, glaucous-winged gulls, fork-tailed storm petrels and red-phalaropes, sooty shearwaters, short-tailed shearwaters and the adjacent feeding grounds are used by the near-threatened Laysan albatross (Audubon Alaska 2014).

St. George Island and its surrounding waters are recognized by the Audubon Society as a globally- significant Important Bird Area both for the large proportions of the global populations of some species that inhabit the area (e.g., kittiwakes and murres) and for their use by threatened or nearly- threatened species (e.g., the red-legged Kittiwake and Laysan albatross; Audubon Alaska, 2014). The St. George colony supports approximately 75-80% of the global red-legged Kittiwake population. Adverse effects on any of these species within the Pribilof Domain may have consequences that extend far beyond the islands. To provide just one example, sooty shearwater and short-tailed shearwaters nest in places like New Zealand, Australia and Chile and travel north in the boreal summer to the productive waters surrounding St. George.

In a letter to NOAA dated November 16, 2016, the Pacific Seabird Group described the significance of St. George's sea bird populations as follows:

The national and international importance of St. George Island and the surrounding Bering Sea to seabirds cannot be overstated. During the summer months, St. George Island is home to globally significant populations of breeding seabirds. These include the largest Thick-billed Murre colony in the North Pacific, estimated at roughly 1.5 million birds (Byrd *et al.* 2009), and the world's largest colony of Red-legged Kittiwake (~70-80% of the global population), which is listed as "Vulnerable" by the IUCN (BirdLife International 2015). The unique combination of diversity of seabird species and the sheer numbers of birds that nest at St. George Island is unrivaled in the Bering Sea. The diversity and abundance of seabirds nesting at St. George Island are due to the proximity of multiple, highly productive marine habitats, including near-shore, shelf, slope, and deep-water basin habitats of the deep-water Bering Sea. The area encompassed by the proposed sanctuary includes all of these habitats, except the Bering Sea basin, and thus stands to protect key foraging areas for all of these breeding seabird species.

The majority of the seabird species breeding at St. George—including Tufted Puffin, Horned Puffin, Least Auklet, Crested Auklet, Parakeet Auklet, Common Murre, and Thick-billed Murre—rely on carrying unmodified food back to their chicks. Successfully raising chicks with this provisioning style necessitates high availability of food in close proximity to the breeding colony. For example, in the case of the Thick-billed Murre, adults carry only one food item at a time to their young, and often individual birds will make multiple short foraging trips during the day with fish and squid caught close to the colony (Harding *et al.* 2013; Paredes *et al.* 2015). This commonality in provisioning style

and reliance on the proximity of prey to the breeding colony by the diverse group of seabird species nesting on St. George Island further emphasizes the value of and need for protecting the marine resources near the island of St. George and within the proposed sanctuary.

Not all seabird species that nest on St. George Island are large enough to carry bio-logging devices, but several species have been tracked during their foraging trips from St. George Island in recent years, offering a spatially explicit assessment of the use of the area by breeding birds originating at the colony. The species for which tracking data are available are the Thick-billed Murre, Common Murre, Black-legged Kittiwake, and Red-legged Kittiwake (Takahashi *et al.* 2008; Paredes *et al.* 2012; Harding *et al.* 2013; Paredes *et al.* 2014; Kokubun *et al.* 2015; Paredes *et al.* 2015; Kokubun *et al.* 2016). Although the data obtained from these species present an incomplete picture relative to the diversity of species that inhabit St. George Island, the tracking data have shown a dependence on multiple marine habitats, including the shelf and areas of the Pribilof Canyon (Paredes *et al.* 2014; Kokubun *et al.* 2015; Paredes *et al.* 2015), that are within the proposed sanctuary. Additionally, recent tracking of Red-legged Kittiwakes during the pre-lay and incubation periods has revealed that birds are making occasional short trips to the Pribilof Canyon region in addition to longer trips out over the Bering Sea basin (Orben *et al.* 2016).

Additionally, at-sea observations have highlighted the use of the northern edge of the Pribilof Canyon (within the proposed sanctuary) by foraging murre (Kokubun *et al.* 2008) and hot-spots of seabirds in the vicinity of St. George Island in the summer and fall (Kinder *et al.* 1983; Benoit-Bird *et al.* 2013; Jones *et al.* 2014; Suryan *et al.* 2016). Though many seabird species leave for the winter months, the waters of the proposed sanctuary are still likely to be important for birds outside the breeding season. This is exemplified by murre that remain in the Bering Sea over-winter (Orben *et al.* 2015c) or migrate into the area (Hatch *et al.* 2000), kittiwakes that return to the Pribilof Islands in mid-to-late March (Orben *et al.* 2015a; Orben *et al.* 2015b;), and cormorants and Crested Auklets that are known through local knowledge and historical accounts (Young *et al.* 2014) to remain in the vicinity of the island. Finally, recent die-offs of Tufted Puffins in the fall of 2016 underscore the uncertainties associated with environmental change and highlight that wintering ranges are shifting and birds may remain in the vicinity of St. George Island longer than in previous years.

Birds were once a crucial part of our Unangan subsistence diet and our cultural tradition. These activities, however, have largely halted due to concern with the health of seabird populations. The “vulnerable” status of the red-legged kittiwake (Birdlife International/IUCN Red List of Threatened Species 2018) and the black-legged kittiwake (Birdlife International/IUCN Red List of Threatened Species 2019), and decreasing populations of other species such as short-tailed shearwaters, sooty shearwater, crested auklets, least auklets and parakeet auklets (Birdlife International/IUCN Red List of Threatened Species 2018, 2019 and 2020, respectively), the anecdotal stories we hear from visiting ornithologists who are concerned about the nesting and egg-laying activities of visiting birds – all of these developments add to our concern about the fate of our beloved seabirds and our marine ecosystem.

Fish

The biologically rich waters around the Pribilof Islands contribute substantially to important Bering Sea fish stocks including walleye pollock, Pacific cod, Pacific halibut, snow crab and red king crab. Larvae and juveniles of these species rear in great numbers within the retention zone surrounding the islands, supporting the walleye pollock fishery, the nation's largest by volume, along with regional and local fisheries for Pacific halibut, and red king and snow crabs. The Pribilof Island ecosystem also supports foraging Pacific salmon.

Moreover, the Bering Sea, and the Pribilof Domain in particular, provides a reservoir of older female halibut that contributes disproportionately to the spawning biomass of the entire coast-wide Pacific halibut population, "subsidizing" the fisheries for halibut in the Gulf of Alaska and British Columbia (Hare, 2012). In this way, the waters around St. George are especially important for the maintenance of the entire Pacific halibut population.

Crab and Pacific halibut fisheries are economically important for St. George residents and provide one of our few sources of cash income. In addition, subsistence fish harvests play a crucial role in meeting our food security and dietary requirements, while sustaining a tradition that binds our families and our culture. The diminishing productivity of halibut fishing grounds in the Pribilof Island marine ecosystem, reflected in reduced fish size and abundance, has a direct negative effect on the marine environment and our community.

Cetaceans

It is estimated that perhaps only 30 North Pacific Right whales exist today. The Bering Sea shelf waters from east of the Pribilof Islands south to the Alaska Peninsula have been designated as critical habitat for these endangered animal (Muto et al. 2020, Allen and Angliss, 2015). Other cetaceans that do or are likely to inhabit the Pribilof Domain waters transiently include killer whales, Beluga whales, Dall's porpoise, Sperm whales, Baird's beaked whale, Stejneger's beaked whale, Humpback whales, fin whales, and Minke whales (Allen and Angliss, 2015). And, as noted in the Sanctuary Nomination, during the summer of 2016, a whale carcass that had washed ashore two years prior was determined to be an entirely new species in the genus *Berardius* (<http://news.nationalgeographic.com/2016/07/new-whale-species/>).

- 2. The area contains submerged maritime heritage resources of special historical, cultural, or archaeological significance, that: Individually or collectively are consistent with the criteria of eligibility or 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.**

St. George and its surrounding waters host rich archaeological and historical resources. We Unangan, an early ocean-going coastal people, were among our continent's first settlers. The Pribilof Island marine ecosystem, therefore, is a region of prehistoric and pre-contact significance for our ocean-centered heritage.

The Pribilof Domain was also a place of cultural transition after contact was established with Russian and American colonial representatives who, over many generations, focused on exploiting the commercial potential of the fur seal trade at the expense of the physical, psychological and material wellbeing of our Unangan people. Through it all, and despite tremendous adversity, our culture and our community has remained intact.

St. George has great potential to become a leading destination for research and education relating to migrations across the Bering Sea Land Bridge, Russian fur trading, subsequent U.S. history in the region, and the heritage of the Unangan people.

For a more detailed response to this criterion, please see the Sanctuary Nomination, which contains additional facts that remain unchanged.

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.

In an effort to define a pathway to economic growth, St. George undertook an economic development planning process, which resulted in the 2020 publication of the [St. George Local Economic Development Strategy](https://www.stgeorgealaska.org) (<https://www.stgeorgealaska.org>). The Strategy includes nine working papers and a number of concrete recommendations for economic growth in seven broad sectors (Research, Education and Conservation; Quality of Life Opportunities; Sustainable Tourism; Fisheries; Harbor; Grants; and Entrepreneurs, Small Business, Innovation and Government Services Opportunities). The Strategy identified creation of the Sanctuary and development of the St. George harbor as key drivers for the community's economic future.

An important point about the National Marine Sanctuary is that it paves the way for a whole host of other significant economic opportunities in not only local jobs, research, education, and conservation, but also in tourism, and by attracting funds to support additional and improved infrastructure (such as renovation of the St. George harbor). An analysis of the Sanctuary's likely economic benefits identified the creation of four full-time jobs on St. George and annual revenues to the community of between \$417,000 - \$1,484,000, with additional growth potential over time.

The creation of the Sanctuary will also generate economic benefit for the region and the state of Alaska more generally. A 2019 study found that the Florida Keys National Marine Sanctuary contributes an estimated \$4.4 billion and 43,000 jobs annually across the state (TBD Economics, LLC 2019). Even a dramatically more modest economic contribution from our Sanctuary would be enormously significant for our community and region.

Subsistence use: Our community is highly dependent on subsistence harvest of local resources, not only to meet our dietary requirements and maintain food security and health, but also as a fundamental, essential part of our Unangan culture and traditions. In our Sanctuary Nomination, we referenced a study conducted by Earth Economics that found that the cost of replacing our

subsistence food with store-bought food would be approximately \$20,000-42,000 per year. This calculation illustrates the potentially devastating financial risks we face if our resources are not sustainably managed. The erosion of our subsistence harvests would violate our community's most fundamental cultural needs and rights.

Commercial fisheries: We have pursued the creation of a Sanctuary because it will ensure holistic management of our marine ecosystem, while enabling our community to pursue important economic activities and priorities. As discussed above, participation in local commercial fisheries is a crucially important source of income for our local families. We look forward to working in close cooperation with APICDA, the North Pacific Fisheries Management Council, the State of Alaska and all relevant stakeholders.

Sustainable Tourism: The Pribilof Islands are unique. We have natural assets that attract visitors from around the world, including our Unangan culture and National Historic Landmark sites. The creation of the Sanctuary will bring attention by the American public and international travelers to the fact that our area has unique and extraordinary natural resources that will be sustained in perpetuity. A market exists for the kind of authentic and distinctive tourism experience that visits to the Pribilof Islands offer, including among bird watchers. By working together with our partners, a branded and marketed Sanctuary could become a prominent destination for wildlife/bird tours, cruise ship day tours and independent travelers.

Research projects: St. George has a long history of hosting important scientific studies by researchers from around the world who come to assess and understand the area's rich natural cultural and archaeological resources. The creation of the Sanctuary would increase the interest and resources available for additional scientific projects in the Pribilof ecosystem area.

The creation of the Sanctuary offers the promise of year-in, year-out visitations to St. George resulting from increased research and tourism, creating a vitally important foundation for economic stability and growth. The marine mammal, seabird and fish species relying on the waters surrounding St. George are also far ranging and affect local economies in many other parts of the world. The Sanctuary, therefore, would benefit not only communities throughout the Bering Sea region and industries dependent on resources from the Pribilof Domain, but also many millions of Americans and others living along the Pacific Rim and beyond.

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.

Our understanding of the publicly derived benefits of the area has not changed since we submitted the Sanctuary Nomination. We respectfully refer readers to that document for additional information.

Consideration Information

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

Our understanding of the opportunities for research in marine science, including marine archaeology, has not changed since we submitted the Sanctuary Nomination. We respectfully refer readers to that document for additional information.

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

Our understanding of the opportunities for education, including the understanding and appreciation of the marine and Great Lakes environments, has not changed since we submitted the Sanctuary Nomination. We respectfully refer readers to that document for additional information.

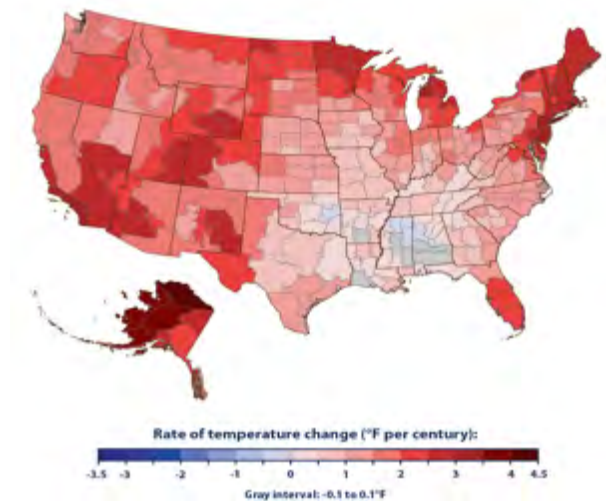
Consideration 3 – Adverse impacts from current or future uses and activities threaten the area's significance, values, qualities, and resources.

Please see the discussion above, in the first national criterion section, regarding the marine mammals, seabirds and fish of St. George.

Despite management measures aimed at slowing and reversing declines, an abundance of scientific research and our own observations tell us that declines in our marine ecosystem have not stopped since submission of the Sanctuary Nomination. We see grave and imminent danger, therefore, for the environment we depend on and for the survival of our community, our unique Unangan culture, and all we have inherited from our ancestors.

The living marine resources of the Pribilof Domain have been adversely affected by multiple stressors and are vulnerable to a number of others that are apt to intensify in the future. The establishment of the Sanctuary will lead to enhanced scientific monitoring and crucially needed adaptive management of our island's living marine resources. The Sanctuary will promote resilience in the face of global climate change, including warming ocean waters and ocean acidification, and the several other threats summarized in the subsections below.

Climate change: The decade from 2011-2020 was the warmest decade on record since thermometer-based observations began. Alaska, and particularly western Alaska, is a region that has experienced the greatest warming.



Rate of temperature change 1901-2020 in lower 48; 1925-2020 in Alaska. Source: Climate Change Indicators: U.S. and Global Temperature, U.S. Environmental Protection Agency

Climate science since submission of the Sanctuary Nomination confirms warming in the Bering Sea, reductions in sea ice, and impacts on the region's marine ecosystem. (See, e.g. Stabeno et al. 2019; Stabeno & Green 2019). The processes set in motion in the Bering Sea as a result of this warming are described more fully in the Sanctuary Nomination.

Ocean Acidification: The Bering Sea and many of its marine organisms are highly vulnerable to ocean acidification (See, e.g. Pilcher et al. 2019, Sun et al. 2021). Additional information about ocean acidification can be found in the Sanctuary Nomination.

Atmospheric Deposition of Persistent Organic Pollutants: Northern latitudes are particularly vulnerable to persistent organic pollutants such as polychlorinated biphenyls, chlorinated pesticides, brominated flame retardants and other halogenated organic compounds because of a process called global distillation. Additional information about persistent organic pollutants, and about their impacts on Northern fur seals, can be found in the Sanctuary Nomination.

Commercial Fisheries: The Bering Sea green belt supports numerous fisheries, including the walleye pollock fishery, which is the world's second largest single-species fishery (FAO 2020). Although these waters are closely managed, many challenges persist, particularly with respect to walleye pollock, Pacific halibut and salmon fisheries and their impacts on Unangan subsistence and our marine environment. (See, e.g., Short et al. 2021, McHuron et al. 2020 and <https://www.adn.com/business-economy/2021/10/14/trawler-bycatch-debate-heats-up-after-alaska-records-dismal-2021-chinook-salmon-returns/>) Additional information about commercial fisheries can be found in the Sanctuary Nomination. The creation of the Sanctuary would present an opportunity for the community to work with NOAA and the North Pacific Fisheries Management Council to examine such issues further and to cooperate on shared stewardship efforts.

Shipping: Arctic vessel traffic has increased dramatically in recent years, increasing by 150 percent through the Bering Strait region between 2008-2018. This volume is expected to continue to increase as an entirely ice-free summer Arctic is predicted by as soon as 2050.

Vessels navigating the Bering Sea pose threats to the region's ecosystems and communities that depend on them, including from air pollution; ballast water and other discharges; noise; introduction of invasive species, such as rats; direct strikes on marine mammals; interference with subsistence activities; and accidents. The International Maritime Organization's creation in 2018 of three new Areas to be Avoided (ATBAs) and two-way shipping routes was a significant step forward. While these precautions are protective, however, shipping-related risks to the Pribilof Domain remain.

Oil and gas: Oil spills pose a threat for the future. Oil spills could result from eventual offshore oil and gas exploration and production in the Bering Sea or nearby waters, or from shipping accidents or discharges involving oil tankers. Additional information about oil and gas can be found in the Sanctuary Nomination.

Marine Debris: Marine debris from vessel traffic and ocean disposals poses a continuing threat. Located in the midst of a high-use sea, the Pribilof Islands are vulnerable to marine debris that becomes entrained in Pacific/Bering Sea currents, washes up on shore or affects offshore marine resources. As NOAA has commented:

[St. George and St. Paul] have long shouldered the burdensome and overwhelming responsibility of removing tens of thousands of tons of debris, much of which originates far from the communities themselves. Because of the multitude of threats resulting from marine debris pollution that constantly accumulates on the coastlines of St. George and St. Paul, these communities have developed and expanded locally-driven marine debris prevention and removal efforts. Since 1998, the tribal governments of St. George and St. Paul have conducted regular marine debris cleanups to prevent negative impacts to important wildlife used for subsistence and to better understand debris accumulation dynamics in the region. Since 2009, the communities have collectively removed almost 200,000 pounds of marine debris, which overwhelmingly consists of fishing-related gear, such as nets, rope, and line

(Community-Driven Activities Create a Strong Foundation for Successful Marine Debris Campaigns in Alaska, November 24, 2020, NOAA Marine Debris Program).

Mortalities and injuries of Northern fur seals caused by entanglement in marine debris has been documented (see, e.g., Muto et al. 2021).

Designation of the Sanctuary will enable the development of fully integrated and adaptive management strategies that will mitigate all of the above risks, ensure conservation of our marine resources and promote resilience for our community and environment.

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

Our understanding of the unique conservation and management value that a national marine sanctuary would provide to this area or adjacent areas has not changed since we submitted the

Sanctuary Nomination. We respectfully refer readers to that document for additional information.

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.

As we stated in the Sanctuary Nomination:

There are a number of ways in which the creation of the Sanctuary and an integrated, adaptive management approach would complement existing management authorities in addressing the potential impacts on ecosystems and sustainable use outlined above in Consideration 3 [of the Sanctuary Nomination]. Much of the regulatory and management efforts around St. George to date have been focused on fisheries. In 1986, for example, a management area for Pacific halibut was designated around the Pribilof Islands to provide for a local fishery for island residents. Abundance, however, has generally declined and remains depressed, perhaps due to environmental factors or coast-wide fishing affecting the entire stock. Blue crab stocks have also declined despite creation in 1995 of a habitat conservation area that prohibits bottom trawling around the Pribilof Islands and closures of the red and snow crab fisheries near the islands in 1999 (NPFMC, 2014). The U.S. Coast Guard has led significant initiatives in the area's maritime safety, marine infrastructure, and search and rescue. NOAA's and U.S. Fish and Wildlife have conducted monitoring and research into the on- and offshore conditions and health of marine mammals and sea birds. The Sanctuary could help integrate a number of complementary approaches, including monitoring, research and education, to understanding and addressing these challenges. National Marine Sanctuaries, for example, invest hundreds of thousands of dollars annually in research, citizen science, education and protection of seabirds.

At this juncture, integrated, adaptive management of the kind afforded by NOAA and the NMS program is essential for the protection of the proposed area's threatened marine resources. Because the NMS's ecosystem-based management approach is consistent with the North Pacific Fisheries Management Council's developing ecosystem-based management approach, strong collaboration is envisaged by this nomination. The U.S. Coast Guard is working on a number of maritime safety issues relevant to St. George and the Pribilof Domain. St. George envisions strong collaboration between the Sanctuary program and the U.S. Coast Guard on such issues as search and response, ship strikes against whales, marine debris and others. Similarly, the Sanctuary will create an important platform for cooperation and integrated management with the U.S. Fish and Wildlife Service and the Arctic Maritime National Wildlife Refuge on such issues as the health of seabirds, marine science, education and conservation programs.

Creating the Sanctuary will also be consistent with the conservation and sustainable resource use goals expressed by the people of Alaska in the state's marine-related laws. NOAA has a long history of working in close cooperation with the State of Alaska to align policies that protect and preserve Alaska's marine resources, coastal habitats and archaeological resources. The creation of the Sanctuary will complement and add a

crucially valuable framework for coordinating federal and state regulatory and policy approaches affecting the Pribilof Domain, including, e.g., in the areas of climate and marine research, shipping, emergency response and marine infrastructure planning.

Although the proposed area is limited in geographic scope, conservation and adaptive management decisions that are protective of St. George's resources will yield enormous multiplying benefits across both time and a vast spatial zone. Working together, drawing on science, local traditional knowledge and collective experiences, we can develop new and better ways to protect our marine environment and our community.

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

As we stated in our Sanctuary nomination:

St. George is a tiny island with a small population in a very remote location in the middle of the Bering Sea. The size and scope of our partnership commitments will by definition be more limited than they might be were our community located in a more populated area. Nevertheless, our community is already a highly recognized destination and is visited by bird watchers and marine researchers from around the globe. We anticipate and very much look forward to building strong partnerships across NOAA programs and with the U.S. Fish & Wildlife Service, the U.S. Department of Agriculture, the Marine Mammal Commission, the Fort Ross Conservancy, as well as such Alaskan institutions such as the University of Alaska, Alaska SeaLife Center, and the Alaska Museum of Natural History, among many others. A linkage has already been created between St. George and the Monterey Bay National Marine Sanctuary. This cooperation will be further developed, as will cooperation with the Greater Farallones National Marine Sanctuary, Papahānaumokuākea Marine National Monument, the Bering Land Bridge National Preserve and other sanctuaries, monuments and parks in the U.S. system with natural ecological and cultural connections to St. George's marine resources.

The NOAA-owned Seal Skin Plant building overlooking the St. George waterfront could serve as an excellent location for the Sanctuary office and visitor's center. 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. A second, satellite office might also be created in Anchorage to support and build awareness of the Sanctuary.

We would add two points to the above. During the past years, St. George has been in communication with our brothers and sisters participating in the national marine sanctuary system on behalf of the Chumash Nation, the Quinault Nation, and in American Samoa and in Hawaii. We are very heartened by their support and look forward to deepening these bonds of fellowship and cooperation around issues relating to preservation of cultural heritage and protection of marine life.

During the years since submission of the Sanctuary Nomination, and particularly during the past year, the community of St. George has also been in dialogue with the Aleut Community of St. Paul Island (ACSPI), the island's tribal government. We greatly appreciate the many efforts ACSPI has been making to develop marine science about the Pribilof Island marine ecosystem and to advance a conservation agenda. We have noted with interest and agreement ACSPI's expressions of concern about the status of Northern fur seals, bycatch and other issues affecting our shared marine environment. We have also noted St. Paul's call for ecosystem-based management of up to 100 nautical miles around the Pribilof Island marine ecosystem, or PRIME, enhanced co-management, and establishment of a national marine sanctuary. The shared goal of conserving our marine environment to the greatest extent possible offers hope and the possibility of a unified approach. The St. George community is committed to continuing this dialogue and achieving protection for our wondrous but threatened shared environment.

Consideration 7 - There is community-based support for the nomination expressed by a broad range of interests.

The St. George community remains committed to this nomination – not simply to keeping it in the NOAA inventory, but to ensuring that it advances as soon as possible to designation.

As described above In 2020, St. George completed the St. George Local Economic Development Strategy (the “Strategy”) and nine accompanying working papers. The Strategy process included a community survey that engaged over 80 percent of our community's households. Survey results confirmed strong support for protection of our marine environment, job creation, economic development, harbor redevelopment and the creation of the Sanctuary. In particular, the Strategy identified the creation of the sanctuary and renovation of St. George's harbor as crucial drivers of our community's economic development hopes for the future.

Redevelopment of the St. George harbor would enable exactly the type of local economic development activities that the Sanctuary is intended to support, as stated in the Sanctuary Nomination and above. At the time the sanctuary nomination was submitted in 2016, some expressed concern that the creation of a national marine sanctuary might conflict with redevelopment of St. George's harbor. In fact, the two initiatives are mutually beneficial. Shortly after the Sanctuary Nomination was submitted, the U.S. Army Corps of Engineers clarified that the Sanctuary was not an impediment to development of the harbor (memo of Michael D. Noah Environmental Resources Section Alaska District, U.S. Army Corps of Engineers dated December 7, 2016). Since that time, the Corps' Environmental Assessment of the harbor project acknowledged the prospective economic benefits the sanctuary would bring to our community (see U.S. Army Corps of Engineers 2020) and the Corps proposed the project to Congress for authorization (see St. George Harbor Improvement Chief's Report 2020).

Throughout the past five years, the St. George community repeatedly expressed its support for pursuit of the creation of a national marine sanctuary by re-electing its chief proponent and architect, the late Mayor Patrick Pletnikoff. Mayor Pletnikoff's and the community of St. George's commitment to the sanctuary is evident in the films and news story cited below (see Additional Resources).

As we stated in the Sanctuary Nomination:

St. George is supported in this effort by a range of members of the wider community of native and Aleut villages in the Bering Sea region and across Alaska, as well as researchers and conservation organizations. They support the community's effort to achieve greater self-determination through the creation of the Sanctuary and participation as an equal partner in decisions affecting the fate of our island and its resources. Our Unangan community, as small and struggling as we are, believe we have the right and responsibility to voice our concerns and take action now to protect our waters and our home for future generations.

"It could be a new beginning".
Mayor Patrick Pletnikoff

Additional resources

Aguugum Tanaa, Our Sacred Place (short films)

Pt. 1, The Seals and the Sea Birds: <https://unangansanctuary.net/790-2/>

Pt. 2, Balance: <https://unangansanctuary.net/790-2/>

Pt. 3, For the Future: <https://unangansanctuary.net/790-2/>

On an Alaskan island a mayor fights for fur seals – and a new future, Reuters, July 12, 2021
<https://www.reuters.com/business/environment/an-alaskan-island-mayor-fights-fur-seals-new-future-2021-07-12/>

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