

# Pacific Seabird Group



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DEDICATED TO THE STUDY AND CONSERVATION OF PACIFIC SEABIRDS AND THEIR ENVIRONMENT

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30 November 2016

William J. Douros  
West Coast Regional Director  
NOAA Office of National Marine Sanctuaries  
99 Pacific Street, Suite 100F  
Monterey, CA 93940

Dear Mr. Douros:

This letter is to express the support of the Pacific Seabird Group (PSG) for the concept of a St. George Island National Marine Sanctuary as proposed in July 2016 by the City Council of St. George. The high-latitude regions of the planet are experiencing extraordinary environmental change and stress on wildlife populations, and PSG greatly appreciates that the residents of St. George are working to take the initiative and begin to define for themselves a path forward to sustain their way of life and the environment and natural resources on which they depend.

The PSG is an international, non-profit organization that was founded in 1972 to promote the knowledge, study, and conservation of Pacific seabirds. It has a membership drawn from 14 nations, including Canada, Mexico, Russia, Japan, China, Australia, New Zealand, Peru, and the USA. The PSG's members include biologists and scientists who have research interests in Pacific seabirds, government officials who manage seabird refuges and populations, and

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representatives of nongovernmental organizations and individuals who are interested in marine conservation. Among PSG's members are many who have studied seabirds in the Pribilof Islands, including on or near St. George Island, for nearly a half century (Hunt *et al.* 1981; Roby & Ricklefs 1986; Lance & Roby 1998; Kildaw 1999; Kitaysky *et al.* 2000).

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

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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).

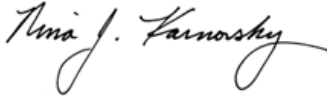
Additionally, at-sea observations have highlighted the use of the northern edge of the Pribilof Canyon (within the proposed sanctuary) by foraging murre (Kokubun *et al.* 2008) and hot-spots of seabirds in the vicinity of St. George Island in the summer and fall (Kinder *et al.* 1983; Benoit-Bird *et 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 ([http://e360.yale.edu/digest/tufted\\_puffins\\_dying\\_bering\\_sea\\_ocean\\_temperatures/4839/](http://e360.yale.edu/digest/tufted_puffins_dying_bering_sea_ocean_temperatures/4839/)) and (<http://www.nationalgeographic.com.au/animals/huge-puffin-die-off-may-be-linked-to-hotter-seas.aspx>).

Some of the challenges—like climate change—confronting St. George Island and its people and seabirds are much larger than the waters around the island and indeed are much larger than the Bering Sea. Nonetheless, if this initiative to establish a marine sanctuary around St. George Island is successful, it will give St. George residents a direct role in the cooperative management and conservation of natural resources and the marine environment around St. George

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Island. That would be a strong, positive step forward, and PSG is pleased to support it.

Sincerely,



Nina Karnovsky, PhD

Chair

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