30 January 2017

Hon. Catherine McKenna Minister of Environment and Climate Change Canada

cc: Caroline Ladanowski, Director, Wildlife Management and Regulatory Affairs Division, Canadian Wildlife Service

By Email

Dear Minister McKenna,

We the undersigned scientists urge the Government of Canada to improve the proposed protection measures for the Scott Islands marine National Wildlife Area, for both the seabirds and for the other marine species that inhabit the waters in this ecosystem.

The draft regulations state that the conservation objective of the Scott Islands marine National Wildlife Area is to "conserve migratory seabirds, species at risk, and the habitats, ecosystem linkages and marine resources that support these species..." However, as currently proposed the Scott Islands marine National Wildlife Area omits a significant portion of known seabird foraging habitat, fails to address known threats, ignores the needs of other species—including *Species At Risk*, and fails to acknowledge the cumulative impacts of anthropogenic threats against a background of climate change.

As the largest seabird-breeding colony in Pacific Canada the Scott Islands is a globally significant site, worthy of strict protection. According to the Regulatory Impact Assessment, the population of breeding seabirds on the Scott Islands has declined from 2.2 million to 1.4 million since the 1990s. Furthermore the effects of the 2014/2015 mass stranding of juvenile Cassin's Auklets on the breeding population have yet to be fully determined. Recent studies have demonstrated the effectiveness of using seabird data to identify ecologically significant areas and have recognised seabirds' role as sentinels for ocean health and ecosystem changes. Therefore declines in their numbers, like those observed at the Scott Islands, and mass die offs are a cause for

¹ http://www.gazette.gc.ca/rp-pr/p1/2016/2016-12-31/html/reg1-eng.php

² Thaxter, C. B., Lascelles, B., Sugar, K., Cook, A. S. C. P., Roos, S., Bolton, M., et al. (2012). Seabird foraging ranges as a preliminary tool for identifying candidate Marine Protected Areas. *Biol. Conserv.* 156, 53–61. doi:10.1016/j.biocon.2011.12.009.

³ Croxall, J. P., Butchart, S. H. M., Lascelles, B., Stattersfield, A. J., Sullivan, B., Symes, A., et al. (2012). Seabird conservation status, threats and priority actions: a global assessment. *Bird Conservation International*. 22, 1–34.

⁴ Montevecchi, W. A., Hedd, A., McFarlane-Tranquilla, L., Fifield, D. A., Burke, C. M., Regular, P. M., et al. (2012).

Tracking seabirds to identify ecologically important and high risk marine areas. *Biological Conservation* 156, 62–71. dx.doi.org/10.1016/j.biocon.2011.12.001

⁵ Hooker, S., and Gerber, L. (2004). Marine reserves as a tool for ecosystem-based management: the potential importance of megafauna. *Bioscience* 54, 27.

significant concern and flag the need for strong protection of the ocean ecosystems on which these animals rely.

Threats at sea pose a serious risk to seabirds and other marine animals. Global assessments of the conservation status of seabirds and other marine species have repeatedly found declines in biomass and biodiversity, and have identified commercial fishing and shipping as primary threats, mainly through oil spills and chemical pollution, noise pollution, bycatch and entanglement, and loss of prey. We are therefore concerned that under the current proposal for the Scott Islands marine National Wildlife Area, commercial fishing and vessel traffic are subject to only minimal regulation, and that activities like bottom trawling, long-lining and shipping will be allowed to continue in the area without limitation despite the known risks and impacts. The only prohibitions are for fisheries that do not actually occur in the designated area, and for vessel traffic in close proximity to the islands. These prohibitions will do little to protect seabirds or other animals at sea.

Given the known risks, and in keeping with Canada's commitment to the United Nations Convention on Biological Diversity, we recommend that the precautionary approach be applied to all current and future activities, until sufficient data are available to demonstrate that there are no negative impacts on seabird populations or marine ecosystems. In this respect, we offer the following recommendations:

- 1. Commercial fishing activities should be prohibited within the Scott Islands marine National Wildlife Area until it can be proven that they have no harmful effects on seabird populations, species at risk, or marine ecosystems.
- 2. Bottom trawling should be permanently prohibited throughout the proposed marine National Wildlife Area, and all other marine protected areas, due to the significant impacts to benthic marine ecosystems, the potential risk of bycatch and entanglement, and the removal of non-target prey species. ^{7 8}
- 3. Gillnet fisheries should be explicitly and permanently prohibited due to the significant risks of bycatch, especially to alcids.^{7 10 11} Gillnet fisheries do not currently occur within

⁶ http://awsassets.panda.org/downloads/lpr living planet report 2016.pdf

⁷ Chuenpagdee, R., Morgan, L. E., Maxwell, S. M., Norse, E. A., and Pauly, D. (2003). Shifting gears: Assessing collateral impacts of fishing methods in US waters. *Front. Ecol. Environ.* 1, 517–524. doi:10.1890/1540-9295(2003)001[0517:SGACIO]2.0.CO;2.

⁸ Boutillier, J. 2016. Characterization and Analysis of Fisheries Related Risks to Significant Species, Habitats and Ecosystem/Community Properties within the Proposed Scott Islands marine National Wildlife Area. DFO Can. Sci. Advis. Sec. Res. Doc. 2016/015. viii + 71 p.

⁹ https://www.cbd.int/marine/precautionary.shtml

¹⁰ Zydelis, R., Bellebaum, J., Osterblom, H., Vetemaa, M., Schirmeister, B., Stipniece, A., et al. (2009). Bycatch in gillnet fisheries - An overlooked threat to waterbird populations. *Biol. Conserv.* 142, 1269–1281. doi:10.1016/j.biocon.2009.02.025.

Regular, P. M., Montevecchi, W.A., Hedd, A., Robertson, G.J., Wilhelm, S. I. (2013). Canadian fishery closures provide an large scale test of gillnet bycatch on seabird populations. *Biology Letters* 9 dx.doi.org/10.1098/rsbl.2013.0088

the proposed boundary but have historically and do occur nearby. The same precautionary approach that was applied to fisheries for Pacific saury, sand lance and krill should be extended for gillnet fisheries.

- 4. Create navigation lanes and channels for ships and other vessels away from key feeding areas and migratory corridors of seabirds and other species, particularly whales, and establish speed limits throughout the marine National Wildlife Area to reduce disturbance and the risk of collision.
- 5. Expand the proposed boundary to include all known key foraging habitat for seabirds. The current boundary excludes a large area of known Cassin's auklet foraging habitat.¹

There is a wealth of scientific research that demonstrates that strongly protected MPAs produce much greater benefits in terms of both biodiversity conservation and benefits to fisheries. ¹² ¹³ With no restriction of commercial and industrial activities, the Scott Islands marine National Wildlife Area will provide limited benefit for seabirds and any other marine species.

As Canada's first marine National Wildlife Area, this proposal should set a strong precedent. The proposed regulations fail to provide any meaningful protection to seabirds and ignore the broader ecological values of the area. This approach contradicts the best available science and guidelines on MPA design and management.¹⁴

We strongly urge Environment and Climate Change Canada to improve the proposed regulations to provide effective in situ conservation and protection of both seabirds, other species at risk (which include sea otters, Steller sea lions, and several species of whales and leatherback sea turtles) and the broader marine ecosystems of the Scott Islands.

Yours Sincerely,

Dr. William A. Montevecchi Research Professor, Memorial University of Newfoundland

and

¹² Lester, S., and Halpern, B. (2008). Biological responses in marine no-take reserves versus partially protected areas. *Mar. Ecol. Prog. Ser.* 367, 49–56. doi:10.3354/meps07599.

¹³ Edgar, G. J., Stuart-Smith, R. D., Willis, T. J., Kininmonth, S., Baker, S. C., Banks, S., et al. (2014). Global conservation outcomes depend on marine protected areas with five key features. *Nature*. doi:10.1038/nature13022.

¹⁴ Jessen, S., Chan, K., Côté, I., Dearden, P., De Santo, E., Fortin, M.J., et al. (2011). Science-based Guidelines for Marine Protected Areas and MPA Networks in Canada. Canadian Parks and Wilderness Society (CPAWS), Vancouver 58 p. http://cpaws.org/uploads/mpa_guidelines.pdf

Dr. Natalie Ban

Assistant Professor, Environmental Studies, University of Victoria

Dr. Dean Bavington,

Associate Professor, Geography Department, Memorial University of Newfoundland

Laura Cassiani

Executive Director, Mission Blue

Dr. Kai M. A. Chan

Professor, Insititute for Resources, Environment and Sustainability, University of British Columbia

Dr. Ratana Chuenpagdee

Professor, Memorial University of Newfoundland

Dr. Isabelle Côté

Professor, Marine Ecology and Conservation, Simon Fraser University

Dr. Donald Croll

Professor, Ecology and Evolutionary Biology, University of California Santa Cruz

Dr. Glen Crossin

Assistant Professor, Department of Biology, Dalhousie University

Dr. Emily Darling

Post-doctoral researcher, University of Toronto and Wildlife Conservation Society

Dr. Paul Dayton

Distinguished Professor emeritus, Scripps Institution of Oceanography

Dr. Phil Dearden

Professor, Department of Geography, University of Victoria

Dr. Elizabeth De Santo

Assistant Professor of Environmental Studies, Franklin and Marshall College

Dr. Rodolphe Devillers

Professor of Geography, Memorial University of Newfoundland

Dr. Antony Diamond

Emeritus Professor of Wildlife Ecology, University of New Brunswick

Dr. Susan Dufour

Associate Professor of Biology, Memorial University of Newfoundland

Dr. Nick Dulvy

Professor and Canada Research Chair in Marine Biodiversity and Conservation, Simon Fraser University

Dr. Sylvia Earle

Founder and Chairman, Mission Blue

Dr. Graham Edgar

Professor, Institute for Marine and Antarctic Studies, University of Tasmania

Dr. Evan Edinger

Professor, Geography, Biology and Earth Sciences, Memorial University of Newfoundland

Dr. Kyle Elliot

Assistant Professor and Canada Research Chair in Arctic Ecology, McGill University

Dr. Brett Favaro

Instructor/Research Scientist, Fisheries and Marine Institute, Memorial University of Newfoundland.

Dr. Marie-Josée Fortin

Professor, FRSC, Canada Research Chair in Spatial Ecology, Department of Ecology and Evolutionary Biology, University of Toronto

Dr. Antony Gaston

Adjunct Professor, Department of Biology, Queen's University

Dr. Ben Halpern

Director, National Center for Ecological Analysis & Synthesis and Professor, Bren School of Environmental Science and Management, University of California Santa Barbara

Dr. Luise Hermanutz

Professor, Department of Biology, Memorial University of Newfoundland

Dr. Mark Hixon

Professor and Former Chair US MPA Federal Advisory Committee, University of Hawai'i

Dr. David J. Innes

Professor, Department of Biology, Memorial University of Newfoundland

Dr. Sara Iverson

Professor, Department of Biology, Dalhousie University

Dr. Jeremy Jackson

Professors, Scripps Institute of Oceanography

Dr. Stephen Kress

Vice-president for Bird Conservation, National Audubon Society

Dr. Patricia Lane

Professor, Department of Biology, Dalhousie University

Dr. Max Liboiron

Assistant Professor, Memorial University of Newfoundland

Dr. David Lieske

Associate Professor, Department of Geography and Environment, Mount Allison University

Dr. Heike K. Lotze

Professor, Department of Biology, Dalhousie University

Dr. Jane Lubchenco

Distinguished University Professor, Oregon State University

Dr. Mark Mallory

Associate Professor and Canada Research Chair in Coastal Wetland Ecosystems, Acadia University

Dr. Laura McFarlane Tranquilla

Atlantic Program Manager, Bird Studies Canada

Dr. Dana Miller

Research Scientist, University of British Columbia

Dr. Lance Morgan

President, Marine Conservation Institute

Dr. Edward H. Miller

Professor, Biology Department, Memorial University of Newfoundland

Dr. Robert Montgomerie

Professor and Research Chair in Evolutionary Biology, Queens University

Dr Ryan Norris

Associate Professor and University Research Chair, University of Guelph

Dr. Mary O'Connor

Associate Professor, Department of Zoology & Associate Director, Biodiversity Research Centre, University of British Columbia

Dr. Sarah Otto

Professor of Zoology, University of British Columbia, and Director, Liber Ero Fellowship Program

Dr. Daniel Pauly

University Killam Professor & Principal Investigator, Sea Around Us, Institute for the Oceans and Fisheries, University of British Columbia

Dr. Laurene Ratcliffe

Professor of Biology, Biosciences Complex, Queens University

Dr. Henry M. Reiswig

Adjunct Professor, Biology Department, University of Victoria

Dr. Callum Roberts

Professor of Marine Conservation, Environment Department, University of York

Dr. Dave Shutler

Professor, Department of Biology, Acadia University

John Smol, OC, PhD, FRSC

Professor, Canada Research Chair in Environmental Change, Queen's University

Dr. Jain, J. Stenhouse

Arctic Program Director & Marine Bird Program Director, Biodiversity Research Institute

Dr. Rashid Sumaila

Director and Professor, Fisheries Economics Research Unit, Institute for the Oceans and Fisheries, University of British Columbia

Dr. Bernie Tershy

Adjunct Professor, Coastal Conservation Action Lab, Center for Ocean Health, Santa Cruz

Dr. Brian N. Tissot

Director & Professor, Marine Laboratory, Humboldt State University

Dr. Amanda Vincent Professor and Director of Project Seahorse, Institute for the Oceans and Fisheries, University of British Columbia

Dr. Kelly Vodden Associate Professor (Research), Memorial University Newfoundland

Dr. Hal Whitehead Professor, Department of Biology, Dalhousie University

Dr. Boris Worm Professor, Department of Biology, Dalhousie University

^{*} Affiliations of signatories are provided for purposes of identification only and do not imply endorsement by the organizations listed.