

# Pacific Seabird Group



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

PSG Website: [www.pacificseabirdgroup.org](http://www.pacificseabirdgroup.org)

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March 30, 2013

Mr. Dan Wolford, Chairman  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland, Oregon 97220-1384

## **Re: Agenda Item H.1 – Adoption of the Pacific Coast Fishery Ecosystem Plan**

Dear Chairman Wolford and Pacific Fishery Management Council Members:

The Pacific Seabird Group (PSG) strongly supports adoption of the Pacific Fishery Management Council's (Council) Fishery Ecosystem Plan (FEP). We urge the Council to take final action at its April meeting to adopt the FEP and to begin implementation of ecosystem-based initiative #1— the protection of unmanaged forage species.

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 the entire Pacific basin, including Canada, Mexico, Russia, Japan, China, Australia, New Zealand, 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 representatives of nongovernmental organizations and individuals who are interested in marine conservation.

As a group, seabirds are now recognized as the most endangered birds in the world.<sup>1</sup> Thirty-percent face some threat of extinction<sup>2,3</sup> and many are exceptionally vulnerable to climate change.<sup>4</sup> Millions of seabirds, including at least 25 species during the breeding season and at

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<sup>1</sup> Croxall, J. et al. 2012. Seabird conservation status, threats and priority actions: a global assessment. *Bird Conservation International* 22:1-34.

<sup>2</sup> IUCN. 2010. Red List. [http://www.iucn.org/about/work/programmes/species/red\\_list/](http://www.iucn.org/about/work/programmes/species/red_list/)

<sup>3</sup> Newton, K., D. Croll, H. Nevins, Scott R. Benson, J. Harvey, B. Tershy. 2009. At-sea mortality of seabirds based on beachcast and offshore surveys. *Marine Ecology Progress Series* 392: 295–305, 2009

<sup>4</sup> North American Bird Conservation Initiative, U.S. Committee. 2010. The State of the Birds 2010 Report on Climate Change, United States of America. U.S. Department of the Interior: Washington, DC.

least an additional 35 species during their nonbreeding seasons, inhabit the area covered by the FEP—the U.S. portion of the California Current Large Marine Ecosystem.

Forage fish, like herring, smelt, sand lance, and eulachon, play a critical role in marine ecosystems, including supporting seabird populations. As a precautionary measure, the North Pacific Fishery Management Council acted in 1997 to prevent development of commercial fisheries on forage species, including capelin, sand lance and euphausiids, and to establish limits on maximum retainable bycatch amounts in directed fisheries.<sup>5</sup> Reliable stock-specific abundance estimates are needed before fisheries are developed, including baseline population estimate and trends over time. More information continues to be needed on the role of forage fish in the marine food web.

The Lenfest Forage Fish Task Force<sup>6</sup> recently completed its final report and recommendations regarding the management of forage fish fisheries that account for their unique life histories and ecological roles. One key recommendation was "an operational precautionary approach that defined levels of knowledge about stock health and ecosystem effects and appropriate limit and target reference points that should apply for each level."

The PSG is interested in this matter primarily for two reasons: seabirds require substantial quantities of prey for survival and reproduction, and seabirds are extremely sensitive to changes in prey abundance. Commercial fisheries may compete for prey species by changing the quantity of prey available to seabirds. There is significant evidence that the collapse of forage fish populations following fisheries exploitation have caused seabird breeding failures and population declines: for example, after the collapse of the anchovy fishery in South America (1950-1960s), the herring fisheries in Norway (1970s) and the capelin fisheries in the Barents Sea (1980s).<sup>7</sup>

Thresholds for the amount of prey have been recently estimated for 14 seabirds across seven ecosystems. Published in *Science*, the study by Cury et al. estimated that one-third of the maximum marine prey biomass is required to maintain seabird productivity.<sup>8</sup> Below that threshold, seabirds experience consistently reduced and more variable productivity.

The Marbled Murrelet provides one example of how a precautionary approach to protect unmanaged forage fish from exploitation could benefit seabirds. The murrelet, which is listed as threatened from California to Washington under the U.S. Endangered Species Act, forages predominately in the nearshore on a variety of forage fish, including small schooling fishes, such as sand lance, anchovy, herring, osmerids, and seaperch. While murrelets also forage on euphausiids and mysids during winter and spring, the fish portion of their diet is during summer and coincides with the nesting and fledging period. Changes in the abundance, distribution and

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<sup>5</sup> North Pacific Fishery Management Council. 1998. North Pacific Fishery Management Council agency report. Retrieved from: [http://www.psmfc.org/tsc2/98\\_TSC\\_rpt/Npfmc98.html](http://www.psmfc.org/tsc2/98_TSC_rpt/Npfmc98.html)

<sup>6</sup> Pikitch, et al. 2012. Little fish, big impact: managing a crucial link in ocean food webs. Lenfest Ocean Program. Washington D.C., pp.108.

<sup>7</sup> Sydeman, W, J. Piatt, H. Browman, eds. 2007. Seabirds as indicators of marine ecosystems. Marine Ecology Progress Series 352: 199–204.

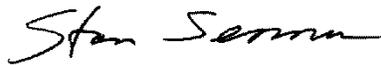
<sup>8</sup> Cury et al. 2011. Global seabird response to forage fish depletion—one third for the birds. *Science* 334: 1703-06.

quality of marine prey have been identified as factors in the decline of Marbled Murrelets<sup>9</sup>, and ensuring an adequate prey base should be a priority going forward.

The PSG urges the Council to take final action at its April meeting to adopt the FEP and to begin implementation of ecosystem-based initiative #1—the protection of unmanaged forage species. These steps will help maintain the diversity and abundance of seabirds in the U.S. portion of the California Current Large Marine Ecosystem.

Please let me know if you have questions or if the PSG can provide additional information or perspectives.

Sincerely,

A handwritten signature in black ink that reads "Stan Senner". The signature is written in a cursive, slightly slanted style.

Stanley Senner  
Vice-Chair for Conservation  
4189 SE Division St.  
Portland, OR 97202

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<sup>9</sup> Recovery Implementation Team. 2012. Report on Marbled Murrelet Recovery Implementation Team meeting and stakeholder workshop. U.S Fish and Wildlife Service, Lacey, WA.