MARYLAND ORNITHOLOGICAL SOCIETY

February 20, 2024

**Committee: Education, Energy, and the Environment**

**Testimony on: SB0956 Environment – Water Pollution Control – Protecting State Waters from PFAS Pollution (Protecting State Waters from PFAS Pollution Act)**

**Position: Support SB0956**

The Maryland Ornithological Society MOS strongly supports SB0956, and urges the Committee to issue a favorable report. This bill would establish limits on the discharge of PFAS chemicals by significant industrial users into Maryland waters. MOS supports efforts to reduce the amount PFAS being discharged into our environment., and support the Protecting State Waters from PFAS Pollution Act. Our reasons are as follows:

- PFAS chemicals due to strong fluorine-carbon bonds persist in the environment for years;
- Many such as PFOA and PFOS bioaccumulate in the tissues of wildlife, sometimes to toxic levels;
- PFAS has been found in eggs, blood, and livers of birds, with concentrations being especially pronounced in industrial areas of North America, Europe, and east Asia;[1]
- PFAS has been shown to reduce hatching success in Double-crested Cormorants in North America[2] and Little Ringed Plovers in Asia[3];
- Wetland-associated insectivorous birds may be particularly at risk of impaired reproduction due to exposure to PFOS and possibly other forms of PFAS;[4]

---

[1] Bonisoli-Alquati, Andrea, PFAS concentrations in birds. https://www.bonisolialquatilab.com/pfas-concentrations-in-birds.html

[2] Sedlak, Meg, et al, Per and Polyfluoroalkyl Substances (PFASs) in San Francisco Bay: Synthesis and Strategy, June 2018, https://www.sfei.org/sites/default/files/biblio_files/PFAS%20Synthesis%20and%20Strategy.pdf

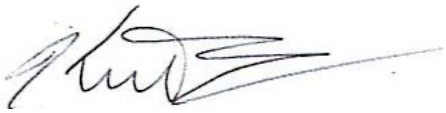
[3] Yoo, Hoon, et al Perfluoroalkyl acids in the egg yolk of birds from Lake Shihwa, Korea. August 2008, https://pubmed.ncbi.nlm.nih.gov/18754515/

[4] Etterson, Matt, et al, Food Web Exposure and Consequent Effects of PFAS on Birds. Strategic Environmental Research and Development Program & Environmental Security Technology Certification Program and DoD Operational EnergySERDP-ESTCP-OE-Innovation Symposium, Arlington, VA, November 29 - December 02, 2022. https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=357491&Lab=CCTE

- PFAS has even been found in the blood of Snow Buntings above the Arctic Circle in the Svalbard archipelago[5], as well as in Northern Cardinals in Hawaii[6];
- Health harms are potentially most concerning for populations of endangered and threatened species exposed to PFAS and other toxic pollutants. Restricting discharge of PFAS presents an opportunity to protect wildlife from chemical pollution and advance species conservation.[7]

As can be seen above, PFAS is ubiquitous, persistent, and injurious to the health of humans and wildlife, to include birds. North America has lost almost 30% of its birds since 1970.[8] It would behoove us to limit the continued deposition of PFAS on the landscape, in our waters, and food. We urge the Committee to issue a favorable report.

Sincerely,



Kurt R. Schwarz
Conservation Chair Emeritus
Maryland Ornithological Society
www.mdbirds.org

[5] Warner, Nicolas, et al, Snow Buntings (Plectrophenax nivealis) as bioindicators for exposure difference in legacy and emerging persistent organic pollutants from the Arctic terrestrial environment on Svalvard, February 2019, https://pubmed.ncbi.nlm.nih.gov/30833262/

[6] Russell, Marie C. et al, Per- and polyfluoroalkyl substances in two different populations of northern cardinals, May 2019, https://pubmed.ncbi.nlm.nih.gov/30710759/

[7] Andrews, David Q. et al, Discussion: Has the human population become a sentinel for the adverse effects of PFAS contamination on wildlife health and endangered species?, Science of The Total Environment, Volume 901, 25 November 2023, https://www.sciencedirect.com/science/article/abs/pii/S0048969723045643?via%3Dihub

[8] Rosenberg, Kenneth V. et al, Decline of the North American avifauna, Science, VOL 366, NO. 6451, 19 September 2019, https://www.science.org/doi/10.1126/science.aaw1313?adobe_mc=MCORGID%3D242B6472541199F70A4C98A6%2540AdobeOrg%7CTS%3D1707754028