

To: House Committee on Climate, Energy, and the Environment
From: Oregon Wild
Re: Support HB 2679
Date: March 4, 2025

## Chair, Vice Chairs, and members of the Committee,

Oregon Wild supports HB 2679. Oregon, like much of the globe, is experiencing an extinction crisis. Animals throughout ecosystems and up and down food chains are threatened by dramatic habitat losses, accelerating climate change, and over-harvest by humans.

To slow and reverse these dramatic losses, Oregon can move neonicotinoids to a restricted-use category, as the science is clear that neonicotinoids harm aquatic animals starting with insects and ending with fish, at the concentrations found in wetlands, ephemeral and seasonal streams, and fish-bearing streams (Hladik et al 2018, Schepker et al 2020, Kuechle et al 2022, Gandara et al 2024).

Scientists continue to learn the aggregate extent of stream networks and thus the extent of waterways that place persistent neonicotinoids adjacent to vitally-important aquatic insects, amphibians, and fish. In the US, stream networks appear to be five times longer than the perennial stream length that we're most familiar with (Prancevic, Seybold, and Kirchner 2025). This represents five times the area in which insects, the base of many ecosystem food chains, are vulnerable to these pesticides.

Finally, the persistence and toxicity of neonicotinoids threatens fisheries by devastating aquatic insect populations (Yamamuro et al 2018). In fact, we're still just learning about the effects and we must exercise caution. As Zheng, Chen, and Zheng wrote in Science Magazine (2013), "In the past, we underestimated the risks of widely used pesticides. As we work to replace older insecticides with less toxic alternatives, we must use caution to prevent a similar mistake." Written twelve years ago.

Oregon Wild urges the House Committee on Climate, Energy, and the Environment to move HB 2679 on to a work session and protect wetlands, streams, and the insects upon which fish depend.

Respectfully,

Casey Kulla state forest policy coordinator MS Environmental Science, forest ecology research thesis Oregon Wild

## Works Cited:

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Hladik, M.L., S.R. Corsi, D.W. Kolpin, A.K. Baldwin, B.R. Blackwell, and J.E. Cavallin. 2018. Year-round presence of neonicotinoid insecticides in tributaries to the Great Lakes, USA. *Environmental Pollution*. 235:1022-1029. <u>https://doi.org/10.1016/j.envpol.2018.01.013</u>

Yamamuro et al. 2018. Neonicotinoids disrupt aquatic food webs and decrease fishery yields. *Science*. Vol 366. Number 6465. <u>doi/10.1126/science.aax3442</u>

Kuechle, K.J., E.B. Webb, D. Mengel, and A.R. Main. 2022. Seed treatments containing neonicotinoids and fungicides reduce aquatic insect richness and abundance in midwestern USA–managed floodplain wetlands. *Environmental Science and Pollution Research*. 29:45261–45275. <u>https://doi.org/10.1007/s11356-022-18991-9</u>

Schepker, T.J., E.B. Webb, D. Tillitt, and T. LaGrange. 2020. Neonicotinoid insecticide concentrations in agricultural wetlands and associations with aquatic invertebrate communities. *Agriculture, Ecosystems and Environment.* 287:106678. https://doi.org/10.1016/j.agee.2019.106678rc

Gandara, et al. 2024. Pervasive sublethal effects of agrochemicals on insects at environmentally relevant concentrations. *Science*. Vol 386, Issue 6720 pp. 446-453 <u>DOI: 10.1126/science.ado0</u>

Prancevic, Seybold, and Kirchner. 2025. Variability of flowing stream network length across the US. *Science*. Vol 387 issue 6735. Pp 782-786. <u>doi/10.1126/science.ado2860</u>