February 11th 2020 House Committee on Health Care 900 Court Street NE Salem, OR 9730



## Re: Testimony in Support of House Bill 4109, related to prohibiting the aerial application of Chlorpyrifos

Dear Chair Salinas, Vice-Chairs Hayden and Nosse, and members of the House Committee on Health Care. My name is Dr Sristi Kamal and I am the Senior Representative for Defenders Of Wildlife in Oregon. I am also an ecologist with a PhD in biodiversity conservation. Defenders is a national wildlife conservation organization that works to protect imperiled species and their habitats. Today, I would like to take this opportunity to express Defenders' support for HB 4109 to prohibit aerial pesticide applicator from spraying or otherwise applying by aircraft pesticide product containing chlorpyrifos.

Chlorpyrifos is a commonly used as a pesticide from a family of chemicals, organophosphates that also function as neurotoxins. Today, you have heard and will hear more about its impact on human health and well-being — they are a highly toxic nerve agent and is associated with developmental disorder including damage the developing brains, loss of memory, and delayed motor development.

However, I am here to speak on behalf of another group — a non-human group whose health and survival is equally impacted by chlorpyrifos. Wildlife. In 2017 an evaluation carried out by US-FWS, National Marine Fisheries Service and the EPA concluded that chlorpyrifos likely adversely affects 97% of species listed as endangered and threatened under the EPA. The National Pesticide Information Center (NPIC) lists chlorpyrifos as "extremely toxic" to fish, aquatic invertebrates and bees.

Of key concern in Oregon is the impact of chlorpyrifos on the Pacific salmon that call Oregon waters their home, as well as the Southern Resident Orcas (SROs or Southern Residents) that depend on these salmons for their survival. Next to recovering the rivers that salmon need by restoring habitats and removing barriers such as dams, the stress and poisoning from chemicals such as chlorpyrifos is the next best thing we can do to prevent the drastic decline of salmon in

Oregon and in the entire Pacific NW. NOAA Fisheries made jeopardy and adverse modification

of critical habitat calls for all listed Pacific salmon and steelhead.

In addition to salmon, NOAA Fisheries has also made jeopardy and adverse modification of crit-

ical habitat calls for chlorpyrifos for the Southern Residents which depend on salmon (primarily

chinook salmon) for their diet. Salmon runs are disappearing and the salmon population is dwin-

dling, and chemical pollution is one of the main reasons behind it. This has a very direct impact

on the SROs. The Southern Residents are different from all other orcas in the world and one of

the main difference is that they eat only salmon. During harsh times in their seasonal cycle, par-

ticularly in the winter, they depend on Oregon's salmon for their survival. Currently, we have

only 72 SROs left in the wild. You probably have heard, read or seen some of the heartbreaking

stories about them over the last few years — without enough food, the Southern Residents are

struggling to have healthy calves and are essentially starving. This is the absolute last chance that

we have to do anything that might keep them from going extinct.

Several states have already banned chlorpyrifos, including California, which leads the nation in

agricultural production, including in many crops central to Oregon's rural economy. Integrated

Pest Management, habitat management, crop selection, and less-toxic pesticides offers a safe and

affordable alternative to chlorpyrifos. Oregon Department of Agriculture guidelines make clear

that chlorpyrifos use is not required, and that alternative pesticides are available.

Under your leadership today, we have the opportunity to improve the environmental and human

health quality in Oregon. I urge you today, to take all the scientific evidence that clearly state the

harmful impact of chlorpyrifos on both human and wildlife and support HB 4109 for a better and

safer Oregon for present and future generation of Oregonians and Oregon's wildlife.

Thank you for your time and consideration. I will be happy to answer any questions. Please con-

tact me at skamal@defenders.org

Sincerely

Sristi Kamal, Ph.D.

Sristi Kamal

Senior Representative, Defenders or Wildlife

Portland, Oregon