## Lorna Smith

(Email Submission)

Hello, Derek Rockett,

Please find attached a letter regarding intention to spray imidacloprid in Willapa Bay and Grays Harbor.

I am strongly oppposed to the issuance of such a permit.

Thank you Lorna Smith

## **Derek Rockett, Water Quality Program**

Washington State Department of Ecology Email:burrowingshrimp@ecy.wa.gov

Dr. Derek Rockett,

I'm writing to urge you to reject the permit to allow the use of imidacloprid in Willapa Bay and Grays Harbor.

Imidacloprid is a dangerous pesticide that many scientific studies have found to cause significant harm to nontarget species, including aquatic invertebrates. These chemicals are now being linked to a world-wide decline in not only pollinators, but all insects. The use of this pesticide in Willapa Bay and Grays Harbor should not even be considered, given the global importance of the area for migrating shorebirds and other aquatic life.

"The highlight of the Grays Harbor National Wildlife Refuge, a.k.a. Bowerman Basin, is the spring migration of shorebirds. Lying within the Pacific Northwest Coast Eco-region, the refuge's 1,500 acres of salt marsh and mudflats play host each year to tens of thousands of shorebirds that stop to feed and rest during their 7,000 mile journey from South America to their nesting grounds in the Arctic. One of the four most important estuaries in North America for migrating shorebirds, Grays Harbor as a whole has been named a Western Hemisphere Shorebird Reserve Network Site. Bowerman Basin and five other sites within the estuary have been designated as Washington State Important Bird Areas." *From Bird Web* 

Although imidacloprid has not been shown to kill birds directly, its use has been not only been associated with decline in insects, aquatic and non-aquatic, but birds have declined where it has been used as well, as documented in several studies now. Young fish of many species including our native salmonids spend much of their early life cycle in estuaries where they adapt to living in a salt-water environment before out-migration. The following is a quote from a recent study published in the scientific journal *Environmental Science and Pollution Research International:* 

"Imidacloprid and fipronil were found to be toxic to many birds and most fish, respectively. All three insecticides exert sub-lethal effects, ranging from genotoxic and cytotoxic effects, and impaired immune function, to reduced growth and reproductive success, often at concentrations well below those associated with mortality. Use of imidacloprid and clothianidin as seed treatments on some crops poses risks to small birds, and ingestion of even a few treated seeds could cause mortality or reproductive impairment to sensitive bird species".

Instead of allowing this dangerous pesticide to be sprayed, I urge the Department of Ecology to work with growers to find creative alternatives to imidacloprid that will not threaten important ecosystems.

Thank you for your thoughtful consideration of these comments.

Sincerely,

Lorna Smith 141 Maple Drive Port Townsend, WA 98368 ecosmithspt@gmail.com