

## Chris Dietrich

I oppose the spraying of Willapa Bay and Grays Harbor with any quantity of imidacloprid. Although the "no action" alternative is acceptable, the only really effective and protective alternative is restoration of the bays' ecology. I hope that restoration will become part of the proposed plan for Willapa Bay and Grays Harbor.

SEIS and other studies identify "immediate adverse, unavoidable impacts to juvenile worms, crustaceans, and shellfish in the areas treated with imidacloprid and the nearby areas covered by incoming tides," and in some cases, monitoring is proposed as a way of reducing uncertainty. SEIS stance of spray and monitor creates science experiments in living bay ecosystems—experiments can create havoc, experiments can fail.

Certainly, no use of imidacloprid can be supported without demonstrating efficacy-- crucially, the SEIS identifies uncertainties about the efficacy of imidacloprid for controlling burrowing shrimp, which include questions of the extent and duration of the effect of imidacloprid, the lack of a treatment threshold, lack of data regarding resistance, lack of field research regarding clams, and efficacy of treatment in low temperature.

And the SEIS finds a number of knowledge gaps concerning the direct effects of spraying imidacloprid, including accumulation in sediments, long-term toxic impacts, impacts on zooplankton, sub-lethal effects, impacts on vegetation, impacts of degradation products, and the area that would be affected.

The SEIS does not adequately address synergistic effects, including impacts of imidacloprid combined with other chemicals ("inert" ingredients, other chemicals used in the bays, and other pollutants) or other stressors.

Among the organisms known to be at high risk is the commercially important Dungeness crab, which has been shown to be susceptible to the effects of imidacloprid, and whose populations experience large natural fluctuations, putting them at risk of extinction.

Given the systemic mode of action of imidacloprid in crop plants, I strongly feel that the failure to account for impacts on non-target animals consuming vegetation in treated areas is inexcusable.

Of the three options proposed, the No Action alternative is the best and I ask that you stand for protecting the Bays by choosing No Action. However, what is truly necessary to address these problems is an option that was not considered in the SEIS—a plan to restore the habitat by removing stressors from streams flowing into the bays.