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WA State Department
of Ecology (SWRO)

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Public Record Comment on the use of imidacloprid to control burrowing shrimp in Willapa Bay.

To Derek Rockett,

I've been following the proposal to use of imidacloprid in order to control burrowing shrimp in Willapa Bay.

Willapa Bay remains one of the cleanest estuaries in the lower 48 states. As I understand this issue, imidacloprid has not been tested for long term aquatic effects. In other words, there are no long term studies to support its use in an aquatic environment. Therefore, using imidacloprid in this effort to control burrowing shrimp amounts to an experiment that will result in unknown as well as possibly seriously deleterious effects on the entire aquatic and wetlands systems of this still relatively clean watershed ecosystem.

This is precisely what the Washington Department of Ecology is supposed to protect us from.

One of the most serious issues facing our food production industries at this point in our relentless effort to speed up a human-caused 6th Mass extinction event, is the potential for bees to die out, thus end the annual cycle of natural pollination that results in food on our tables. Recent research indicates that widespread agricultural use of imidacloprid may be contributing to honey bee colony collapse and disorder, and the decline of honey bee colonies in Europe and North America that has been observed since 2006.(1., 2., 3.). While imidacloprid is slightly toxic to fish -- with variation by species -- it has proven to be highly toxic to honeybees and other beneficial insects. Other beneficial animals and insects may also be affected (4.)

The breakdown of imidacloprid with other chemicals in the aquatic environment has not been studied in depth, nor has its potential effect on our sensitive wetlands been brought to full understanding.

As a result of the above scientific evidence, or lack thereof, a more cautious and long term sustainability-oriented EU has seen fit to protect important web-of-life species from our human hunger for profits at the expense of the environment. I see no reason why our state's Department of Ecology should not do the same in Willapa Bay until we have a clear understanding of the risks involved with this experimental introduction of this pesticide into our ecosystem, especially given that the application rate allowed by the EPA would at best be minimally effective.

So why even embark on this experiment? We need a clear answer to such questions when the extent of environmental threats are not brought clearly into the light.

As I understand it, oyster cultivators have alternatives to the use of pesticides, such as stake culture. These may not be as profitable, but they have a much lower impact and don't require the introduction of still

questionable toxins in the bay.

In the long run, while we are facing ever more dead zones in our oceans off the mouths of rivers from these practices, we should consider that allowing the bay to cleanse itself of toxins may bring back species that consume the shrimp and solve the problem.

Thank you for considering my comments.

Sincerely,



Warren A. Huntsinger

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1. Carrington, Damian (March 29, 2012). "Pesticides linked to honeybee decline". The Guardian. Retrieved April 7, 2012.
2. Whitehorn, P. R.; O'Connor, S.; Wackers, F. L.; Goulson, D. (2012). "Neonicotinoid Pesticide Reduces Bumble Bee Colony Growth and Queen Production". *Science* 336 (6079): 351–2. doi:10.1126/science.1215025. ISSN 0036-8075. PMID 22461500.
3. Lu, Chensheng; Warchol, K. M.; Callahan, R. A. (2012). "In situ replication of honey bee colony collapse disorder (13 March 2012 corrected proof)" (PDF). *Bulletin of Insectology* 65 (1). ISSN 1721-8861. Retrieved 7 April 2012.
4. National Pesticide Information Center Fact Sheet, <http://npic.orst.edu/factsheets/imidagen.html>.