From:	Kim Patten
To:	Rockett, Derek (ECY)
Subject:	comments on scoping for eis
Date:	Wednesday, February 05, 2014 9:20:09 PM
Attachments:	patten comments on scoping for eis on imid .pdf

Derek,
please find attached my written comments.
You did a good job on sat.
Thanks

--

Kim Patten
WSU Long Beach Research and Extension Unit - Extension Professor
WSU Pacific County Extension Director
360-642-2031
pattenk@wsu.edu
WSU Extension programs and employment are available to all without discrimination. Evidence of non-compliance may be reported through your local Extension office or to the WSU Center for Human Right

Date: February 4, 2014

Derek Rocket
Washington State Department of Ecology
Water Quality Program
Southwest Regional Office
PO Box 47775
Olympia, WA 98504

Attn: Derek Rocket

Comments on the scope of the EIS for imidacloprid.

The scope of the EIS should be limited to relevant expected impacts of its use for control of burrowing shrimp. What is relevant are the direct and indirect target and nontarget impacts of imidacloprid, its fate and persistence, and its economic and ecological impacts (negative and positive).

The scope of the EIS should limit how it addresses impacts that are relevant to its terrestrial use, in particular, its effects on pollinators. While imidacloprid does affect pollinators, it should be stressed that are no bees using the tideflats of Willapa Bay. Therefore a full scoping in this regard in not required. Instead, a review of the potential of off-site movement of the chemical (aerial drift) onto sites with pollinators should be adequate to assure minimal risk. No doubt there will be concerned citizens suggesting that the risk to pollinators should be a reason to deny this use pattern. This use pattern that poses no threat to pollinators because there are no bees associated with the used pattern. EPA's registration of imidacloprid included an analysis of this factor and found it not to be an issue.

The scope of the EIS should address the fate and persistence of imidacloprid, but needs to use data that are based on tidal use, not terrestrial use. Again there will probably concerned citizens writing in to stress how persistent imidacloprid is in terrestrial sediment. While this is true for some uses on land, it is not true for estuarine uses. What is important is what will happen with this use pattern, not some other use pattern. The EIS only needs to address the fate and persistence of its use in Willapa Bay and Grays Harbor.

The Scope of the EIS should consider the relative toxicity of imidacloprid compared to other control options. Carbaryl, for example, is several orders of magnitude more toxic to the relevant organisms than imidacloprid. The scope should be based on the data developed over the past decade on infauna and megafauna impacts in Willapa Bay, not speculation.

The Scope of the EIS needs to consider the societal and community value of the shellfish industry to Willapa Bay and Grays Harbor. There will no doubt be suggestions that the industry should grow oysters on lines or floats. There will be suggestions that we should follow the Oregon oyster industry model of not using any control on shrimp at all. These are valid suggestions and the EIS should consider what the consequences of those suggestions would be. What would be the size of the resulting industry in 10 to 20 years without any effective large-scale ability to control shrimp? With no shrimp control how many jobs will be lost, how many

farms will go out of business, how much money will be lost from Pacific and Grays Harbor, how will this affect taxes, schools and communities if the SW Washington shellfish industry is dramatically scaled down in size? The EIS should also consider the overall impact of this industry's decline to sustainability of the local economy. How many other place-based, locally-owned, natural resources-based industries are there in SW coastal Washington? The timber industry, although important, is mostly multi-national or insurance-owned. That leaves shellfish farming, cranberry farming and small locally owned tree farms. Of these three, only the shellfish industry generates many hundreds of local jobs and tens of millions of dollars in both direct and intangible income.

In addition to this basic analysis, the alternative analysis of no control should consider the worst case scenario for burrowing shrimp recruitment levels and ocean acidification. With these two variables added as industry stressors, the inability to control shrimp could seal the industry's fate.

The EIS alternative analysis needs to be based on what is relevant and practical on the large scale. This is not a backyard industry. Suggestions for mechanical, biological or cultural control, for example, that might be suitable for small research trials do not address what is practical over 10,000 acres of diverse ground. Scientists from WSU, UW, PSI, OSU and USDA spent this past decade researching suitable alternatives to carbaryl. These were multi-million dollar research efforts that looked at a full array of chemical, biological, mechanical and cultural alternatives. There was no second place or other best practice that could be used if imidacloprid does not obtain an NPDES. Nevertheless, there will still be concerned citizens that suggest additional research should be done to find a better alternative than imidacloprid. While such an effort could be made, it is extremely unlikely any such effort would be successful. This past decade of research failed to find anything remotely viable. All reasonable avenues of chemical, mechanical and biological control have been assessed with nothing to show for it. The EIS should point out that additional research to find an alternative is not a viable option.

In summary, comments from concerned citizens on the scoping of this EIS will no doubt be based on extraordinary claims of harm that will occur with the use of imidacloprid. Not only do these extraordinary claims need to be relevant to the use pattern, but they should be backed up by science, not alarmism.

Kim Patten
Extension Professor
Washington State University Long Beach REU
2907 Pioneer Road
Long Beach WA 98631
Phone: 360-642-2031
Email: pattenk@wsu.edu