Focus on Water Quality

ECOLOGY
State of Washington

Water Quality Program

Revised April 2015

Control of burrowing shrimp on shellfish beds in Willapa Bay and Grays Harbor

At the request of shellfish growers, the Washington Department of Ecology has issued a permit authorizing the application of a pesticide to control a growing population of burrowing shrimp on oyster and clam beds in portions of Willapa Bay and Grays Harbor. This permit replaces the pesticide carbaryl, used widely since the 1960s, with imidacloprid, a common household pesticide.

Burrowing shrimp refers to ghost and mud shrimp. These native shrimp live in the sediment and burrow into shellfish beds, making them too soft for shellfish cultivation. While carbaryl has been used since the 1960s, shellfish growers have been studying and experimenting with other pest control methods and chemicals. After receiving public comment and reviewing alternatives, Ecology has selected imidacloprid as a preferred, less-toxic alternative. This alternative will reduce the permitted amount of pesticide applied in the two growing areas for the control of burrowing shrimp by about 85%.

Permit would include safeguards

The permit requires the applicants, the Willapa/Grays Harbor Oyster Growers Association, to submit an annual operations plan for Ecology's review and approval before use of the new pesticide. Additionally, the growers are required to conduct intensive water and sediment monitoring, according to Ecology approved methods, throughout the five year term of the permit. The permit allows growers to use the pesticide only on commercial oyster and clam beds where burrowing shrimp are causing economic harm. Treatment areas will be posted with signs and spraying will occur during daylight low tides and only in low-wind conditions.

WHY IT MATTERS

Burrowing shrimp harm oyster production. They destabilize tidelands, causing oysters to sink into mud and sand and suffocate. Carbaryl was permitted by Ecology for the control of burrowing shrimp on commercial shellfish beds in Willapa Bay and Grays Harbor since 2002. Ecology is now issuing a permit for imidacloprid as an alternative.



Website:

http://www.ecy.wa.gov/prog rams/wq/pesticides/imidacl oprid/index.html

Contact information

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Special accommodations

To request ADA accommodation for disabilities, or printed materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

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Imidacloprid registered by EPA

In 2013, the Environmental Protection Agency registered imidacloprid for use on commercial shellfish beds in Willapa Bay and Grays Harbor for the control of burrowing shrimp. This registration was issued after the completion and review of a risk assessment.

Final Environmental Impact Statement released

As a part of the process to consider issuing a new permit, Ecology prepared an environmental impact statement (EIS) based on comments received during the scoping process. The draft EIS was presented at a public hearing and was available for public review and comment along with a draft permit. Ecology considered all comments prior to issuing a permit.

There were comments concerning possible effects from imadacloprid on honeybees from pesticide use on farms and residential areas, but bees are not found on shellfish beds. Additionally, the low-wind restrictions and lack of flowering plants in the mudflats should minimize any chance for incidental exposure.

To view the EIS, permit, response to comments, and more information please visit the http://www.ecy.wa.gov/programs/wq/pesticides/imidacloprid/index.html