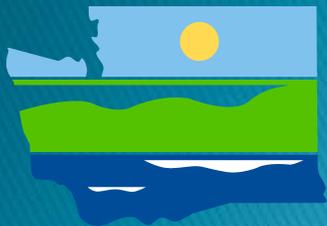


Proposal

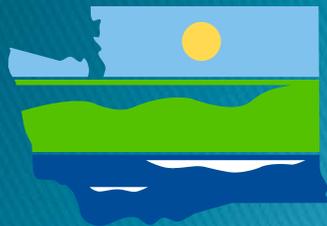
The Willapa/Grays Harbor Oyster Growers Association (The Association) has submitted an application to the Department of Ecology for a permit for imidacloprid to control burrowing shrimp on commercial shellfish beds in Willapa Bay and Grays Harbor.



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Purpose of Workshop

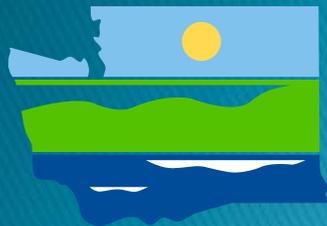
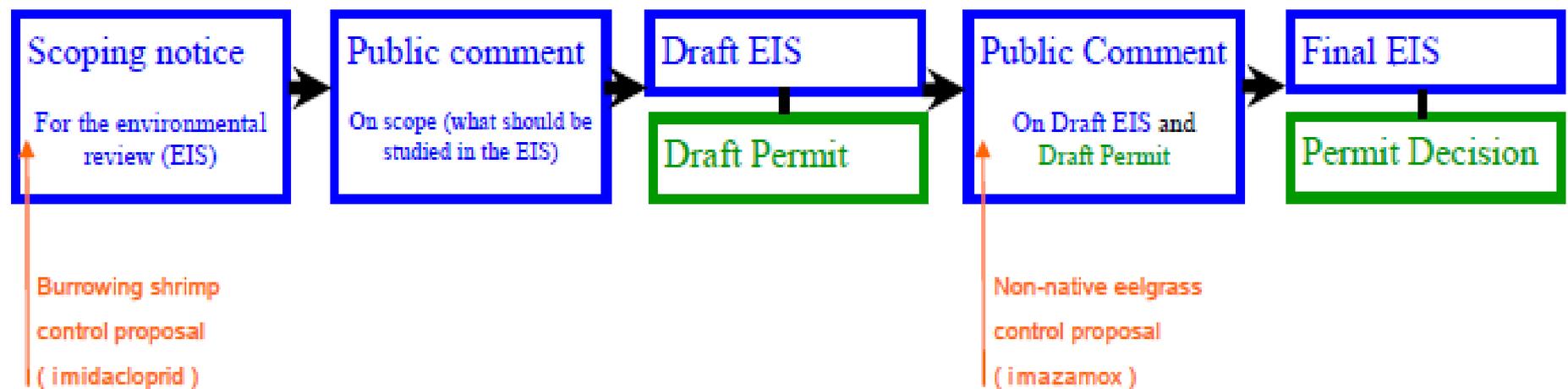
- Before the permit can be considered, an environmental review must occur.
- The review includes an Environmental Impact Statement (EIS).
- The purpose of today's meeting is to give you an opportunity to tell us what you want to see examined in the EIS.



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Timeline

Timeline for burrowing shrimp & non-native eelgrass control proposals



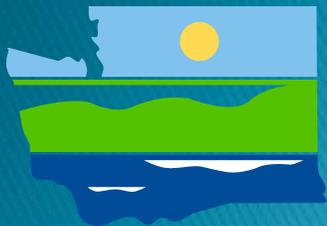
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History

- ▶ **Oysters have been farmed in Willapa Bay since the 1800's.**
- ▶ **Out of the 45,000 acres of tidelands in Willapa Bay, approximately 9,000 acres (20%) have been farmed for oysters or clams.**
- ▶ **Out of the 34,460 acres of tidelands in Grays Harbor, approximately 900 acres (3%) have been farmed for oysters or clams.**
- ▶ **Since the 1940s, Willapa Bay and Grays Harbor have experienced expansive growth in populations of burrowing shrimp.**

Impacts from Shrimp

- **Burrowing shrimp destabilize the sediment on shellfish beds.**
- **The beds become too soft to support the oysters, which sink into the sediment and suffocate.**



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Ghost Shrimp



Mud Shrimp

Oyster culture

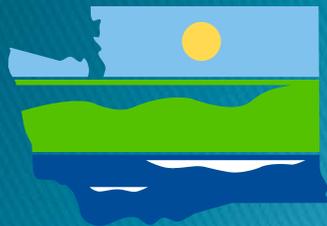


Shrimp habitat



Carbaryl

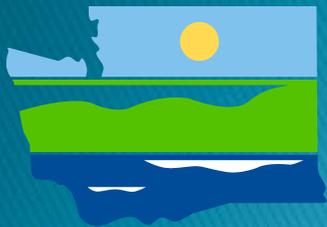
- The pesticide carbaryl has been used in Willapa Bay and Grays Harbor to control burrowing shrimp since the 1960s.
- On March 12, 2001, the U.S. Court of Appeals for the Ninth Circuit in *Headwaters Inc. v Talent Irrigation District* ruled that water quality modifications for herbicide applications in waters of the United States (irrigation waters) would require a NPDES permit.
- The Department of Ecology issued an NPDES permit for carbaryl in 2002, and again in 2006.



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Imidacloprid

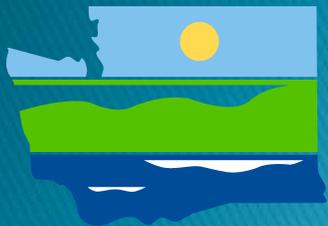
- As of January 15, 2014, carbaryl is no longer registered for burrowing shrimp control in Willapa Bay and Grays Harbor.
- The Association has been pursuing the use of imidacloprid as a replacement for carbaryl to control burrowing shrimp.
- On July 03, 2013, Ecology received an application for an NPDES permit for imidacloprid to control burrowing shrimp.



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What is Imidacloprid?

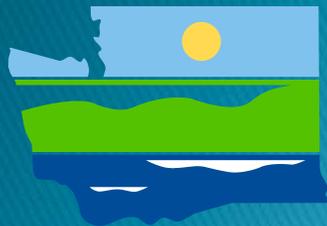
- Imidacloprid is an insecticide that was first used in the United States in 1994.
- Common uses:
 - pest control in agriculture
 - pest control for gardens
 - treatment of domestic pets to control fleas
 - foundation application to prevent termite damage



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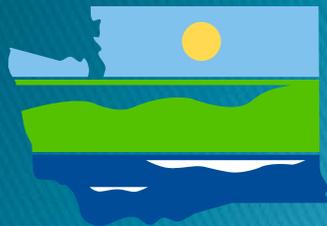
Application Methods

- The proposal is for the application of a granular and liquid form of imidacloprid.
- The liquid form is typically applied by helicopter during extreme low tides on beds with no water cover.
- The granular form is typically applied using ground based vehicles equipped with spinners or drop spreaders, or conventional granular pesticide applicators (“belly grinders”). The granular form could be applied on beds with water cover.



Registration

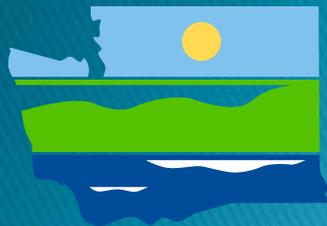
In 2013 the Environmental Protection Agency approved (registered) imidacloprid to control burrowing shrimp on commercial shellfish beds only in Willapa Bay and Grays Harbor.



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Scoping

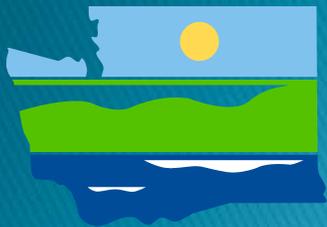
- **Based on EPA approval, the Association has applied for a permit from the Department of Ecology.**
- **Currently we are in the scoping phase of the EIS.**



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Scoping

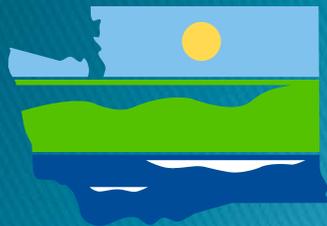
Please let us know what environmental effects you want to see examined in the EIS.



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Submitting Comments

Ecology prefers to have comments submitted by email, but accepts all comments. Submit comments on the EIS scoping to Derek Rockett of Ecology's Southwest Regional Office at:



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Submitting Comments

Derek Rockett

Email: ShrimpControlPermit@ecy.wa.gov

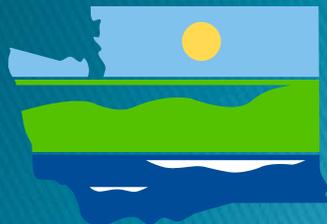
Mail: *Washington State Department of Ecology*

Water Quality Program

Southwest Regional Office

PO Box 47775

Olympia, WA 98504-7775

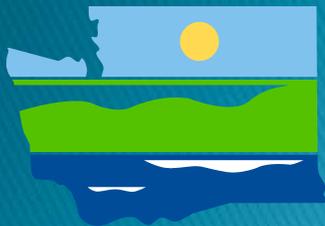


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Web Site

You can visit Ecology's web site in order to obtain more information and/or updates regarding this proposal at:

<http://www.ecy.wa.gov/programs/wq/pesticides/imidacloprid/index.html>



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Contact Information

Derek Rockett

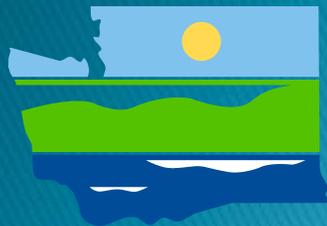
Washington State Department of Ecology

Southwest Region

Water Quality Program

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360-407-6697



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