ROBERT WENMAN

Robert Wenman, Resident Gig Harbor, WA 98329

I am concerned that the Department of Ecology is catering to the shellfish industry for purposes that have nothing to do with the wishes of citizens of Washington State, the ecological health of Willapa Bay or human health. While others are banning the use of pesticides, such as Imidacloprid, our Department of Ecology is working closely with the aquaculture industry to expand the use of this dangerous chemical in our precious waters.

The number of agencies and retailers who are implementing a ban on the use of the pesticide imidacloprid continues to grow. Most recently, most retailers have agreed to phase out neonicotinoid pesticides, of which imidacloprid is one. The City of Portland issued an immediate ban on its use. The Oregon Legislature has bills before it which would eliminate its use. The US Fish and Wildlife agency has banned their use on wildlife refuges across the United States. The European Commission, in 2013, banned the use of imidacloprid. The NY Times reported in a European Academies Science Advisory Council report stated imidacloprid "has severe effects on a range of organisms that provide ecosystem services like pollination and natural pest control, as well as on biodiversity. Additionally, in 2015 the general public across the state of Washington together with a large coalition of restaurant owners opposed the previous permit based on numerous concerns including ecological impact and impact upon human health . Seattle Times, April, 2015

The following chemicals have been used upon Willapa Bay and Grays Harbor, altering the ecology, and endangering the health of local species and humans that consume fish, shellfish, and waterfowl that utilize these waters:

- Carbaryl—Eradicates native ghost shrimp and could harm other benthic species. Known to adversely effect salmon.
- Imazapyr—Eradicates spartina.
- Glysophate—Eradicates spartina. A recent study* on the effects of glysophate-based herbicides states: "Pesticides may be involved in oyster summer mortality events, not necessarily as a single causative agent but as an additional stressor."
- Imazamox—Eradicates Zostera japonica eelgrass, but is known to also eliminate nearby native eelgrass. Adverse effects on other aquatic vegetation are not documented at this time.
- Imidacloprid—Eradicates native ghost shrimp and could harm other benthic species. Linked to bee colony collapse disorder and subject of bans in other countries and states.

Among the concerns is "...the significant risk Imidacloprid presents to aquatic invertebrates..." which, in turn, "...can also cause a cascading trophic effect, harming fish, birds, and other organisms that rely on them for sustenance." Of special concern noted is the fact that Willapa Bay and Grays Harbor "...are among the most important migratory bird stopover sites on the west coast."

I have the following basic concerns with the SEIS:

- 1. The SEIS is inadequate, in that it ignores best available science; such as bay circulation patterns and sediment/plant capture of systemic poisons designed to kill invertebrates.
- 2. The SEIS does not consider the impact of the use of Imadacloprid on key species already in trouble. These include waterfowl, salmon, and forage fish.
- 3. The SEIS does not consider the cumulative impacts of this action and future permits that may further impact this water body or become a determinate on expanding this program to other waters.

Request:

- 1.I request that Ecology declare the SEIS to be inadequate to support drafting an NPDES permit for Imidacloprid for burrowing shrimp removal in Willapa Bay and Grays Harbor.
- 2.I request that application of Imazamox to kill eelgrass in Willapa Bay be suspended. The Buffer Validation Test is unreliable with respect to how much chemical was actually applied, and suspect when the plan was abandoned to have final review of damage done by an independent WDFW contractor. The latter was removed and replaced with the same Extension Agent who applied the chemical and was at the time in violation of State Ethics codes. Damage was done in drainages outside the protective buffer and evaluated as acceptable by the same conflicted person who supervised the application improperly.
- 3.A public task force should be set up to advise WDFW on a plan to recover the ecological state of Willapa Bay and review the ecological state of Grays Harbor. Recommendations of this task force would be incorporated in any future plans to remove or restore habitat in Willapa Bay.
- 4.It is recommended that WDFW immediately restore plans, this year, to survey waterfowl stopping over in Willapa Bay, especially during historical peak periods. The cause of historic declines locally must be determined and corrected. This for example would include November peaks for ducks and geese and spring staging periods for Pacific Brant. Further, WDFW should commit to monitoring herring spawning mass annually in Willapa Bay going forward, and generating a recovery plan for these forage fish. The Willapa Salmon Management Policy should be supplemented with a more robust recovery plan for these fish under current conditions, and expanded to include recovery of both species of sturgeon historically present in large numbers.

Sincerely,

Robert Wenman