

**From:** [Brian Sheldon](#)  
**To:** [Rockett, Derek \(ECY\)](#)  
**Subject:** Public Comment on imidacloprid NPDES  
**Date:** Sunday, December 07, 2014 2:46:39 PM  
**Attachments:** [12-7-14 NOC Final Comments.pdf](#)

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Hello Derek,

Attached are my public comments on the imidacloprid NPDES permit. Please make these part of the formal record. I'd appreciate if you'd let me know that this came through ok.

Thanks,  
Brian

December 7, 2014

Derek Rocket  
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Dear Mr. Rocket,

I appreciate the opportunity to provide comment in regard to the proposed issuance of an NPDES permit for the use of imidacloprid to control burrowing shrimp in Willapa Bay and Grays Harbor. I support the issuance of this permit and ask that it be issued as soon as possible so that we do not lose more shellfish beds to this destructive species. These farm lands are where the first agricultural products in Washington, shellfish, were grown and exported in 1849. Shellfish farmers have been on the front lines of sustaining these lands ever since, and like any farmer must have effective pest management tools continuously available to protect and preserve these lands.

My family has been farming shellfish in Willapa Bay for four generations. For three of those four generations it's been necessary to control burrowing shrimp on our farm in order to sustain our shellfish beds. When my grandfather and other growers first began to notice their crops disappearing in the early 1950s, they had no idea why this was happening. Once they identified the problem, they began working to develop a solution. They started with attempts to implement mechanical control methods, but these failed. These methods had large impacts on bay ecology simply due to the physical disturbance. After several years of experimentation, carbaryl was identified as the best method to provide control with no demonstrated long term impact. In fact carbaryl was permitted in 1963 and continued to provide safe and effective control up through 2013. Throughout that 50 year pest management history there was never any documented long term negative impact. This fact is illustrated clearly when one considers that Willapa Bay is one of the healthiest estuaries remaining in the United States. Based on the large data set on burrowing shrimp control, which includes more than 150 objective studies, it isn't logical to refute what we see with our own eyes in regard to the overall benefit of protecting shellfish beds for both their food producing value, and ecological benefit.

It is unquestionable that Willapa would be in much worse condition if there hadn't been an effective shrimp control program in place. Science has demonstrated that as shrimp expand their populations to new areas, most species diversification is lost. This should be of great concern to DOE given that maintaining species diversity is an overall focus of DOE. Highly infested areas are devoid of most infauna and surface dwelling species for all practical purposes. In contrast, research has documented that shellfish beds are one of the most valuable and diverse habitats, providing three dimensional habitat for thousands of species. Shellfish beds provide habitat for an incredible array of organisms, fish, crab, plants, birds, etc. Many of the species that benefit are species that support other commercial and recreational stakeholder activities. Shellfish beds have been demonstrated to provide habitat value equal to or greater than most other bay habitat. Moreover, Ecology identifies commercial shellfish beds as critical saltwater habitat, to be

protected similar to other critical saltwater habitats, including kelp and eelgrass beds and forage fish spawning areas. It follows that by protecting shellfish beds from degradation caused by burrowing shrimp that shellfish growers are protecting this habitat for many other species. This should be considered a tangible ecological service and encouraged.

Shellfish growers have been supporting an IPM program with emphasis on burrowing shrimp control for many years. In fact, work was initiated to look at imidacloprid as a possible alternative to carbaryl beginning in 1996. Many other control tools have been investigated, but to date none has shown an ability to provide control, let alone do so while leaving as light an environmental footprint as carbaryl or imidacloprid. Besides carbaryl, imidacloprid appears to be the best hope we have to implement a no-touch and benign control tool. However, it is such a low toxicity that it will take several years to develop application methods and tools that result in an acceptable farming efficacy level. I believe we will be able to accomplish this, but must be allowed to dedicate resources toward this end. For this reason I ask that monitoring requirements tied to the permit be as minimal as possible and be aligned with specific protocol that is relevant to Willapa Bay and that is aligned with the intended use pattern. I believe it is reasonable to include some monitoring requirements, but these need to be limited to only those that produce data absolutely necessary to demonstrate compliance, and recognize the actual risk of utilizing this greatly reduced toxicity tool.

Because shellfish growers are protecting some of the best known and diverse habitat while implementing a shrimp control program, they are delivering a tangible public service. Protecting and restoring marine habitat is an incredibly valuable service, and shellfish growers should be credited for this service. They have invested an incredible amount of resource to demonstrate the safety of using imidacloprid during the last eighteen years of research, and should not be further burdened with expansive monitoring and permit management costs. A real world question is what the impacts would be if the shellfish industry was eliminated because it could not farm in shrimp infested ground? Beyond the lost economic contributions, community involvement, cultural and historical benefits, etc., most of the ecological services provided by shellfish beds would be eliminated, and tens of thousands of acres of the best quality habitat is overrun as burrowing shrimp expand their normal population areas. The value of this habitat service must be considered as a tangible contribution the growers are providing to the public.

The shellfish industry in Willapa Bay is the single largest private employer in Pacific County. It's been estimated that without an effective tool in place to control burrowing shrimp between 60 and 80% of shellfish production would disappear. This is exactly what we saw happen after shellfish farmers in Oregon lost their ability to control shrimp in the 1980s. Up until that time growers there were able to control a limited number of acres with carbaryl. Without a control tool their oyster production reduced by approximately 80%. The decline in employment would be in line with this reduction. A 2010 study completed by Northern Economics found that the shellfish industry in Willapa bay produced \$90 million in economic activity, and supported 1,580 direct and indirect jobs with \$45 million in wages being generated. These figures for the Grays Harbor shellfish industry are \$12 million in economic activity, 210 jobs, and \$6 million in wages. Pacific and Grays Harbor Counties rely on shellfish farming to provide these living wage employment opportunities. If we cannot control shrimp, most of this economic benefit will be eliminated. One must also consider that with this large reduction it will become infeasible for

many families to continue farming shellfish simply because the economics will not allow them to continue farming such a small amount of shellfish.

NOAA's stated goal under the National Shellfish Initiative is "to increase shellfish aquaculture for commercial and restoration purposes, thereby stimulating coastal economies and improving ecosystem health." The National Shellfish Initiative recognizes that shellfish aquaculture provides a "broad suite of benefits" by improving water quality, conserving habitat, stabilizing coastlines, restoring depleted species, and creating jobs. The State of Washington shares these goals. The State adopted the Washington Shellfish Initiative in 2011, recognizing that "shellfish are critical to the health of Washington's marine waters and the state's economy." One of the goals of the Washington Shellfish Initiative is to expand harvestable shellfish acres in the state, both to support local economies and "help filter and improve the quality of our marine waters thereby being part of the solution to restore and preserve the health of endangered waters". In 2012, President Obama and NOAA followed up the National Shellfish Initiative with the release of a National Ocean Policy. In 2013, the White House released an Implementation Plan for the National Ocean Policy. Noting that the United States faces an \$11.2 billion seafood trade deficit and imports 91% of its seafood, the Implementation Plan called for the expansion of domestic aquaculture. This recognition of shellfish aquaculture's multi-faceted ecological and economic value by the White House, NOAA, and Department of Commerce underscores the industry's desire to ensure that shellfish beds are sustained in a fashion that allows shellfish to be cultivated. It has been demonstrated that burrowing shrimp act to destroy shellfish beds, so it follows that by issuing this permit in such a way that allows shellfish beds to be protected and preserved is aligned with national and state policy.

As a part of this permitting there is a proposal to restrict the south area of Willapa Bay from coverage under the permitting. I oppose this and ask that the entire south bay be covered by this permit, as it has for the past 50 years. This area comprises over one third of our farm land, most of which was acquired under Bush and Callow laws many years ago. Our overall farm relies on this area for its seed cultivation, and direct harvest crops. We have a documented history of controlling shrimp on our beds in the south bay, and know that without control we will lose this ground over time. This will devastate our farm production and income on a permanent basis. The economic losses will occur over generations, and cannot be assessed on an annual basis. The trickle-down effect on our farm will be to lose a large portion of our oyster harvest beds because we will not have the seed from the south bay for planting. For every acre of seed ground we lose in the south bay, we will lose the ability to plant about 2.5 acres of our farm in the north Willapa. This means our production will be decimated and we will be forced to eliminate a number of employees proportionate to these lost acres. In addition, we have many acres of cultivated clam beds in the south bay area and these will also be lost as shrimp continue to recruit uncontrolled into the area. This will reduce our clam production by about one third, and this will translate into more lost jobs and income. I'm unclear on why there is any proposal to limit where shrimp can be treated in the overall bay. I have seen no relevant data or regulation to support this proposal and request the entire bay be left in a fully permitted status. There is simply no Best Available Science that indicates there is a reason to prohibit treatment in south Willapa Bay. Ours is but one of many farms that rely on controlling shrimp on their farm lands in the south Willapa. All of these farms will realize similar economic damages if they can't

protect their farms, and these economic damages need to be considered as part of this permitting action.

Shellfish growers and their families are an important part of coastal communities and participate at all levels of service in these communities. These long term resident families participate on school boards, county commissions, volunteer fire departments, etc. Our long term efforts to protect water quality are unsurpassed by any other group, and it's difficult to identify another group more effective in preserving water quality through participation in growth management that keeps our shorelines and waters clean. If farms are lost this service will be mostly lost as grower families are forced to leave the area to pursue other economic opportunities. This will leave no organized group with anywhere near the dedication and tenacity of the shellfish industry in regard to assuring our clean water is preserved. It's a simple matter to review history to see the impact shellfish growers have had in regard to water quality preservation, and if we are not here there is no group that can or will take our place on this front. We have often times worked hand in hand with WDOE to assure water quality is protected through balanced and sensible long term growth management. Since long before there was a WDOE, shellfish growers have been on the front lines of protecting water quality.

Section S4.d implies that there must be a Sediment Sampling and Analysis Plan submitted by March 1<sup>st</sup> annually. It needs to be clarified that this plan is part of the normal Annual Operations Plan that will be submitted to your office. In addition, section S4.e indicates that a Sediment Data report along with all data is to be submitted also. Again, it needs to be clarified that this will be a part of the Annual Report submitted to your office. I request this so as to assure reporting is not expanded unnecessarily. As written it could be interpreted that plans and reports are also due to someone in DOE's sediments division, but I don't believe that is the intent. Assuring the point of contact at DOE is kept clear is the appropriate way to assure communication and reporting chains are kept clear so there is little risk of missing a deadline. Information will be delivered, but it needs to be sensible, and aligned with any other agricultural reporting in regard to IPM activities.

I'll close by noting that there is no motive beyond protecting farm lands to control burrowing shrimp. As I've stated above there are tremendous values to the public resource, but these are not tied to our ability to produce a crop on our land. Pest management is an incredibly expensive process that no grower would pursue if it weren't absolutely necessary. I mention this because in reality shellfish growers are actually motivated not to implement expensive pest control actions. The result of this is that while there may be acres permitted for treatment, control will be limited simply from an economic perspective to only those acres necessary. This is a form of self-regulation that goes beyond the specific permit allowances in assuring the minimal amount of acres are controlled each year.

Thank you for the opportunity to provide comment on this important issue. I again encourage you to expedite issuance of this permit, and to not overburden shellfish growers with any unnecessary costs around permit maintenance.

Sincerely,  
Brian Sheldon *BRS*