January 12, 2025

To: Shawn Ultican WA State Dept. of Ecology PO Box 47696 Olympia, WA 98504-7696

From: Brian & Marilyn Sheldon PO Box 1039 Ocean Park, WA 98640

Re: Zostera japonica management on Commercial Clam Beds in Willapa Bay General Permit

Dear Shawn,

Thank you for the opportunity to provide input to the renewal process for the Zostera Japonica Management on Commercial Clam Beds in Willapa Bay General Permit. This permit is a critical component in the control of this highly destructive invasive species. After years of research beginning in the 1998 timeframe, the state Weed Board agreed with the destructive nature of this invasive and added it to the WSDA list as a Class-C noxious weed in 2012 across the entire state.

At this time the permit limits control to only commercial clam beds in Willapa Bay, which is unfortunate given that this invasive eco engineer has caused immeasurable damage to all areas it has infected throughout the State's marine areas. It has altered the marine lands to provide habitat for other invasive species, such as European Green Crab. It has altered the highly aerobic characteristics of these lands to create anaerobic conditions more suitable for a worm species that predates our clam crops and other species. As we understand, there has been recent work in Willapa Bay to characterize the biota comparison between native eel grass and japonica. At a recent presentation by the principal scientist on this work, it was indicated that japonica harbors mostly invasive species. A report on this work is due out within the next few months. Japonica has altered conditions on all our shellfish beds to trap water at low tide. This trapped water damages our shellfish crops by exposing them to high water temperatures on hotter days, and this results in reduced yields, lower quality meats, increased mortality, etc. This large negative impact to our shellfish crops by this invasive weed is not limited to the boundaries of our commercial clam beds in Willapa Bay. It has been documented that this invasive acts to reduce clam crop densities by over 65%, while at the same time slowing crop growth. This same reduction is seen on all lands including public recreation areas as well as on private tidelands.

Beginning in 2014 we have been covered by an NPDES permit that has allowed voluntary control of this invasive species. The efforts of shellfish growers have resulted in a great service in the battle against invasive species with no charge to the public. We

have participated in the control program most of the years since the permit has been in place. We conduct annual on-site monitoring, and to date have seen no negative effect on native eel grass due to the control of japonica. In fact, studies conducted on native eel grass overall in Willapa have shown no fluctuation in abundance beyond normal season changes.

We offer the following more specific comments on the draft permit based on my longterm direct experience working with invasive weeds in the marine environment, knowledge of permit logistics, on site experience with controlling japonica, and many years of monitoring general impacts in areas around japonica treatment sites.

S3.E.2 (page 8) If multiple permittees are combining efforts to treat under a single DMP per section S3-E, then only one permit fee will be charged for that combined group.

We suggest adding the above language in order to match language we suggest in **G11** (page 25)

Section S4. Product Use

S4.A.1.a (page-9): "A properly licensed applicator has direct supervision responsibilities for the use of pesticides during treatment. An unlicensed person can apply under the direct supervision of a properly licensed individual. Direct supervision means the licensee is physically present on site **and be in voice and in visual contact with the certified applicator at all times during the application".**

Due to the logistics and conditions during an application it is not always possible to be in voice contact with the person being supervised. In addition, the person performing the application under the supervision of a licensed applicator is not considered a "certified" applicator. The person may be trained in the application and apparatus, but this does not necessarily equate to them being certified. We request the wording be amended as shown above.

S4.A.2. (page-9): "Only apply imazamox from May 15 through July 31 (dates inclusive)."

Amending the permit seasonal treatment window to be from May 15th through July 31st is a positive objective change. It will allow a better assessment to be made when determining what areas require treatment in a given year. We support this change.

S4.B. (page-10): Japonica is a class-C invasive noxious weed and establishing a buffer acts to prohibit the farmer from protecting their crops from this noxious weed. This has large economic impacts on the farm as has been documented thoroughly. For example, if a bed has a total bed line of 1000 feet, and a 10-meter (approx. 30') buffer is protected, then the grower will see crop damage on 30,000 sq ft of the crop land due to this buffer. This equates to a large economic impact to the grower, while at the same time the benign nature of imazamox has been objectively documented through multiple impact studies conducted over multiple years regarding any significant off-site negative

impacts. Results from those studies document well that any potential offsite impact is negligible and well below and threshold. The damage to clam crops caused by japonica has also been objectively documented. I request that setback buffers be eliminated from the permit so growers can protect all their crop lands against this noxious invasive plant.

S4D.3-7. (page-10): The treatment sites covered under this permit are predominantly in remote areas far away from any public access and on private property. Other similar permitting for treatments in this type environment limit posting to public access points, and I request that this permit follow this same pattern. I request posting be required at public access sites within ¼ mile of an actual treatment site, and no other posting be required.

S4D.3 (page-10): I do not support a requirement to post signs at all corners of the treatment site. Treatment sites are located in remote areas away from any public access. In addition, the environmental conditions at these sites are exposed to often harsh water and weather conditions, so holding a sign in place is unpredictable. In reviewing other marine applications of this nature, we see no requirement for the posting of signs on site, so there is no precedent for this requirement. If a treatment site is within ¹/₄ mile of a public access, then posting should be limited to that public access.

S4D.5 (page-10): We oppose requiring signs to be posted 24 hours before treatment. These sites are in remote areas, and access is limited due to tidal inundation twice daily. Making a special trip to the site forces the grower to utilize valuable low tides they need to conduct farm work in other areas. In addition, the conditions in these areas are harsh and not a simple matter of putting a stake in with a sign on it. Holding a sign in place under water with wave and current actions is extremely difficult and about impossible to assure they'll stay in place through multiple tides. We request this requirement be removed from permit language.

S5.A (page-14): During the initial permit implementation, the effects of treating japonica in regard to offsite impacts were documented as insignificant in multiple field studies, and far below the 10% impact threshold developed by WDFW. My on-site observations over many years of treating japonica are in line with those objective studies. There are no significant offsite impacts, and there has been no new objective data provided that disputes this fact. While I understand the need to be vigilant, and to provide some level of feedback annually, the proposed monitoring requirements proposed in the draft permit are over the top regarding level of complication and resource requirement. This proposed plan is far above anything we've seen in any other NPDES permit approved for the control of invasive weeds in the marine environment and will only act to discourage participation in the control of this noxious weed. We request that monitoring be limited to a requirement for the grower to return to the site within 30 to 60 days and provide a statement that reflects the condition of the immediate area of the treatment in regard to any reduction in native eel grass.

S6.A (page-15: I request that the following section be added: S6.A.4: *In the event that a group of permittees are cooperating under a single coordinator, then all records for those cooperating may be housed at the location designated by the coordinator.*

S7.B.1 (page-18): We request that this section be removed from the permit. Again, this is a new requirement above and beyond the standard application of an NPDES requirement for any other marine invasive plant. The permittee is already required to provide public notice to conduct treatments within the permitted treatment window. This additional notification requirement is complicated, and again only acts to discourage the voluntary control of this noxious weed. In addition, this program does not take place in a benign upland environment where most weed control activities take place. The activity takes place in a highly dynamic environment where the grower has no control of what conditions may be on the day of treatment. As someone with years of experience actually doing control in this environment, it is a regular theme that planned treatments are changed the day of based on weather, tide, and other conditions controlled by mother nature.

S7.B.4 (page-18): We request that this new section be removed from the permit. There is no other permit of this kind that has such a requirement around notifying all adjoining landowners. Based on actual treatment history, these treatments all take place in remote locations away from the public. A high percentage of neighbors would need to trespass a long distance to even access a treatment site. This new requirement places an unreasonable burden on growers who are providing a public service by controlling noxious weeds with no cost to the public. Imposing this unnecessary and costly burden on growers is without merit.

In regard to S7 public notice, an option we do support is to place an annual notice in a local publication, or other acceptable public site that provides notice of the control and treatment window. This notice could also direct interested parties to the DOE or other website where they could access permit documents. In this way the interested party would have access to the objective details surrounding the overall invasive weed issue.

G11 (page-25): Those participating in the control of japonica as an invasive noxious weed are performing a public service at substantial cost to themselves. For other similar weed control programs, many of these costs, including the NPDES annual permit fee, are paid by the entity providing oversight. In line with this standard approach, I request that if a group of permittees are participating cooperatively as a group that the group only be assessed a single permit fee to cover all participants. We request that appropriate language be inserted in this section to provide for this.

Again, thank you for the opportunity to provide comment on this critical invasive noxious weed management program.

Sincerely,

Brian & Marilyn Sheldon