

November 4, 2019

To: Washington State Department of Ecology

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

Hello and thank you for accepting these comments in regard to the re-issuance of the permit to control the invasive noxious weed *Zostera japonica* in Washington State. I am requesting that WDOE reissue the Imazamox/*japonica* permit in an expeditious fashion, and consider amendments as requested below.

The noxious invasive weed *Zostera japonica* has destroyed tens of thousands of acres of natural habitat along the west coast of the US. It's listed as an invasive noxious weed in all of Washington State's waters, as well as in California. It's displacing native Eel grass *Zostera Marina* in the lower tideland areas. I have witnessed this in all the areas I visit in Willapa Bay. Its geographic scope has increased from a narrow band in the upper inter tidal range (+4') in the 1990's, to the lowest reaches of the inter tidal area (-3.5'). While this has occurred, state and federal agencies have taken little if any action to protect natural critical areas from its infestation. In reality, most effort around this issue by engaged agency science and other staff has been to mislead and misrepresent the issue to the public so as to insinuate that this invasive species is a net positive in regard to overall ecological impact. The position of net positive impact is in clear conflict with the documented and real-world impacts this invasive are causing. The end result is that agencies have mismanaged this massive infestation, where if it had been addressed responsibly in the first place it could have been eradicated in the same fashion and location as invasive *Spartina* has been.

At long last some responsible public land managers are stepping up and accepting the facts around the negative impacts this invasive is causing to our estuaries. Displacement of native Eel grass, loss of recreational and commercial shellfish harvest areas, loss of shore and migratory bird forage habitat, loss of sturgeon forage habitat, massive tide flat areas eco-engineered into anaerobic muck supporting other invasive species, etc. While the ability to eradicate this invasive species has likely been lost due to mismanagement, a safe and effective control program has been developed thanks to responsible action of shellfish growers in Willapa Bay. Since 2014 when the permit was initially issued, shellfish growers have conducted a small control program to control this weed. This program has been limited by DOE to only commercial clam beds in Willapa Bay. My understanding is that it's unprecedented to limit permit coverage to only one infinitesimal area of the state for an aggressive invasive species listed on the State weed list as a noxious weed. Through great effort it has been demonstrated that the only effective control is the use of imazamox. By limiting permit coverage as DOE has chosen to do, it has essentially eliminated the ability of all other public and private land managers to implement any control action for

this aggressive noxious weed. I request that WDOE remove this restriction from the permit and treat japonica like any other listed weed in regard to coverage under the State's General Permit so other land managers can manage this invasive as necessary, and per state law related to listed noxious weed control requirements. For 6 years now the use of imazamox has been demonstrated to be a safe and effective management tool. It has negligible impacts on other species, and results in a good level of efficacy. It is very effective at returning areas to their more natural high aerobic function so other native species can utilize these areas for foraging, travel, etc. State and public lands left uncontrolled are acting to re-infest controlled areas causing great economic damages to agriculture, and there is no reason for this to be continuing given the proven safety of selectively controlling this aggressive invasive species.

The Washington State Department of Agriculture (WSDA) is charged with managing agricultural and other pests that are harming the State's agricultural interests. Japonica has destroyed thousands of acres of agricultural lands and continues to threaten other lands. WSDA manages the state General Permit for the control of aquatic weeds such as Spartina. It's extremely duplicative and unusual for WDOE to be managing an invasive agricultural pest species, and this duplicity and lack of expertise in agricultural pest management is resulting in millions in wasted tax dollars, confusion in the application of weed law, lost agricultural lands, etc. To remedy this, I request that the management of the Zostera japonica NPDES permit be turned over to WSDA to be managed like any of the other 100s of weed species already managed by WSDA under the state General Permit. WSDA has the expertise to manage this weed now that the program has been proven to be safe and effective using imidacloprid.

Thank You