

**From:** jerry johannes [<mailto:jfjohannes4@msn.com>]  
**Sent:** Tuesday, October 30, 2012 11:59 AM  
**To:** Hamel, Kathy (ECY)  
**Subject:** japonica comments

Dear Kathy--

Thank you for the opportunity to comment on the use of imazamox to destroy zosteria japonica in Willipa Bay.

It is not appropriate to develop a general permit at this time. Extensive study needs to be done before any use be approved.

The paramount reason is that imazamox is non selective and will kill marina just as readily as japonica.

Imazamox has surfactants in it that may be toxic to aquatic organisms and also may have synergistic effects when combined with pesticides and herbicides (from Preliminary Survey of Pyrethroid Pesticides and Surfactants in San Juan County Surface Waters {page 3} by Barsh, Halliday, Clifford & Mottet). Imazamox also has the potential to develop resistant weed ("superweeds") in a relatively short time frame.

There are many local, state and federal laws that protect zosteria. These laws and regulations on the books need to be followed. For example, eelgrass under the federal Manguson/Stevens Act is considered to be Essential Fish Habitat (EFH) and may not be destroyed. This prime habitat for endangered salmonoids is being deliberately eradicated.

In the study here <http://www.int-res.com/articles/meps/103/m103p119.pdf> Baldwin and Lovvorn document the *millions* (my italics) of use days that japonica provides our waterfowl in Boundary Bay. This usage is replicated many times over in our marine bays including Willipa Bay. Prime habitat will be destroyed that supports our bird and fish populations.

It is confirmed (by Dan Penttila) that herring use japonica as a spawning medium. Thus, herring spawn habitat would be destroyed.

Also, I just learned that brant use the fat of the herring spawn as food to power their way north in their springtime migration. Zosteria is a very important component of the diet of brant.

"No Action" is the preferred alternative that should be taken at this time. We need extensive peer reviewed scientific research on this issue before proceeding.

Regards,

Jerry Johannes

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**To:** [Hamel, Kathy \(ECY\)](#)  
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