COALITION
To Protect Puget Sound Habitat

# Supplemental Information and Documents on Zostera japonica Listing as a Class C Noxious Weed by Washington State Noxious Weed Control Board

**1. How The Shellfish Industry was able to have Zostera japonica listed as a Class C Noxious Weed, despite the known ecological benefits in Washington**

It is important to note that Zostera japonica was listed as a protected priority habitat by the Washington Department of Fish and Wildlife (WDFW) until 2010.

Taylor Shellfish, with the assistance of Representative Brian Blake, convinced Phil Anderson (Director of WDF&W) to sign the letter under his signature written by Bill Dewey to take Zostera japonica off the priority habitat list (per public records). This action was the first step of the plan that would allow the State Weed Board to list Zostera japonica as a noxious weed and would pave the way for the shellfish industry application for a NPDES permit to spray Imazamox for complete eradication in the entire State of Washington.

The eradication of Zostera japonica enables the shellfish industry to expand their clam and geoduck operations in Washington. It is also important to note that the "Pest Management Strategic Plan for Bivalves in Oregon and Washington" issued July 2010, lists both Zostera japonica and Zostera marina (native eelgrass) as "weeds".

**2. The following statement contained in the March 26, 2013 letter from the shellfish industry attorney's to the Pierce County Hearing Examiner regarding a geoduck application already misrepresents the facts about the Zostera japonica listing:**

"The first revision-clarifying that the buffer between farm activities shall only apply to native eelgrass—is necessary to insure consistency with state law. The Washington State Noxious Weed Control Board has classified non-native eelgrass (Zostera japonica) as a Class C noxious weed. WAC 16-750-015. Aquatic plants on the noxious weed list are considered "to be highly destructive, competitive, or difficult to control…" WAC 16-750-001. Were condition 26.C to apply to non-native eelgrass, it would require the Applicants to protect a noxious weed, which would be inconsistent with state law. Therefore, the condition must be revised to clarify that the protective buffer only applies to native eelgrass." Page 4

**3. State Weed Board Ignored Documented Beneficial Aspects, Purposes, Functions of Zostera japonica in Willapa Bay and Puget Sound existing ecosystems (summary list)**

Seagrass beds are important for:

- Grazers-Ducks
- All life history stages of Endangered Species Act (ESA) listed species: Chinook, chum, steelhead (some exceptions) and three species of rockfish use eelgrass as cover from predation, as migration corridor and to seek food
- Epiphyte grazers-feed on seagrass
  Waterfowl including ducks, Pacific Brant and geese
- Epiphytes-sea urchins, fish, etc.
- Detritus Feeders-Feed on decaying organic matter
- Habitat for invertebrate species that are food for commercially important fish species Shelter for starfish, sand dollars, etc.
- Substrate food for:
  Barnacles
  Isopods
  Amphipods
  Snails
  Anchovies
  Waterfowl-American Widgeon, Northern Pintail, and Pacific Brant
- Providing some of the same basic habitat functions as the native Zostera marina, which is in decline
- Binding sediments with extensive rhizomes and roots
- Baffling waves and currents, important with climate change
- Improving water quality by taking up nutrients (epiphytes do the same
- Oxygenating water
- Spawning medium for herring
- Serving as carbon sink, relevant to the shellfish industry's concerns regarding reducing effects of ocean acidification
- Deterring ghost shrimp from burrowing in areas colonized by Zostera japonica which could reduce the further use of chemicals industry now uses to control ghost shrimp
- Contributing to the billions of dollars of economic value of Washington's natural resources

**4. The State Noxious Weed Board erred by listing Zostera japonica as a Class C noxious weed:**

- Initially listed Zostera japonica in November 2011 as a Class C noxious weed (on commercially managed shellfish beds only) for 2012 violating a host of Federal and State laws. Even though the shellfish industry requested no limitations, the Board modified the requested shellfish

industry proposal in order to "hold back" Zostera japonica control to just "commercially managed shellfish beds only."

- Approved request by the Pacific County Weed Board on behalf of the shellfish industry, to allow noxious weed control of Zostera japonica “everywhere” on December 11, 2012.

    1. According to the Board’s October 5, 2012 press release, “The WSNWCB’s advisory committee has recommended that this data.”. Eliminating the initial limitation was contrary to the Board’s advisory committee recommendation and inconsistent with the "holdback for scientific deliberation statement” made by the Board in November 2011.

    2. No scientific deliberation was accepted or allowed prior to the December 2012 decision.

- Failed to adequately address economics of eelgrass eradication to make way for Manila clam expansion. Allowed un-substantiated testimony without evidence that Zostera japonica had damaged aquaculture by ruining production which is a final criterion for listing a noxious weed

- Failed to require records that documented shipping statistics in non-eelgrass beds vs production overall to substantiate claims

- Ignored scientific evidence--Approval of "control everywhere" proposal, modified by the weed board, overrides recommendation of board's own advisory committee, WDFW, Washington Department of Natural Resources (WDNR) and others with scientific concerns. Washington Waterfowl and The United States Fish and Wildlife Service sent in letters to Ecology listing their concerns about listing this species and the proposed spray permit.

- Lack of assessment of negative effects from eradication of Zostera japonica on native eelgrass, ESA listed species, waterfowl, salmonid habitat, aquatic marine life

- Ignored testimony from citizen with 30 years of sampling of hundreds of waterfowl gullets. These findings mirrored the findings of Baldwin and Lovvorn, Boundary Bay BC: Dependence of widgeon on Zostera japonica leaves, 50% of mallard and Pintail forage being Zostera japonica rhizomes, Pacific Brant preferred Zostera japonica over less nutritious Zostera marina.

  Gullet samples were provided in public to industry scientist (Patten), but this evidence was ignored in his findings of “no significant uptake of

Zostera japonica in Willapa Bay."

- Relied upon imprecise hearing testimony from shellfish industry growers that was not substantiated in scientific studies. For example: "there was no evidence of significant uptake of Zostera japonica by waterfowl in Willapa Bay" and "Zostera japonica is bad for the ecology of the mudflats." The Board allowed unfounded industry statements to override all scientific input to the contrary

- Ignored Concise Explanatory Statement from the first meeting that noted "more time for deliberation." One year later, after comments from 4 scientific bodies, the Class C listing was expanded without scientific consultation or deliberation

- Failed to require monitoring by impartial scientific persons

- Allowed conflict of interest when the Technical Advisory Group representative was also the staff person drafting the NPDES permit (Hamel)

- Allowed the 2012 decision to be made even though the Environmental Risk Assessment report was not made available until 2-3 days after the 2012 Board meeting where Zostera japonica was listed as a weed in all Washington waters. This document confirmed Zostera japonica an important food source for waterfowl

- Initiated a Class C Listing with no acreage eradication limits which paves the way for unlimited herbicide control (per Dec 6 Ecology public meeting in Raymond, Wa.). Contradicts initial 2011 decision where there would be acreage limits, now hailed as just a "small start" for spraying by Kathy Hamel, the Ecology NPDES writer and former member of the Technical Advisory Group. This listing approval brings implied support for the wider use of herbicides in all Washington waters, including Puget Sound. "It clearly lends support to the use of Imazamox over a broader area before scientific studies determine whether the benefits provided by Japanese eelgrass outweigh the perceived inconvenience."

**5. Picture of Pacific Brant waterfowl that are featured on a poster in Port Townsend, but are facing their food source being eradicated in all Washington waters.**

April 15, 2013