

March 9, 2012

VIA EMAIL (Kathy.Hamel @ecy.wa.gov)

Ms. Kathy Hamel
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Re: COMMENTS Regarding the Proposed Issuance of a General Permit for the Application of the Aquatic Herbicide Imazamox to Manage Japanese Eelgrass in Commercial Shellfish Beds

Dear Ms. Hamel:

On behalf of the Case Inlet Shoreline Association and the Coalition to Protect Puget Sound Habitat, we submit the following comments in opposition to Ecology's proposed issuance of a General Permit (GP) for the application of the aquatic herbicide Imazamox to manage Japanese Eelgrass on commercial shellfish beds in Puget Sound and Willapa Bay. The mission of the Case Inlet Shoreline Association is to preserve and protect the pristine Case Inlet for future generations. The Coalition to Protect Puget Sound Habitat has, as its goal, the protection of habitat of Puget Sound tidelands in relation to expansion of new intensive shellfish aquaculture methods and practices. The proposed issuance of a GP for the application of Imazamox is likely to adversely affect not only Case Inlet, but also the habitat and ecosystems of Puget Sound and Willapa Bay tidelands.

A. The Spraying of Imazamox Will Violate Eelgrass Protections in Washington and Threaten Valuable Wildlife Habitat Throughout Puget Sound and Willapa Bay.

At the outset, there is no doubt that the commercial shellfish industry in Willapa Bay and Puget Sound seeks to destroy both Japanese eelgrass and native eelgrass, and consider them to be "weeds/pests." In the past, it is evident the commercial shellfish industry has ignored legal standards by mowing native eelgrass in Willapa Bay and clearing it in Puget Sound. Native eelgrass coexists with Japanese eelgrass throughout Puget Sound and Willapa Bay, and the application of Imazamox will attack both types of eelgrass indiscriminately.

A host of existing state and federal regulatory protections for both native and Japanese eelgrass will be violated or implicated by the issuance of the proposed GP. These plant protections include, but are not limited to, the following statutory provisions: RCW 77.115.010, 77.12.047, 77.60.060, 77.60.080, 77.65.210, 77.115.030, and 77.115.040, the Hydraulic Code Rules set forth at WAC 220-110-250, the Shoreline Management Act and its regulations set forth

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at WAC 173-26-221(2)(C), the Growth Management Act and Fish and Wildlife Habitat Conservation Areas, as well as Nationwide Permit 48, Regional General Permit 48, Regional General Permit 6, issued by the Army Corps of Engineers, the Critical Area Ordinance identifying the fish and wildlife habitat conservation areas, the Pacific Coast Groundfish Fishery Management Plan identifying Habitat Areas of Particular Concern 7.3, and the WDFW Priority Habitat Puget Sound Nearshore established by WDFW in 2010.

Clearly federal and state authorities have developed an extensive regulatory scheme that recognizes the ecological value of Japanese eelgrass. The proposed GP will likely violate many, if not all, of the above-cited statutes and regulations. More importantly, it would impair the vital role that both types of eelgrass, but especially Japanese eelgrass, play in the functioning of the existing ecosystems in both Puget Sound and Willapa Bay. In that regard, it is likely that Japanese eelgrass, similar to *Zostera Marina*, provides an important source of organic material and sediments, increases sedimentation of fine particles, stabilizes sediments, and is an important food source for some herbivores and an important contributor to the “detrital-based food webs.”

The limited available scientific studies and literature pertaining to Japanese eelgrass dictate **not** authorizing any action which is designed to eradicate or damage these eelgrass species. We know that it provides for sediment stabilization, provides valuable nursery and spawning habitat for fish, crabs, and other species, including species listed as threatened or endangered under the Endangered Species Act. It provides for biodiversity and acts as a carbon sink. Japanese eelgrass also provides critical habitat for a substantial number of bird species. The role the Japanese eelgrass plays in providing “an important feeding habitat for many migratory waterfowl was documented and explained with the authors concluding that it supported almost 5,000,000 use days by dabbling ducks and brant in Boundary Bay, British Columbia, Canada.” See the article published by scientists John R. Baldwin and James R. Loveron in the *Marine Ecology Progress Series*, Vol. 103, pp. 119-27 (1994).

Baldwin and Loveron note that Japanese eelgrass had spread to Puget Sound and south to coastal bays in Oregon and likely plays a similar vital role as valuable waterfowl habitat in those areas as well. At this stage, it cannot be denied that *Z Japonica* is substantially beneficial to major components of the ecosystem in the waters of Puget Sound and Willapa Bay. The proposed Permit to allow destruction of this plant will significantly and adversely affect the quality of those ecosystems.

As set forth above, other agencies have recognized the value of Japanese eelgrass to aquatic habitat in the state and have continued its protection. As the cited Baldwin and Loveron study provides, in pertinent part:

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Although *Zostera Japonica* was introduced inadvertently, it may be an unusual example of an exotic species being generally beneficial to major components of an ecosystem. *Z Japonica* is now a principal food of migrating and wintering waterfowl.... *Z Japonica* is also adding many metric tons of organic matter to the detrital system ... and birds grazing. *Z Japonica* might bypass the slow decomposition process by excreting several tons of fecal nitrogen....

B. The Economics of Eelgrass Eradication to Make Way for Manila Clams Has Not Been Adequately Assessed.

Significantly, the commercial shellfish industry's rationale for eradicating Japanese eelgrass is that it is an exotic species, and yet it proposes to grow manila clams in the areas where Japanese eelgrass is to be eradicated. Manila clams are another exotic species that do not provide widespread habitat values on a par with eelgrass in this region. As a practical matter, the economic impact of the proposed chemical assault on eelgrass in the State of Washington to promote the increased production of shellfish in public waters and tidelands has not been established. Regardless of the projected economic value it may provide, the ecological value of Japanese eelgrass to the current ecosystem in the areas to be sprayed is extraordinary and cannot be discounted. Certainly, an effort should be undertaken to determine, with more precision, those respective impacts and values before authorizing the chemical eradication of *Z Japonica*.

C. The Spraying of Imazamox Will Have Dramative Negative Effects on the Environment Beyond Killing Japanese Eelgrass.

Imazamox is the chemical proposed to be used to kill *Z Japonica*. It is a member of the imidazolinone family, "some of the most potent herbicides on the market." It affects vascular plants and is non-discriminatory between native and Japanese eelgrasses. It will kill *Z Marina* just as readily as it kills *Z Japonica*. This is a double blow to habitat, and application of this toxic chemical will almost certainly have unintended consequences. Known effects of the chemical include interference with the ability of both birds and aquatic animals to successfully reproduce. Its effects on water contamination have not been adequately studied, but it will undoubtedly contaminate the waters, and its application will inevitably result in chemical drift beyond the intended areas of application. The accompanying unintended, but potentially devastating, consequences to the ecosystem will, in effect, go beyond the unintended, but inevitable, concomitant destruction of native eelgrass. The industry's own scientist, Kim Patten, acknowledged the lack of information about the chemical to be applied and its potential impacts to native eelgrass.

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Perhaps the most significant reason for not issuing the Permit is that we know little about the effects of spraying Imazamox, but we do know that sister compounds, for example, Imazapic, are quite toxic and the application of this chemical in marine ecosystems threatens other species of plant, animal, and, in particular, bird life. The likely synergistic effects with other chemicals or compounds in the environment have also not been considered. In short, there is simply not enough scientific analysis to support the spraying of this chemical on an important positive contributor to water habitat to make way for the harvesting of a different exotic species.

No detailed study has been cited in the record regarding the effects of Imazamox locally or elsewhere, and no EIS has been prepared. We know from past experience, however, that the authorization to use chemicals to kill other species in order to promote aquaculture has resulted in significant negative outcomes for native fish. For example, Carbaryl has been found not to be benign as initially concluded when its use was authorized. It is now accepted that Carbaryl adversely affects fish species, including, especially, ESA-listed salmon.

In the absence of confirmed in-house experts or otherwise, how can an industry be expected to effectively monitor the toxic effects of its spraying activities?

D. The Proposed Permit Should Not Be Issued for Any Waters that Are “Water Quality Limited,” But Do Not Yet Have TMDLs.

EPA regulations, consistent with § 301(b)(1)(C) of the Clean Water Act, prohibit a “new source of pollution or new discharger if the discharge from its operation will cause or contribute to the violation of water quality standards.” 40 C.F.R. § 122.4(i). The only exception to this prohibition exists where there is a TMDL in place, but only if the new source or new discharger demonstrates:

Before the close of the comment period, that:

- (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
- (2) The existing discharges into that segment are subject to compliance schedules designed to bring the segment into compliance with the applicable water quality standards.

40 C.F.R. § 122.4(i).

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In *Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007 (9th Cir. 2007), *cert. denied*, 129 S.Ct. 896 (2009), the Ninth Circuit Court of Appeals held that without a plan to achieve water quality standards, a permitting agency cannot allow any new discharges that will exacerbate the existing water quality standards violations. The Court held that all existing discharges must be subject to compliance schedules. 504 F.3d at 1012-13. It also ruled that “if there are no adequate point sources to do so, the permit cannot be issued unless the State or the [discharge permit applicant] agrees to establish a schedule to limit pollution from a nonpoint source or sources sufficient to achieve water quality standards.” *Id.* at 1014.

In other words, a TMDL is a necessary condition for a source to use the exception provided in EPA rules to the general prohibition on new sources into impaired waters, but a TMDL by itself is not sufficient. Reduction from sources, whether point or nonpoint, under compliance schedules, is also necessary. Here, there has been no such demonstration, and Ecology may not merely rely on a permit statement that it does not allow discharges that will cause or contribute to violations of water quality standards because it is the Department’s obligation to only issue permits that will comply with the Clean Water Act. 40 C.F.R. § 122.4(a). Likewise, Ecology may not issue a permit if it does not contain the requirements necessary to “achieve water quality standards established under § 303 of the CWA, including State narrative criteria for water quality.” 40 C.F.R. § 122.4(d).

A permit is required to contain “limitations to control all pollutants or pollutant parameters ... [which] may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standards, including State narrative criteria for water quality.” 40 C.F.R. § 122.4(d)(i).

Here, the proposed discharge is into a WQL water body and it will therefore cause or contribute to diminished water quality standards. Therefore, to allow this proposed discharge, Ecology would be obligated to issue a Permit with effluent limitations to prevent such an outcome – which, in any event, is prohibited by 122.4(i) – taking into consideration the lack of existing controls on other pollution sources, both point and nonpoint. Since Ecology cannot issue such a Permit, it is prohibited from allowing the discharge.

As the conditions into which the Imazamox is proposed to be applied are site-specific, and because non-target species, including native eelgrass, will be adversely affected by the application of Imazamox, the issuance of a GP is not appropriate. Rather, individual permits should be required that are site-specific. At the very least, Ecology needs to condition any GP on the applicant’s full compliance with FIFRA, the Federal Insecticide, Fungicide, and Rodenticide Act, and require compliance with the applicable FIFRA’s labels for the chemical involved.

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We have also been provided with a copy of the comments submitted by Dan Penttila of Salish Sea Biological in Anacortes. Penttila, a retired WDFW forage fish biologist, states that upon personal observation, experience, and expertise, “any attempted control of *Z Japonica* beds immediately inshore and possibly intermingled with the inshore portions of *Z Marina* beds, would cause damage to the native *Z Marina* beds and their herring spawning habitat function, and notes “any such damage would be considered violations of the Washington State GMA, the SMA, the WAC Hydraulic Code Rules, and federal Essential Fish Habitat Rules for the Conservation of ESA-listed salmonids, all of which advocate no net-loss protections for documented herring spawning grounds.” We agree and object to the proposed permit on this ground as well.

E. The Comment Period Should be Extended to Allow Further Review of the Public Records Expected to be Produced After the Scheduled Close of the Comment Period.

Finally, we do not believe there has been adequate information presented to us or to the public, or adequate time allowed to fully identify all of the likely consequences and implications of the proposed issuance of the GP. In that regard, requests have been made under the Washington Public Records Act for all documents and records that relate to:

Planning for adoption of, or issuance of, General NPDES Permit that would allow application of chemicals to Japanese eelgrass, including, but not limited to, electronic communications, written communications and notes pertaining to telephone and/or personal communications, related in any to Japanese eelgrass and/or the potential or actual Washington State listing of it as a noxious weed.

Public records requests have been made to the Washington State Noxious Weed Board, the Department of Natural Resources, the Washington Department of Fish and Wildlife, as well as to the Department of Ecology. We request the opportunity to provide additional comments in conjunction with the proposed issuance of this GP after the requested documents have been received, reviewed, and evaluated. We also request that the record be left open until that time, and we also request that there be another opportunity for public review and comment on any proposed plans by any would-be permittee before registration is allowed, with a comment period of at least 90 days given the significant potential consequences associated with the proposed issuance of this Permit.

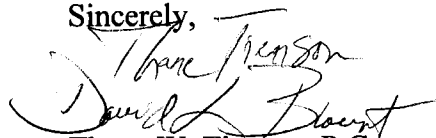
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CONCLUSION

Ecology may only issue a Permit that is consistent with state and federal laws and regulations, including the Clean Water Act. In doing so, it must place protection of the existing and designated beneficial uses of the State's waters at the forefront of its analysis and regulatory actions. Federal regulations give guidance to the Department in weighing one set of designated uses against another by requiring states "for waters with multiple use designations, [to adopt] criteria [that] shall support the most sensitive use." 40 C.F.R. § 131.11(a). Ecology is therefore obligated to provide protection to the most sensitive uses; *i.e.*, aquatic and aquatic-dependent species such as migratory waterfowl and salmonids over the desire of the shellfish industry to expand its production in public waters and tidelands. There is no evidence that the proposed GP will comply with these applicable federal and state laws and regulations. Both Willapa Bay and Puget Sound, but especially Puget Sound, has already experienced enormous habitat loss and interference with critical ecosystem functioning. The commercial shellfish industry has been more than an incidental contributor to this habitat destruction. It should not be allowed to embark on an effort that will assuredly result in even greater destruction of both the habitat and ecosystems and their dependent species.

For the above reasons, we urge Ecology to deny the proposed General Permit.

Sincerely,



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*Attorneys for the Case Inlet Shoreline Association
And Coalition to Protect Puget Sound Habitat*

/jgz

Cc: Clients

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